Technical Report

--on the--

CUMBERLAND PROPERTY
Georgetown District
Queensland, Australia

--for--

Essex Minerals Inc.
3002 -1211 Melville Street,
Vancouver, B.C. V6E 0A7

Prepared By:

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1.0 SUMMARY

1.1 Introduction

Richard Newport & Associates (“RNA”), has prepared this independent report on the KNX Resources Limited. (“KNX”) eighty eight percent (88%) owned Cumberland Property located in the Georgetown District of North Queensland, Australia, for Mr Paul Loudon, Chief Executive Officer and Director of Essex Minerals Inc (TSX-V:ESX). KNX is an Australian unlisted public company. The minority twelve percent (12%) contributing interest is held by AMD Resources Limited, an Australian unlisted public company.

The purpose of this report is the assessment of the technical and economic potential of the Property areas in light of exploration carried out by Ismins Pty Ltd (“ISM”) a wholly owned subsidiary of KNX, Essex’s joint venture partner.

The sources of information and data contained in this technical report were either provided by KNX or sourced from publicly available reports as listed in Chapter 19 References of this report. Individual sources are cited throughout the body of the report.

Richard Newport, the author (“the Author”) of this report last visited the Property between June 21 and July 21 2021, for a duration of 31 days as part of an Independent review of KNX’s Georgetown District, Australia properties.

This report is an Independent Technical Report prepared to Canadian National Instrument 43-101 (“NI 43-101”), Form 43-101F1, Technical Report and Companion Policy 43-101CP standards.

1.2 Property

The four granted EPM’s EPM 18775, EPM 26268, EPM 26343 and EPM 26586 constitute the Property (“The Property”). They are contiguous and adjacent to one another in the Georgetown District of North Queensland (Figure 2). The combined area of the tenements covers 247.39 square kilometres, comprising a total of 77 sub-blocks and are located in the Georgetown District of North Queensland.
As of Wednesday 24 November 2021 the Property is as described on the Queensland Government QSpatial portal. There are no material changes in the statutory requirements and conditions of Property since the various EPM’s have been granted. There are no known terms of any royalties, back-in rights, payments or other agreements and encumbrances to which the property is subject to and the only known environmental liability on the Property is for the rehabilitation of earth works and excavations for the purposes of exploration and the capping and abandoning of drill holes. Permits required to conduct the work proposed for the Property under Queensland regulations are notices for entry onto private land to conduct preliminary and/or advanced exploration and geophysical surveys. A separate Conduct and Compensation Agreements with the private landholders has been in place since the granting of the various EPM’s. There are no known other significant factors and risks that may affect access, title or the right or ability to perform work on the Property.

1.3 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Property is centred at Latitude 18° 21' S; Longitude 143° 20' E, 25km WSW of Georgetown in North Queensland (Figures 1 and 2). Access is via the all-weather Gulf Developmental Road that passes through Georgetown, linking Cairns – 380km to the east - and Normanton – 301km to the west. The historic Cumberland Chimney is a well known landmark off to the side of the Gulf Development Highway 20km west of Georgetown and adjacent to the Property. An all-weather sealed airstrip is located at Georgetown.

The region has a tropical savannah climate (with high humidity and two seasons, the wet season (November to April) and the dry season (May to October). A tropical monsoon season occurs from December to March with doldrums occupy the transition periods during November and April. Winters are dry with average temperatures in the mid to high 20's°C.

The topography consists of rolling, low-level hills and flat river plains, dissected by the Gilbert and Etheridge rivers that drain northwards into the Gulf of Carpentaria. The vegetation is low stand eucalyptus woodland, scrub and savannah grasslands.

1.4 Geological Setting

The Property is located in the western portion of the Georgetown Inlier, which makes up most of the Etheridge Province. The inlier occupies approximately 50,000 square kilometres to the west of the North Queensland coast between Cairns and Townsville. It consists of variably metamorphosed and deformed sedimentary and volcanic rocks of Palaeo- to Mesoproterozoic age, intruded by Mesoproterozoic granites. The Proterozoic rocks have been intruded by Siluro-Devonian age I type granitic rocks during a period of subduction and underplating that is thought to have occurred during the Tabberabberan cycle of the Tasman Orogen (ca 430-380 Ma). The Georgetown Inlier subsequently experienced a period of felsic intrusion and accompanied sub-aerial volcanism during the Carboniferous to Permian period (ca 350-230 Ma), associated with extension and rifting that developed during the Hunter-Bowen cycle of the Tasman Orogeny. This magmatism is termed the Kennedy Association, consisting of widespread and voluminous extrusive and intrusive igneous rocks, producing a number of large volcanic subsidence structures. The Property covers a large outcrop of the Carboniferous-Permian felsic intrusive and extrusive igneous rocks in the western margin of the Georgetown Inlier.

The Property geology consists of Carboniferous to Permian acid intrusives and their related sub-aerial volcanics of the Cumberland Range Volcanics which cover much of the southern and western portions of the property. They form a partially preserved collapsed caldera structure in the south with more deeply eroded dykes of high level (sub- volcanic) intrusives of microgranites and rhyolites to the north and west. These dykes host later rhyolite dykes and breccia veins and pipes.

Mineralisation

The gold-silver-copper prospects on the Property are associated with the altered and mineralised fault/vein structures that are in close proximity to the high level felsic intrusives. These high level intrusive systems are likely to have significant stockwork veins and breccia pipes associated with the sub-volcanic dykes and plugs at depth. Several large fault structures are also present within the tenement, and these also host significant gold-silver-base metal mineralisation

ISM identified a total of seven (7) distinct mineralised prospects on the Property. They are

1. Log Creek Prospect; Carboniferous to Permian quartz feldspar porphyry microgranite displaying high temperature sericite alteration Subsequent structural events, have contributed to emplacement of rhyolite dykes which are variously altered and contain a high

background of volatile elements accompanied by low temperature epithermal mineralisation which has overprinted the earlier phase sericite alteration event. Log Creek is considered to be a multiphase intrusive event in an epithermal back arc setting.

2. RBZ Prospect; Is a series of hydrothermal breccia zones associated with Carboniferous to Permian quartz feldspar porphyry dykes, representing a similar but shallower continuation of the Log Creek alteration system. RBZ is considered to be a multiphase breccia event in an epithermal back arc setting. Drilling in 2020 confirmed gold and silver mineralization associated with sericite alteration in coarse grained granite.

3. The Rock Prospect; Carboniferous to Permian quartz feldspar porphyry microgranite intrudes into Proterozoic Lane Creek sediments consisting of fine grained sediments variably contact metamorphosed and extensively altered to sericite and clay with associated multi-phase quartz veining. Observed mineralisation at The Rock consists of breccias, bedding conformable quartz veins with sulphides, sericite filled fractures, and altered intrusive dykes showing multiphase quartz veining with scorodite, possibly pyromorphite and jarosite.

4. Pillars Prospect; Carboniferous to Permian quartz feldspar porphyry microgranite containing later, low temperature quartz veins and sulphides associated with brecciated porphyry in a linear structural zone. Pillars is considered to be similar to the RBZ in it's setting.

5. Golden Orb Prospect: Carboniferous to Permian rhyolitic flow dome intrusive into rhyolitic volcanic pile associated with silicified jasperoidal breccias containing chalcedonic veins Golden Orb is considered to be a shallow epithermal event in a back arc setting.

6. WMF Breccia Prospect (Wait for Me); Carboniferous to Permian brecciation, possibly confined to a pipe structure, associated with felsic intrusives and hydrothermal fluids, that have introduced quartz-carbonate veining and sulphide mineralisation, along with variable alteration. WMF is considered to be multiphase breccia pipe event in an epithermal back arc setting

7. The Hook Prospect;Carboniferous-Permian rhyolitic breccia, quartz veining in quartz feldspar porphyry crosscutting strongly altered porphyritic rhyolite breccia clasts with weakly developed ginguro banding within white multi-phase chalcedonic quartz surrounding illite-muscovite altered porphyritic rhyolite breccia clasts, returning high gold values from rock chips.

1.5 Deposit Types

The principal deposit types targeted in the Property are intrusion related gold and silver mineralization. The style and depth of formation of gold-silver deposits approaching the metal bearing igneous system varies from distal (epithermal) through intermediate (porphyry) to proximal (plutonic). These deposits can be accompanied by economic concentrations of gold, silver, copper, base and other valuable metals. Epithermal porphyry and plutonic ore deposits develop in response to plate tectonic processes, typically as partial melting related to subduction gives rise to magmatism mainly within compressional and locally transpressional, linear magmatic arcs extending into the back arc extensional settings. Magmatic arcs are distinguished between island arcs which are underpinned by oceanic crust and continental arcs that form on continental plate margins (Pirajno 1992). Island arc igneous rocks tend to be intermediate to felsic in composition, whereas continental arcs and back arc igneous rocks tend to be more fractionated and felsic in composition

1.6 Exploration

Essex Minerals Inc has not conducted any exploration on the Property on it's own right.

Exploration undertaken on this property and the subject of this report, was conducted solely by ISM, but funded by Essex Minerals Inc. since March 2020.

ISM commenced exploration after the granting of EPM 18775, conducting reconnaissance exploration to confirm the high-grade assays of gold and silver recorded from previous explorers. ISM carried out detailed mapping, rock chip and soil geochemistry and acquisition of LiDAR geophysics. Previous staged exploration from initial reconnaissance to detailed geochemical sampling and mapping, in combination with interpretation of the MGP magnetics and radiometrics, coupled with structural geology interpretation from the LiDAR, allowed ISM to focus on key areas of interest. The exploration culminated in a drilling program conducted in 2020 for a total of 1,851.6m of diamond core drilling at RBZ.

The key points gained from ISM exploration are:

- Regional association of Ag/As stream sediment geochemistry and the lack of follow up of anomalism by previous operators

- Recognition of epithermal style mineralisation associated with significant surface values spatially associated with the interpreted Carboniferous to Permian intrusives.

- Recognition of high-level epithermal veins associated with the Carboniferous to Permian Cumberland Volcanics.

- Interpretation of MGP magnetic and radiometric data with respect to the identified prospects and regional structure.

- Acquisition of Lidar leading to a detailed understanding of the structure and lithological association of the observed surface mineralisation.

- ISM completed 1,851.6m of HQ diamond drill coring on the RBZ prospect which successfully intersected gold and silver mineralization (the details of this drilling are reported in Chapter 10 of this report). Analysis of the drilling results included half core sampling and assay for gold by 50g fire assay and multielement ICP AES analysis, detailed petrology and structural analysis of the core.

- A new prospect was identified at the Hook (7) in EPM 26586 (Figure 20) generated by interpreting structure from the Lidar data. Results of rock chips have indicated a series of epithermal quartz infilled breccia zones displaying sulphides at surface with appreciable gold and silver values occurring along and adjacent to a NW faulted contact between porphyritic intrusive rhyolites of Carboniferous to Permian age and Proterozoic sediments of the Lane Creek Formation

1.7 Drilling

Essex Minerals Inc has not conducted any drilling on the Property on it's own right.

Historical drilling of the Property by previous explorer KGM, consisted of five combined RC with diamond tail drill holes at the Log Creek Prospect (1), to test coincident DC/IP and base metal soil anomalies associated with quartz sericite alteration.

ISM reviewed the KGM drill program finding that the five drill holes at Log Creek were targeted on linear IP chargeability and coincident base-metal soil anomalies associated with quartz-sericite alteration located on NW trending ridges. Four were drilled to the north of Log Creek and one to the south. KGM reported that all holes intersected zones of strong sericite-pyrite alteration within the Carboniferous quartz feldspar porphyry. The fourth hole (LCRD4) also intersected a breccia from 76.6 to 103.5m, which was mineralised from 76.6 to 82.8m.

Drilling undertaken by ISM on the Property, was conducted solely by ISM, but funded by Essex Minerals Inc. It consisted of ten (10) HQ sized diamond drill holes for a total of 1,851.6 metres of core drilling in the RBZ Prospect. The holes were designed to test two zones of gold and silver soil geochemical anomalies. The drill holes are designated RBZS for RBZ South and RBZN for RBZ North.

RBZ South Drilling Summary

Four diamond holes drilled into RBZ South contained intersections of gold and silver mineralization in 3 out of 4 holes, albeit narrow in 2 out of 3 holes but with extensive associated alteration. Epithermal quartz vein arrays are associated with multi-phase intrusives at the intersection of a conjugate fault system in a monzo-diorite intrusive into Proterozoic coarse grained granite. Not all quartz veins intersected displayed significant gold and silver grades. All mineralized intersections to date occur in coarse grained granite below the monzo-diorite contact. Predictions of dip and strike of structures and mineralized veins is uncertain at this time. Good correlation between S and Au/Ag mineralization – suggests a DC/IP survey as a useful tool to locate high sulphide bearing zones.

RBZ North Drilling Summary

RBZ North mineralization is spatially associated with porphyritic rhyolite subvolcanic intrusive into Proterozoic granite and monzo-diorite and granodiorite. The rhyolite has been intruded along NW to NNW structures associated with the RBZ structure. Two individual zones of rhyolites were mapped.

The eastern contact zone (QFP-granite), displayed high Ag surface soil geochemistry along with high grade silver and gold in rock chips, was drilled at Robs Vein (3 holes) .Despite surface mineralization associated with pervasive alteration and excellent structural preparation of host granites, mineralization intersected was weak with low metal and moderate sulphur levels with the exception of a narrow zone intersected in hole 20RBZNDD005 which correlates with gold and silver mineralization sampled at surface.

The western contact (QFP-Diorite-Granite) was drilled with one hole (20RBZNDD002) under a surface Au-Ag soil anomaly with no observable outcropping mineralization. Broad zones of anomalous gold and silver in fractured rhyolite with narrow zones of higher grade Au and Ag, were intersected. Orientation of the mineralized contact trends N to NNW. Similar to RBZ South the mineralization at RBZ North is closely associated with the more mafic diorites.

1.8 Interpretation and Conclusions

A mineral resource has not been discovered on the property. For this reason, the property is considered an early stage exploration project, with excellent potential of discovering a precious metal resource. Previous exploration has identified the potential geologic setting for an epithermal style precious metal mineralisation that is likely to be silver (Ag) dominant with gold (Au) credits.

Drilling by ISM in 2020 has discovered high grade gold mineralization over short intervals in the RBZ Prospect, reinforcing the potential for discovery of a precious metal resource.

The evidence of mineralization in favourable host rocks is sufficient to warrant ongoing work programs.

The Author believes the Property is a property of merit, and is worthy of a significant continuing phase of exploration.

1.9 Recommendations

The Author's recommendations for ongoing work on the Property covers two phases of work designed to attain sufficient geochemical, geophysical and structural information for drill targeting on EPMs 26586, 26343 and 26268 and for follow up drilling at the RBZ Prospect within EPM 18775.

Phase 1 Consists of geochemical sampling of the meta-sediment inlier on the margin of the Cumberland Range Caldera within EPM 26268, acquire infill soil samples at a density of 50 metre line spacing and 25 metre sample spacing along lines on the RBZ Prospect within EPM 18775 and extending the sampling eastward to cover the complete distribution of monzo-diorite. Undertake soil sampling over The Rock Prospect within EPM 18775 on a 50 x 50 metre grid pattern.
Magnetic inversion modelling of aeromagnetic data flown by previous operators over the NW trending major structural feature that transgresses EPMs 26586 (The Hook), EPM 26343 and the western edge of EPM 18775 aimed to define circular magnetic features shown on the RTP image localised by the NW structure, some of which occur under cover followed up by ground truthing features derived from the modelling.

At the conclusion of Phase 1 and the analysis of results, it is expected that interpretation of this information will more coherently define the various prospects. This in turn will focus exploration on to high priority areas to conduct the DC/IP surveys in phase 2. Advancing to the second stage is not wholly dependent on the outcomes of the first stage but will be strongly influenced by those results.

Phase 2 Undertake 21 line kilometres dipole-dipole DC/IP survey over the RBZ structural zone along lines spaced 200m apart with an electrode spacing of 100m in a dipole-dipole configuration covering a 6 kilometre long structural zone, with the objective of defining potential precious metal mineralised structures within the regional feature.

A budget of approximately C$ 287,251 is required to complete the two phases of work on the Property. Table 18-1 below provides a preliminary summary of the total work program budget in the 2022 field season.

2.0 INTRODUCTION

Richard Newport & Associates (“RNA”) of 149A McCarrs Creek Road, Church Point, NSW, Australia, was requested by Mr Paul Loudon, Chief Executive Officer and Director of Essex Minerals Inc (TSX-V:ESX) of 3002 -1211 Melville Street, Vancouver, B.C. Canada (“ESX”) to prepare an independent report on the KNX Resources Limited. (“KNX”) one hundred percent (100%) owned Property located in the Georgetown District of North Queensland, Australia (Figure 1)

The authorization, terms of reference and purpose of this report is to provide an Independent Technical Report conforming to National Instrument 43-101, to support the agreement to acquire 100% of ESX joint venture partner, KNX, that was announced by ESX on April 29, 2021.

The report was prepared in Sydney Australia, between November 15 and December 08 2021.

The sources of information and data contained in this technical report were either provided by KNX or sourced from publicly available reports as listed in Chapter 19 References of this report. Individual sources are cited throughout the body of the report.

Richard Newport the Author (“the Author”) of this report last visited the Property between June 21 and July 21 2021, for a duration of 31 days as part of an Independent review of KNX’s Georgetown District, Australia properties.

There has been no material exploration on the Property since the Author concluded his visit on July 21 2021.

The report is based on information known to the Author as of 25th November, 2021.

All measurement units in this report are metric, and currency is expressed in Canadian Dollars.

This report is an Independent Technical Report prepared to Canadian National Instrument 43-101 (“NI 43-101”), Form 43-101F1, Technical Report and Companion Policy 43-101CP standards. The report assesses the technical and economic potential of the Property areas and recommends a follow-up program.

The Author understands that this Report may be used by ESX for securities regulatory filings and for exploration/development fundraising activities. A formal consent statement for public filing of this technical report is included.

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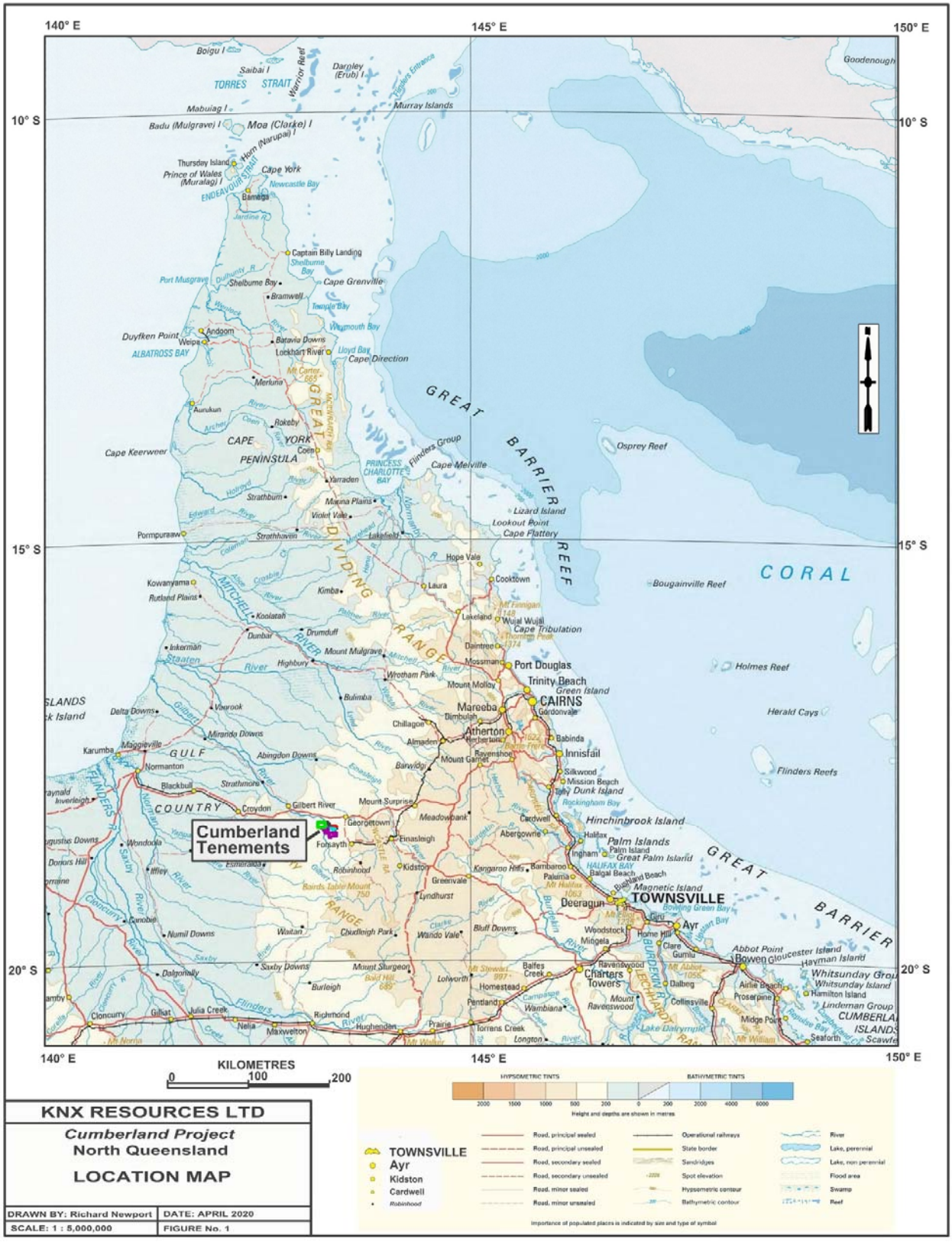

Figure 1: Location Map (extracted from Geoscience Australia 1:5M Topographic Map)

3.0 RELIANCE ON OTHER EXPERTS

The Author assumed that all of the information and technical documents reviewed and listed in the "References" are accurate and complete in all material aspects. While the Author carefully reviewed all of this information, the Author has not conducted any extensive independent investigation to verify their accuracy and completeness. However, since the exploration work was carried out by individuals or companies that have professional designations of or equivalent to those of a Qualified Person in Canada, the Author believes that the data is reliable within industry norms.

The Author has not searched titles to the land holdings and has not independently verified the legal status of the ownership of the Property or the underlying agreements. Information provided in this report with respect to land holdings and legal status is that provided to the Author by KNX. The Author has been able to access and view the files containing original contracts, location maps, etc. of these properties and, having found no irregularities, is generally satisfied with the validity of the exploration rights. However, the Author has not conducted detailed investigations such as title searches, etc. that would be normally conducted by legal professionals. The status of the surface and mineral rights and related agreements is therefore not certified by the Author.

The information, conclusions contained herein are based on the information available to the Author at the time of preparation of this Report, assumptions, conditions and qualifications as set forth in the Report and data listed in the "References".

Essex Minerals Inc. has reviewed draft copies of the Report for factual errors. Any changes made as a result of these reviews did not involve any alteration to the conclusions made. Hence, the statement and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1. Property and Agreements

The four granted EPM's EPM 18775, EPM 26268, EPM 26343 and EPM 26586 constitute the Property ("The Property"). They are contiguous and adjacent to one another in the Georgetown District of North Queensland (Figure 2). The combined area of the tenements covers 247.39 square kilometres, comprising a total of 77 sub-blocks and are located in the Georgetown District of North Queensland.

The historic Cumberland Chimney is a well known landmark off to the side of the Gulf Development Highway 20km west of Georgetown and adjacent to the Property. This landmark is located at 748330mE; 7975200mN; elevation 220m amsl in GDA94 UTMZ54S coordinates.

KNX has title to the following Queensland Mining tenements comprising four (4) Exploration Permits for Minerals ("EPM") through it's wholly owned subsidiary Ismins Pty Ltd ("ISM"), the registered applicant or holder of the legal interest pursuant to the terms of the Minerals Resources Act 1989 (Qld). AMD Resources Limited ("AMD"), an Australian unlisted public company originally held a contributing twenty percent (20%) interest in the Property in 2018 and at the date of this report AMD has a diluted interest of twelve percent (12%).

Essex Minerals Inc announced on May 1, 2020, the signing of an earn-in joint venture over three epithermal and orogenic gold properties in Australia (including the Property), assembled by a private Australian company KNX in the Georgetown region of Queensland. During the year ended September 30, 2021, KNX acknowledged that the Company had completed the first stage earn-in and has earned 50% of KNX's interest in all three properties. On April 29, 2021, Essex Minerals Inc. announced that further to its Australian gold earn-in joint venture it reached agreement to acquire 100% of its joint venture partner, KNX. On September 22, 2021, Essex Minerals Inc. announced revised purchase terms of the KNX acquisition. Pursuant to the revised purchase terms, Essex Minerals Inc agreed to acquire all the issued and outstanding shares in KNX in exchange for the issuance of 5,000,000 ordinary shares of the Company (the "Purchase Shares") and 5,000,000 two year share purchase warrants with an exercise price of $0.20 per warrant ("Purchase Warrants") to the shareholders of KNX. Completion of the acquisition will give Essex Minerals 88% ownership of the Property through its 100% ownership of KNX.

Appendix 1, covers in detail the current standing of the property, surface rights, legal access, fees, securities and expenditure commitments to retain the Property in good standing. There has been no material change in the statutory requirements and conditions of Property since being granted.
The only known environmental liability on this property is for the rehabilitation of excavations for the purposes of exploration such as trenches and pits for sampling, drill sites and the capping and abandoning of drill holes. Permits required to conduct the work proposed for the Property under Queensland regulations are notices for entry onto private land to conduct preliminary and/or advanced exploration and geophysical surveys. These notices are prepared when the activity is about to take place. A separate Conduct and Compensation Agreements with the private landholders has been in place since the granting of the licences. There are no known other significant factors and risks that may affect access, title or the right or ability to perform work on the Property.

The Author has accessed the Queensland Government QSpatial portal and downloaded the current Exploration Permits for Minerals dataset on Wednesday 24 November 2021 and can confirm that the EPM's described in Appendix 1 are current and as drawn on Figure 2.

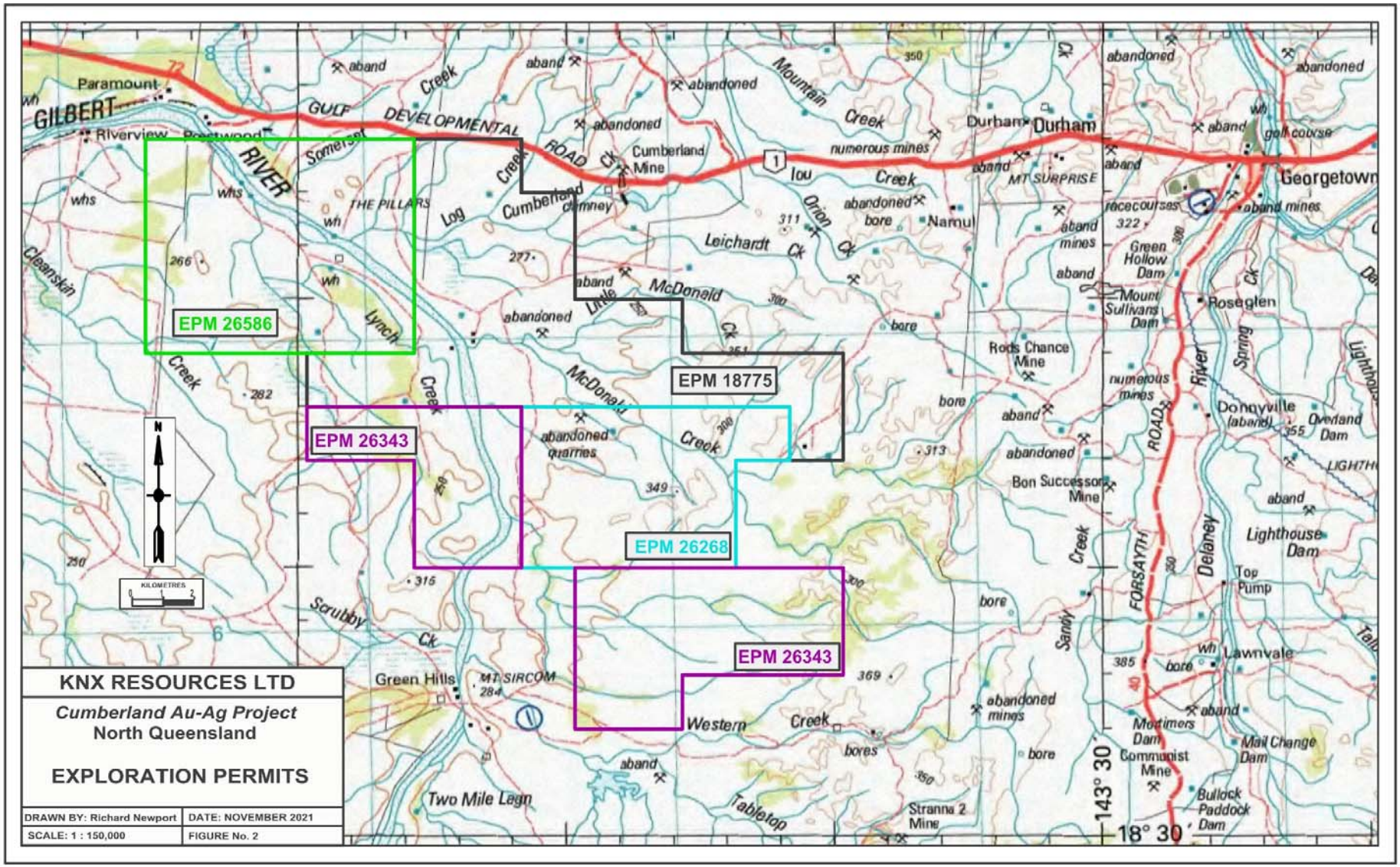

Figure 2 Exploration Permits

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Property tenements are centred at Latitude 18° 21' S; Longitude 143° 20' E, 25km WSW of Georgetown in North Queensland.
Access is via the all-weather Gulf Developmental Road that passes through Georgetown, linking Cairns – 380km to the east - and Normanton – 301km to the west (Figure 1).
An all-weather sealed airstrip is located at Georgetown (Figure 2).

The region has a tropical savannah climate (with high humidity and two seasons, the wet season (November to April) and the dry season (May to October). A tropical monsoon season occurs from December to March with doldrums occupy the transition periods during November and April. Winters are dry with average temperatures in the mid to high 20's°C.

The topography consists of rolling, low-level hills and flat river plains, dissected by the Gilbert and Etheridge rivers that drain northwards into the Gulf of Carpentaria. The vegetation is low stand eucalyptus woodland, scrub and savannah grasslands (Figure 3).

Figure 3 Typical Topography and Vegetation – Property NQLD

6.0 HISTORY

The Etheridge Goldfield at Georgetown, contains numerous mesothermal vein quartz-gold-base-metal sulphide deposits from which some 20t of Au-Ag bullion has been extracted. These deposits, some of which occur within the Property tenements, are mostly hosted by Proterozoic granitic and metamorphic rocks. The estimated age of the mineralizing event is 426-398 Ma (Siluro-Devonian), which is similar in age to the Charters Towers gold deposits.

Modern exploration activities have been conducted on the Property since the early 1980's for gold, base metals and uranium, and some exploration has taken place for stratabound base metals and intrusive related tungsten mineralisation. The more significant work in the Property area has been undertaken by Bridge Minerals Pty Ltd, Battle Mountain (Australia) Inc., Kidston Gold Mines Ltd and Mega Georgetown Pty. Ltd, before KNX subsidiary Ismins Pty Ltd lodged the current EPM's. Detailed summaries of work carried out on the Property by previous title holders is set out below in chronological order and all the reports are referenced in Appendix 2 or in Chapter 20.

6.1 1970 – 1972 Bridge Minerals Pty. Ltd. ("BML") explored A to P 813M situated in the Georgetown region of North Queensland. Their Prestwood block covered almost all of the Property. BML undertook regional geochemical sampling consisting of nine hundred and fifty nine (959) stream sediment samples (approximately 1 sample per square kilometre), analysed for copper (Cu), Lead (Pb), Zinc (Zn) and Molybdenum (Mo). Anomalous results were recorded near known historic mining activity. Follow up rock chip program focused on the stream sediment anomalies and the historic mine site which were also geologically mapped. BML concluded that there was insufficient encouragement to continue exploration on the tenement (Wright et al 1972).

6.2 1987 – 1989 Battle Mountain (Australia) Inc ("BMA") explored A to P 5065M "Cumberland Range" that covers the southern half of the Property (Cussen et al, 1989).
BMA undertook detailed stream sampling (325 samples – approximately 1 sample per kilometre) for bulk cyanide leach (BCL) and heavy mineral concentrate (HMC). The BCL samples were bottle rolled for 24 hours then assayed for gold (Au) and silver (Ag). HMC samples were weighed and fire assayed for gold. The distribution of the silver and arsenic stream anomalies in Figure 16 shows that it is likely that there is a strong north to northwest structural system controlling the late stage mineralization associated with Carboniferous sub-aerial volcanism. There is a second, weaker east trend that may be re-activated older faults that are similar to the major Big Wonder Fault to the north. BMA found three occurrences of gold veining near the confluence of McDonald and Little McDonald Creeks. The southern vein of these two occurrences are the old Jesse Belle and Rose Gold Mines. The third gold vein is located near the junction of the two main tributaries of Little McDonald Creek (Figure 4) BMA collected a total of 24 rock chip samples from three localities on these veins. The average gold and silver assays for all 24 rock chip samples were 44g/t Au and 139g/t Ag. The maximum assays from these samples were 370g/t Au 840g/t Ag.

Mapping at the time indicated the zone is trending NW-SE, which is at odds with the previously noted northerly trend for the Jesse Bell mine. At Little McDonald Creek, quartz-pyrite-hematite mineralisation extends for 160m and is associated with a strongly sheared and brecciated granitoid of the Forsayth Granite. Fragments of rhyolitic sub- volcanic or strongly sheared granitoid occur as minor clasts in the breccia and mineralised zones. A series of small pits and costeans were sampled, with the highest gold results corresponding to quartz-pyrite-arsenopyrite-jarosite veins. It is significant that both the McDonald and Little McDonald Creek Prospects record several of the high gold assay results from samples described by BMA as altered and sheared wall-rock or thin stockwork veins in wall-rock. This indicates the possibility for broader zones of gold mineralisation, rather than only being confined to very narrow quartz-sulphide veins. Also, the description by BMA of gold mineralisation in rhyolite dykes is very significant; as it indicates the gold mineralisation is related to Carboniferous to Permian age sub-volcanic intrusions.

The gold, silver and arsenic stream geochemical anomalies are plotted up over the simplified geology in Figure 4.

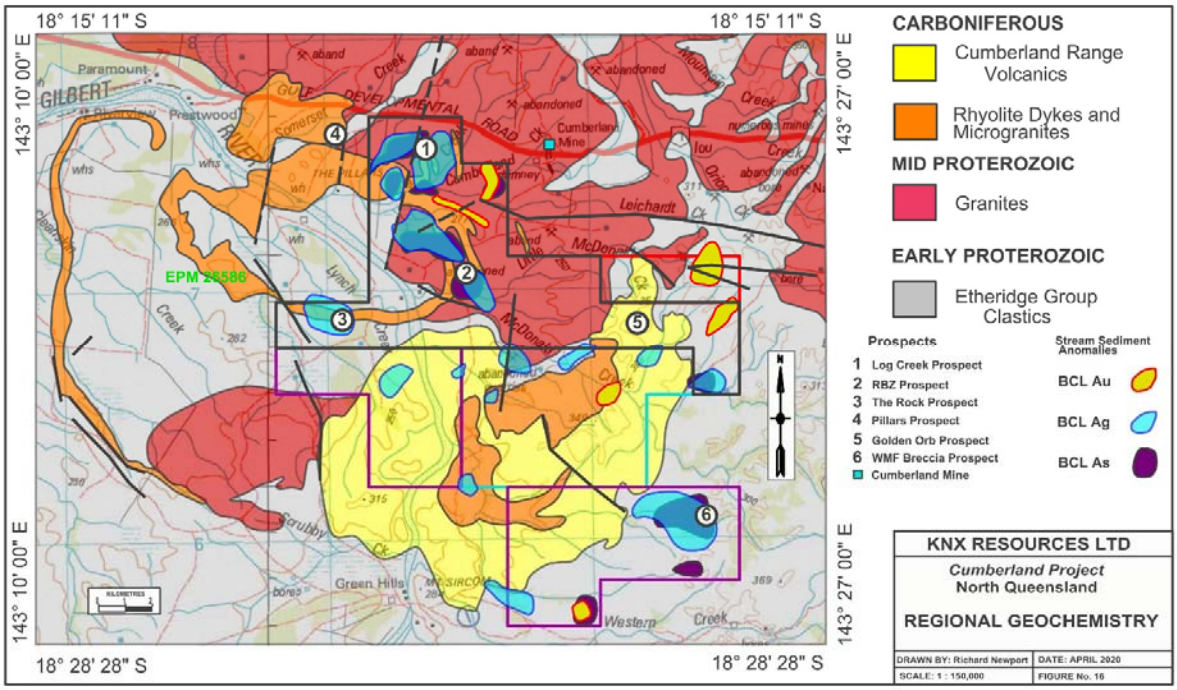

Figure 4. Simplified geological map showing BCA Au, Ag & As stream sediment anomalies.

6.3 1995 – 2000 Kidston Gold Mines Ltd ("KGM") conducted exploration on their tenements in the northwestern portion of the Property area, finding the Log Creek Prospect from anomalous stream samples (Au, Cu & Pb) draining a 2km long ridge of altered micro-granite porphyry (Figure 17). KGM followed up with soil and rock chip sampling, mapping, ground magnetics, gradient and dipole-dipole IP/Resistivity surveys. At Log Creek, five drill holes were used to test soil and IP anomalies that are reviewed in the following Chapter 10 of this report. Holes were a combination of RC & diamond tails, and some had down-hole IP surveys done (Ricketts et al 1995, _1996,_1997, Sparks 1998a, 1998b, 2000).

A soil geochemistry program was conducted over the Log Creek-RBZ prospect using a 100 by 100m grid and assaying for Au, Cu. Pb, Zn and As (Figure 5). Results were: anomalous in precious and base metals, following the general trend of alteration. Anomalous gold marked in yellow on Figure 17 returned up to 592 ppb. In the rock chip sampling program, 6 out of 22 rock samples returned >0.5g/t Au with a high of 2.15g/t Au. The ground magnetic program returned a magnetic low anomaly, centred on the historic Victory South pit (60nT low anomaly over 500 by 150 metre zone coinciding with gold in soil anomaly). This was interpreted to be due to magnetite destruction during alteration.

A total of 28 line-km of gradient and dipole-dipole array IP was recorded over the Log Creek – RBZ prospects. The survey area (marked in light blue) coincided with the KGM soil grid. Three linear NS chargeability zones were identified coinciding with mapped alteration.

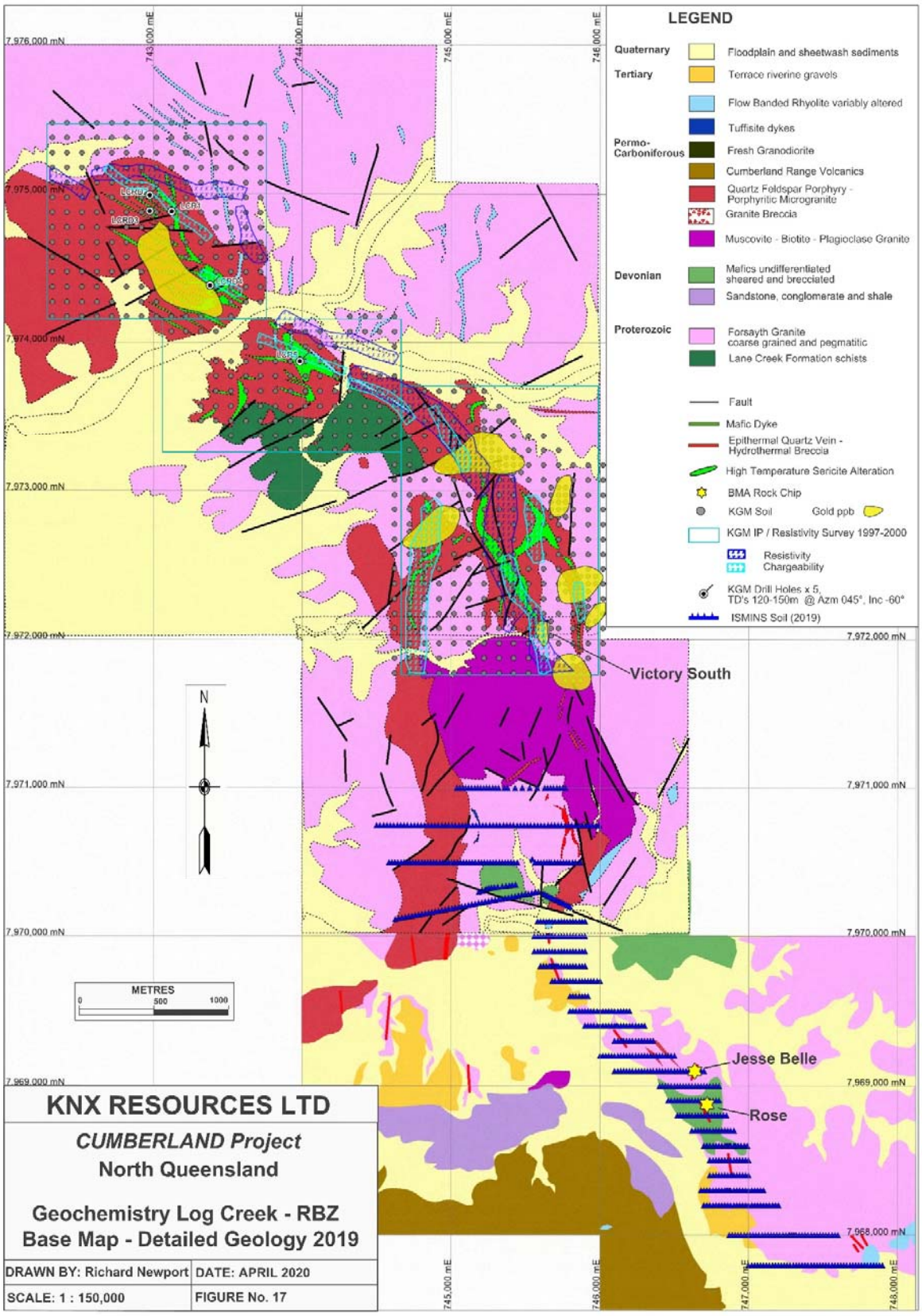

Figure 5. Detailed 2019 geological map showing BCA, KGM & Ismins geochemistry programs

6.4 2006 – 2007 Mega Georgetown Pty Ltd ("MGP") acquired a detailed (100m line spacing), airborne low level magnetic and radiometric geophysical survey over a large area in the Georgetown district, flying 40,270 line kilometres. Although the survey covered the Property, no follow-up work was carried out in the area.

Regional Geophysics acquired by MGP in 2007 covering the Property was extracted, processed and interpreted to provide a regional structural context to the identified prospects within the property (Figure 6).

The main structural lineaments derived from the aeromagnetics are as follows

- A regional major NW structure which bisects all geological terrains not noted on published maps. ISM have termed this structure the Gilbert River Transfer Structure (GRTS). This has localised a series of magnetic highs in the NW one of which is close to The Rock Prospect.
- Subsidiary NW structures which run parallel to the GRTS
- NE linears which transect Proterozoic metasediments to the east of the Cumberland Range Volcanics.
- The Cumberland Range Volcanics appear to structure bounded in the west by a NNE structure.
- EW structures which appear to be early and have been disrupted by later structures.
- Apparent low magnetic response of the Prestwood Microgranite that has been interpreted as a ring dyke.

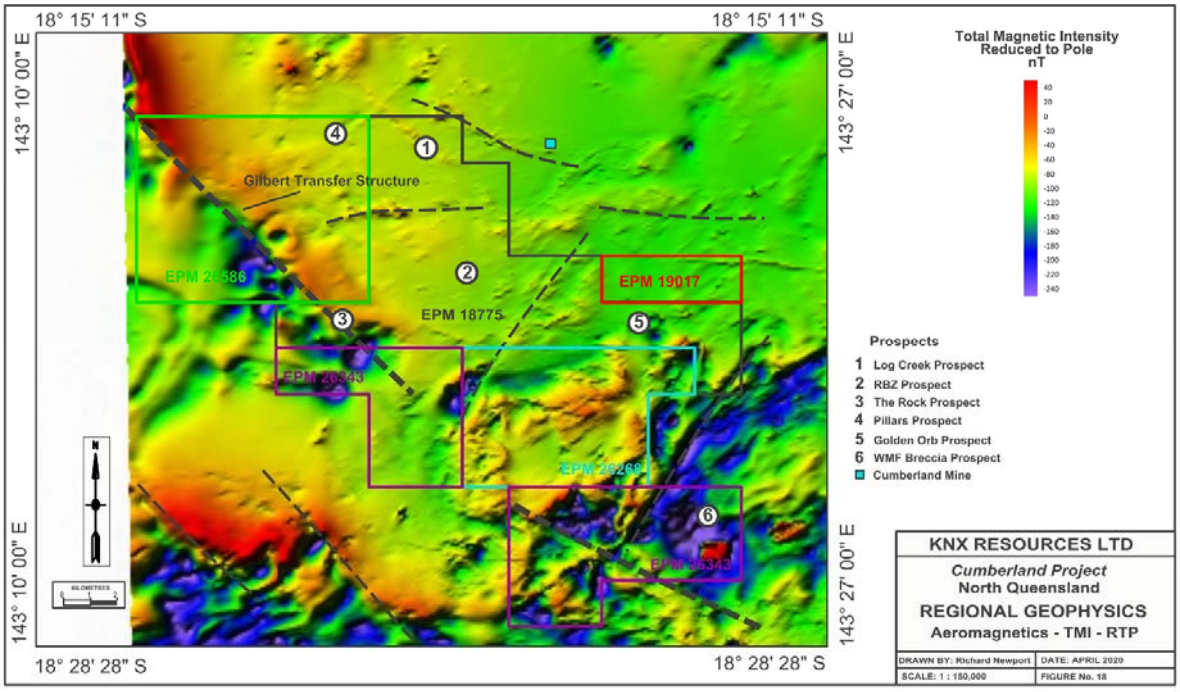

Figure 6. Regional Aeromagnetic TMI Reduced to Pole derived from MGP 2007

No additional historical information has been discovered and assessed for the writing of this report.

7.0 GEOLOGICAL SETTING and MINERALIZATION

7.1. Paleotectonic Setting and Temporal Range of the North Queensland Region

The North Queensland region (Figure 7) is made up of a Palaeoproterozoic to Mesoproterozoic cratonic basement, exposed in the Etheridge Province (containing the sub-provinces of Forsayth, Croydon, Savannah and Yambo). It represents the eastern remnant margin of the Proterozoic in Australian after the breakup (ca. 600-515Ma) of the Neoproterozoic Rodinia continent (Cawood, 2005).

The Etheridge Province is bounded to the east by the accretionary North Queensland Orogen , representing the northern part of the largely Paleozoic Tasman Orogen, which dominates eastern Australia, and is generally thought to have been produced by a long-lived accretionary convergent margin (Cawood, 2005; Collins and Richards, 2008; Glen, 2005). It consists of the Hodgkinson Province, containing the Broken River sub-province and may contain the Charters Towers and Barnard Provinces.

In the Early Carboniferous to latest Permian (ca 350-250 Ma) eastern Australia, including northern Queensland was dominated by extension and rifting, producing intracratonic basins and extensive magmatism. The magmatism is termed the Kennedy Association, consisting of widespread and voluminous extrusive and intrusive igneous rocks The geochemical composition of the igneous rocks is dominantly felsic. (Figure 7).

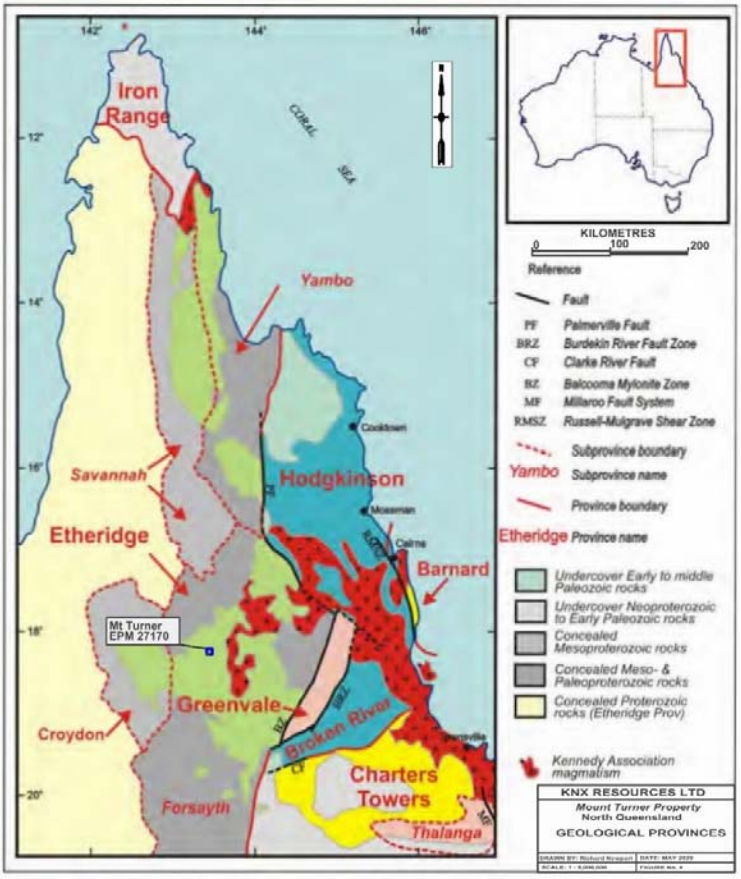

Figure 7 Geological Provinces North Queensland (modified from Kositcin, et al 2009)

7.2. Regional Geology

The Property lies in the western portion of the Georgetown Inlier, which makes up most of the Etheridge Province (Figure 8). The inlier occupies approximately 50,000 square kilometres to the west of the North Queensland coast between Cairns and Townsville. It consists of variably metamorphosed and deformed sedimentary and volcanic rocks of Palaeo- to Mesoproterozoic age, intruded by Mesoproterozoic granites.

The Proterozoic rocks have been intruded by Siluro-Devonian age I type granitic rocks during a period of subduction and underplating that is thought to have occurred during the Tabberabberan cycle of the Tasman Orogen (ca 430-380 Ma).

The Georgetown Inlier subsequently experienced a period of felsic intrusion and accompanied sub-aerial volcanism during the Carboniferous to Permian period (ca 350-230 Ma), associated with extension and rifting that developed during the Hunter-Bowen cycle of the Tasman Orogeny. This magmatism is termed the Kennedy Association, consisting of widespread and voluminous extrusive and intrusive igneous rocks, producing a number of large volcanic cauldron subsidence structures.

The Property covers a large outcrop of the Carboniferous-Permian felsic intrusive and extrusive igneous rocks in the western margin of the Georgetown Inlier (Figure 8)

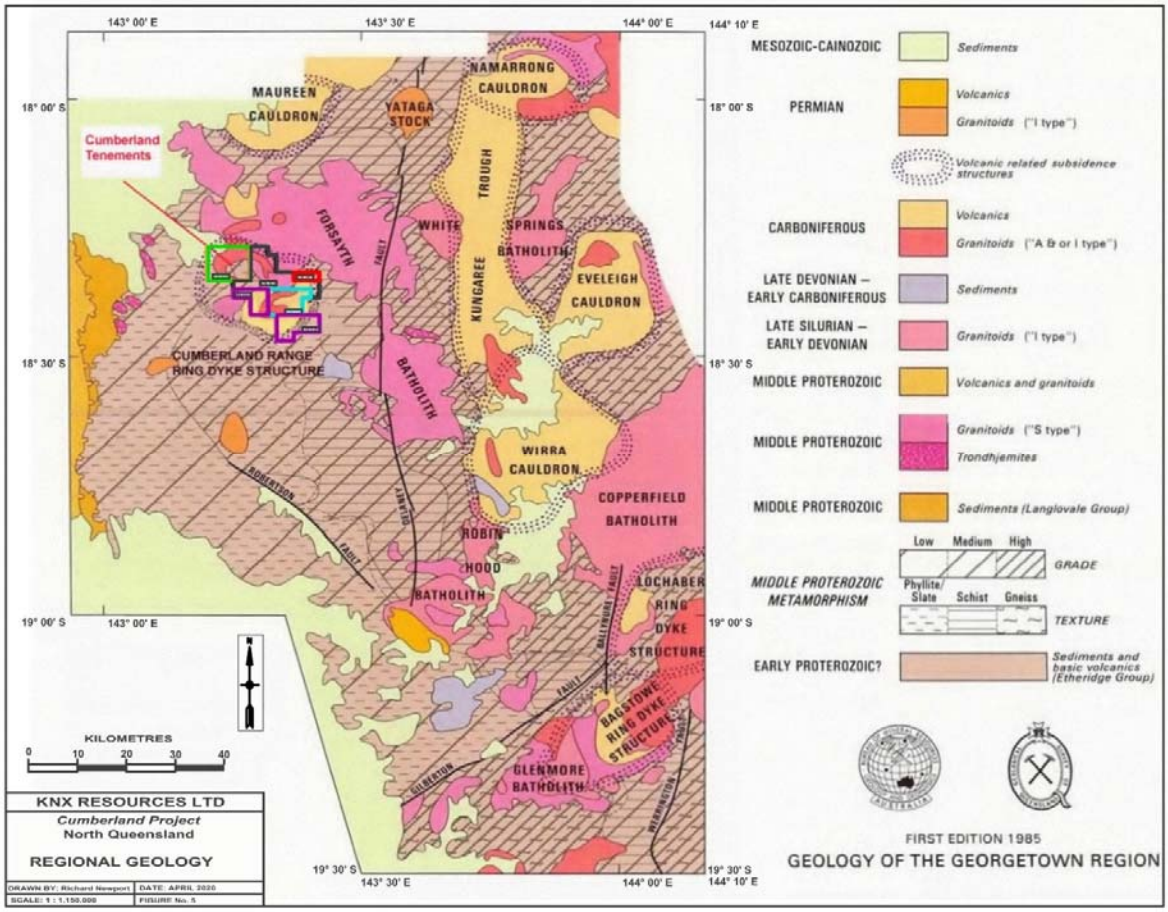

Figure 8 Geology of the Georgetown Inlier (modified from GA & GSQ map 1985)

7.3. Property Geology

Palaeo-Mesoproterozoic age metasediments and metabasic rocks, intruded by Mesoproterozoic granites, form the basement rocks in the Property (Figure 9).

The basement rocks have been intruded by Siluro-Devonian granites that crop out to the east of the Property, and are thought to underlie and have given rise to the Etheridge Goldfield at Georgetown, including the Cumberland Mine.

Carboniferous to Permian acid intrusives and their related sub-aerial volcanics of the Cumberland Range Volcanics cover much of the southern and western portions of the tenements. They form a partially preserved collapsed caldera structure in the south with more deeply eroded (probably older) dykes of high level (sub- volcanic) intrusives of microgranites and rhyolites to the north and west. These dykes host later rhyolite dykes and breccia veins and pipes.

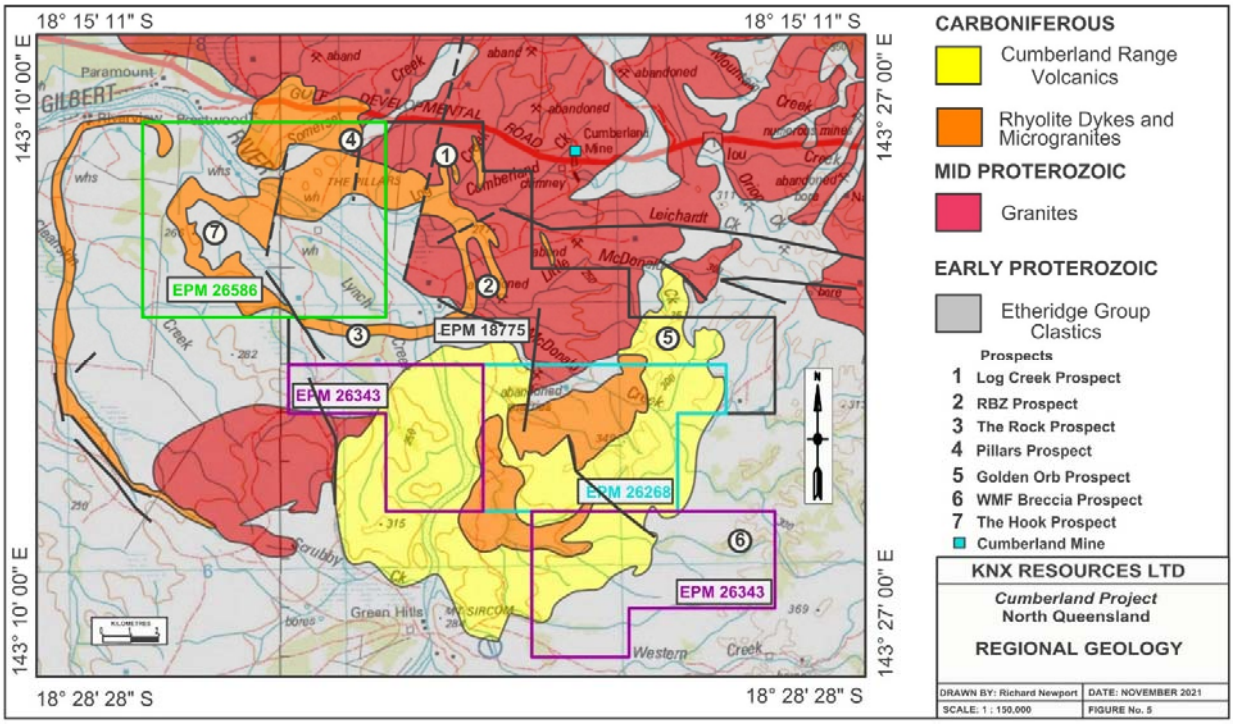

Figure 9 Property – Simplified Geology with Tenement Boundaries & Prospects

7.4. Mineralization

The gold-silver-copper prospects on the Property are associated with the altered and mineralised fault/vein structures that are in close proximity to the high level felsic intrusives. These high level intrusive systems are likely to have significant stockwork veins and breccia pipes associated with the sub-volcanic dykes and plugs at depth.

Several large fault structures are also present within the tenement, and these also host significant gold-silver-base metal mineralisation

Styles of mineralization occurring on the Property are identified in Chapter 8 Deposit Types, Section 8.2. prospects are compared to Intrusion Au - Ag Deposit Models. The locations of all seven (7) prospects are displayed in Figure 9 above, and discussed in more detail below.

The Author completed site visits of all the seven (7) prospects (Figure 5) listed in this report in June 2018, May 2019 and June 2021 as part of an independent review of the Property.

7.4.1 Log Creek: The prospect consist of Carboniferous-Permian quartz feldspar porphyry microgranite displaying high temperature sericite alteration Subsequent structural events, have contributed to emplacement of later rhyolite dykes which are variously altered and contain a high background of volatile elements accompanied by low temperature epithermal mineralisation which has overprinted the earlier phase sericite alteration event. Log Creek is considered to be a multiphase intrusive event in an epithermal back arc setting. The sulphide mineralization is contained in brecciated rhyolite dykes (Figure 10). These breccias have been silicified with strong iron staining observed between breccia fragments. Gold soil geochemistry defines the mineralization in a discontinuous northwest striking zone 4000m long by 750m wide. that included the historic Victory South workings that exhibits the same trend as the geological units. A northeasterly trend can also be seen corresponding to structural breaks in the mapped units refer (Figure 5).

Figure 10 Strongly brecciated rhyolite at Log Creek.

7.4.2 RBZ: Is a series of hydrothermal breccia zones associated with Carboniferous-Permian quartz feldspar porphyry dykes, representing a similar but shallower continuation of the Log Creek alteration system. RBZ is considered to be a multiphase breccia event in an epithermal back arc setting.

The RBZ is currently defined as occupying a 2.5 kilometre long structural zone which trends to the northwest from south of the Rose mine to MacDonald Creek, where it is dislocated by a north east fault zone that is occupied in places by flow banded, altered rhyolites (Figure 5). This northeast structure dislocates the quartz feldspar porphyry unit and induces significant brecciation in the Forsayth Granite. The RBZ zone trends in a northerly direction from the dislocation and is terminated in the north by another northeast trending shear zone. The southern extent of the KGM gold soil anomaly lies on strike to the north of this second structure and may represent a northerly extension of the RBZ prospect.

Figure 11. RBZ multiphase hydrothermal silica veining in breccias.

In the north the RBZ consist of low relief, friable and poorly outcropping coarse grained Forsayth Granite that has been interpreted to be significantly altered and contains a number of mineralised structures consisting of drusy quartz infilling hydrothermal breccia. On the eastern contact with a brecciated quartz feldspar porphyry, a series of sub-parallel ribbons of hydrothermal breccia containing visible sulphides associated with drusy quartz infill extend for a distance of 600 metres on the surface. The breccias are variably quartz veined with sulphides consisting as coarse aggregates of pyrite and arsenopyrite with subordinate sphalerite and brecciated fragments of ginguro banding (Figure 11). The breccias consistently display high levels of Ag (+300g/t) with increasing Au values to the south. This zone has been measured at 40 metres wide in the thickest zone but narrows off to the south to 1.5 metres (Figures 5, 22 and 23).

To the south and west of the breccias, a sub-cropping, semi-circular mafic intrusive of indeterminant age, intrudes the Forsayth granite. It's margins display chalcedonic veining trending northerly and on the western contact with the western outcrop of the quartz feldspar porphyry. This western contact extends to the south into brecciated granites with sub-cropping banded chalcedonic veins and corresponds to a +100ppb gold in soil anomaly and associated strong Ag anomaly,

South of MacDonald Creek, the RBZ contains a number of shallow workings were recorded over a discontinuous 900 metre long zone striking northwest (Figure 5, 22, 23). The old workings were rock chip sampled by previous companies returning values of up to 50 ppm Au and 140 ppm Ag. The southeast end of the RBZ includes the old workings of Jesse Bell and Rose (Figure 5)

7.4.3 The Rock: Carboniferous-Permian quartz feldspar porphyry microgranite and associated multi-phase quartz and quartz carbonate veining has intruded into Proterozoic Lane Creek grey carbonaceous siltstone. The siltstones are variably contact metamorphosed and extensively altered to sericite and clay. The alteration of the plutonic wall rock contact setting extends for approximately 1 square kilometre. Observed mineralisation at The Rock consists of breccias, bedding conformable quartz veins with sulphides, sericite filled fractures, and altered intrusive dykes showing multiphase quartz veining with scorodite, possibly pyromorphite and jarosite (Figure 12). Rock chips within the alteration zone returned assays of up to 4 g/t Au and 237 g/t Ag with high base metals.

Figure 12. The Rock prospect, grey carbonaceous siltstone & thin carbonate quartz veins

7.4.4 Pillars: Is located in a series of north south structures within Carboniferous-Permian quartz feldspar porphyry microgranite containing later, low temperature quartz veins and sulphides associated with brecciated porphyry in a linear structural zone. Rock chip sampling of the veins overall returned low results with the exception of two samples out of twenty six, one of which returned assay values of Au 2.94g/t and Ag 2.3g/t (Figure 13).

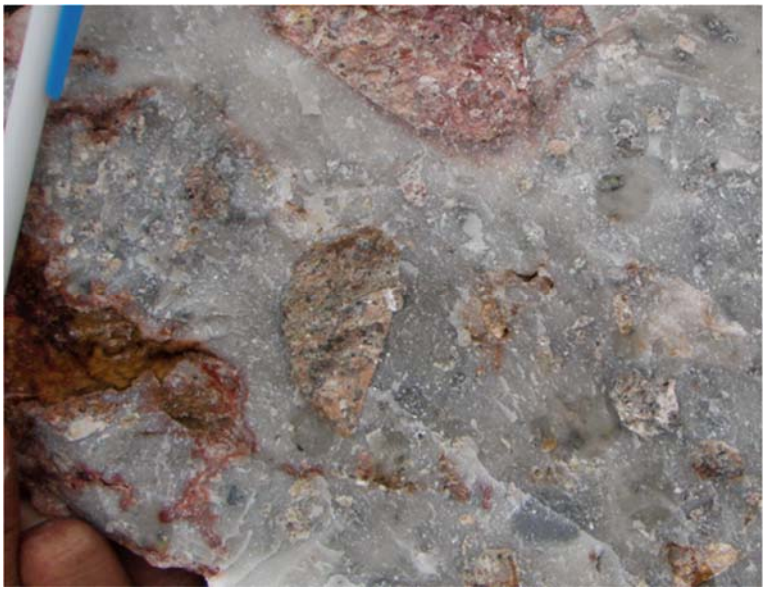

Figure 13. Vein breccia consisting of altered QFP in a matrix of cherty silica

7.4.5 Golden Orb: Carboniferous-Permian rhyolitic flow dome intrusive into rhyolitic volcanic pile associated with silicified jasperoidal breccias containing chalcedonic veins. Initial rock chip sampling returned low assay values of Au 0.1g/t Ag 0.5g/t (Figure 14).

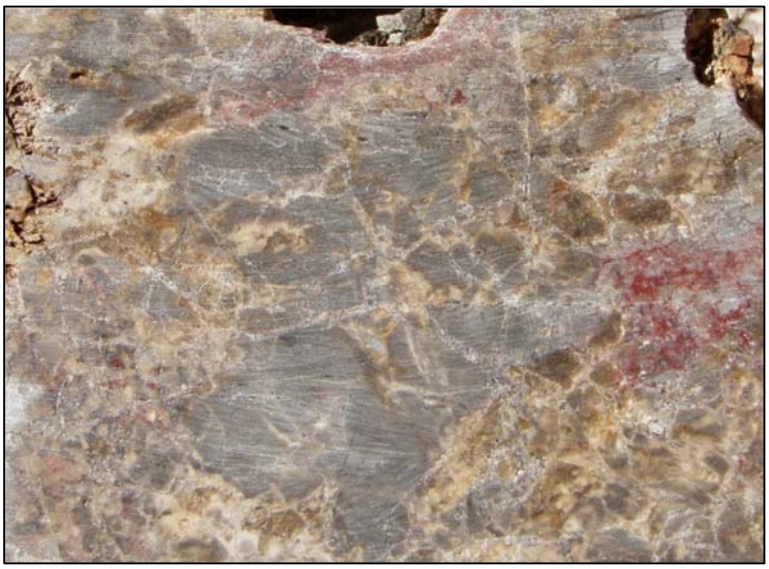

Figure 14. Silicified breccia cut by open space epithermal silica and jasperoidal silica.

7.4 6 WFM: Carboniferous-Permian volcanics and sediments that are brecciated, possibly confined to a pipe structure, associated with felsic intrusives and hydrothermal fluids. The fluids have introduced quartz-carbonate veining and sulphide mineralisation, along with variable alteration. Initial rock chip sampling returned the highest assay of Au 0.17g/t Ag 3.6g/t (Figure 15).

Figure 15. Multi-lithological breccia cut by gossanous veins.

7.4.7 The Hook: Carboniferous-Permian rhyolitic breccia quartz veined occurring over a wide area and generally consist of more resistant quartz veinlets crosscutting strongly altered porphyritic rhyolite breccia clasts. The dominant veins trend approximately 345 ^{0} magnetic and located within coarse grained porphyritic rhyolite. Some samples showed weakly developed ginguro banding within white multi-phase chalcedonic quartz surrounding illite- muscovite altered porphyritic rhyolite breccia clasts (Figure 16).

Figure 16. Weakly developed ginguro banding, assayed 9.9g/t Au and 2160 g/t Ag.

8.0 DEPOSIT TYPES

8.1. Intrusion Related Gold Silver Deposits

The principal deposit types targeted in the Property are intrusion related gold and silver mineralization. The style and depth of formation of gold-silver deposits in metal bearing igneous system varies from distal (epithermal) through intermediate (porphyry) to proximal (plutonic). These deposits can be accompanied by economic concentrations of gold, silver, copper, base and other valuable metals. Epithermal porphyry and plutonic ore deposits develop in response to plate tectonic processes, typically as partial melting related to subduction gives rise to magmatism mainly within compressional and locally transpressional, linear magmatic arcs extending into the back arc extensional settings. Magmatic arcs are distinguished between island arcs underpinned by oceanic crust and continental arcs formed on continental plate margins (Pirajno 1992). Island arc igneous rocks tend to be intermediate to felsic in composition, whereas continental arcs and back arc igneous rocks tend to be more fractionated and felsic in composition (Figure 17).

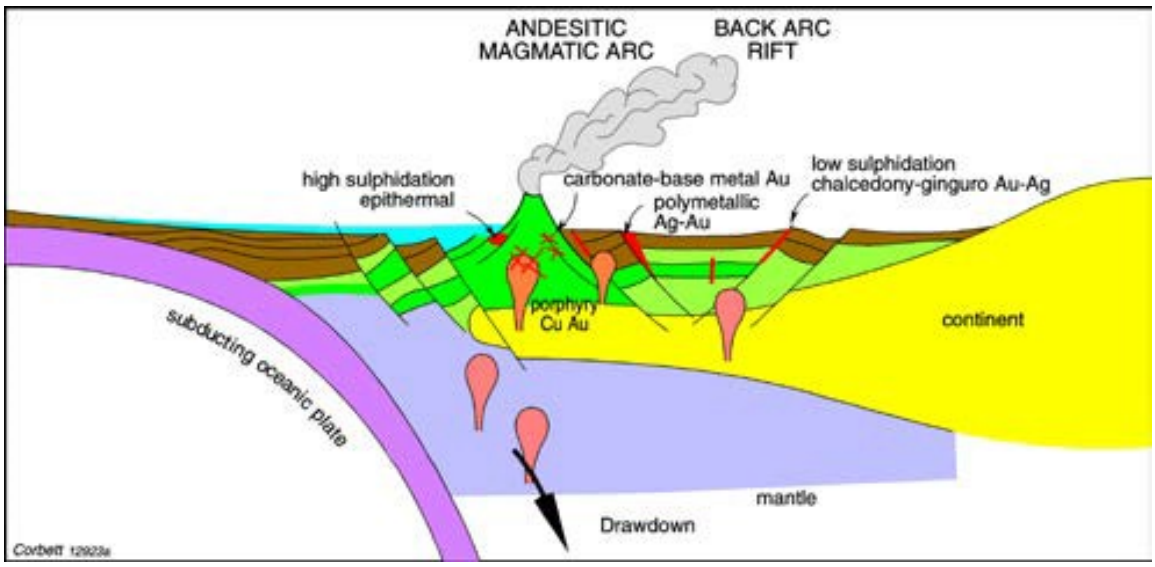

Figure 17 Conceptual cross section through a subduction zone, magmatic arc and back arc showing the settings of epithermal and porphyry deposit formation (After Corbett 2018)

These epithermal porphyry and plutonic ore deposit categories can be further broken down and described as follows;

Epithermal Systems

Epithermal systems are split into high and low sulphidation systems, based on two very different physical and chemical evolving fluids. They commonly occur between surface and 2 kilometres depth above an observed or interpreted igneous intrusion (Figure 18).

High sulphidation systems can be considered as a closed system with relatively low interaction with surrounding rocks and their contained connate and meteoric waters, as they rise from the magma to the point of deposition. As they rise, they become more acidic in nature as the high sulphur content (SO_2) exsolves from the fluid to produce acid (H_2SO_4), and hydrogen sulphide (H_2S) in a predominantly saline fluid (Rye et al., 1992). Wall rock alteration, ore and gangue mineralogy reflect the acid nature of the high sulphidation system with zoned advanced argillic, alunite, kaolin and illite alteration minerals, accompanying abundant pyrite, enargite, covellite, chalcocite, bornite and chalcopyrite. Economic metal concentration tends to be gold (Au) > silver and copper (Ag+Cu).

Economic metal recovery tends to be better in the oxide zone, becoming refractory at depth (Corbett & Leach 1998).

Low sulphidation systems can be considered as an open system with relatively higher interaction with surrounding rocks, and their contained connate and meteoric waters as they rise from the magma to the point of deposition. The low sulphidation fluids are largely neutral magmatic-connate-meteoric in composition, consisting of (CO_2) and chlorine radical (Cl) with lower concentrations of sulphur dioxide (SO_2) and hydrogen sulphide (H_2S). Wall rock alteration, ore and gangue mineralogy reflect the neutral nature of the low sulphidation systems with early propylitic and zoned argillic, illite, quartz, carbonate and pyrite alteration minerals, accompanying low concentration of pyrite (< 5%), sphalerite, galena, chalcopyrite and silver (Ag) sulphosalts. Economic metal concentration tends to be gold (Au) > silver (Ag) in magmatic arc settings and the reverse in extensional back arc settings. Economic metal recovery is good but tends to be poorer when gold (Au) is bound up in fine grained arsenic (As) bearing pyrite. (Corbett & Leach 1998).

The low sulphide system is further subdivided into two sub-systems based on the modification of their hydrothermal fluid composition with the wall rocks and the connate and meteoric water. They start off as neutral-chloride fluids at the magma source and evolve as they ascend and interact with surrounding rocks and their contained connate and meteoric waters, producing two types of fluid end members, bicarbonate and acid sulphate.

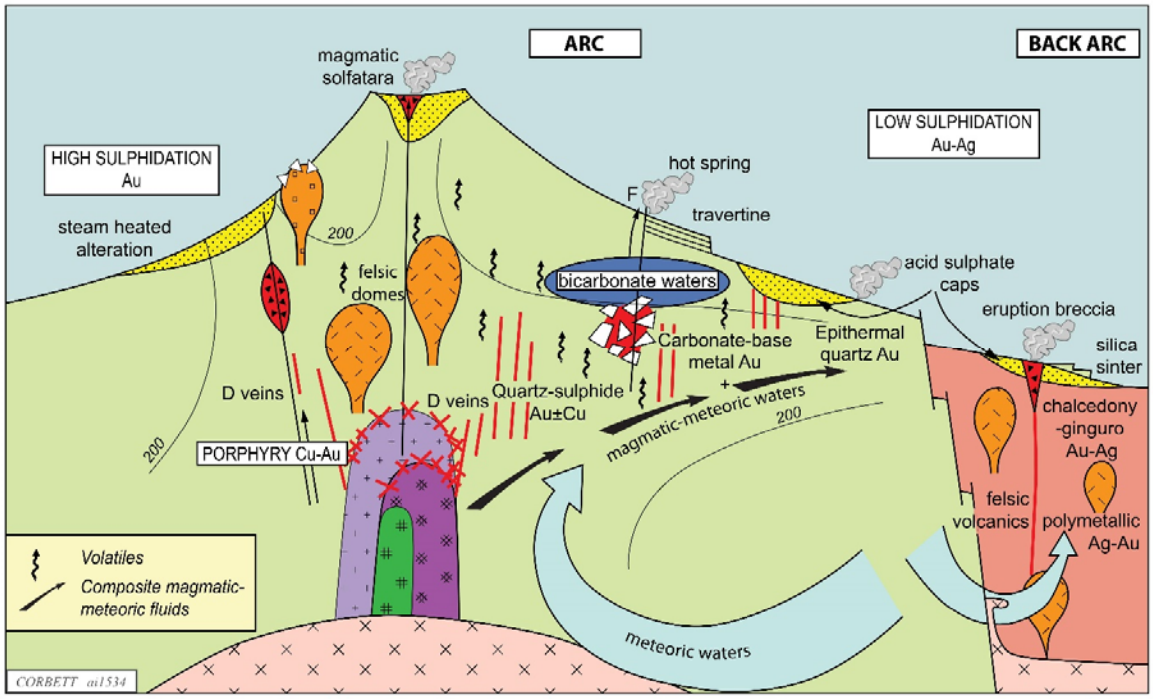

Figure 18 Conceptual cross section showing the magmatic arc and back arc geothermal systems displaying the different epithermal systems and porphyry deposit formation (After Corbett 2018)

Porphyry Copper

The term porphyry copper deposit in current usage refers to the porphyritic texture of predominantly calc-alkaline and the less common alkaline intrusive igneous rocks, which host dominantly copper (Cu) with or without economic concentrations of molybdenum (Mo) and gold (Au) and less commonly silver (Ag) mineralization. These metals are primarily contained in sulphides comprising pyrite, chalcopyrite bornite and molybdenite, that occur as disseminations, in breccia fill, stockwork and sheeted quartz-sulphide veins. The best mineralization may occur in the upper margins of the

intrusions or as vertically attenuated spine like stocks and apophyses, derived from deeper magmatic sources, rising to a depth of 2-4 kilometres below the palaeosurface. Porphyry copper deposits typically display zoned hydrothermal alteration and vein styles, but better grade deposits are more likely to be associated with multiple intrusive events, producing polyphase mineralization, resulting in complex zoned relationships of alteration and veining.

Skarns

Skarn deposits are the result of metasomatic alteration of carbonate bearing wall rocks affected by contact metamorphism that has resulted from the intrusion of igneous rocks. This style of mineralization is commonly associated with porphyry copper – gold (Cu-Au) intrusions, sharing the same mineralizing fluids that gave rise to the porphyry Cu-Au deposits. These deposits are typically zoned form proximal copper rich to distal gold rich mineralization. This zonation is similar to the porphyry-epithermal paragenesis.

8.2. The Property prospects compared to Intrusion Au - Ag Deposit Models

There are seven (7) major prospects in the Property area (Figure 5 & 19), all of which show characteristics of epithermal to porphyry breccia association and possibly wall rock porphyry mineralization (Figure 19).

1Log Creek Prospect; Carboniferous to Permian quartz feldspar porphyry microgranite displaying high temperature sericite alteration Subsequent structural events, have contributed to Emplacement of rhyolite dykes which are variously altered and contain a high background of volatile elements accompanied by low temperature epithermal mineralisation which has overprinted the earlier phase sericite alteration event. Log Creek is considered to be a multiphase intrusive event in an epithermal back arc setting.

2RBZ Prospect; Is a series of hydrothermal breccia zones associated with Carboniferous to Permian quartz feldspar porphyry dykes, representing a similar but shallower continuation of the Log Creek alteration system. RBZ is considered to be a multiphase breccia event in an epithermal back arc setting.

3The Rock Prospect; Carboniferous to Permian quartz feldspar porphyry microgranite intrudes into Proterozoic Lane Creek sediments consisting of fine grained sediments variably contact metamorphosed and extensively altered to sericite and clay with associated multi-phase quartz veining. The Rock is considered to be in a plutonic wall rock contact setting.

4Pillars Prospect; Carboniferous to Permian quartz feldspar porphyry microgranite containing later, low temperature quartz veins and sulphides associated with brecciated porphyry in a linear structural zone. Pillars is considered to be similar to the RBZ in it's setting.

5Golden Orb Prospect: Carboniferous to Permian rhyolitic flow dome intrusive into rhyolitic volcanic pile associated with silicified jasperoidal breccias containing chalcedonic veins Golden Orb is considered to be a shallow epithermal event in a back arc setting.

6WMF Breccia Prospect (Wait for Me); Carboniferous to Permian brecciation, possibly confined to a pipe structure, associated with felsic intrusives and hydrothermal fluids, that have introduced quartz-carbonate veining and sulphide mineralisation, along with variable alteration. WMF is considered to be multiphase breccia pipe event in an epithermal back arc setting

7. The Hook is considered to be similar in setting to the Pillars.

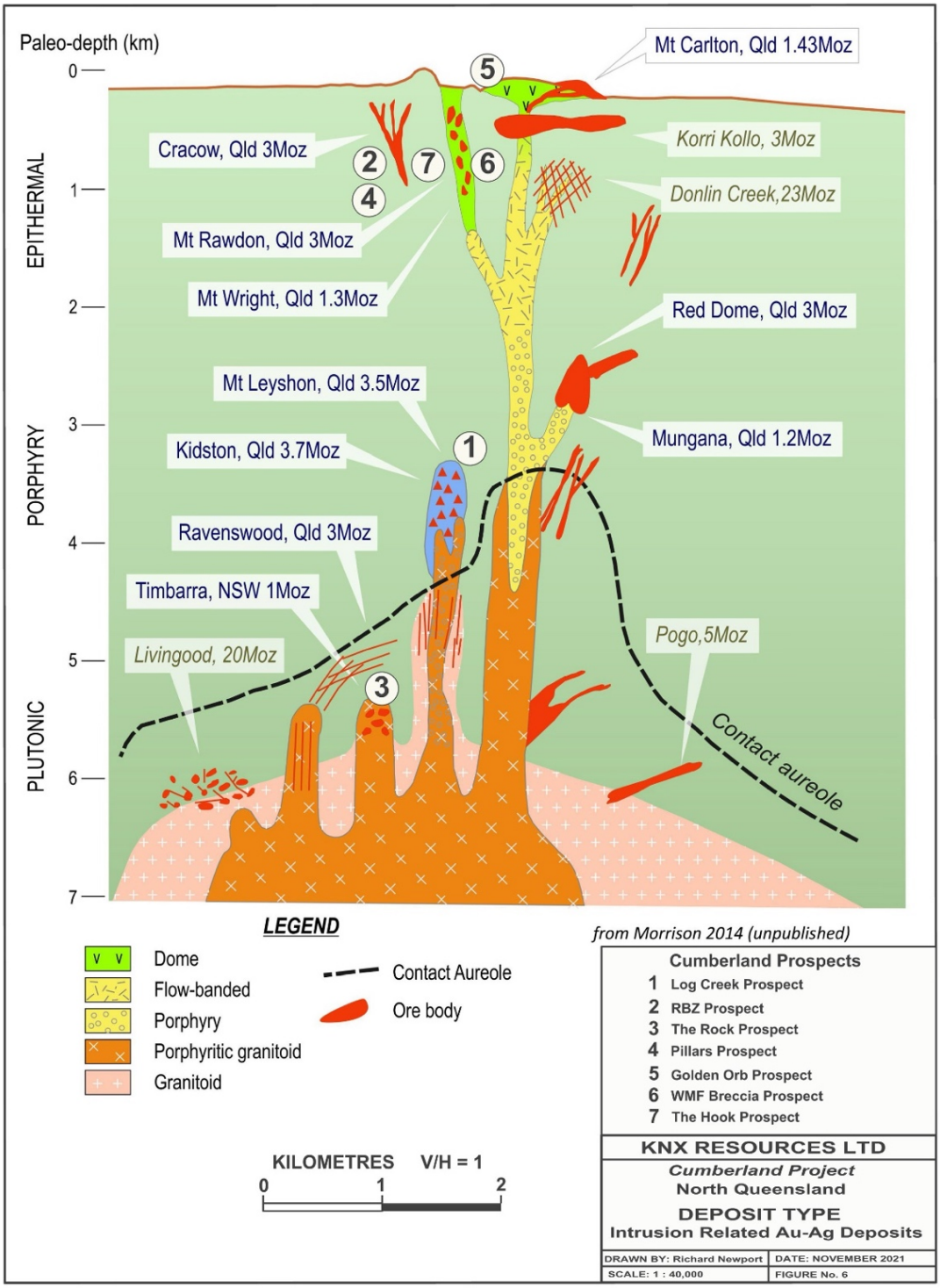

Figure 19 Conceptual cross section showing the Intrusive Related Gold – Silver Mineralization Model, with a number of Eastern Australian deposits and the Property Prospects superimposed.
(Modified from Morrison, G. W., 2014 published In Lisitsin et al 2017)

9.0 EXPLORATION

Essex Minerals Inc has not conducted any exploration on the Property on its own right.

Exploration undertaken on this property and the subject of this report, was conducted solely by ISM, but funded by Essex Minerals Inc after the signing of an earn-in joint venture on May 1, 2020 (refer Chapter 4 of this report).

ISM commenced exploration after the granting of EPM 18775 and 19017 (subsequently relinquished), conducting reconnaissance exploration to confirm the high-grade assays of gold and silver recorded from previous explorers (Spencer, 2013). ISM carried out detailed mapping, rock chip and soil geochemistry and acquisition of LiDAR geophysics. Previous staged exploration from initial reconnaissance to detailed geochemical sampling and mapping, in combination with interpretation of the MGP magnetics and radiometrics, coupled with structural geology interpretation from the LiDAR, allowed ISM to focus on key areas of interest (Spencer 2020). The exploration culminated in a drilling program conducted in 2020 for a total of 1,851.6m of diamond core drilling at RBZ.

The key points gained from ISM exploration are:

- Regional association of Ag/As stream sediment geochemistry and the lack of follow up of anomalism by previous operators

- Recognition of epithermal style mineralisation associated with significant surface values spatially associated with the interpreted Carboniferous to Permian intrusives.

- Recognition of high-level epithermal veins associated with the Carboniferous to Permian Cumberland Volcanics.

- Interpretation of MGP magnetic and radiometric data with respect to the identified prospects and regional structure.

- Acquisition of Lidar leading to a detailed understanding of the structure and lithological association of the observed surface mineralisation.

- ISM completed 1,851.6m of HQ diamond drill coring on the RBZ prospect which successfully intersected gold and silver mineralization (the details of this drilling are reported in Chapter 10 of this report). Analysis of the drilling results included half core sampling and assay for gold by 50g fire assay and multielement ICP AES analysis, detailed petrology and structural analysis of the core.

- A new prospect was identified at the Hook (7) in EPM 26586 (Figure 20) generated by interpreting structure from the Lidar data. Results of rock chips have indicated a series of epithermal quartz infilled breccia zones displaying sulphides at surface with appreciable gold and silver values occurring along and adjacent to a NW faulted contact between porphyritic intrusive rhyolites of Carboniferous to Permian age and Proterozoic sediments of the Lane Creek Formation

9.1 LiDAR Digital Terrain Survey acquired by ISM in 2018 covering the Property was commissioned in order to provide a detailed digital terrain model on which to interpret regional and detailed structural geology with respect to the identified prospects within the property (Figure 20).

ISM reported that the LiDAR data greatly assisted in the subsequent detailed mapping programs carried out on the prospects within the property (Spencer 2020).

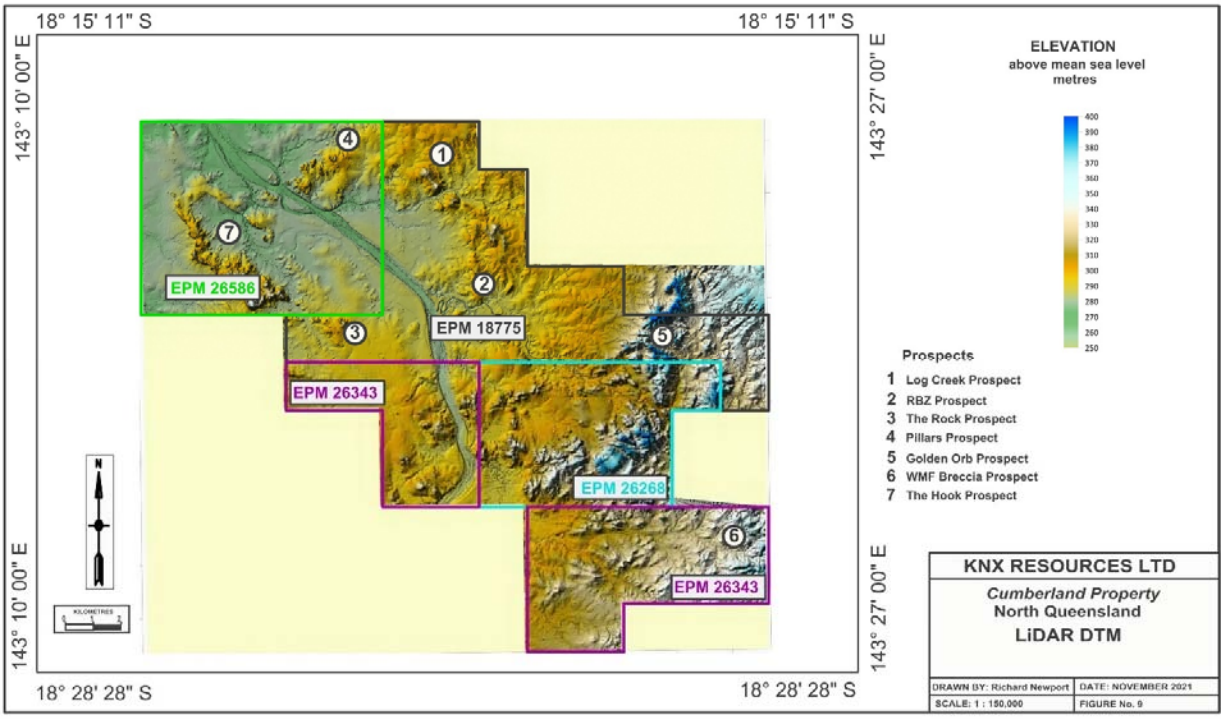

Figure 20. Property 2018 LiDAR Digital Terrain Model

There are seven (7) major prospects identified in the Property area (marked from 1 to 7 in Figures 9, 19 & 20), all of which show characteristics of epithermal to porphyry breccia association and possibly wall rock porphyry mineralization (Figure 19).

9.2 Log Creek Prospect (1) is a Carboniferous to Permian quartz feldspar porphyry microgranite displaying high temperature sericite alteration. Subsequent structural events have contributed to emplacement of later rhyolite dykes which are variously altered and contain a high background of volatile elements accompanied by low temperature epithermal mineralisation which has overprinted the earlier phase sericite alteration event. Log Creek is considered to be a multiphase intrusive event in an epithermal back arc setting.

ISM carried out detailed analysis of KGM's exploration of the Log Creek Prospect (Prospect [1] in Figure 20 and Figure 21), identifying the mapped units, alteration, mineralization, drill hole collars and assessment of the exploration potential of the system from Log Creek to Victory South. Sampling by ISM of the northwest trending quartz veins and altered rhyolites at Log Creek contained weakly anomalous gold, weak to moderately anomalous silver and strongly anomalous lead and arsenic, consistent of a mineralizing event with an epithermal signature.

A broad northwest trending gold in soil anomaly defined by previous explorer KGM, that included the historic Victory South workings, exhibits the same trend as the geological units. Victory South returned similar results, but a late stage, northeast trending quartz vein returned values of 72.8 ppm Au, 101

ppm Ag, 2,000ppm Cu, 8.9% Pb, 7,700ppm Zn and 1,720ppm As.

The DC/IP survey conducted by previous explorer KGM demonstrated a similar trend to the geochemistry and the geology (Figure 21), with a notable exception being the chargeability anomaly following the western contact between the quartz feldspar porphyry and the Proterozoic granite.

KGM drilled five holes to the northeast into the resistivity-IP anomaly (results of which are discussed in the following chapter 10).

Considering that KGM drilled to the northeast, focusing on the northwest trending alteration, it is very likely that they did not test the later stage northeast trend. It is also apparent that KGM drilled the DC/IP anomaly rather than modest gold anomaly that occurs to the southwest behind the drill collars.

ISM concluded that the Log Creek - Victory South prospect appears to be under drilled.

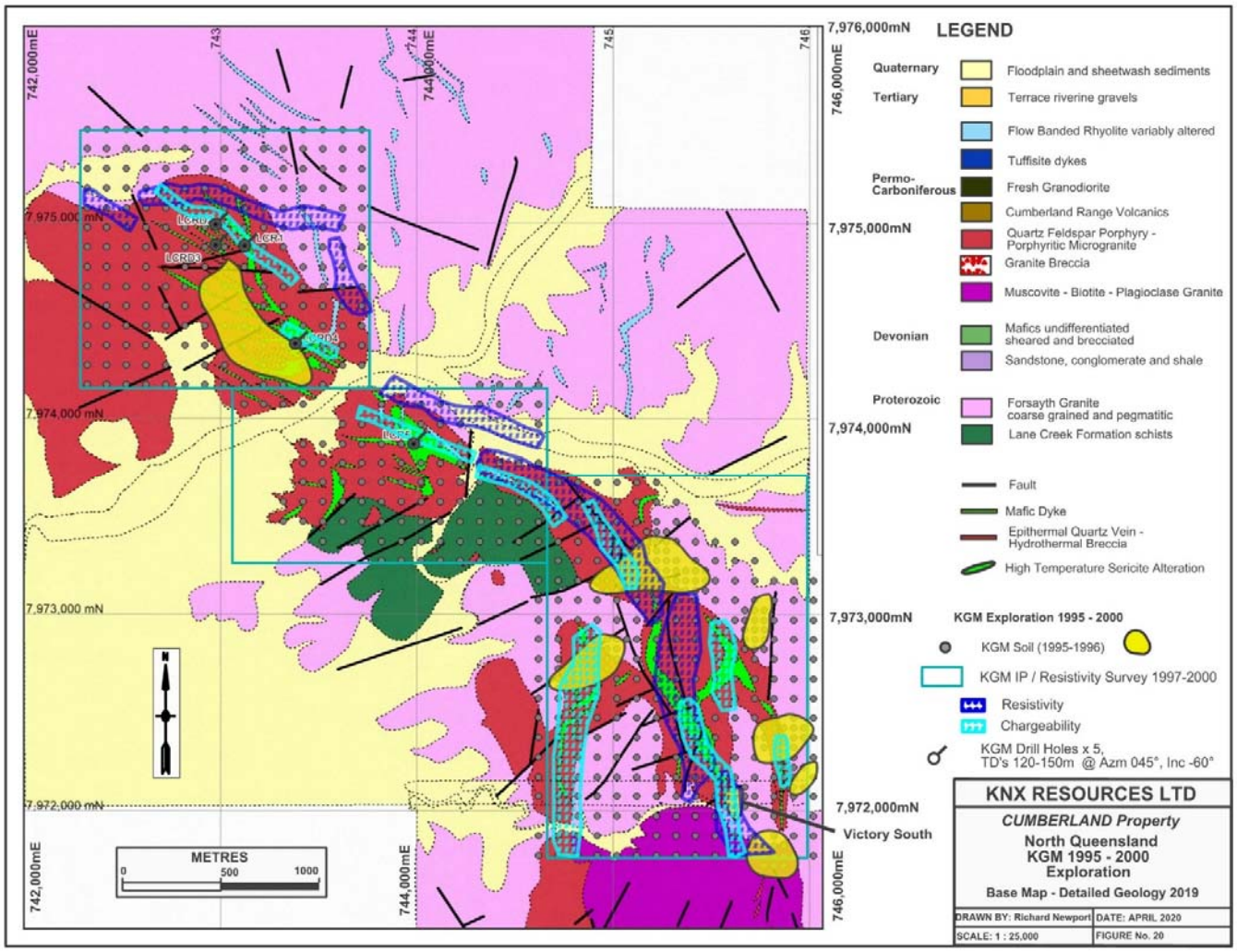

Figure 21. Log Creek Detailed Geology with KGM Exploration 1995 - 2000

9.3 RBZ Prospect (2); Is a series of hydrothermal breccia zones associated with Carboniferous to Permian quartz feldspar porphyry dykes, representing a similar but shallower continuation of the Log Creek alteration system. RBZ is considered to be a multiphase breccia event in an epithermal back arc setting.

The RBZ is currently defined as occupying a 2.5 kilometre long structural zone which trends to the northwest from south of the Rose mine to MacDonald Creek, where it is dislocated by a north east fault zone that is occupied in places by flow banded, altered rhyolites (Figure 22). This northeast structure dislocates the quartz feldspar porphyry unit and induces significant brecciation in the Forsayth Granite. The RBZ zone trends in a northerly direction from the dislocation and is terminated in the north by another northeast trending shear zone. The southern extent of the gold soil anomaly identified by the previous explorer KGM, lies on strike to the north of this second structure and may represent a northerly extension of the RBZ prospect.

In the north, the RBZ consist of low relief, friable and poorly outcropping coarse grained Forsayth Granite which has been interpreted to be significantly altered and contains a number of mineralised structures consisting of drusy quartz infilling hydrothermal breccia. ISM soil sampling gold and silver anomalies spatially correspond to these breccia zones. On the eastern contact with a brecciated QFP, a series of sub-parallel ribbons of hydrothermal breccia containing visible sulphides associated with drusy quartz infill extend for a distance of 600 metres on the surface. The breccias are variably quartz veined with sulphides consisting as coarse aggregates of pyrite and arsenopyrite with subordinate sphalerite and brecciated fragments of ginguro banding. The breccias consistently display high levels of Ag (+300ppm) with increasing Au values to the south. Rock chip sampling at 50 metre intervals averaged 2.1ppm Au and 379ppm Ag This zone has been measured at 40 metres wide in the thickest zone but narrows off to the south to 1.5 metres (Figures 22, 23 and 24).

To the south and west of the breccias, a sub-cropping, semi-circular mafic intrusive of indeterminant age, intrudes the Forsayth granite. Its margins display chalcedonic veining trending northerly and on the western contact with the western outcrop of the quartz feldspar porphyry. This western contact extends to the south into brecciated granites with sub-cropping banded chalcedonic veins and corresponds to a +100ppb gold in soil anomaly and associated strong Ag anomaly,

South of MacDonald Creek the RBZ contains a number of shallow workings identified over a discontinuous 900 metre long zone striking northwest (Figure 22, 23, 24). The area is located is a subdued topographic area between MacDonald and Little MacDonald Creek. Little outcrop is observed as much of the area is covered by Recent sediments from the two drainages. The vein orientation trends to the northwest but disappears under recent sediments at the confluence of MacDonald and Little MacDonald creeks. At the Rose, the veins swing to a southerly strike where they are cut by a major northwest structure, before disappearing under Tertiary terrace river gravels.

Results of the ISM rock chip sampling of the RBZ prospect are summarized in the following table and displayed in Figures 21 (gold) and Figure 22 (silver),

The old workings were rock chip sampled by previous companies returning an average for all samples of :

Northwest group (746025mE/7969145mN):	33.9 ppm Au & 35.5 ppm Ag (4 samples)
Southeast group (746486mE/7968862mN)	51.3 ppm Au & 146.1 ppm Ag (9 samples)

The assay results from the ISM rock chip sampling confirmed that the RBZ Prospect contains a series of epithermal veins with high to very high values of gold and silver. One sample from the Silver vein assayed at 5.48 ppm Au and 1.265% Ag (400 oz).

Table 9 - 1 Average gold and silver assays from selected rock chips collected by ISM

VEIN NAME	LOCATION GDA94 UTMZ54S EAST m	NORTH m	STRIKE LENGTH m	WIDTH m	NUMBER of SAMPLES	AVERAGE ASSAY ppm Au	Ag
Robs	745770	7970700	600	2.0	15	2.1	379
Little Hill	745655	7970000	100	0.5	7	7.9	322
Little MacDonald Ck	746780	7969475	200	0.75	6	16.0	141
Lees	746110	7969380	120	3.0	4	20.8	73
Jesse Bell	746630	7969085	140	0.5	4	17.3	330
MacDonald Creek	746080	7969085	30	2.4	4	10.5	85
Jims	746475	7969050	130	0.5	3	27.0	260
Rose	746705	7968860	300	1.5	8	30.5	327
Silver	746880	7968380	450	1.0	10	8.3	1,967

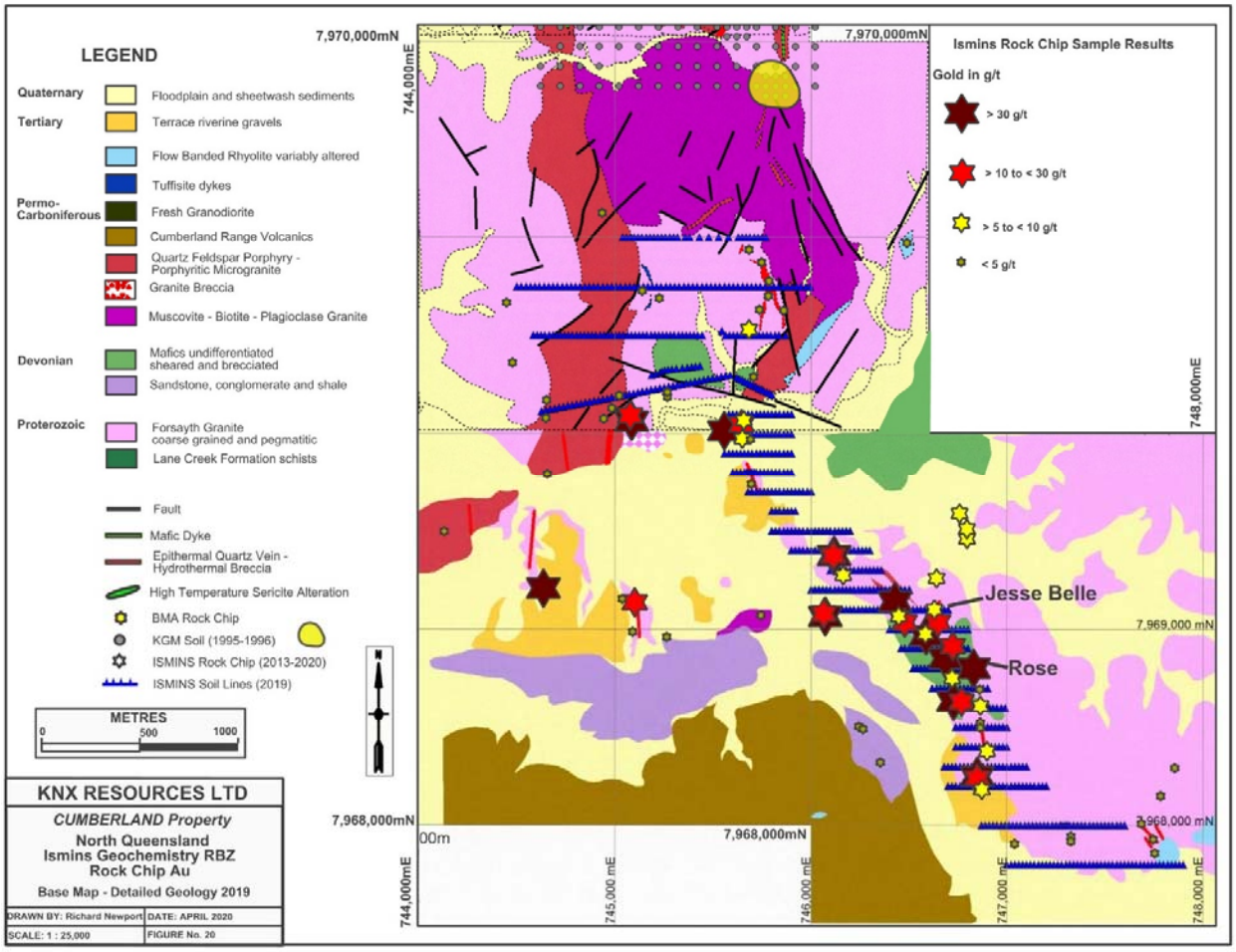

Figure 22. RBZ Detailed Geology Rock Chip Geochemistry - Gold

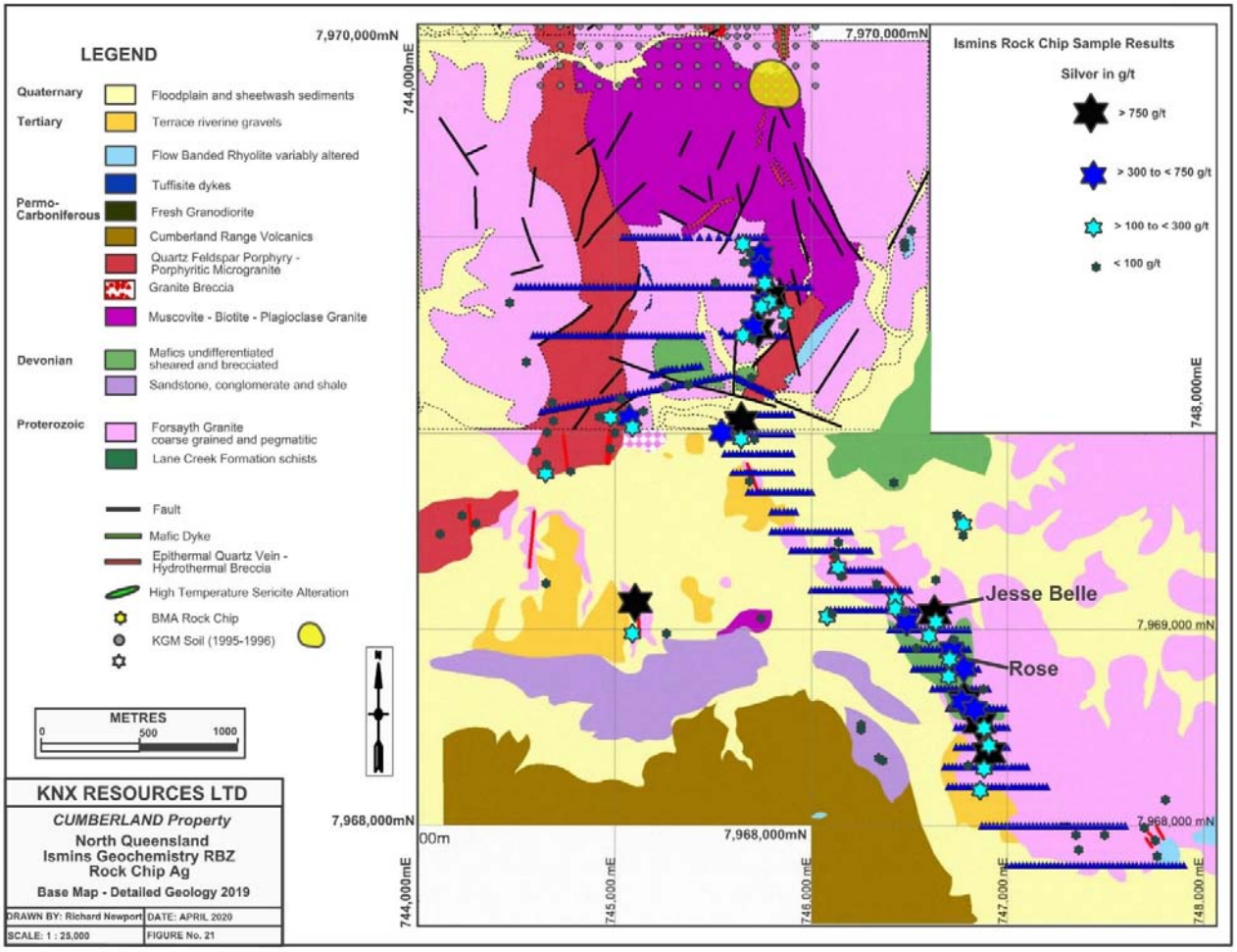

Figure 23. RBZ Detailed Geology Rock Chip Geochemistry – Silver

Soil sampling by ISM of the RBZ prospect was based on a nominally east west grid covering 3000 metres of strike length (Figure 24). A total of 647 samples representing 13,481 linear metres was collected generally spaced at 20 metre intervals, obvious mineralisation was sampled at 10metre intervals. Samples were screened at minus 80 mesh at certified laboratory ALS in Brisbane Queensland, prior to assay by ICP-MS. A description of bedrock lithologies were made at each sample site where outcrop was noted.

The geochemical association of Au-Ag-As were noted previously as having the most significance in distinguishing epithermal mineralisation as distinct from earlier phase mesothermal orogenic mineralisation which characteristically has an association of Au -Pb -Zn +/- Ag, Cu, Bi. The Au-Ag association was individually plotted on geology for data ranges as indicated in Figure 24, noting that base metals were generally low, consistent with epithermal style mineralisation.

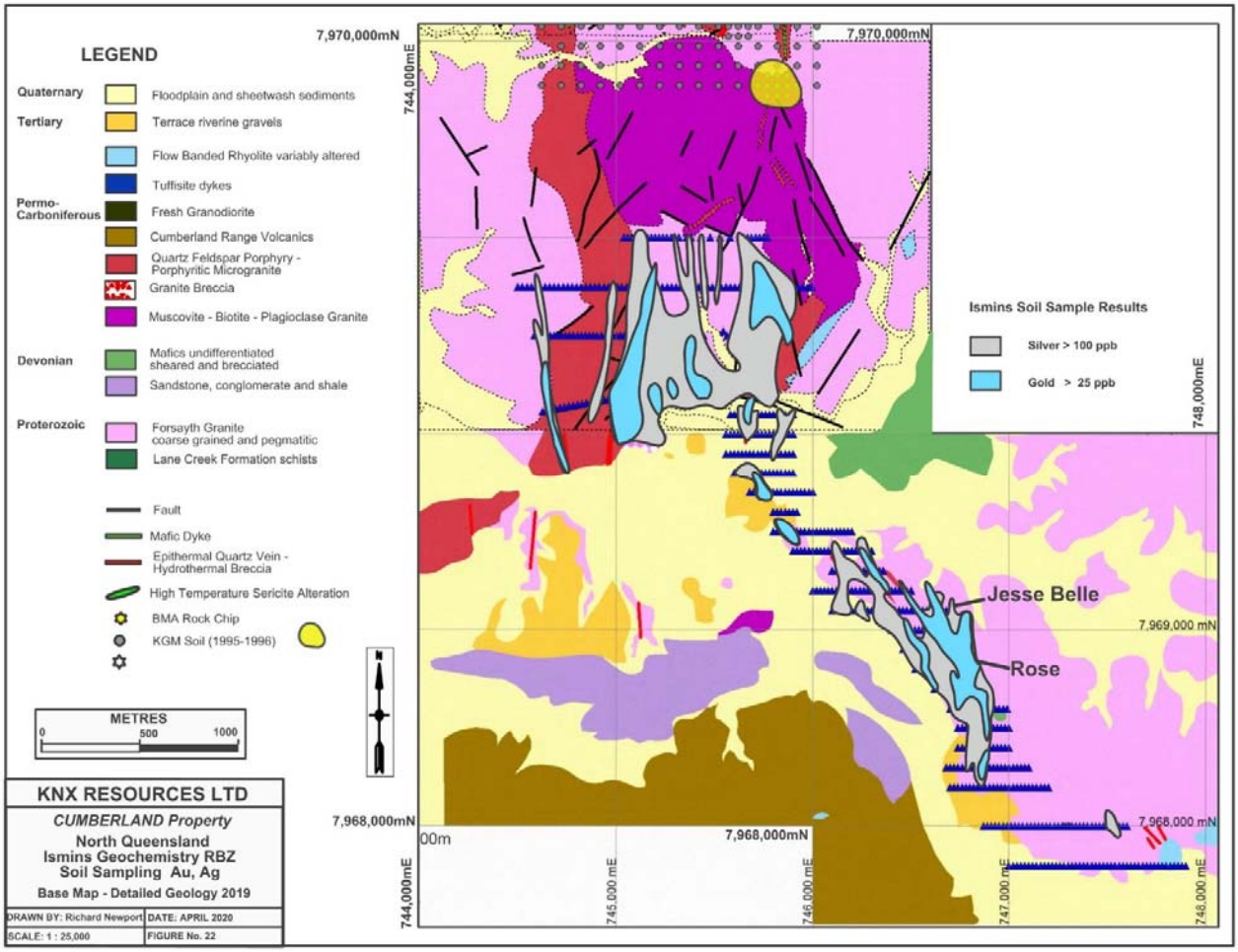

Figure 24. RBZ Detailed Geology Soil Geochemistry – Gold and Silver

9.4 The Rock Prospect (3); Consists of Carboniferous to Permian quartz feldspar porphyry microgranite intruding into Proterozoic Lane Creek fine grained sediments displaying variably contact metamorphic textures and extensively alteration to sericite and clay with associated multi-phase quartz veining. The Rock is considered to be in a plutonic wall rock contact setting.

ISM mapped The Rock prospect at 1:5000 scale after collecting a number of rock chip samples which returned anomalous values of silver up to 96 ppm.

The mapping identified a series of plug shaped mafic bodies intruding the Lane Creek Formation that appear to be older than the subsequent intrusions of the Carboniferous to Permian Prestwood Microgranite Figure 25

Observed mineralisation at The Rock consists of breccias, bedding conformable quartz veins with sulphides, sericite filled fractures, and altered intrusive dykes showing multiphase quartz veining with scorodite, possibly pyromorphite and jarosite

ISM conducted reconnaissance soil sampling of the Rock prospect on three lines (Figure 25) for a total of 1266 metres and 62 samples, Soil samples were taken at a nominal 20 metre spacing. Samples were screened at minus 80 mesh at certified laboratory ALS in Brisbane Queensland, prior to assay by ICP-MS.

Gold showed only spot high values with a peak of 23 ppb. There was a good correlation between high Ag, spot Au and coincident As + Pb + (Sb, Mo).

Silver values show consistent, coherent anomalous values, with almost all values greater than 150ppb. The silver anomaly greater than 500ppb is primarily distributed along soil line 3 to the southeast and around the highest topography.

A comparison of the anomalous soil results with the historic gold-silver rock chip sampling did not match the location of the higher rock chip results around soil line 1, however, rock chips containing Au conformed to the coincident zones of Ag -As-Pb.

The soil data is presented showing gold and silver distribution greater than 10ppb Au and 500ppb Ag, plotted on a base geology map at 1:5000 scale.

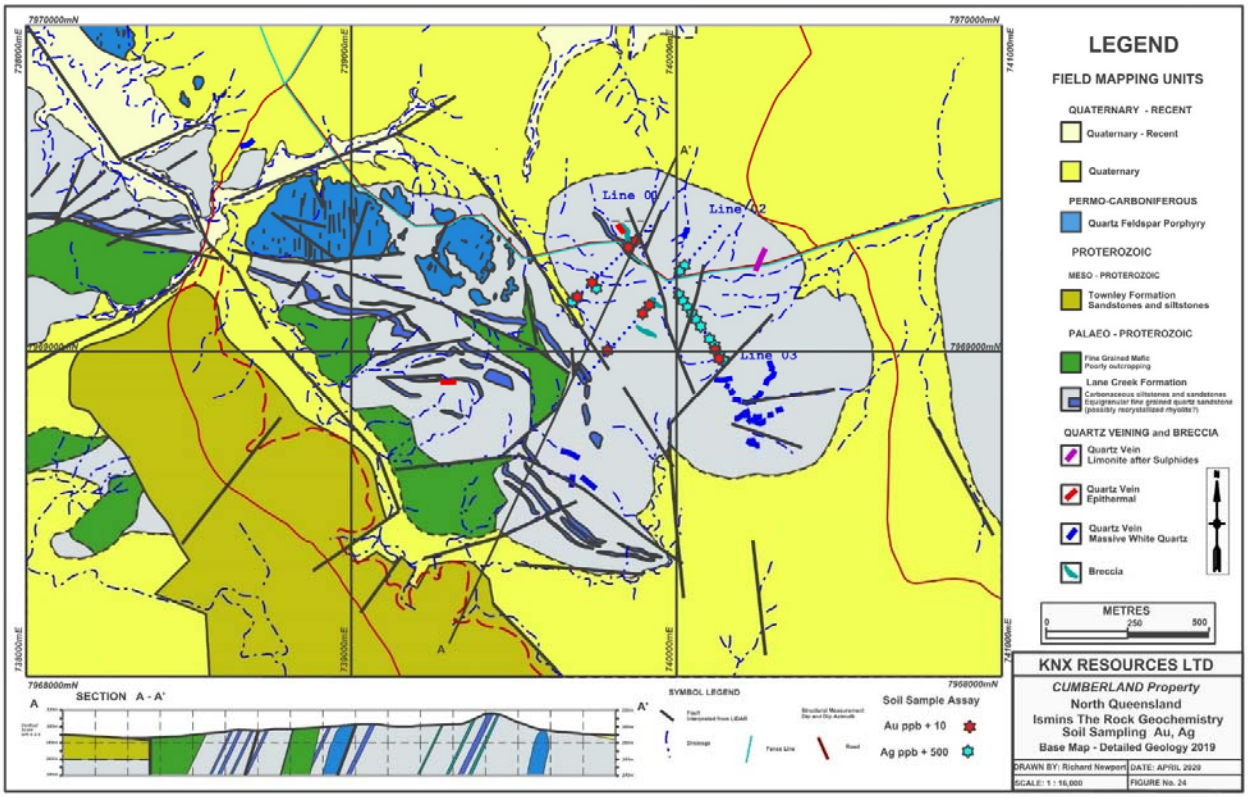

Figure 25. The Rock Prospect Detailed Geology Soil Geochemistry – Gold and Silver

9.5 Pillars Prospect (4) is located in a series of north south structures within Carboniferous to Permian quartz feldspar porphyry microgranite. It consists of, low temperature quartz veins and sulphides associated with brecciated porphyry in a linear structural zone. Pillars is considered to be similar to the RBZ prospect in its setting (Figure 26).

Exploration of this prospect is at a very early stage, with reconnaissance rock chip sampling by ISM returning up to 2.76 ppm Au and 09. ppm Ag.

Four (4) kilometres to the west is the recently discovered Hook prospect, in a similar setting to the Pillars returning a silver assays up to of 2000ppm Ag.

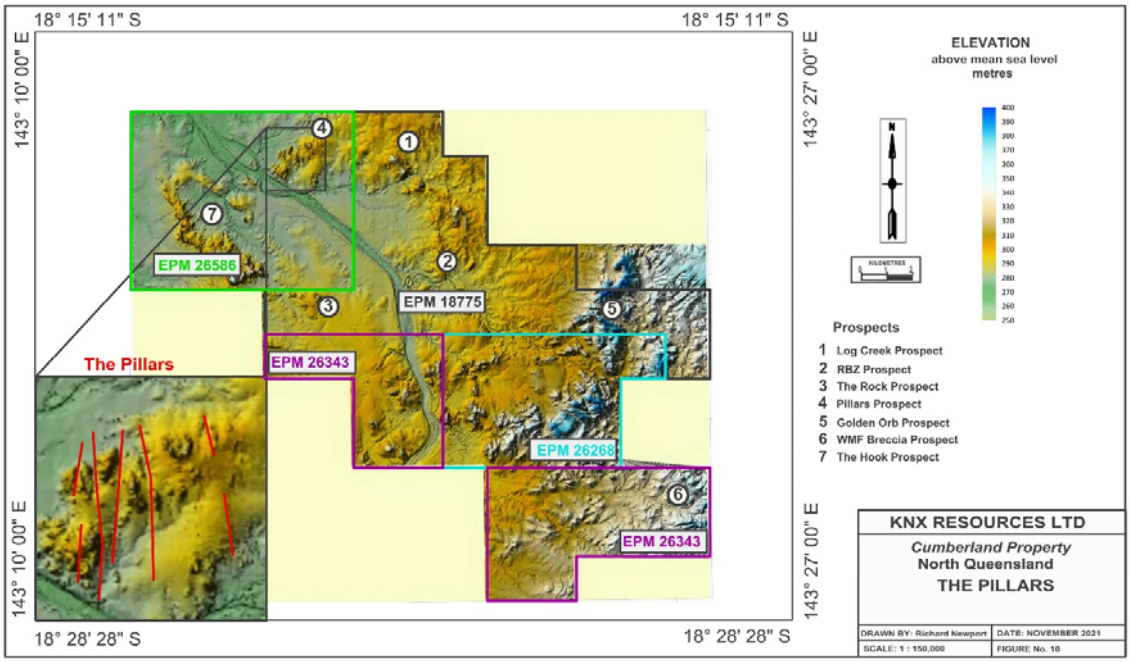

Figure 26. The Pillars Prospect Location on LiDAR and details of structure

9.6. Golden Orb Prospect (5): Consists of Carboniferous to Permian rhyolitic flow dome intrusive into rhyolitic volcanic pile associated with silicified jasperoidal breccias containing chalcedonic veins. Golden Orb is considered to be a shallow epithermal event in a back arc setting.

The Golden Orb vein was discovered by Battle Mountain Australia (BMA) in the 1980's and described as a multiphase, layered to drusy, strongly brecciated chalcedonic silica vein containing sericite and altered rhyolite volcanic fragments. Initial rock chip sampling of the Golden Orb vein by BMA returned anomalous gold to 0.86 ppm Au in the pyrite-arsenopyrite rich zones within the vein. Downstream float samples of similar lithologies collected by BMA returned up to 1.56 ppm Au. The Golden Orb vein is 600m long and 0.1 to 1.5m wide, and trends 100 degrees magnetic and is vertical, (MacGregor-Dawson 2018). A number of veins of similar composition and orientation, but of smaller size, were reported by BMA to exist on the inner edge of the Scrubby Creek Rhyolite ignimbrite up to 300m south of the Golden Orb Vein (Figure 27).

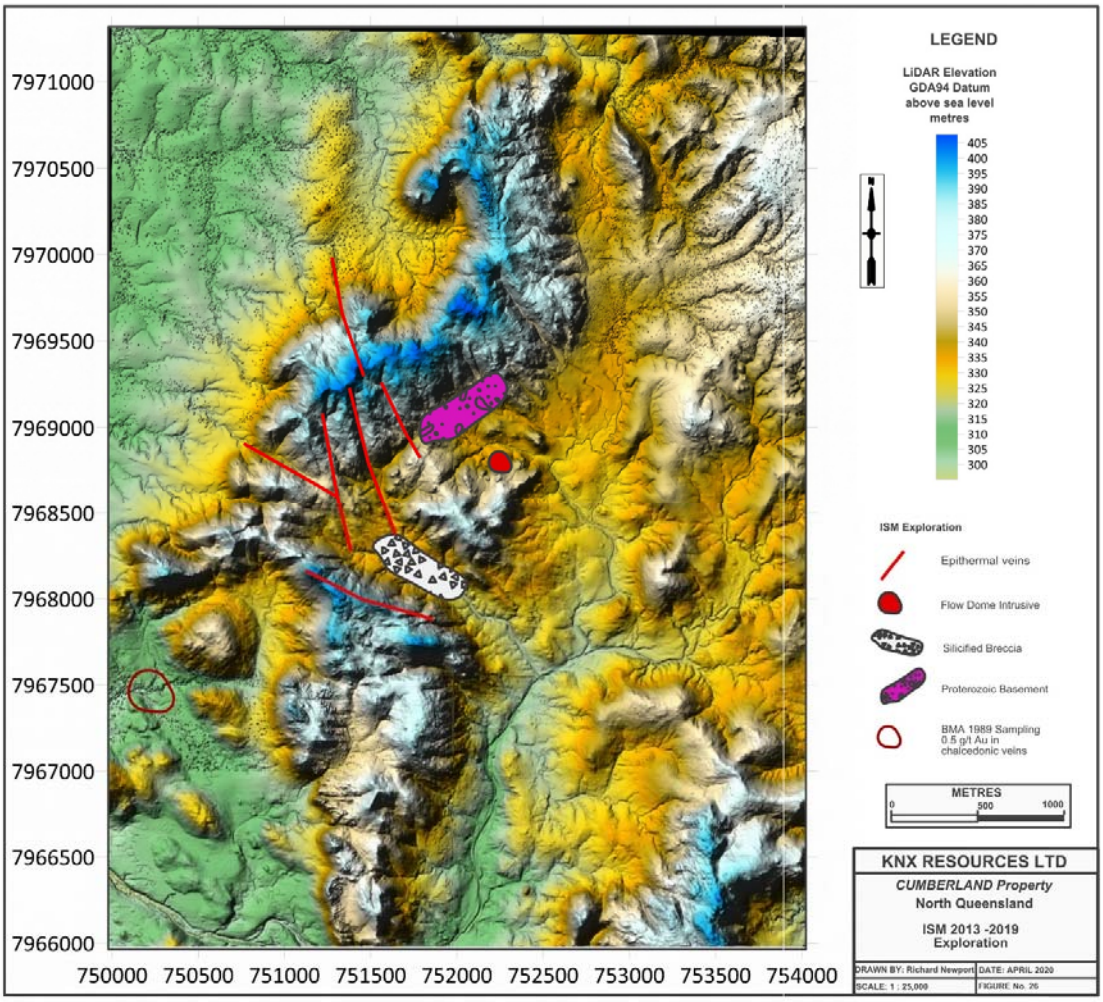

Figure 27. Golden Orb Prospect Location on LiDAR and details of structure

ISM discovered further epithermal veins of similar character to the Golden Orb Vein along with a flow banded rhyolite dome intrusive into the volcanic pile and at least one zone of intensely brecciated and jasperoidal volcanics. Assays of outcrops by ISM returned up to Au 0.23 ppm and Ag 1.7 ppm.

9.7 WMF Breccia Prospect (6); Consists of Carboniferous to Permian brecciation, possibly confined to a pipe structure, associated with felsic intrusives and hydrothermal fluids, that have introduced quartz-carbonate veining and sulphide mineralisation, along with variable alteration. WMF is considered to be multiphase breccia pipe event in an epithermal back arc setting.

This prospect was discovered with BCL stream sampling by previous explorer KGM in 1995 locating four contiguous stream samples returned BCL gold values of 12.6, 6.7, 4.9 & 4.1 ppb Au. Follow up rock chip sampling returned low order gold results up to 0.48 ppm Au. Further work by KGM included soil samples collected on a regular grid of 23 line km soil grid (1.2 x 0.95 km) with 50m spaced lines and sample intervals for a total of 500 samples. Additionally, 25 rock chip samples were collected from the breccia area, making a total of 28 rock samples on the project. Of the 28 rock chip samples, 18 returned values of 0.10 ppm Au or higher, with 7 samples from 0.46 to 3.90 ppm Au Figure 28). The soil survey defined a strong very strong core soil anomaly over 300m x 150m for all four elements (Au, Ag, As & Pb) that appears to be related to an intersection of northeast-southwest structures and less prominent west- east structures centred on 754,000mE / 7,960,850mN. KGM carried out a ground magnetic survey, the results of which show a high centred on the location of an intrusive porphyry outcrop which is offset to the southwest of the main geochemical anomaly.

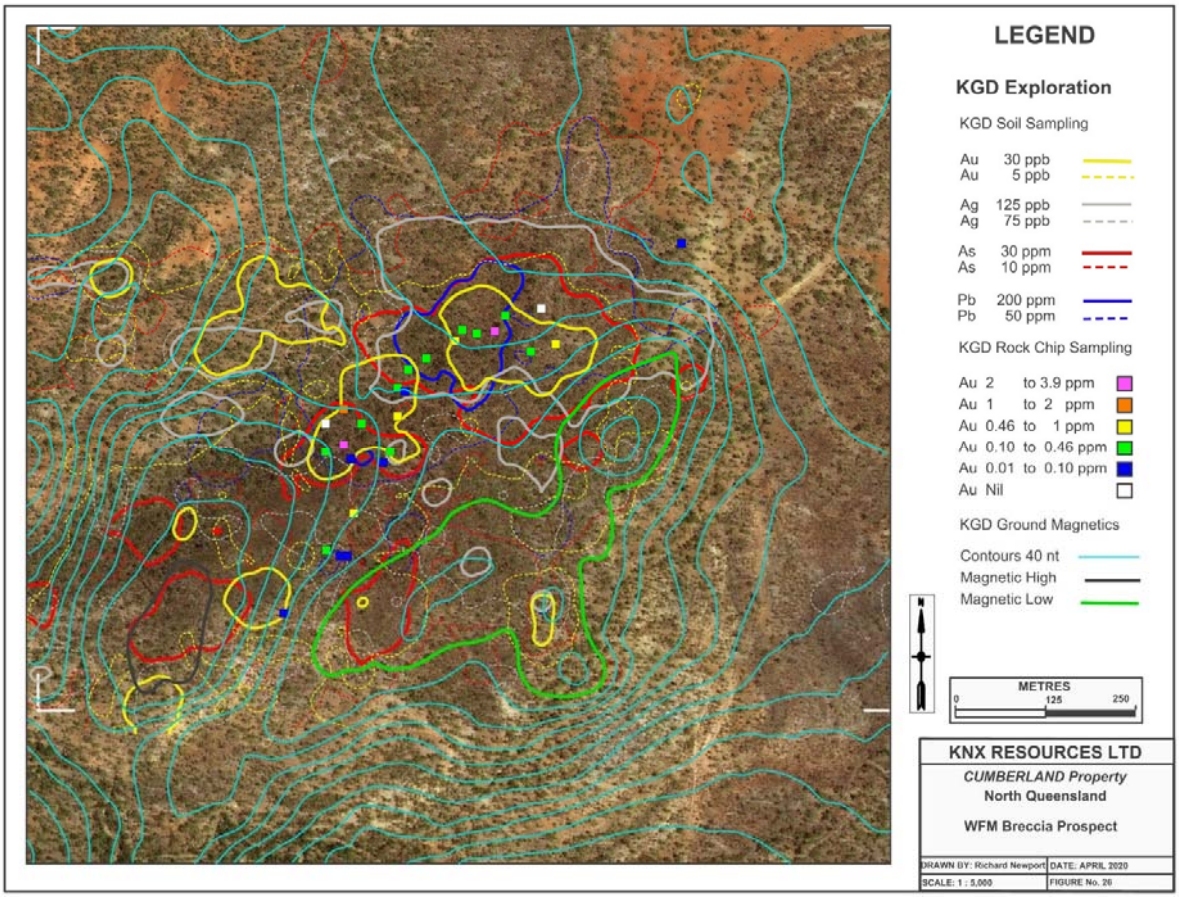

Figure 28. WMF Breccia Prospect Geochemistry and Geophysics

ISM examined the prospect in 2017 and 2018 and intends to explore it further using DC/IP geophysics to better define drill targets (MacGregor-Dawson 2018)

9.8 The Hook Prospect (7); Consists of Carboniferous to Permian quartz feldspar porphyry microgranite intruding into Proterozoic Lane Creek fine grained sediments displaying variably contact metamorphic textures and extensively alteration to sericite and clay with associated multi-phase quartz veining. The prospect occurs in the northwest of the Property (Figure 29).

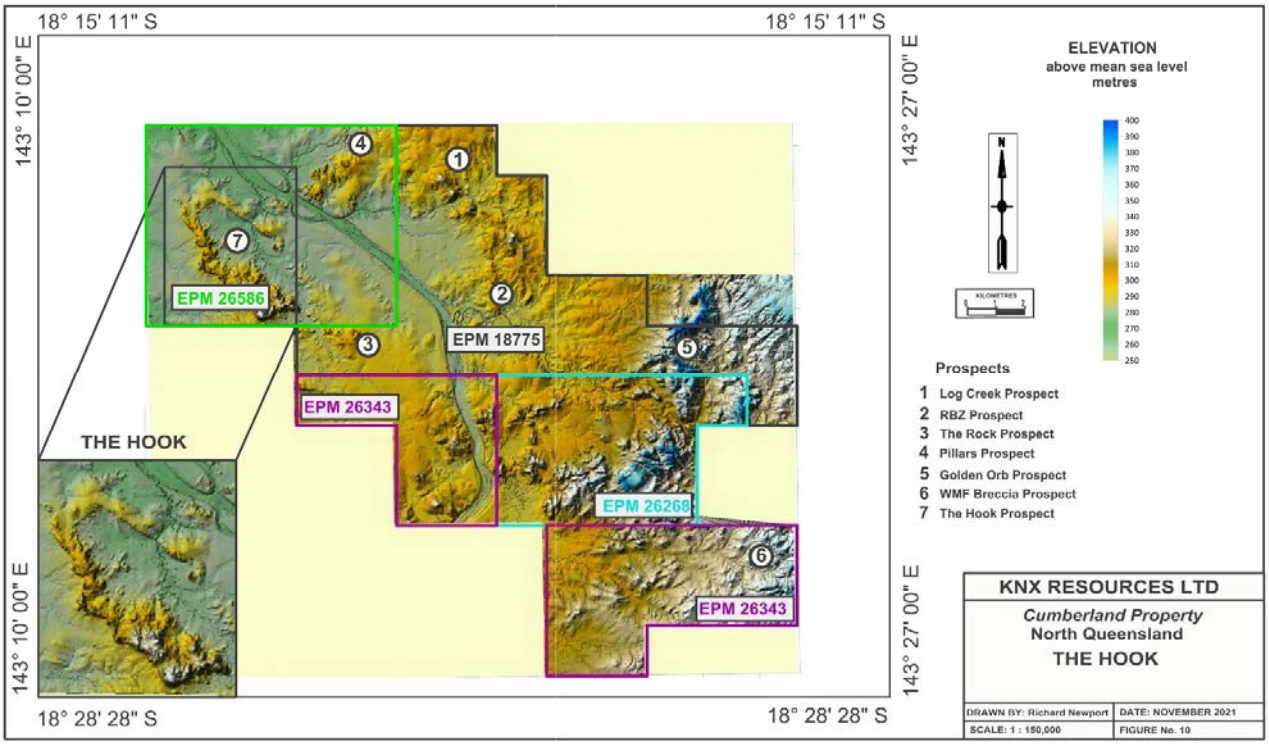

Figure 29. The Hook Prospect LiDAR Digital Terrain Model –

ISM has structurally mapped the Hook prospect using previous reconnaissance information on the geology and LiDAR processed to 1 metre resolution. The variable topography and the detailed surface textures allowed confident mapping of the various rock units that crop out on the prospect providing a base for surface geochemical sampling (Figure 30)

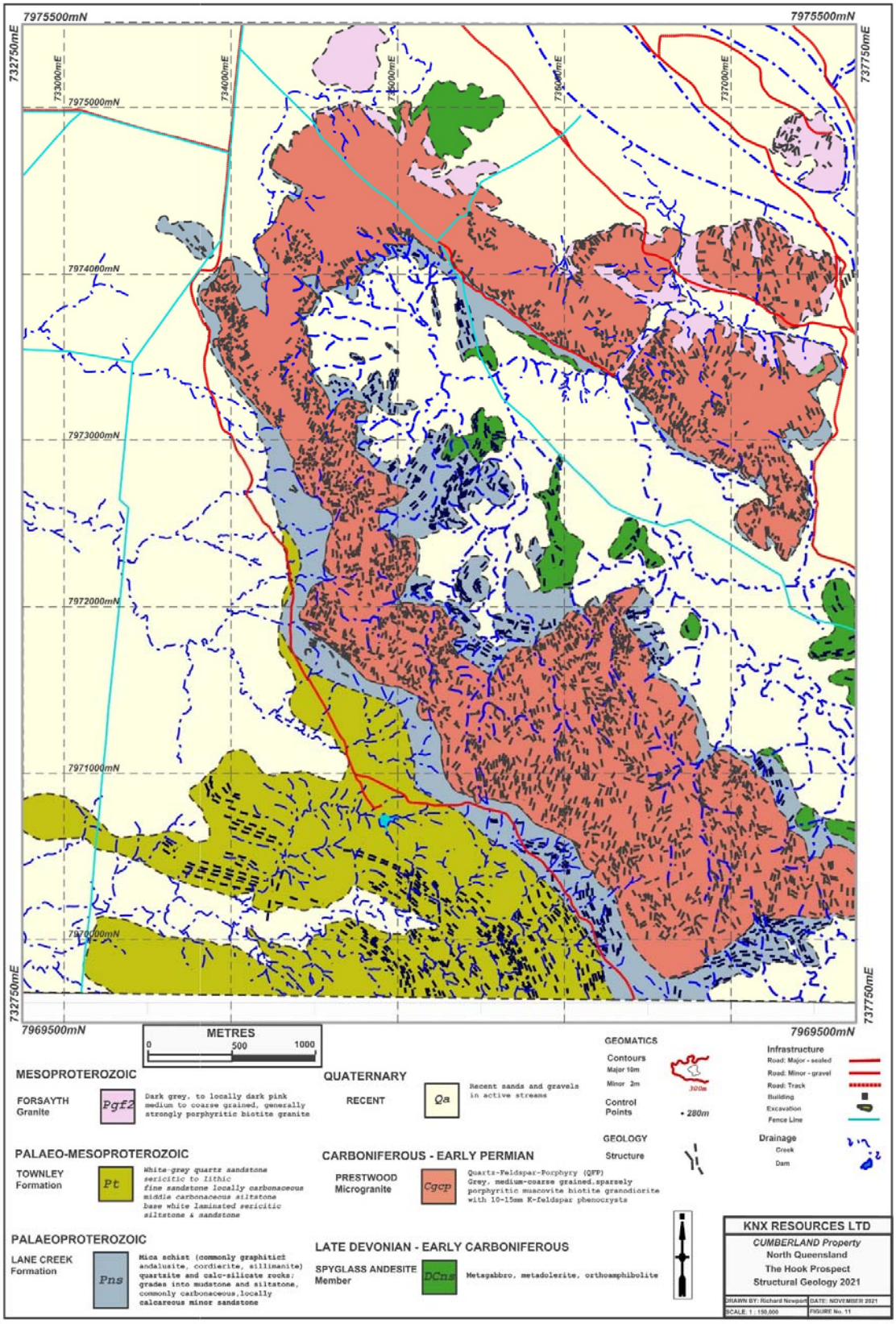

Figure 30. The Hook Prospect Structural Geological Mapping from LiDAR Digital Terrain Model –

The Hook Prospect is dominated by the Carboniferous to Permian Prestwood Microgranite in red on the map. This forms a topographic high above the more subdued Proterozoic rocks.

The Prestwood Microgranite contains a multiphase assemblage of hypabyssal intrusives including later rhyolite dykes and associated breccia veins and pipes. These later stage intrusive units were the focus of the rock chip sampling reported below.

A total of twenty eight (28) rock chip samples were taken from out cropping quartz breccia veins that cross cut strongly altered porphyritic rhyolite breccia with a dominant vein trend of 340° (grid North). The samples were sent to ALS Townsville certified laboratory in Queensland, to assay gold by 50g fire assay and multielement by ICP-MS.

Assay results showed variable gold along with significant silver and associated base metals and arsenic. Strongly elevated Sb is also evident which contrasts with the veins sampled in the previous year on the eastern side of the Gilbert River within a similar host rock. The distribution of gold and silver assays are shown in Figures 31 and 32.

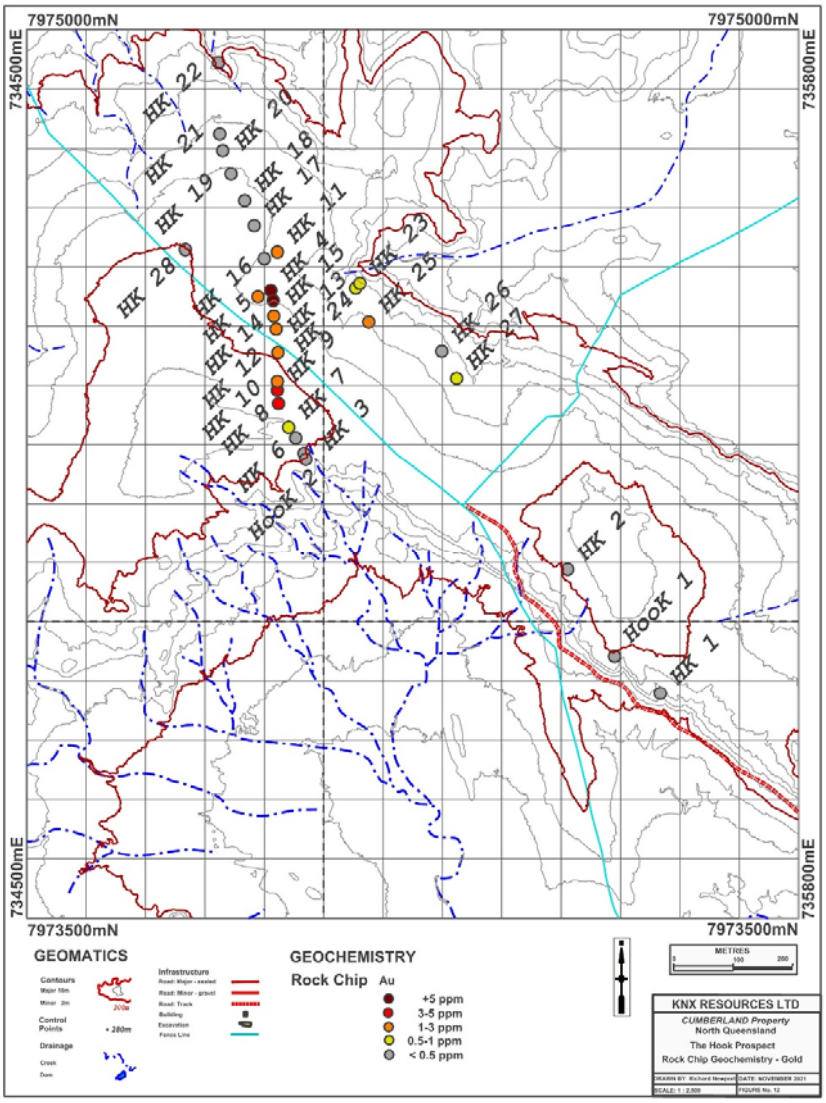

Figure 31. The Hook Prospect Distribution and Gold assay of rock chip samples

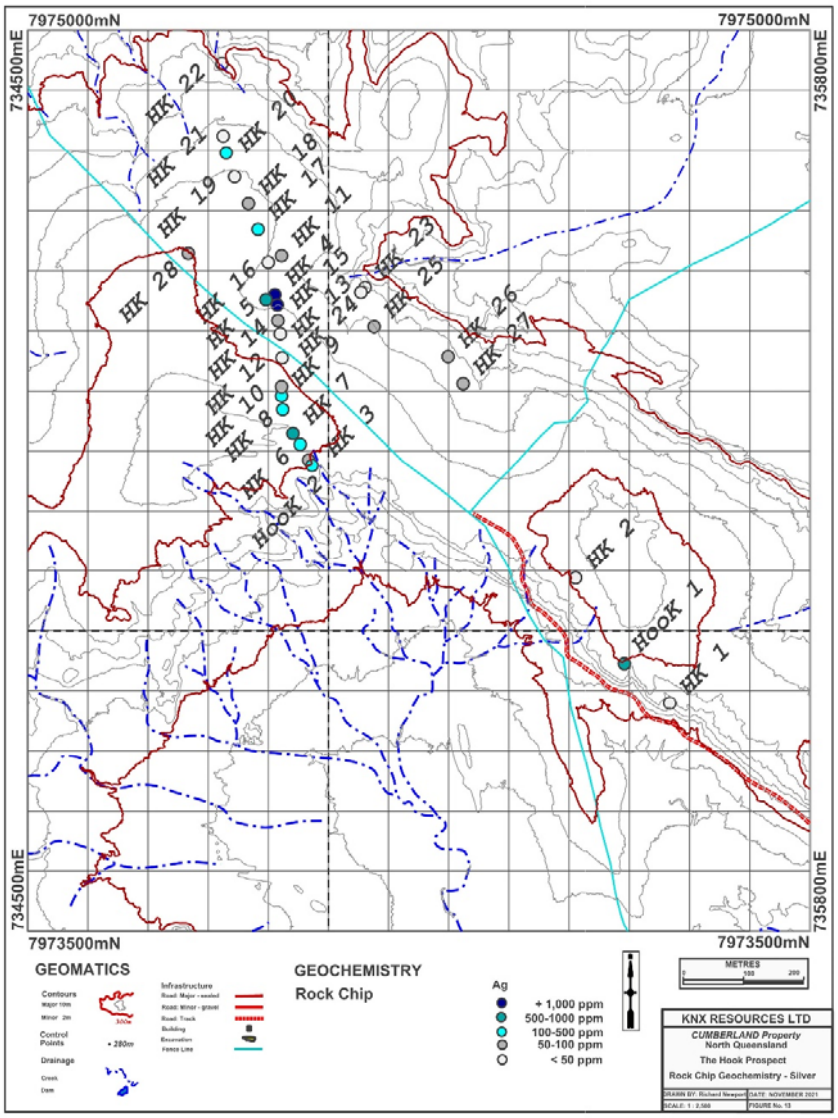

Figure 32. The Hook Prospect Distribution and Silver assay of rock chip samples

10.0 DRILLING

Essex Minerals Inc has not conducted any drilling on the Property on it's own right.

Historical drilling of the Property by previous explorer KGM, consisted of five combined RC with diamond tail drill holes at the Log Creek Prospect (1), to test coincident DC/IP and base metal soil anomalies associated with quartz sericite alteration (Ricketts et al 1997). The location of the Log Creek Prospect and the 5 drill collars are shown on Figure 33.

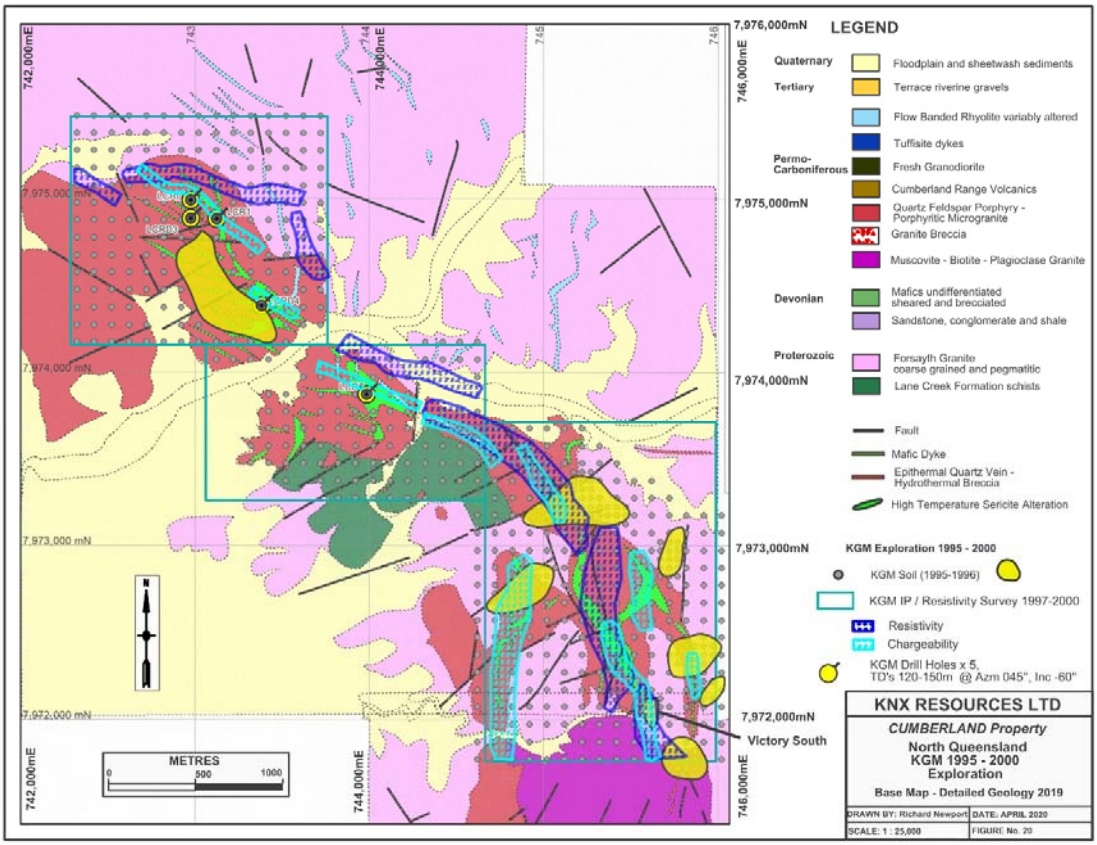

Figure 33. Log Creek Detailed Geology with KGM Exploration Drill hole Locations

ISM reviewed the KGM drill program finding that the five drill holes at Log Creek were targeted on linear IP chargeability and coincident base-metal soil anomalies associated with quartz-sericite alteration located on NW trending ridges. Four were drilled to the north of Log Creek and one to the south. All holes were drilled to the NE with a dip of -60° to a depth of around 120 to 150m. KGM reported that all holes intersected zones of strong sericite-pyrite alteration within the Carboniferous quartz feldspar porphyry. The fourth hole (LCRD4) also intersected a breccia from 76.6 to 103.5m, which was mineralised from 76.6 to 82.8m. Pervasive sericitic alteration is present throughout the upper 150m of this hole.

Assays of the drilling samples (Table 10.1) returned narrow intervals of low-level gold and strongly elevated base metals. Silver was significantly anomalous, returning up to 63ppm Ag (2oz/t) over a 2m interval, 30m down hole (the corresponding gold assay was 0.83ppm Au). KGM considered the presence of breccias and similar vein assemblages within this large mineralised system, to have affinities to the Kidston breccia-hosted gold deposit (3.7Moz Au), approximately 100km to the south east.

Table 10-1: Log Creek Drilling By KGM- 1995

Hole	From	To	Intv	Au	Cu	Pb	Zn	Ag	As	S
LCR1	m	m	m	ppm	ppm	ppm	ppm	ppm	ppm	%
	30	32	2	0.83	244	471	908	63	27600	2.82
	50	52	2	0.05	3510	223	482	29	118	1.55
	54	56	2	0.15	204	151	1590	1	24	0.25
	82	86	4	0.11	983	507	1330	19	1000	2.89

Hole	From	To	Intv	Au	Cu	Pb	Zn	Ag	As	S
LCRD2	m	m	m	ppm	ppm	ppm	ppm	ppm	ppm	%
	12	64	52	<0.005	45	1163	3299	1.5	10	0.27
Includes	14	34	20	<0.01	93	2257	4110	3.4	11	0.48
And	46	48	2	0.26	26	447	1740	1	47	0.21
And	48	54	6	0.006	40	1545	3167	2.1	9	0.32
	88	90	2	0.013	345	9000	22100	29	44	1.87
	100	114	14	0.066	424	1669	6665	13	103	0.77
Includes	110	112	2	0.38	2700	1290	32800	72	596	3.55

Hole	From	To	Intv	Au	Cu	Pb	Zn	Ag	As	S
LCRD3	m	m	m	ppm	ppm	ppm	ppm	ppm	ppm	%
	4	34	30	<0.01	70	1110	3670	3.3	42	0.56
Includes	26	34	8	<0.01	100	2300	5670	5	88	1.22
	58	64	6	0.102	488	196	9356	8.2	20	1.11
Includes	62	64	2	0.2	692	250	9200	13	19	1.6
	128	140	12	0.009	109	222	3250	4	388	0.44
Includes	134	140	6	0.014	156	281	5183	6.3	634	0.72
	158	166	8	0.02	366	205	1196	9.3	2791	0.82
Includes	158	162	4	0.033	647	344	1553	17.5	5540	1.42

Hole	From	To	Intv	Au	Cu	Pb	Zn	Ag	As	S
LCRD4	m	m	m	ppm	ppm	ppm	ppm	ppm	ppm	%
	32	36	4	0.18	2037	324	219	26	2190	2
	36	96	60	0.01	149	460	2108	3.3	507	0.69
Includes	76	78	2	0.1	1090	1580	9500	17	12700	3.22
	130	134	4	0.005	44	2380	2285	3	15	0.18
	170	201	31	0.007	12	378	479	0.9	34	0.2

Hole	From	To	Intv	Au	Cu	Pb	Zn	Ag	As	S
LCRD5	m	m	m	ppm	ppm	ppm	ppm	ppm	ppm	%
	0	98	98	~0.005	410	1504	4633	5	576	0.78
includes	26	42	16	<0.005	1261	1535	4157	6.8	549	0.63
And	86	90	4	0.022	1590	140	7650	10.4	10205	3.04
	98	108	10	0.072	91	193	919	8.1	998	1.48

To the Author's knowledge, no other historical drilling has been recorded as being conducted on the Property.

Drilling undertaken by ISM on the Property, was conducted solely by ISM, but funded by Essex Minerals Inc. It consisted of ten (10) HQ sized diamond drill holes for a total of 1,851.6 metres of core drilling in the RBZ Prospect (2). The holes were designed to test two zones of gold and silver soil geochemical anomalies. The drill holes are designated RBZS for RBZ South and RBZN for RBZ North The location of the prospect and the ten drill collars are shown in Figure 34.

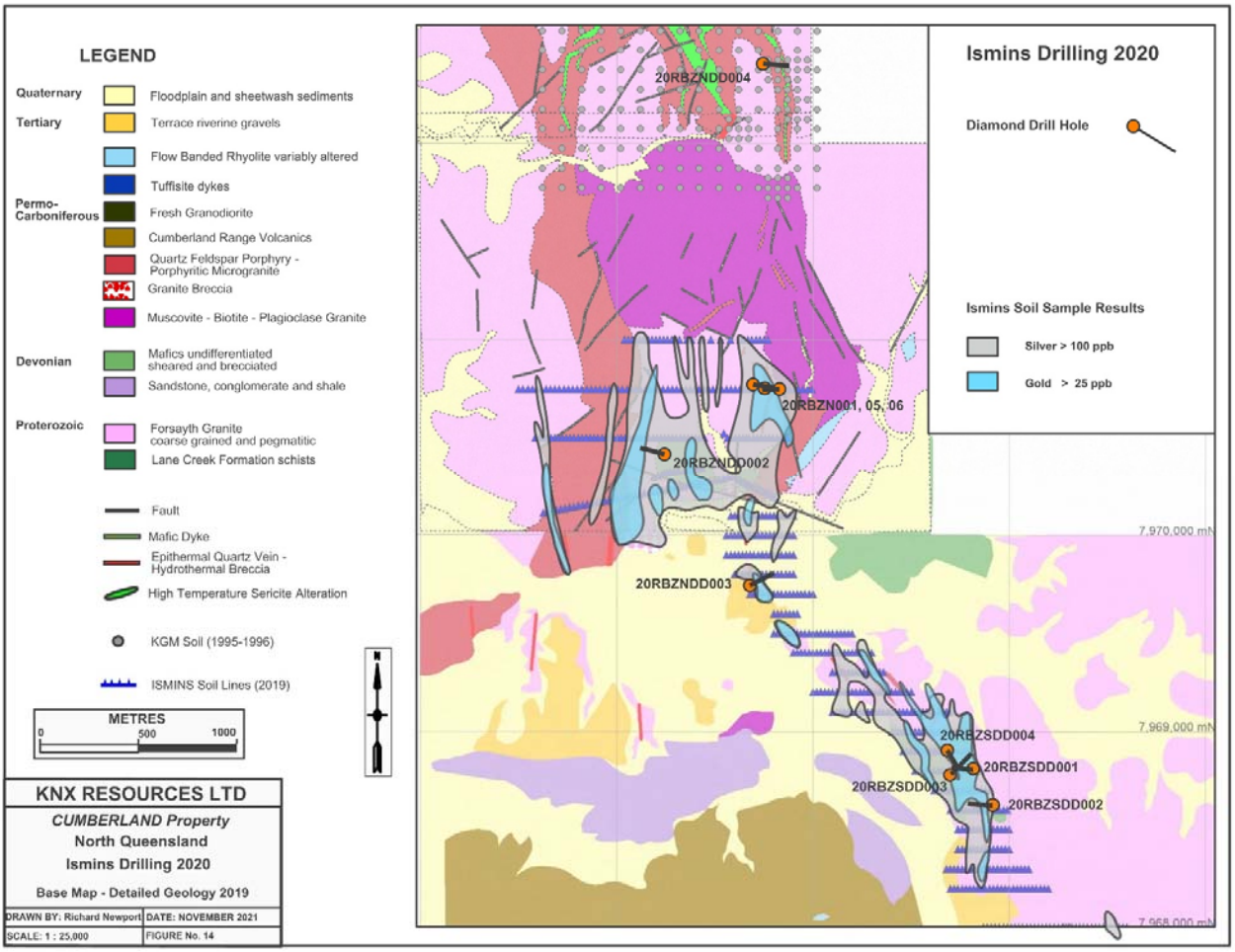

Figure 34. ISM 2020 diamond drilling program shown on the geological base map and the extent of the Gold & Silver soil anomalies

10-1 RBZ South Drilling Summary

- Four diamond holes drilled into RBZ South contained intersections of gold and silver mineralization in 3 out of 4 holes, albeit narrow in 2 out of 3 holes but with extensive associated alteration
- Epithermal quartz vein arrays are associated with multi-phase intrusives at the intersection of a conjugate fault system. Not all quartz veins intersected displayed significant gold and silver grades.
- The geological setting consists of a monzo-diorite intrusive (+ 2.6 Ha) into Proterozoic Coarse grained granite. K feldspar altered monzo-diorite appears to be associated with a medium – grained granite to granodiorite on the margins. Monzo-diorite has been faulted by NW structures associated with the RBZ facilitating quartz feldspar porphyry and rhyolites dykes which are altered followed by unaltered lamprophyre dykes. Monzo-diorite narrows to the NW and SE but widens to the NE.
- All mineralized intersections to date occur in coarse grained granite below the monzo-diorite contact. Relative paucity of quartz veins within the monzo-diorite- suggests porous coarse grained granite beneath competent diorite has a damming effect on fluids hence higher Au and Ag grades- diorite/granite contacts are the target where NW structures have intersected.
- Au and Ag mineralization is associated with quartz veins in proximity to major structures which are associated with breccias in places.
- Predictions of dip and strike of structures and mineralized veins is uncertain at this time. What can be said is the high Au grade structure is associated with chromium muscovite in Hole 20RBZSDD 001 and is unconstrained. Using existing logged structural data high grade structure is currently interpreted to strike EW with a steep dip.
- Holes 20RBZSDD003 and 4 were drilled to intersect the interpreted structure in Hole 20RBZSDD001 but (geochemically and visually) they did not intersect the high grade mineralization associated with chromium muscovite.
- Depleted zones of Na correlate well with mineralization and phyllic alteration overprint of early potassic alteration.
- Good correlation between S and Au/Ag mineralization – suggests a DC/IP survey as a useful tool to locate high sulphide bearing zones.

Table 10-2: RBZ South Drilling

	Position and Elevation conform to GDA94 Zone 54 S and AHD Geoid 09					
HOLE_ID	metres_E	metres_N	metres_Elev	Azimuth_G	Inclination	TotalDepth
20RBZSDD001	746817	7968806	241	276.3	-55	203.7
20RBZSDD002	746917	7968620	239	276.3	-55	191.7
20RBZSDD003	746698	7968774	237.4	45	-55	212
20RBZSDD004	746684	7968900	239.7	150	-56.5	182.2

Drill hole 20RBZSDD001 terminated at 203.7 metres intersecting gold and silver mineralization as summarized in Table 10-2.1. This hole was collared in a medium grained granite and intersected a potassic altered diorite then on the western contact a coarse grained altered granite. The diorite is intrusive into the coarse grained granite with numerous xenoliths noted. The mineralised zone was located in brecciated and phyllic altered (characterised by green chromium mica) coarse grained granite in contact with an altered monzo-diorite. Orientation of the structure was unclear as the alteration appears to be a flooding event at high angle to the core axis. Refer Figure 35 for section.

Table 10-2.1: RBZ South Drilling 20RBZSDD001

20RBZSDD001	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	139.5	145.9	6.4	18.8	160.6
	152.5	153	0.5	9.9	191

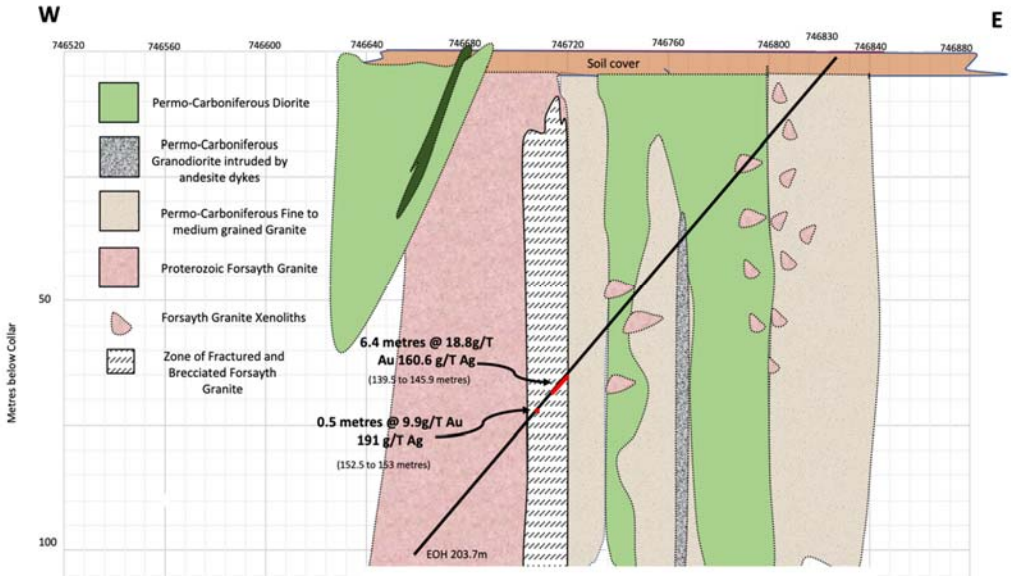

Figure 35. East-West Section of drill hole 20RBZSDD001 along 796880mN.
Cross section length is 360 metres and vertical exaggeration is 2 times.

Drill hole 20RBZSDD002 terminated at 191.7m was collared 200m SE of 20RBZSDD001 and drilled west to target the source of a moderate silver in soil anomaly. The hole intersected three sub-vertical zones (up to 12 m wide) of argillic and phyllic alteration in coarse grained granite associated with silicification and fine-grained sulfides. Assay results returned weakly anomalous gold and silver Table 10-2.2. Figure 36 shows an east-west section of 20RBZSDD002 with surface geochemistry projected above it.

Table 10-2.2: RBZ South Drilling 20RBZSDD002

20RBZSDD002	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	1.5	2.9	1.4	0.06	17
	48.6	49.1	0.5	0.17	2.3
	52.7	53.2	0.5	0.01	49.6
	134	135.8	1.8	0.12	8
	138	138.5	0.5	0.14	7.9

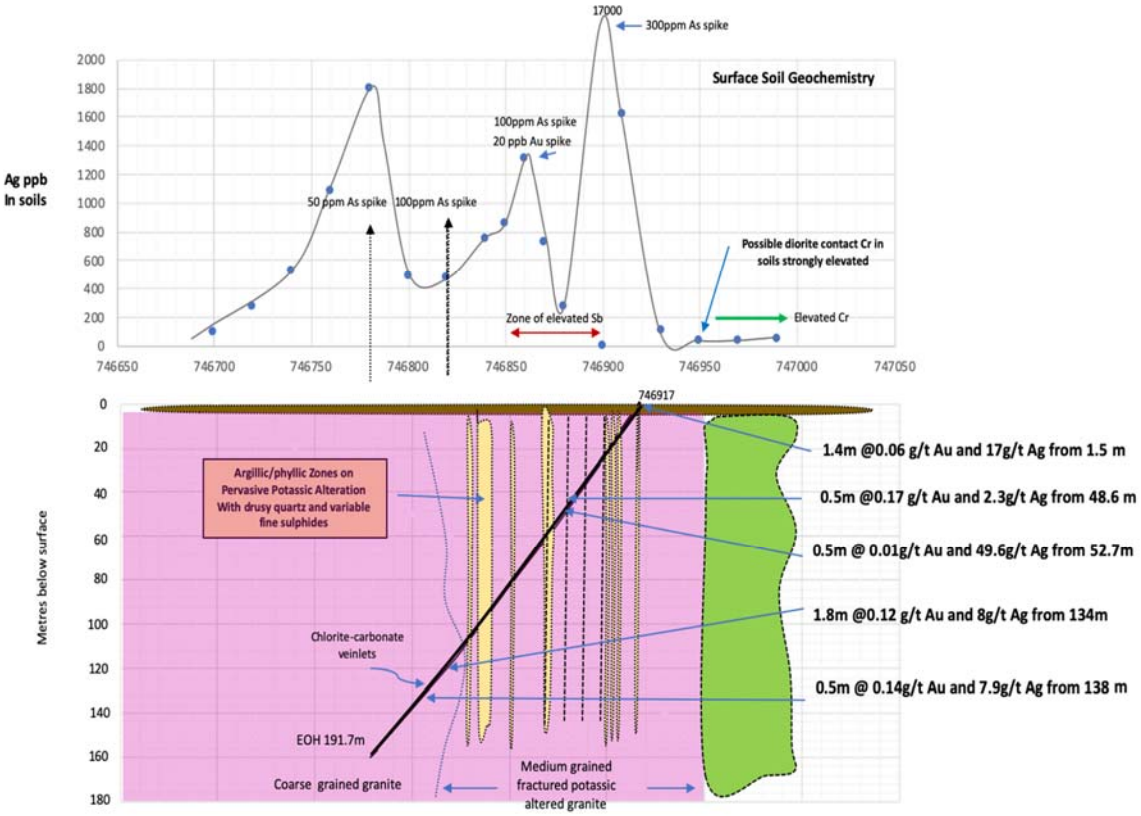

Figure 36. East-West Section of drill hole 20RBZSDD002 along 7968625mN.

Drill holes 20RBZSDD003 and the subsequent 20RBZSDD004 were designed to intersect the mineralization discovered in 20RBZSDD001 from different angles (Figure 37).

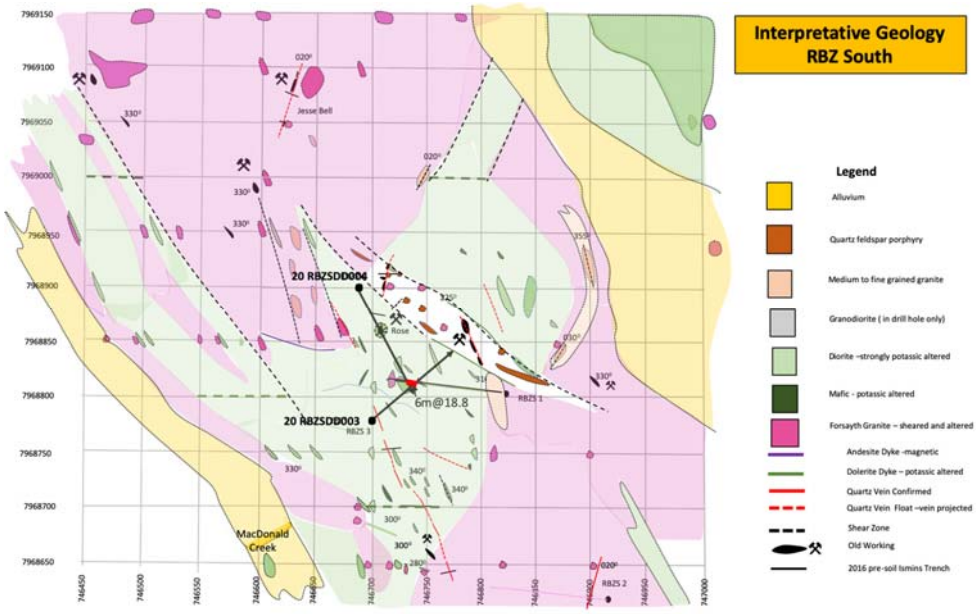

Figure 37. Plan of interpreted geology showing the location and disposition of follow up drill holes 20RBZSDD003 & 20RBZSDD004

Hole 20RBZSDD003 was drilled approximately 300 metres NW of Hole 20RBZSDD001 oriented at 045 ° grid and an inclination of minus 55° (Figure 37). It was terminated in coarse grained granite at a depth of 212 metres. The hole intersected 121 metres of variably potassic altered monzo-diorite. The diorite contained abundant altered granite xenoliths with up to 2% pyrite towards a coarse grained granite contact. Chilled margins within the diorite was observed indicating the diorite had intruded the granite. Although no measurements could be noted from the core, the contact appears to dip north west and strike to the NE from surface mapping. The coarse grained granite was extensively brecciated and fractured. Three zones of quartz sulphide mineralisation were encountered, refer Table 10-2.3 and Figure 38:

Table 10-2.3: RBZ South Drilling 20RBZSDD003

20RBZSDD003	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
Zone-1	16.3	17	0.7	0.22	0.4
Zone-2	172.3	172.8	0.5	1.4	4
Zone-3	186.2	186.7	0.5	12.2	13.4

Zone 1 intersected mineralization in fine grained laminated quartz veins at 20° to the core axis and silicified breccia with associated strong arsenic and weak antimony in altered diorite. No base metals were apparent.

Zone 2 intersected mineralization in white quartz infill of brecciated granite, trending 40° to the core axis. The quartz contains abundant coarse grained pyrite with rare sphalerite.

Zone 3 intersected mineralization in a white quartz filled shear zone in altered granite trending 55° to the core axis. The vein contains abundant coarse grained pyrite associated with base metal sulphides and elevated arsenic. This intersection is located approximately 50m northwest and 50m lower in elevation than the intersection in Hole 20RBZSDD001.

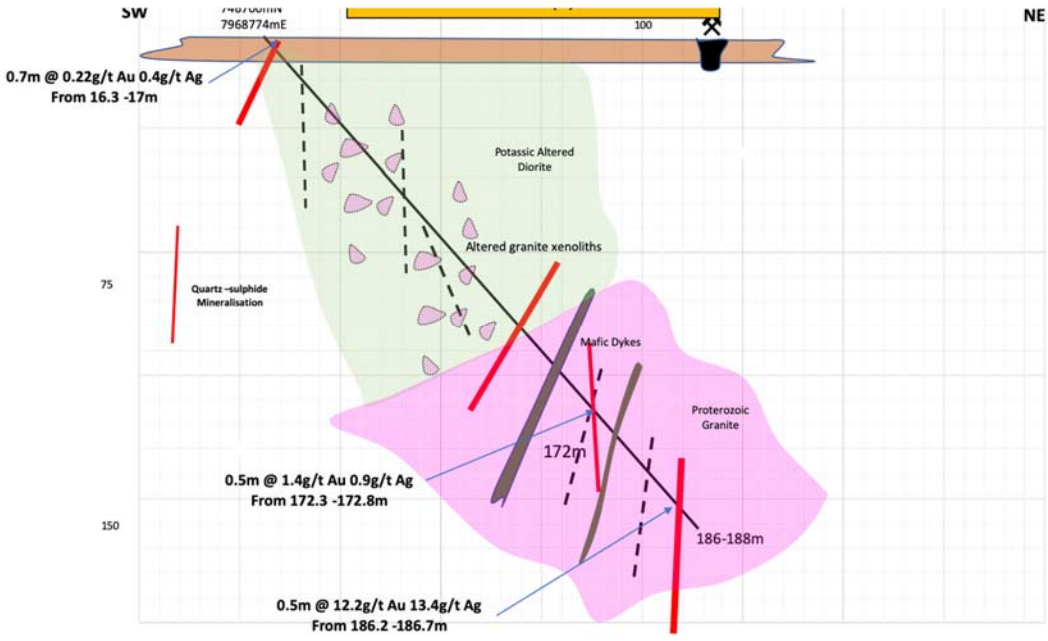

Figure 38. Southwest-Northeast Section of drill hole 20RBZSDD003.

Hole 20RBZSDD004 was drilled approximately 250 metres west of Hole 20RBZSDD001 oriented at 144° magnetic and an inclination of minus 55° and was terminated in coarse grained granite at a depth of 182.2 metres. The hole intersected 151 metres of potassic altered monzo-diorite intruded at irregular intervals of lamprophyre dykes. The diorite is also characterised by abundant altered granite xenoliths as a coarse grained fractured granite contact is approached at 151 metres downhole.

Table 10-2.4: RBZ South Drilling 20RBZSDD004

20RBZSDD004	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	160.5	161	0.5	3.2	4

This hole intersected mineralization within quartz vein associated with elevated base metals and arsenic. Sulphides are coarse grained. This intersection is located approximately 10 metres south and 15 metres lower in elevation than the intersection in hole 20RBZSDD001 (Figure 39).

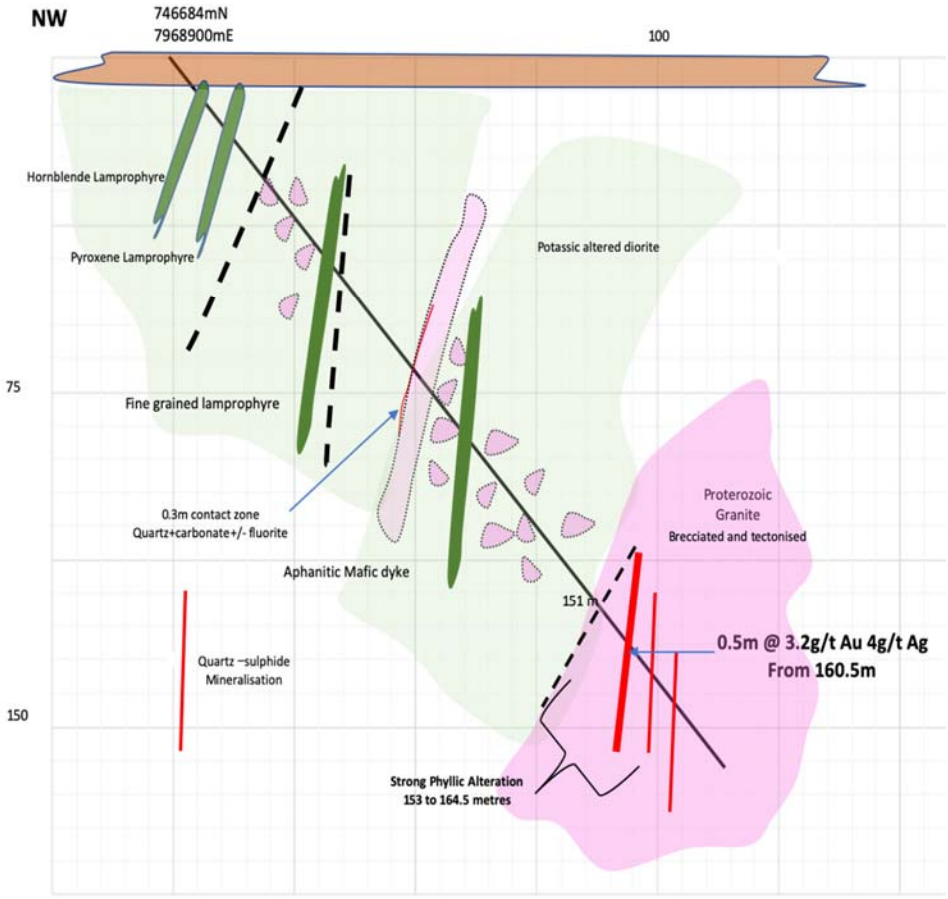

Figure 39. Northwest-Southeast Section of drill hole 20RBZSDD004.

10-2 RBZ North Drilling Summary

- RBZ North mineralization is spatially associated with porphyritic rhyolite (mapped as quartz feldspar porphyry) intrusive into Proterozoic granite and monzo-diorite and granodiorite.
- The rhyolite has been intruded along NW to NNW structures associated with the RBZ structure. Two individual zones of rhyolites were mapped.
- The eastern contact zone (QFP-granite) drilled at Robs Vein (3 holes), displayed high Ag surface soil geochemistry along with high grade silver and gold in rock chips. within breccia zones infilled by drusy quartz with some sulphides observed at surface. Despite surface mineralization associated with pervasive alteration and excellent structural preparation of host granites, mineralization intersected was weak with low metal and moderate sulphur levels with the exception of a narrow zone intersected in hole 20RBZNDD005 which correlates with gold and silver mineralization sampled at surface. Strong surface geochemistry extends to the south.
- The western contact (QFP-Diorite-Granite) was drilled with one hole (20RBZNDD002) under a surface Au-Ag soil anomaly with no observable outcropping mineralization. Broad zones of anomalous gold and silver in fractured rhyolite with narrow zones of higher grade Au and Ag, were intersected.
- Orientation of the mineralized contact trends N to NNW.
- A target zone approximately 10 metres wide, flanking the monzo-diorite /QFP contact extends for 1 kilometer then dives under alluvium in the south.
- Similar to RBZ South the mineralization at RBZ North is closely associated with the more mafic diorites. (Figure 40).

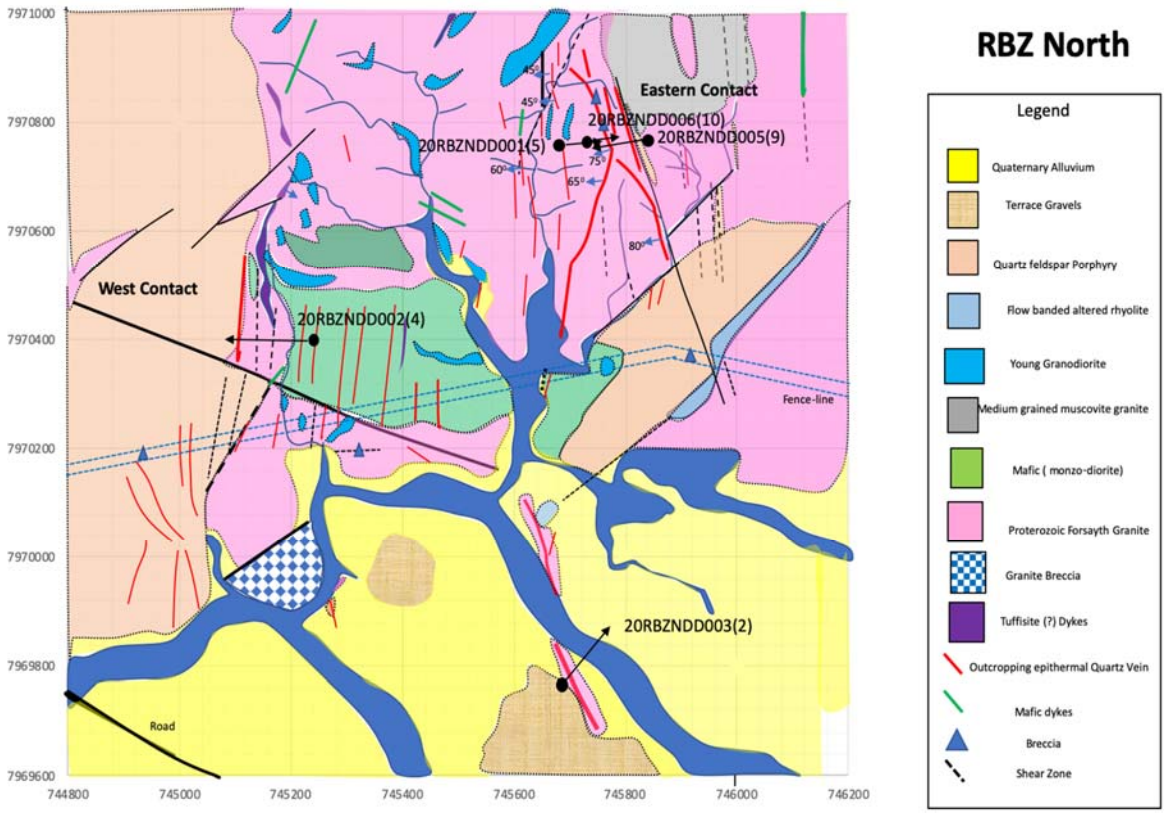

Figure 40. Plan of interpreted geology showing the location and disposition of the five drill holes 20RBZNDD001-003 & 20RBZSDD005-006

Table 10-3: RBZ North Drilling

HOLE_ID	Position and Elevation conform to GDA94 Zone 54 S and AHD Geoid 09 metres_E	metres_N	metres_Elev	Azimuth_G	Inclination	TotalDepth
20RBZNDD001	745695	7970769	240.0	96.3	-55.0	192.6
20RBZNDD002	745243	7970413	235.5	280.3	-55.0	209.5
20RBZNDD003	745679	7969740	234.0	66.3	-55.0	219.9
20RBZNDD004	745745	7972400	257.0	93.3	-55.0	231.5
20RBZNDD005	745829	7970746	244.6	263.7	-51.5	145.0
20RBZNDD006	745754	7970750	243.9	85.3	-55.1	62.0

Drill hole 20RBZNDD003, located 1km northwest of 20RBZSDD001, intersected wide zones of argillic and phyllic alteration associated with breccias infilled by fluorite veins and flooded in places by fine-grained silica and sulphides (dominantly pyrite and arsenian pyrite) in strongly fractured, coarse grained granite, and has returned weak anomalous gold and elevated arsenic and weak base metal values. The hole terminated in potassic altered granite at 219.9m. The hole was sited on the west bank of Little MacDonald Creek and was targeting quartz veining and altered granite occurring as small inliers in Quaternary terrace gravels. The following intersections were noted in table 10-3.1:and the drill section is presented in Figure 41

Table 10-3.1: RBZ North Drilling 20RBZNDD003

20RBZNDD003	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	26.5	27.1	0.6	0.45	2.2
	29.5	30.0	0.5	0.12	0.1
	93.0	93.5	0.5	0.12	0.8
	125.5	126.0	0.5	0.11	0.9

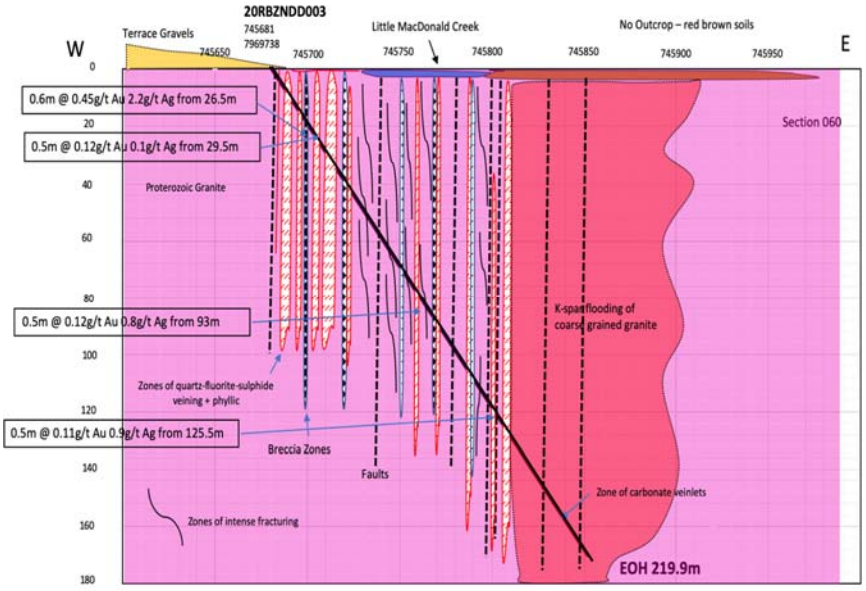

Figure 41. Southwest-Northeast Section of drill hole 20RBZNDD003.

Hole 20RBZNDD002, was collared 2.2km NNW of 20RBZSDD001 and drilled 209.15 m west to target the source of a surface gold, silver and base metals in soil anomaly (Figure 40). The hole intersected three zones of quartz-sulfide mineralization at the contact of quartz-feldspar porphyry and sheared and altered quartz monzo-diorite all intrusive into coarse grained Forsayth Granite. Assay results returned strong arsenic mineralization with up to 1,505ppm As within a 7m intersection between 131m and 138m down hole with anomalous gold and silver associated with a fault zone. West of the fault fresh quartz feldspar porphyry was intersected (Figure 42). The following intersections were noted:

Table 10-3.2: RBZ North Drilling 20RBZNDD002

20RBZNDD002	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	120.0	121.0	1.0	0.30	2.5
	131.5	133.5	2.0	0.23	57.6
	134.0	135.1	1.1	0.73	116.0
	153.0	154.0	1.0	0.46	4.6

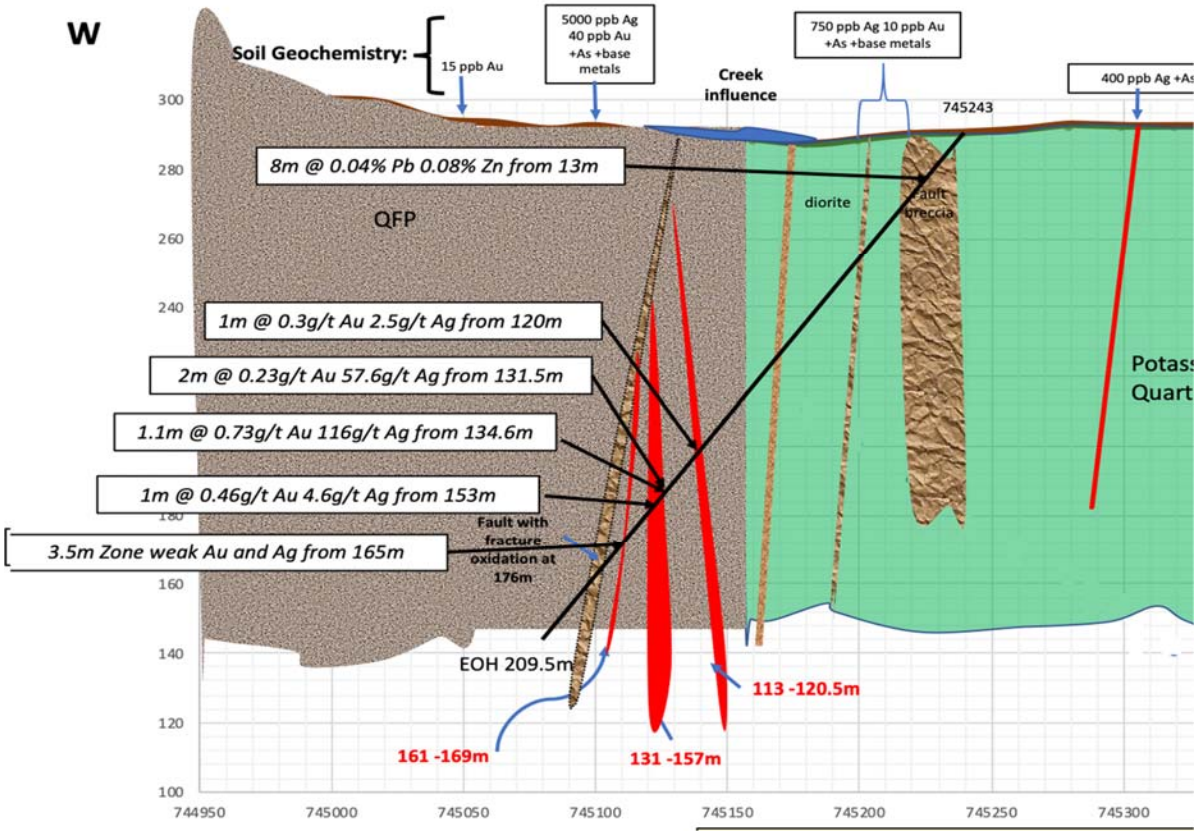

Figure 42. West-East Section of drill hole 20RBZNDD002 on Line 7969738mN.

Hole 20RBZNDD001 was located 2.3km NW of Hole 20RBZSDD001, drilling east to 192 metres downhole (Figure 40). The hole intersected narrow intervals of low-grade silver, base metals and arsenic mineralization before encountering a major fault at 104m downhole. The hole was designed to intersect a strong silver in soil anomaly associated with epithermal style quartz veining at surface which returned high grade silver assays. The soil anomaly and veining occurred at the eastern contact of altered coarse grained granite and quartz feldspar dykes mapped at surface (Figure 43). The following intersections were noted:

Table 10-3.3: RBZ North Drilling 20RBZNDD001

20RBZNDD001	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	0.0	1.4	1.4	0.10	34.0
	44.4	44.9	0.5	0.03	31.0
	72.0	73.0	1.0	0.10	49.0

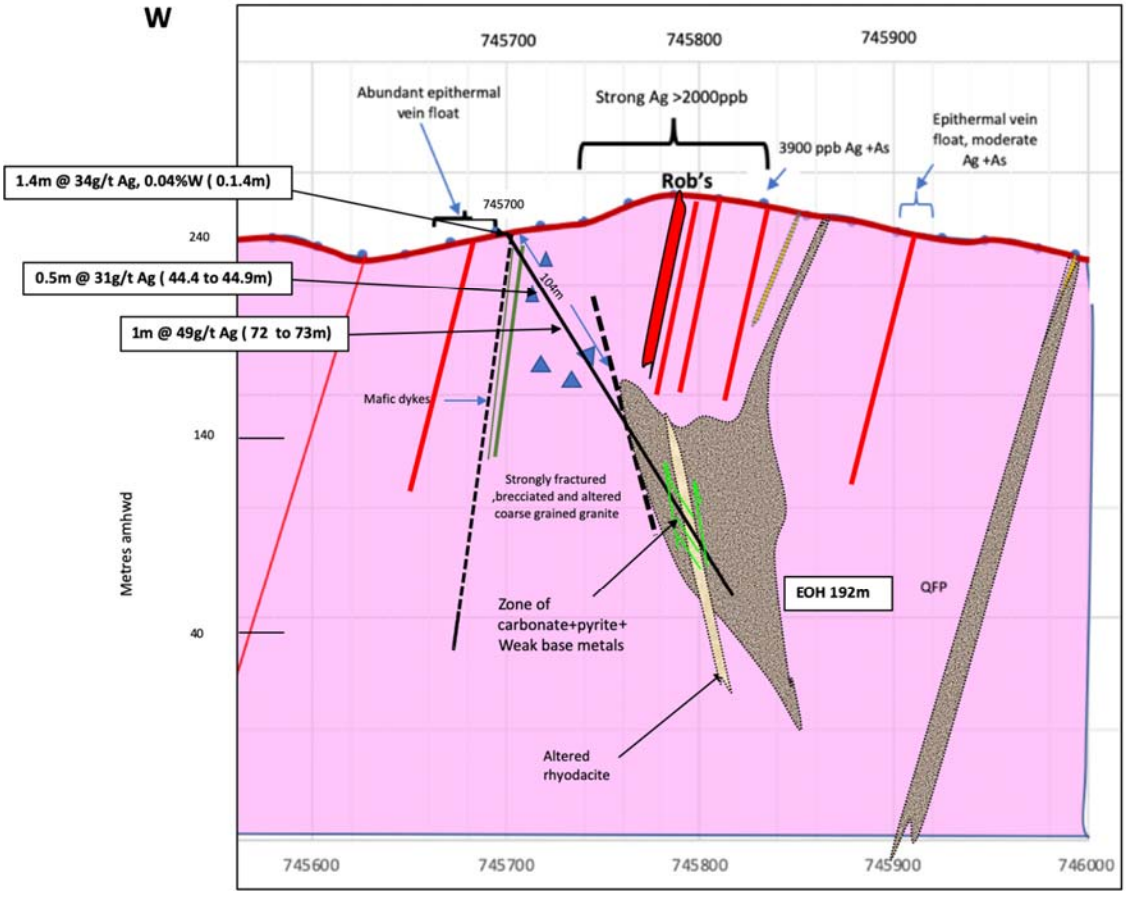

Figure 43. West-East Section of drill hole 20RBZNDD001 on Line 7970750mN

It was concluded the unexpected fault terminated mineralisation prior to surface mineralisation being intersected at depth. Assays were disappointing compared to surface mineralisation widths and tenor.

Hole 20RBZNDD005 was drilled to a depth of 145.2 metres, oriented 263.7°grid at an inclination of 55°. The hole was designed as a “scissor hole” to 20RBZNDD001 drilling back in the opposite direction (Figure 44). The hole collared into a fault zone consisting of breccia fragments of what was visually described as a crowded porphyry but petrologically described as a porphyritic rhyolite. Another fault was intersected between 56.5 and 65 metres where the contact was with a medium grained granite. Numerous felsic dykes were intersected between 98 and 104 metres. At 106 metres, an altered coarse-grained granite, displaying early potassic alteration overprinted by argillic and phyllic zones was intersected to 111 metres while a third major fault zone was intersected at 136 metres. Porphyritic rhyolite was intersected from 138 metres to the end of the hole.

Generally, mineralisation was encountered with quartz veins and veinlets associated with fine grained pyrite and arsenian pyrite with minor base metals including sphalerite and minor galena associated with faulted contact zones. Mineralised zones included the following assays:

Table 10-3.4: RBZ North Drilling 20RBZNDD005

20RBZNDD005	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	1.1	2.6	1.5	0.10	26.1
	29.0	29.5	0.5	2.30	117.0
	60.0	60.5	0.5	0.50	104.0
	133.0	134.0	1.0	0.34	1.0

Hole 20RBZNDD006 was drilled to a depth of 62.5 metres, oriented 085.3° grid at an inclination of minus 55°. The hole was collared immediately to the west of a ridge of quartz veined breccias measured as 14 metres wide at surface and displaying high grade silver mineralisation with minor gold in rock chips and soil geochemistry. This hole was collared in altered coarse grained granite which had been extensively fractured and brecciated and was intruded by several mafic dykes displaying alteration to 30 metres down hole. Several zones of strong brecciation were mapped in association with faults at 1.4 to 2 metres, 40 to 51.5 metres, and at 60.5 metres in contact with porphyritic rhyolite. Very poor recovery was measured in these zones due to high clay content.

Only weakly anomalous gold and silver was intersected in the breccia zones despite extensive open space cavities infilled by fine silica and strong phyllic alteration in association with arsenic and weak to moderate base metals. The only intersection of note was from 60.5 metres in a fault breccia in contact with porphyritic rhyolite associated with abundant fine grained pyrite and weak sphalerite mineralisation (Figure 44). This intersection can be collated with the 0.5m @ 2.3 ppm gold and 117ppm silver from 29 metres in hole 20RBZNDD005 and thence to surface outcrop.

Table 10-3.5: RBZ North Drilling 20RBZNDD006

20RBZSDD006	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	60.5	61	0.5	3.2	104.0

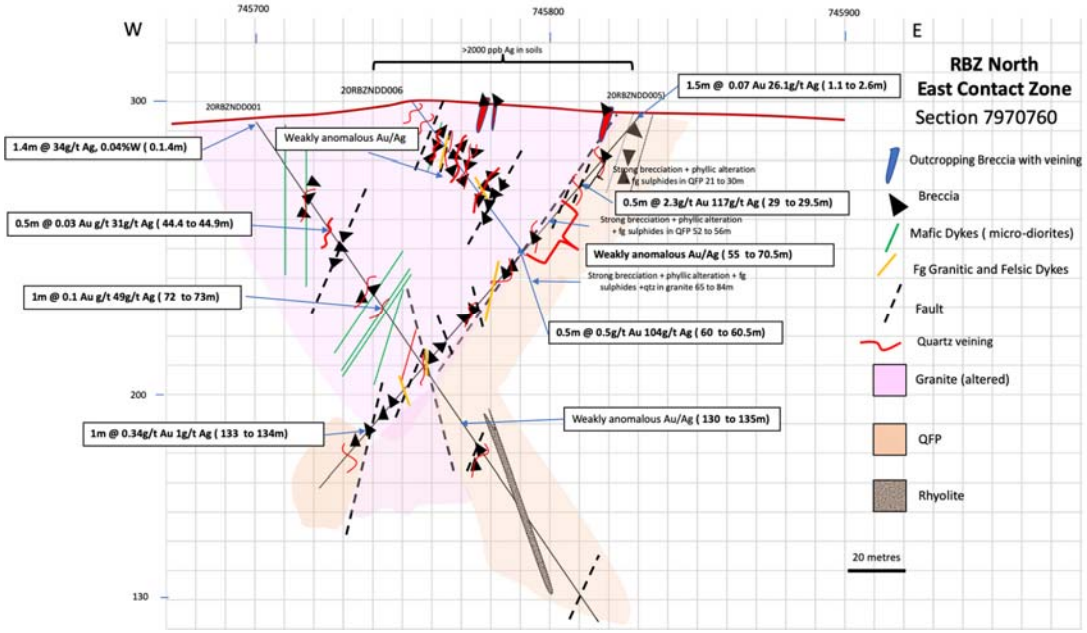

Figure 44. West-East Section of drill holes 20RBZNDD001, 20RBZNDD006 & 20RBZNDD005 on Line 7970760mN. Geology is as per Figure 20
Cross section length is 350 metres and vertical exaggeration is 1.0 times.

Hole 20RBZN-DD004 drilled 3.5km NW of Hole 20RBZSDD001, intersected zones of anomalous copper and base metal mineralization associated with a number of closely spaced mafic dykes (Figure 34). The hole was drilled to a depth of 231.5 metres to the east and was targeting strong surface base metal, moderate silver and weak gold and bismuth soil geochemistry associated with an epithermal veined sericite altered quartz feldspar porphyry intruding coarse grained granite.

The target was not intersected due to unaltered flow banded rhyolites being intersected at depth, (Figure 45). The following intersections were noted:

Table 10-3.6: RBZ North Drilling 20RBZNDD004

20RBZNDD004	m_From	m_To	m_Interval	Au_ppm	Ag_ppm
	0.0	6.0	6.0	-	2.8
	20.0	36.0	16.0	-	4.0
	85.0	94.0	9.0	-	2.6

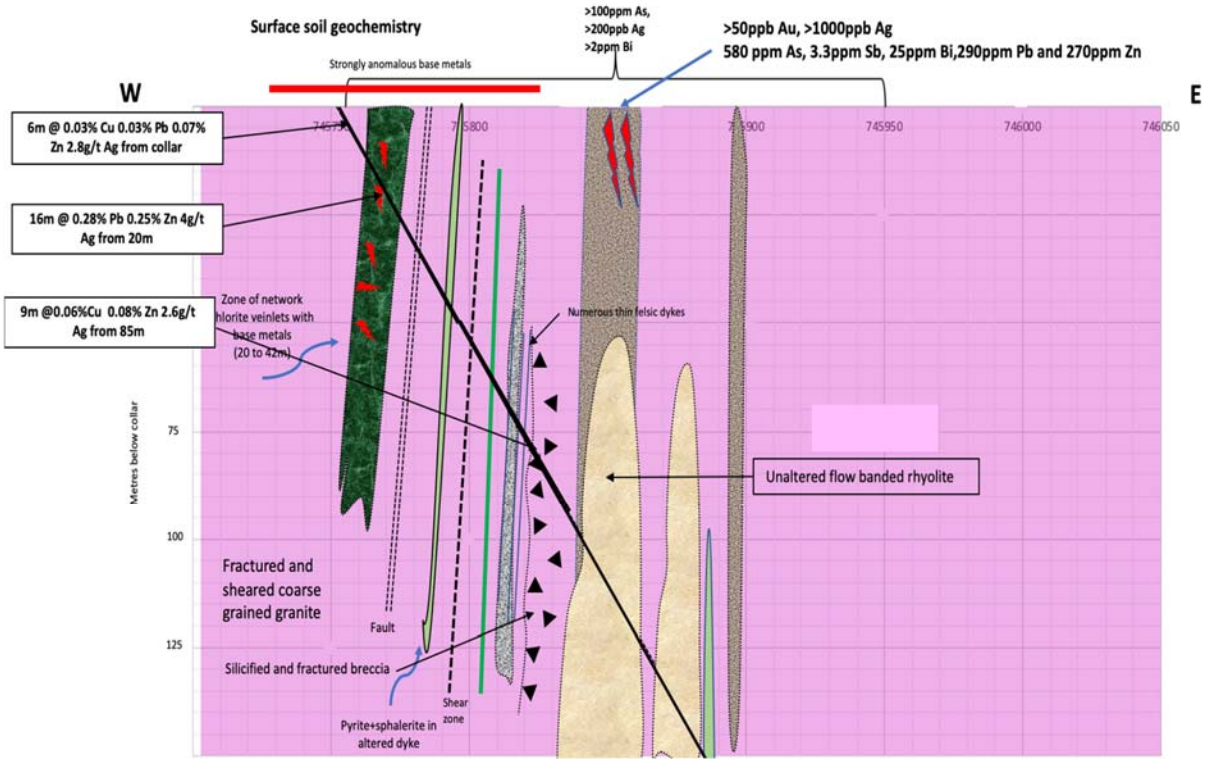

Figure 45. West-East Section of drill hole 20RBZNDD004 on Line 7972400mN.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Essex Minerals Inc has not conducted any sampling on the Property on it's own right.

11.1 Historic Sampling A variety of procedures were utilized for the various programs and the different types of samples collected over time. Records of sampling methods from previous explorers are described in Chapter 6 and contained in the following references;

1972	Wright et al (1972)	Bridge Minerals Pty. Ltd
1989	Cussen et al (1989)	Battle Mountain (Australia) Inc
1995	Ricketts et al (1995)	Kidston Gold Mines Ltd
1996	Ricketts et al (1996)	Kidston Gold Mines Ltd
1997	Ricketts et al (1997)	Kidston Gold Mines Ltd
1998	Sparks (1998a)	Kidston Gold Mines Ltd
1998	Sparks (1998b)	Kidston Gold Mines Ltd
2000	Sparks (2000)	Kidston Gold Mines Ltd
2020	Spencer (2020)	Ismins Pty Ltd
2021	Spencer (2021)	Ismins Pty Ltd

A number of different types of samples have been obtained from the Property at various times including:

- Surface rock chip grab samples from outcrops and historic mine dumps.
- Soil and stream sediment geochemical samples,
- Drill chip assay samples,
- Sawn drill core assay samples, and
- The Authors verification samples

The author has examined all these reports and is satisfied that appropriate sampling methods and approaches are consistent with industry standards at the time of collection.

11.2 ISM Sampling

ISM carried out rock chip sampling of all the prospects on the property (Chapter 9), before transporting by ISM vehicle from the Property to Townsville and submitting the samples to certified laboratory ALS Townsville Queensland division (ABN 009 936 029). Gold, in conjunction with a wide range of 33 base metal and pathfinder elements, were determined from the same samples. The process consisted of crushing and pulverizing the entire sample, performing a pulverizing QC test then splitting out 50g for a fire assay for gold with an AAS finish (analysis code Au-AA26). A 0.25g split was subjected to a four acid digestion and analysed by ICP-AES (analysis code ME-ICP61) for 33 elements. Ore grade analysis using four acid digest were carried out on several samples that recorded values above the detection limit of the ICP-AES, for Ag, Pb and As.

ISM also carried out soil sampling on the property, submitting the samples to certified laboratory ALS Brisbane Queensland division (ABN 009 936 029). Gold, in conjunction with a wide range of 51 base metal and pathfinder elements, were determined from the same digested solution via a combination of ICP-MS and ICP-AES (analysis code AuME_TL44).

In 2020 ISM carried out a ten (10) hole diamond drilling program of the RBZ prospect on the Property (Chapter 10). The HQ size core was marked out for sampling and cut in half by diamond saw by Ismins personnel, supervised by a consulting geologist. The sampling interval was 1 metre and the total number of samples submitted for assay was 1,452 samples taken from 1,851.6 metres of core. The half core was transported by ISM vehicle from the Property to Townsville and submitted to certified laboratory ALS Townsville Queensland division (ABN 009 936 029).

Gold, in conjunction with a wide range of 33 base metal and pathfinder elements, were determined from the same samples. The process consisted of crushing and pulverizing the entire half core sample, performing a pulverizing QC test then splitting out 50g for a fire assay for gold with an AAS finish (analysis code Au-AA26). A 0.25g split was subjected to a four acid digestion and analysed by ICP-AES (analysis code ME-ICP61) for 33 elements. A 50g Fire assay with a gravimetric finish was performed on one sample that exceeded the detection limit of the AAS finish. Ore grade analysis using four acid digest were carried out on several samples that recorded values above the detection limit of the ICP-AES, for Ag, Cu, Pb, Zn and As.

Assay Certificates are reported in Appendix 3 of this report

The Author is satisfied that appropriate sampling methods and approaches are consistent with industry standards and that security of the samples from preparation to delivery to a Certified Laboratory facility and their analytical procedures, meet industry best practice

12.0 DATA VERIFICATION

The Author's data verification of the sampling programs carried out by ISM included the confirmation of existence of work sites such as survey grids, property boundaries, and drill holes, as well as procedures to test the reliability of the data collected, in particular the gold, silver and base metal analytical results.

The Author completed site visits of all the seven (7) prospects listed in this report in June 2018, May 2019 and June 2021 as part of an Independent Review of the ISM Property. During the visits the Author collected samples for assay and reviewed the sampling procedures of ISM for rock and soil sampling, concluding that the sampling practice employed by ISM was at a level of industry standard for these forms of sampling.

The Author also examined the core from the ten (10) hole drilling program conducted by ISM in 2020, and confirmed the sampling and logging of the core to be appropriate and conforming to industry best practice.

The Author was not present during the drilling program in 2020, but requested that a number of commercially available pulp standards from OREAS be inserted in the sample train for each of the ten holes drilled. These certified standards represented material from mineralization similar to that being sought at the Property. A comparison was done by the Author, between the certified values of element concentration and the results from the laboratory and was found to conform.

Copies of the supporting ALS laboratory certificates are reproduced in Appendix 3

There has been no material exploration carried out on the Property after the Author's visit in June 2021. This was confirmed by ISM management at the effective date of this report.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

To the knowledge of RNA, no recent mineral processing or metallurgical testing has been undertaken on material from the current property.

14.0 MINERAL RESOURCE ESTIMATES

To the knowledge of RNA, no mineral resource or mineral reserve estimates have been undertaken for the current property.

15.0 ADJACENT PROPERTIES

The author is not aware of any current, significant mining operations or published resources and reserves of minerals adjacent to the Property.

16.0 OTHER RELEVANT DATA AND INFORMATION

To the knowledge of RNA there is no other relevant data and information concerning the current property.

17.0 INTERPRETATION AND CONCLUSIONS

A mineral resource has not been discovered on the property. For this reason, the property is considered an early stage exploration project, with excellent potential of discovering a precious metal resource.

Modern exploration activities have been conducted on the Property since the early 1970's for gold, base metals and uranium, and some exploration has taken place for stratabound base metals and intrusive related tungsten mineralisation. The more significant work in the Property area has been undertaken by Bridge Minerals Pty Ltd, Battle Mountain (Australia) Inc., Kidston Gold Mines Ltd and Mega Georgetown Pty. Ltd, before KNX subsidiary Ismins Pty Ltd ("ISM") lodged the current EPM's.

Historical drill results from the Log Creek Prospect (KGM) indicate only low-grade gold (Au) but moderate grade silver over short intersections of brecciated Carboniferous to Permian quartz feldspar porphyry with strong sericite-pyrite alteration. KGM considered the presence of breccias and similar vein assemblages within this large mineralised system, to have affinities to the Kidston breccia-hosted gold deposit (3.7Moz Au), approximately 100km to the south east.

Exploration by ISM has identified the potential geologic setting for an epithermal style precious metal resource that is likely to be silver (Ag) dominant with gold (Au) credits. The evidence of mineralization in favourable host rocks is sufficient to warrant ongoing work programs. This report is partially based on technical data that was collected in the 1970s through 2000s, and maintained by various property owners throughout the past 50 years. The Author relies on the quality of work of previous operators, their integrity of reporting, and has no reason to doubt the accuracy of the historical data. There would be minimal risk or impact derived from use of this data, as most of this historical work contributes to the ongoing recommended program.

Drilling by ISM in 2020 has discovered high grade gold mineralization over short intervals in the RBZ Prospect, reinforcing the potential for discovery of a precious metal resource.

The Author believes that epithermal style precious metal mineralization hosted in brecciated Carboniferous to Permian acid volcanics, porphyry intrusives and the dioritic basement has the most potential for discovery and development of a mineral resource. In summary, the Property is considered a property of merit, and is worthy of a significant continuing phase of exploration.

18.0 RECOMMENDATIONS

The Author's recommendations for ongoing work on the Property covers two phases of work designed to attain sufficient geochemical, geophysical and structural information for drill targeting on EPMs 26586, 26343 and 26268 and for follow up drilling at the RBZ Prospect within EPM 18775.

Phase 1 Geochemical Sampling and Simultaneous Geophysics- Magnetic Inversion Modelling

- Acquire soil sample coverage over the meta-sediment inlier on the margin of the Cumberland Range Caldera within EPM 26268. Samples to be secured on a 100 x 50 metre grid, estimated number of samples 300.
- Acquire infill soil samples at a density of 50 metre line spacing and 25 metre sample spacing along lines on the RBZ Prospect within EPM 18775 and extending the sampling eastward to cover the complete distribution of monzo-diorite. Estimated number of samples 600.
- Undertake soil sampling over The Rock Prospect within EPM 18775 on a 50 x 50 metre grid pattern, estimated number of samples 500.
- Carry out magnetic inversion modelling of aeromagnetic data flown by previous operators over the NW trending major structural feature that transgresses EPMs 26586 (The Hook), EPM 26343 and the western edge of EPM 18775. The objective of the modelling will be to define circular magnetic features shown on the RTP image localised by the NW structure, some of which occur under cover.
- Ground truth anomalous features derived from the modelling.

At the conclusion of Phase 1 and the analysis of results, it is expected that interpretation of this information will more coherently define the various prospects. This in turn will focus exploration on to high priority areas to conduct the DC/IP surveys in phase 2.

Advancing to the second stage is not wholly dependent on the outcomes of the first stage but will be strongly influenced by those results.

Phase 2 Geophysics – Electrical DC/IP Survey

- Undertake dipole-dipole DC/IP survey over the RBZ structural zone. The survey will collect DC/IP data from surface along lines spaced 200m apart with an electrode spacing of 100m in a dipole-dipole configuration. The total survey is expected to consist of 21 line kilometres covering a 6 kilometre long structural zone, with the objective of defining potential precious metal mineralised structures within the regional feature.

A budget of approximately C$ 287,251 is required to complete the two phases of work on the Property. Table 18-1 below provides a preliminary summary of the total work program budget in the 2022 field season.

In the opinion of the Author the above program will establish the potential for the Property to host discoverable economic concentrations of precious metals, leading to recommendations for drilling of established targets.

Table 18-1: Property Preliminary Budget Proposal (C$)

Estimated cost of the programs

Phase One – Geochemical Sampling and Magnetic Inversion Modelling

Geochemical Sampling

Sample Collection	$44,590
Sample Analysis	$54,782
Data Analysis	$7,500
Statutory Reporting and Tenement costs	$4,000
TOTAL (CAD $)	**$110,872**

Geophysics-Magnetics

Magnetic Inversion Modelling	$5,000
Data Integration	$7,500
TOTAL (CAD $)	**$12,500**

Phase Two –

Geophysics-Electrical DC/IP

DC/IP Data Collection	$70,000
DC/IP Program Supervision and Logistics	$30,000
Data Analysis and Drill Targeting	$37,765
TOTAL (CAD $)	**$137,765**

TOTAL	**$261,137**
G&A + Contingency (10%)	**$26,114**
GRAND TOTAL FOR BUDGET PURPOSES	**$287,251**

The above table provides a summary of a two (2) stage exploration/development work program budget in the 2022 field season. Additional capital expenditures may be required to continue exploration/development work on the Property after the program is completed

19.0 REFERENCES

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20.0 DATE AND SIGNATURE PAGE

CERTIFICATE of QUALIFIED PERSON

I, Richard Newport, of the Sydney, NSW, Australia hereby certify that:

1. I graduated with a BSc. (Hons) degree in Applied Geology from the University of New South Wales, Sydney, NSW, Australia in 1973.
2. I am a consulting and contract geoscientist; my business address is 149A McCarrs Creek Road CHURCH POINT NSW 2105 Australia
3. I am a member in good standing of the Australian Institute of Geoscientists (#2182).
4. I have worked as a geoscientist continuously for 47 years since graduation, initially with major international resource companies before establishing an independent contracting and consulting business, providing geological services to the minerals & petroleum industry in Australia, Papua New Guinea and the Pacific Islands. I have considerable experience in mineral exploration for epithermal, porphyry, orogenic and stratiform gold, silver, copper, lead and zinc deposits.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, professional affiliation, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am responsible for the content and preparation of the entire report entitled Technical Report on the Property, Georgetown District Queensland Australia for Essex Minerals Inc. and dated December 08, 2021 (Effective Date), relating to the Property tenements. I visited the Property in June 2018, May 2019 and lastly between June 21 and July 21 2021, for a duration of 31 days as part of an Independent review of KNX's Georgetown District, Australia properties
7. On December 08, 2021, the effective date of the Technical Report, to the best of my knowledge, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading
8. I am not aware of any material fact or material change that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I have had a prior involvement with the Property in June 2018 and May 2019, providing independent technical reviews for KNX.
10. I am independent of the vendor and issuer as applies in Section 1.5 of NI 43-101
11. 1 have read NI 43-101 and Form 43-101F1, to prepare this Technical Report in compliance with the instrument and form.

Richard Newport BSc (Hons) MAIG (2182)
Date: March 16th 2022

21.0 CONSENT OF QUALIFIED PERSON

To: Securities Regulatory Authority TSX Venture Exchange

I, Richard Newport, do hereby consent to the public filing of technical report entitled Technical Report on the Cumberland Property, Georgetown District Queensland Australia and dated December 08, 2021 (the "Technical Report") by Essex Minerals Inc (the "Issuer"), with the TSX Venture Exchange under its applicable policies and forms in connection with the agreement to acquire 100% of joint venture partner, KNX Resources Limited (“KNX”), that was announced in a news release on April 29, 2021 to be entered into by the Issuer and I acknowledge that the Technical Report will become part of the Issuer's public record.

Richard Newport BSc (Hons) MAIG (2182)
Date: March 16 2022

APPENDICIES

1.0 PROPERTY DOCUMENTS

Queensland Government

Department of **Resources**

Renewal of Exploration Permit

11 January 2022 Reference: EPM 18775

Ismins Pty Ltd
Terra Search Pty Ltd
PO Box 981
Castletown
HYDE PARK QLD 4812

Dear Sir/Madam

We are pleased to advise that pursuant to section 147A of the *Mineral Resources Act 1989* (MRA), Exploration Permit for Minerals (EPM) 18775 has been renewed.

Renewal approval date: 11 January 2022
Renewal commencement date: 30 April 2022
Term: 5 years
Area: 24 sub-blocks

It is important to note that the department will, at all times, insist on strict compliance with the conditions of the permit that are detailed in the following documents:

- *Mineral Resources Act 1989;*
- Mineral Resources Regulation 2013;
- *Mineral and Energy Resources (Common Provisions) Act 2014; and*
- Approved Work Program and Conditions (attached).

The Resource Authority Public Report for this permit provides further details and is available in MyMinesOnline and online at www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/searches.

You are required to carry out the activities detailed in your approved work program for the term. You must ensure you relinquish the required area at the end of year 15. Refer to Operational policy, MIN/2015/1254, *Exploration work program and relinquishment requirements for an exploration permit* for more information.

Annual Reporting Requirements
Holders of certain coal and mineral permits have annual reporting requirements. Activity Reports and Expenditure Statements are due within one month after each anniversary day of the permit. For more information on reporting requirements, go to https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/reports-notices/annual-reporting

More information

Level 9, Verde Tower, 445 Flinders Street, Townsville QLD 4810
PO Box 1752, Townsville QLD 4810
Telephone 07 4447 9230
Email: mineralhub@resources.qld.gov.au
www.resources.qld.gov.au
ABN 59 020 847 551

There are a range of useful resources and support materials available to assist you in learning more about land access and building relationships with landholders on our website www.business.qld.gov.au/industries/mining-energy-water/resources. You can also download guidelines and policies on your resource authority obligations, reserve land and native title as it applies to mining and exploration activities.

If you would like to receive future reminders via email, or need help desk services, please register with MyMinesOnline via the website or email myminesonline@resources.qld.gov.au.

If you have questions about this letter, or specific detail relating to the above permit please contact the Mineral Assessment Hub on MineralHub@resources.qld.gov.au or 07 4447 9230.

Yours faithfully

Greg Farlow
Principal Mining Registrar

Att - Approved Work Program and Conditions

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Exploration Permit Mineral (EPM) 18775

Conditions

You must comply with the conditions outlined in the *Mineral Resources Act 1989* (MRA) and the Mineral Resources Regulation 2013 (MRR).

The permit is subject to the following special conditions:

1. Nil.

Exclusions

The following is excluded from the permit area:

2. Restricted Area (RA) 452
   MRA - Pursuant to section 391 of the *Mineral Resources Act 1989*, all applications for the grant of mining claims within the State are prohibited.

Approved work program

The following work program has been approved by the department. You are required to carry out the following work program within the term in accordance with the:

- Work program guideline (MRA); and
- Operational policy MIN/2015/1254: Exploration work program and relinquishment requirements for an exploration permit.

In accordance with section 141 of the MRA, the holder may undertake any activities allowable under section 129 of the MRA, as appropriate, for the purpose that the permit is granted. Such activities must be undertaken in accordance with the conditions under the MRA and the MRR.

You are required to give an entry notice and/or enter into a conduct and compensation agreement with the landholder before accessing private land to undertake these activities.[1]

[1] See https://www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/accessing-private-land or chapter 3 of the *Mineral and Energy Resources (Common Provisions) Act 2014.*

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Work program summary for an activities-based work program

Years	Sub Blocks	Discipline	Activities to be carried out	Units – Number (estimate and description)	Quantity (cumulative) – number and description	Estimated expenditure (technical and financial resources) proposed to be committed to exploration during the term
11	24	Sample Collection Sample Analysis Site Logistics Site Logistics Site Technical Site Technical Site Technical	Soils Soils Camp or Accommodation costs Vehicle Hire Costs Internal Project Staff Cost Program Supervision Consultancy Cost	1089 samples 30 days 90 days 90 days 90 days 30 days 15 days	1089 kg	$32,670.00 $43,560.00 $16,200.00 $27,000.00 $49,500.00 $25,000.00 $22,500.00
12	24	Geophysics Mapping Sample Collection Sample Analysis Site Logistics Site Logistics Site Technical Site Technical Site Technical	Induce Polarisation Geological Soils Soils Camp or Accommodation costs Vehicle Hire Costs Internal Project Staff Cost Program Supervision Consultancy Cost	30 lines 30 days 600 samples 30 days 120 days 120 days 120 days 60 days 30 days	21 line km 600 kg	$75,000.00 $30,000.00 $18,000.00 $14,400.00 $21,600.00 $36,000.00 $66,000.00 $35,000.00 $30,000.00
13	24	Drilling Site Logistics Site Logistics Site Logistics Site Logistics Site Technical Site Technical Site Technical Sample Analysis	Reverse Circulation Camp or Accommodation costs Vehicle Hire Costs Access or Drill Site Preparation costs Rehabilitation costs Chip logging Consultancy Cost Internal Project Staff Cost Drill Sample Assays	25 holes 180 days 180 days 7 days 4 days 30 days 30 days 180 days 90 days	4250 metres	$318,750.00 $18,000.00 $27,000.00 $16,800.00 $9,600.00 $30,000.00 $30,000.00 $84,000.00 $170,000.00

14	24	Drilling Site Logistics Site Logistics Site Logistics Site Logistics Site Technical Site Technical Site Technical Sample Analysis Drilling	Reverse Circulation Camp or Accommodation costs Vehicle Hire Costs Access or Drill Site Preparation costs Rehabilitation costs Chip logging Consultancy Cost Internal Project Staff Cost Drill Sample Assays Diamond	75 holes 270 days 270 days 30 days 15 days 90 days 60 days 270 days 180 days 4 holes	7500 metres 100 metres	$562,500.00 $55,350.00 $40,500.00 $24,000.00 $18,000.00 $90,000.00 $60,000.00 $126,000.00 $316,000.00 $50,000.00
15	24	Desktop Studies Desktop Studies Feasibility Studies Feasibility Studies	Consultancy Studies Technical Review Scoping Study Environmental assessment	30 90 30 60		$30,000.00 $75,000.00 $45,000.00 $15,000.00

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Relinquishment requirements have changed for EPs. The following arrangements apply from 25 May 2020:

- nil relinquishment is required at the first renewal; and
- 50% of the area existing on 25 May 2020 is due to be relinquished 5 years after the EP is first renewed; and
- the remainder of the EP is due to be relinquished 10 years after the first renewal.

Where an EP is granted for a term of less than 5 years, the relinquishment requirement of 50% will be applied at the end of each 5 year period.

Queensland Government

Department of **Resources**

Renewal of Exploration Permit

11 January 2022 Reference: EPM 26268

Ismins Pty Ltd
Terra Search Pty Ltd
PO Box 981
Castletown
HYDE PARK QLD 4812

Dear Sir/Madam

We are pleased to advise that pursuant to section 147A of the *Mineral Resources Act 1989* (MRA), Exploration Permit for Minerals (EPM) 26268 has been renewed.

Renewal approval date: 11 January 2022
Renewal commencement date: 23 January 2022
Term: 5 years
Area: 13 sub-blocks

It is important to note that the department will, at all times, insist on strict compliance with the conditions of the permit that are detailed in the following documents:

- *Mineral Resources Act 1989;*
- Mineral Resources Regulation 2013;
- *Mineral and Energy Resources (Common Provisions) Act 2014; and*
- Approved Work Program and Conditions (attached).

The Resource Authority Public Report for this permit provides further details and is available in MyMinesOnline and online at www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/searches.

You are required to carry out the activities detailed in your approved work program for the term. You must ensure you relinquish the required area at the end of year 10. Refer to Operational policy, MIN/2015/1254, *Exploration work program and relinquishment requirements for an exploration permit* for more information.

Annual Reporting Requirements
Holders of certain coal and mineral permits have annual reporting requirements. Activity Reports and Expenditure Statements are due within one month after each anniversary day of the permit. For more information on reporting requirements, go to https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/reports-notices/annual-reporting

More information

Level 9, Verde Tower, 445 Flinders Street, Townsville QLD 4810
PO Box 1752, Townsville QLD 4810
Telephone 07 4447 9230
Email: mineralhub@resources.qld.gov.au
www.resources.qld.gov.au
ABN 59 020 847 551

There are a range of useful resources and support materials available to assist you in learning more about land access and building relationships with landholders on our website www.business.qld.gov.au/industries/mining-energy-water/resources. You can also download guidelines and policies on your resource authority obligations, reserve land and native title as it applies to mining and exploration activities.

If you would like to receive future reminders via email, or need help desk services, please register with MyMinesOnline via the website or email myminesonline@resources.qld.gov.au.

If you have questions about this letter, or specific detail relating to the above permit please contact the Mineral Assessment Hub on MineralHub@resources.qld.gov.au or 07 4447 9230.

Yours faithfully

Greg Farlow
Principal Mining Registrar

Att - Approved Work Program and Conditions

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Exploration Permit Mineral (EPM) 26268

Conditions

You must comply with the conditions outlined in the *Mineral Resources Act 1989* (MRA) and the Mineral Resources Regulation 2013 (MRR).

The permit is subject to the following special conditions:

1. Nil.

Exclusions

The following is excluded from the permit area:

2. Restricted Area (RA) 452
   MRA - Pursuant to section 391 of the *Mineral Resources Act 1989*, all applications for the grant of mining claims within the State are prohibited.

Approved work program

The following work program has been approved by the department. You are required to carry out the following work program within the term in accordance with the:

- Work program guideline (MRA); and
- Operational policy MIN/2015/1254: Exploration work program and relinquishment requirements for an exploration permit.

In accordance with section 141 of the MRA, the holder may undertake any activities allowable under section 129 of the MRA, as appropriate, for the purpose that the permit is granted. Such activities must be undertaken in accordance with the conditions under the MRA and the MRR.

You are required to give an entry notice and/or enter into a conduct and compensation agreement with the landholder before accessing private land to undertake these activities.[1]

[1] See https://www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/accessing-private-land or chapter 3 of the *Mineral and Energy Resources (Common Provisions) Act 2014.*

Approved Work Program and Conditions

Work program summary for an activities-based work program

Years	Sub Blocks	Discipline	Activities to be carried out	Units – Number (estimate and description)	Quantity (cumulative) – number and description	Estimated expenditure (technical and financial resources) proposed to be committed to exploration during the term
6	13	Sample Collection	Hand sampling	400 samples	800 kilograms	$20,000.00
		Site Logistics	Camp or Accommodation costs	60 days		$4,000.00
		Site Logistics	Vehicle Hire Costs	40 days		$7,000.00
		Sample Analysis	Soils	400 samples	400 kilograms	$18,000.00
		Sample Analysis	Rock Chips	5 days		$5,000.00
		Sample Analysis	Mineralogy / Petrology	2 days		$2,000.00
		Site Technical	Program Supervision	15 days		$10,000.00
		Site Technical	Gridding/Surveying Cost	5 days		$1,500.00
		Site Logistics	Access or Drill Site Preparation costs	4 days		$700.00
		Desktop Studies	Technical Review	5 days		$3,000.00
7	13	Sample Collection	Hand sampling	400 samples		$20,000.00
		Site Logistics	Camp or Accommodation costs	60 days		$7,500.00
		Site Logistics	Vehicle Hire Costs	40 days		$7,000.00
		Sample Analysis	Soils	400 samples		$18,000.00
		Sample Analysis	Rock Chips	5 days		$18,000.00
		Sample Analysis	Mineralogy / Petrology	2 days		$2,000.00
		Site Technical	Consultancy Cost	30 days		$20,000.00
		Site Technical	Program Supervision	15 days		$10,000.00
		Site Technical	Gridding/Surveying Cost	5 days		$1,500.00
		Site Logistics	Access or Drill Site Preparation costs	4 days		$700.00
		Desktop Studies	Technical Review	5 days		$3,000.00
		Mapping	Reconnaissance	7 days		$5,000.00
8	13	Drilling	Reverse Circulation	6 holes	900 metres	$65,000.00
		Sample Analysis	Drill Sample Assays	900 samples		$24,000.00
		Site Logistics	Access or Drill Site Preparation costs	6 days		$10,000.00

		Site Logistics Site Logistics Site Logistics Site Technical Site Technical Site Technical Site Technical	Camp or Accommodation costs Rehabilitation costs Vehicle Hire Costs Consultancy Cost Internal Project Staff Cost Chip logging Gridding/Surveying Cost	50 days 3 days 30 days 30 days 30 days 20 days 7 days		$7,000.00 $3,000.00 $5,000.00 $30,000.00 $15,000.00 $10,000.00 $3,500.00
9	13	Drilling Sample Analysis Site Logistics Site Logistics Site Logistics Site Logistics Site Technical Site Technical Site Technical	Reverse Circulation Drill Sample Assays Access or Drill Site Preparation costs Camp or Accommodation costs Rehabilitation costs Vehicle Hire Costs Consultancy Cost Internal Project Staff Cost Chip logging	20 holes 2000 samples 7 days 60 days 10 days 60 days 60 days 60 days 30 days	2000 metres	$150,000.00 $80,000.00 $10,000.00 $10,000.00 $5,000.00 $9,000.00 $60,000.00 $30,000.00 $20,000.00
10	13	Desktop Studies Resource Evaluation Resource Evaluation Sample Analysis	Technical Review Resource Modelling JORC Resource Estimation Metallurgical studies	15 days 15 days 15 days 20 days		$15,000.00 $15,000.00 $15,000.00

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Relinquishment requirements have changed for EPs. The following arrangements apply from 25 May 2020:

- nil relinquishment is required at the first renewal; and
- 50% of the area existing on 25 May 2020 is due to be relinquished 5 years after the EP is first renewed; and
- the remainder of the EP is due to be relinquished 10 years after the first renewal.

Where an EP is granted for a term of less than 5 years, the relinquishment requirement of 50% will be applied at the end of each 5 year period.

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Exploration Permit Mineral (EPM) 26268

Conditions

You must comply with the conditions outlined in the *Mineral Resources Act 1989* (MRA) and the Mineral Resources Regulation 2013 (MRR).

The permit is subject to the following special conditions:

1. Nil.

Exclusions

The following is excluded from the permit area:

2. Restricted Area (RA) 452
   MRA - Pursuant to section 391 of the *Mineral Resources Act 1989*, all applications for the grant of mining claims within the State are prohibited.

Approved work program

The following work program has been approved by the department. You are required to carry out the following work program within the term in accordance with the:

- Work program guideline (MRA); and
- Operational policy MIN/2015/1254: Exploration work program and relinquishment requirements for an exploration permit.

In accordance with section 141 of the MRA, the holder may undertake any activities allowable under section 129 of the MRA, as appropriate, for the purpose that the permit is granted. Such activities must be undertaken in accordance with the conditions under the MRA and the MRR.

You are required to give an entry notice and/or enter into a conduct and compensation agreement with the landholder before accessing private land to undertake these activities.[1]

[1] See https://www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/accessing-private-land or chapter 3 of the *Mineral and Energy Resources (Common Provisions) Act 2014.*

Approved Work Program and Conditions

Work program summary for an activities-based work program

Years	Sub Blocks	Discipline	Activities to be carried out	Units – Number (estimate and description)	Quantity (cumulative) – number and description	Estimated expenditure (technical and financial resources) proposed to be committed to exploration during the term
6	13	Sample Collection	Hand sampling	400 samples	800 kilograms	$20,000.00
		Site Logistics	Camp or Accommodation costs	60 days		$4,000.00
		Site Logistics	Vehicle Hire Costs	40 days		$7,000.00
		Sample Analysis	Soils	400 samples	400 kilograms	$18,000.00
		Sample Analysis	Rock Chips	5 days		$5,000.00
		Sample Analysis	Mineralogy / Petrology	2 days		$2,000.00
		Site Technical	Program Supervision	15 days		$10,000.00
		Site Technical	Gridding/Surveying Cost	5 days		$1,500.00
		Site Logistics	Access or Drill Site Preparation costs	4 days		$700.00
		Desktop Studies	Technical Review	5 days		$3,000.00
7	13	Sample Collection	Hand sampling	400 samples		$20,000.00
		Site Logistics	Camp or Accommodation costs	60 days		$7,500.00
		Site Logistics	Vehicle Hire Costs	40 days		$7,000.00
		Sample Analysis	Soils	400 samples		$18,000.00
		Sample Analysis	Rock Chips	5 days		$18,000.00
		Sample Analysis	Mineralogy / Petrology	2 days		$2,000.00
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		Site Technical	Gridding/Surveying Cost	5 days		$1,500.00
		Site Logistics	Access or Drill Site Preparation costs	4 days		$700.00
		Desktop Studies	Technical Review	5 days		$3,000.00
		Mapping	Reconnaissance	7 days		$5,000.00
8	13	Drilling	Reverse Circulation	6 holes	900 metres	$65,000.00
		Sample Analysis	Drill Sample Assays	900 samples		$24,000.00
		Site Logistics	Access or Drill Site Preparation costs	6 days		$10,000.00

		Site Logistics Site Logistics Site Logistics Site Technical Site Technical Site Technical Site Technical	Camp or Accommodation costs Rehabilitation costs Vehicle Hire Costs Consultancy Cost Internal Project Staff Cost Chip logging Gridding/Surveying Cost	50 days 3 days 30 days 30 days 30 days 20 days 7 days		$7,000.00 $3,000.00 $5,000.00 $30,000.00 $15,000.00 $10,000.00 $3,500.00
9	13	Drilling Sample Analysis Site Logistics Site Logistics Site Logistics Site Logistics Site Technical Site Technical Site Technical	Reverse Circulation Drill Sample Assays Access or Drill Site Preparation costs Camp or Accommodation costs Rehabilitation costs Vehicle Hire Costs Consultancy Cost Internal Project Staff Cost Chip logging	20 holes 2000 samples 7 days 60 days 10 days 60 days 60 days 60 days 30 days	2000 metres	$150,000.00 $80,000.00 $10,000.00 $10,000.00 $5,000.00 $9,000.00 $60,000.00 $30,000.00 $20,000.00
10	13	Desktop Studies Resource Evaluation Resource Evaluation Sample Analysis	Technical Review Resource Modelling JORC Resource Estimation Metallurgical studies	15 days 15 days 15 days 20 days		$15,000.00 $15,000.00 $15,000.00

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Relinquishment requirements have changed for EPs. The following arrangements apply from 25 May 2020:

- nil relinquishment is required at the first renewal; and
- 50% of the area existing on 25 May 2020 is due to be relinquished 5 years after the EP is first renewed; and
- the remainder of the EP is due to be relinquished 10 years after the first renewal.

Where an EP is granted for a term of less than 5 years, the relinquishment requirement of 50% will be applied at the end of each 5 year period.

Queensland Government

Department of **Resources**

Renewal of Exploration Permit

12 January 2022 Reference: EPM 26343

Ismins Pty Ltd
Terra Search Pty Ltd
PO Box 981
Castletown
HYDE PARK QLD 4812

Dear Sir/Madam

We are pleased to advise that pursuant to section 147A of the *Mineral Resources Act 1989* (MRA), Exploration Permit for Minerals (EPM) 26343 has been renewed.

Renewal approval date: 12 January 2022
Renewal commencement date: 13 April 2022
Term: 5 years
Area: 20 sub-blocks

It is important to note that the department will, at all times, insist on strict compliance with the conditions of the permit that are detailed in the following documents:

- *Mineral Resources Act 1989;*
- Mineral Resources Regulation 2013;
- *Mineral and Energy Resources (Common Provisions) Act 2014; and*
- Approved Work Program and Conditions (attached).

The Resource Authority Public Report for this permit provides further details and is available in MyMinesOnline and online at www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/searches.

You are required to carry out the activities detailed in your approved work program for the term. You must ensure you relinquish the required area at the end of year 10. Refer to Operational policy, MIN/2015/1254, *Exploration work program and relinquishment requirements for an exploration permit* for more information.

Annual Reporting Requirements
Holders of certain coal and mineral permits have annual reporting requirements. Activity Reports and Expenditure Statements are due within one month after each anniversary day of the permit. For more information on reporting requirements, go to https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/reports-notices/annual-reporting

More information

Level 9, Verde Tower, 445 Flinders Street, Townsville QLD 4810
PO Box 1752, Townsville QLD 4810
Telephone 07 4447 9230
Email: mineralhub@resources.qld.gov.au
www.resources.qld.gov.au
ABN 59 020 847 551

There are a range of useful resources and support materials available to assist you in learning more about land access and building relationships with landholders on our website www.business.qld.gov.au/industries/mining-energy-water/resources. You can also download guidelines and policies on your resource authority obligations, reserve land and native title as it applies to mining and exploration activities.

If you would like to receive future reminders via email, or need help desk services, please register with MyMinesOnline via the website or email myminesonline@resources.qld.gov.au.

If you have questions about this letter, or specific detail relating to the above permit please contact the Mineral Assessment Hub on MineralHub@resources.qld.gov.au or 07 4447 9230.

Yours faithfully

Greg Farlow
Principal Mining Registrar

Att - Approved Work Program and Conditions

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Exploration Permit Mineral (EPM) 26343

Conditions

You must comply with the conditions outlined in the *Mineral Resources Act 1989* (MRA) and the Mineral Resources Regulation 2013 (MRR).

The permit is subject to the following special conditions:

1. Nil.

Exclusions

The following is excluded from the permit area:

2. Restricted Area (RA) 452
   MRA - Pursuant to section 391 of the *Mineral Resources Act 1989*, all applications for the grant of mining claims within the State are prohibited.

Approved work program

The following work program has been approved by the department. You are required to carry out the following work program within the term in accordance with the:

- Work program guideline (MRA); and
- Operational policy MIN/2015/1254: Exploration work program and relinquishment requirements for an exploration permit.

In accordance with section 141 of the MRA, the holder may undertake any activities allowable under section 129 of the MRA, as appropriate, for the purpose that the permit is granted. Such activities must be undertaken in accordance with the conditions under the MRA and the MRR.

You are required to give an entry notice and/or enter into a conduct and compensation agreement with the landholder before accessing private land to undertake these activities.[1]

[1] See https://www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/accessing-private-land or chapter 3 of the *Mineral and Energy Resources (Common Provisions) Act 2014.*

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Work program summary for an activities-based work program

Years	Sub Blocks	Discipline	Activities to be carried out	Units – Number (estimate and description)	Quantity (cumulative) – number and description	Estimated expenditure (technical and financial resources) proposed to be committed to exploration during the term
6	20	Sample Collection Sample Collection Mapping Drilling Site Logistics Site Logistics Site Logistics Site Technical Site Technical Sample Analysis	Rock Chips Soils Reconnaissance Mixed Type Access or Drill Site Preparation costs Camp or Accommodation costs Vehicle Hire Costs Survey General Cost Consultancy Cost Drill Sample Assays	100 Samples 25 Samples 30 Days 1 Hole 3 Days 30 Days 30 Days 30 Days 30 Days	500 metres	$4,000.00 $1,000.00 $20,000.00 $100,000.00 $10,000.00 $15,000.00 $10,000.00 $10,000.00 $65,000.00 $20,000.00
7	20	Geophysics Sample Collection Sample Analysis Site Logistics Site Technical	Induce Polarisation Soils Multi-Element Camp or Accommodation costs Consultancy Cost	10 lines 500 samples 20 Days 20 Days	21 line km	$175,000.00 $25,000.00 $20,000.00 $15,000.00 $40,000.00
8	20	Drilling Sample Analysis Site Logistics Site Logistics Site Technical Site Logistics Site Logistics Mapping	Mixed Type Multi-Element Access or Drill Site Preparation costs Camp or Accommodation costs Consultancy Cost Vehicle Hire Costs Rehabilitation costs Reconnaissance	5 Holes 4 days 20 Days 20 Days 20 Days 4 Days 5 Days	2000 metres	$200,000.00 $80,000.00 $5,000.00 $15,000.00 $50,000.00 $5,000.00 $5,000.00 $10,000.00
9	20	Drilling Sample Analysis Site Logistics Site Logistics	Mixed Type Multi-Element Access or Drill Site Preparation costs Camp or Accommodation costs	10 Holes 4 Days 30 Days	5000 metres	$500,000.00 $100,000.00 $5,000.00 $15,000.00

		Site Logistics Site Technical Resource Evaluation Mapping Site Logistics	Vehicle Hire Costs Consultancy Cost Resource Modelling Reconnaissance Rehabilitation costs	30 days 30 Days 10 Days 10 Days 4 Days		$10,000.00 $60,000.00 $20,000.00 $15,000.00 $5,000.00
10	20	Resource Evaluation Feasibility Studies Mapping Site Technical Site Logistics Site Logistics Sample Analysis	Resource Modelling Scoping Study Geological Consultancy Cost Camp or Accommodation costs Vehicle Hire Costs General Sample Assays	5 Days 10 Days 10 Days 10 Days 10 Days 15 Days		$20,000.00 $40,000.00 $15,000.00 $10,000.00 $5,000.00 $5,000.00 $5,000.00

Queensland Government

Department of **Resources**

Approved Work Program and Conditions

Relinquishment requirements have changed for EPs. The following arrangements apply from 25 May 2020:

- nil relinquishment is required at the first renewal; and
- 50% of the area existing on 25 May 2020 is due to be relinquished 5 years after the EP is first renewed; and
- the remainder of the EP is due to be relinquished 10 years after the first renewal.

Where an EP is granted for a term of less than 5 years, the relinquishment requirement of 50% will be applied at the end of each 5 year period.

Queensland Government

Department of **Natural Resources, Mines and Energy**

Grant of EPM 26586

10 May 2018 Reference: EPM 26586

Ismins Pty Ltd
C/- Terra Search Pty Ltd
PO Box 981 Castletown
Hyde Park QLD 4812

Dear Sir/Madam

We are pleased to advise that pursuant to section 136 of the *Mineral Resources Act 1989*, EPM 26586 has been granted.

Grant date: 10 May 2018
Commencement date: 10 May 2018
Term: 5 years
Area: 20 sub-blocks
Environmental authority number: EPSX00611713

Note: the Department will, at all times, insist on strit compliance with all terms and conditions of the exploration permit.

For your information the conditions applying to this exploration permit are contained in:

- the *Mineral Resources Act 1989*
- the *Mineral Resources Regulation 2013*
- the *Mineral and Energy Resources (Common Provisions) Act 2014*
- specific conditions for the exploration permit
- the Native Title Protection Conditions

What do I need to do now?
At a minimum the below conditions need to be addressed promptly after grant.

- *Land Access Conditions:*
    - You must notify relevant land owners or occupiers of any intended entry prior to commencing activity. Unless otherwise agreed, this notification must be on the approved form and be no less than 10 days prior to entry.
    - Unless you have reached alternate arrangements before commencing advanced activities a conduct and compensation arrangement is required, with the relevant landowner or occupier.
    - We strongly advise you to review the land access code and the restricted land provisions before undertaking any activities on private land.[1]

1 The Land Access Code is found in Chapter 3 Part 1 and schedule 1; restricted land provisions is in Division 2 Part 4 and Section 228B of the *Mineral and Energy Resources (Common Provisions) Act 2014* and s129(3) of the *Mineral Resources Act 1989.*

Department of Natural Resources, Mines and Energy
Mineral Assessment Hub
Verde Tower, 445 Flinders Street; PO Box 1752
Townsville QLD 4810
https://www.business.qld.gov.au/industries/mining-energy-water/resources
Email: mineralhub@dnrme.qld.gov.au
ABN 59 020 847 551

- *Environmental authority conditions*
    - If your permit was granted without the financial assurance requirement being paid you must pay the financial assurance prior to the commencement of on ground activities.[2]
    - Contact the Department of Environment and Science for assistance on financial assurance calculation on palm@des.qld.gov.au or 1300 130 372.
- *Areas of regional interest*
    - If this permit overlaps with Priority Agricultural Area, Priority Living Area, Strategic Environmental Area and/or Strategic Cropping Area which is administered under the *Regional Planning Interests Act 2014* (RPI Act) you may be required to obtain additional approvals. For more information, go to: http://www.dilgp.qld.gov.au/planning/regional-planning/rpi-act-forms-guidelines-and-fact-sheets.html
- *Health and Safety Requirements*
    - You must comply with the requirements of the *Mining and Quarrying Safety and Health Act 1999* and Mining and Quarrying Safety and Health Regulations 2001 for operations on non-coal mining tenure.
    - Before commencing any operations notify an inspector of mines for the appropriate region to find out your health and safety obligations and responsibilities.
    - For more information about the safety and health requirements, go to: https://www.business.qld.gov.au/industries/mining-energy-water/resources/safety-health

Queensland mining and quarrying operations are required to supply information for all or part of the previous 12 months on the Queensland Mining and Quarrying Industry Census Form, located on the departmental website. The census form for calculating the annual Safety and Health Levy must be lodged quarterly with the department within 20 days of the end of each quarter. For more information about completing the census forms, phone 07 3199 8019 or email safetyandhealthlevy@dnrme.qld.gov.au

- *Native Title Protection Condition requirements:*
    - You must provide written notice to native title parties within 7 business days of grant seeking details of the body nominated to receive funds[3;] Please familiarise yourself with these conditions as annual payments and other requirements apply.
    - Written notice must be provided to native title parties regarding exploration activities before commencing. This applies only to those parts of the grant area that are covered by the native title claim[4.]

For convenience, we have listed below relevant native title parties[5] as advised by the Native Title Tribunal. There may be new registered native title claimants to liaise with. It is your responsibility to ensure you are dealing with the correct Native Title Parties at the time activities occur.

Relevant Native Title Parties:

1. Ewamian People #3 Tatampi Puranga Aboriginal Corporation RNTBC (Registered Native Title Claimant)
   QCD2013/007 (National Native Title Tribunal Number)
   QUD6018/2001 (Federal Court Number)

[2] Section 292 *Environmental Protection Act 1994*
[3] Clause 11.1 of the Native Title Protection Conditions
[4] Clause 3.1 and 3.4 of the Native Title Protection Conditions
[5] Schedule 1 of the Native Title Protection Conditions

Requirement to provide security
All future applications for the grant, renewal, variation or transfer of an exploration permit will be required to provide to the department an amount of security to be determined prior to the grant, renewal, variation or transfer. This requirement is in accordance with section 144(4) of the *Mineral Resources Act 1989* and Policy 01/2018 *Security assessment – mineral and coal resource authorities*.

Policy 01/2018 provides information about the assessment process that will be used to determine the amount of security to be held against a resource authority granted under the *Mineral Resources Act 1989* and can be found on our website https://www.business.qld.gov.au/industries/mining-energy-water/resources/applications-compliance/policies-guidelines

Where do I find more information?
There are a range of useful resources and support materials available to assist you in learning more about land access and building relationships with landholders from our website https://www.business.qld.gov.au/industries/mining-energy-water/resources. You can also download guidelines and policies on your resource authority obligations, reserve land, land access and native title as it applies to mining and exploration activities.

If you have questions about this letter, or specific detail relating to the above permit contact the Mineral Assessment Hub on MineralHub@dnrme.qld.gov.au or +61 (07) 4447 9230.

If you would like to receive future reminders via email, or need help desk services, please register with MyMinesOnline via the website or email mines_online@dnrme.qld.gov.au.

Regards

Mining and Petroleum Operations
Department of Natural Resources, Mines and Energy

Department of **Natural Resources, Mines and Energy**

Queensland Government

Approved work program for EPM 26586

The following is the work program that has been approved by the department. You are required to carry out the following work program within the conditioned period and comply with the related expenditure commitments outlined throughout the permit term.

In accordance with ***Operational policy 5/2012 - Work program and relinquishment conditions,*** your work program performance will be assessed against each component of the work program condition period.

Conditioned period 1

Year 1
Sub-blocks 20

Activity	Total expenditure
Mapping - Recon Mapping & sampling, 5 days Geophysics - Geophysics Interpretation, 5 days Sample collection - Rock samples and assays, 40 samples Site Logistics - Camp/ Accom, 6 days Site Logistics - Vehicle, 10 days Desktop studies - Tech/ Geo/ review or geophys processing, 7 days	$15,000

Year 2
Sub-blocks 20

Activity	Total expenditure
Sample Collection - Rock Chips / Soils and assays, 100 samples Site Technical - Access/ trenching & rehabilitation, 3 days Site Technical - Mapping & rock chip sampling, 10 samples Site Logistics - Camp/ Accom, 11 days Site Logistics - Vehicle x 2, 12 days Office work - Reporting & preparation of maps & data, 5 days Desktop studies - Tech/ Geo/ review or geophys processing, 4 days	$25,000

Year 3
Sub-blocks 20

Activity	Total expenditure
Sample Collection - Drill Assays, 200 samples Site Technical - Access/ drill site prep, 3 days Site Technical - Chip Logging & additional field mapping, 5 days Site Logistics - Camp/ Accom, 6 days Site Logistics - Vehicle x 2, 7 days Drilling - RC drilling & reporting, 3 holes, 200m	$75,000

Note:
40% relinquishment of sub-blocks required at end of year 3
50% relinquishment of sub-blocks is required if a renewal of the permit is sought

Condition period 2

Year 4

Sub-blocks 12

Activity	Total expenditure
Sample Collection - Drill Assays & petrography, 500 samples Site Technical - Access/ drill site prep, 4 days Site Technical - Chip Logging & additional recon, 8 days Site Logistics - Camp/ Accom, 10 days Site Logistics - Vehicle x 2, 13 days Drilling - RC drilling w/ minor core, 3 or 4 holes, 350m Desktop studies - Tech/ Geo/ Reporting & maps & Interp, 15 days	$150,000

Year 5

Sub-blocks 12

Activity	Total expenditure
Sample Collection - Drill Assays, 700 samples Site Technical - Access/ drill site prep, 3 days Site Technical - Chip & core Logging & camp costs, 10 days Site Logistics - Vehicle x 2, 13 days Drilling - RC/ core 50/50 by cost, 3 or 5 holes, 350m Desktop studies - Tech/ Geo/ Reporting, Preliminary Feasibility studies - Scoping and Metallurgical Studies, 15	$200,000

2.0 ALS ASSAY CERTIFICATES

1.EPM 18775 – DRILLING ASSAYS

2.EPM 26586 – ROCK CHIP ASSAYS

Australian Laboratory Services Pty. Ltd.
32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 7 3243 7222 Fax: +61 7 3243 7218
www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
C/- R.D. PERKES
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 24-AUG-2020
Account: ISMINS

CERTIFICATE TV20164469

Project: Cumberland

P.O. No.: 278774

This report is for 145 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 3-AUG-2020.

The following have access to data associated with this certificate:

JIM MCGREGOR-DAWSON	LEE SPENCER	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
TRA-21	Transfer sample
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Pb-OG62	Ore Grade Pb - Four Acid	
Zn-OG62	Ore Grade Zn - Four Acid	
Au-GRA22	Au 50 g FA-GRAV finish	WST-SIM
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 7 3243 7222 Fax: +61 7 3243 7218
www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
C/- R.D. PERKES
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 24-SEP-2020
Account: ISMINS

CERTIFICATE TV20196315

Project: Cumberland

P.O. No.: 316753

This report is for 124 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 7-SEP-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
TRA-21	Transfer sample
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 7 3243 7222 Fax: +61 7 3243 7218
www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
C/- R.D. PERKES
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 1-SEP-2020
Account: ISMINS

CERTIFICATE TV20174593

Project: Cumberland

P.O. No.: 278775

This report is for 179 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 13-AUG-2020.

The following have access to data associated with this certificate:

JIM MCGREGOR-DAWSON	LEE SPENCER	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
TRA-21	Transfer sample
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
32 Shand Street
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www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
C/- R.D. PERKES
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 17-SEP-2020
Account: ISMINS

CERTIFICATE TV20189476

Project: Cumberland

P.O. No.: 316751

This report is for 237 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 31-AUG-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 7 3243 7222 Fax: +61 7 3243 7218
www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
C/- R.D. PERKES
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 28-SEP-2020
Account: ISMINS

CERTIFICATE TV20196313

Project: Cumberland

P.O. No.: 316752

This report is for 168 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 7-SEP-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
TRA-21	Transfer sample
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
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Brisbane QLD 4053
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www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
C/- R.D. PERKES
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 14-OCT-2020
Account: ISMINS

CERTIFICATE TV20209117

Project: Cumberland

P.O. No.: Rob Spencer

This report is for 239 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 21-SEP-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
TRA-21	Transfer sample
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

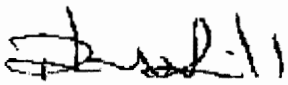
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Pb-OG62	Ore Grade Pb - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:



Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
32 Shand Street
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Brisbane QLD 4053
Phone: +61 7 3243 7222 Fax: +61 7 3243 7218
www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 3-DEC-2020
Account: ISMINS

CERTIFICATE TV20270437

Project: Cumberland

P.O. No.: 316757

This report is for 84 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 20-NOV-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
32 Shand Street
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Brisbane QLD 4053
Phone: +61 7 3243 7222 Fax: +61 7 3243 7218
www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 24-DEC-2020
Account: ISMINS

CERTIFICATE TV20284922

Project: Cumberland

P.O. No.: 316762

This report is for 59 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 4-DEC-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

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www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 15-JAN-2021
Account: ISMINS

CERTIFICATE TV20295593

Project: Cumberland

P.O. No.: 316764

This report is for 167 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 14-DEC-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: Sample 102335 depleted during processing gold. Has been excluded from this report

Signature:

Peter Neville, Laboratory Manager

Australian Laboratory Services Pty. Ltd.
32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 7 3243 7222 Fax: +61 7 3243 7218
www.alsglobal.com/geochemistry

To: **ISMINS PTY LTD**
P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 11-JAN-2021
Account: ISMINS

CERTIFICATE TV20295481

Project: Cumberland

P.O. No.: 316763

This report is for 76 Drill Core samples submitted to our lab in Townsville, QLD, Australia on 14-DEC-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager

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P.O. BOX 386
CROWS NEST NSW 1585

Finalized Date: 8-DEC-2020
Account: ISMINS

CERTIFICATE TV20270456

Project: Cumberland

P.O. No.: 316759

This report is for 28 Rock samples submitted to our lab in Townsville, QLD, Australia on 20-NOV-2020.

The following have access to data associated with this certificate:

LEE SPENCER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample
PUL-23	Pulv Sample - Split/Retain

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Pb-OG62	Ore Grade Pb - Four Acid	
ME-OG62h	Extended Ore Grade 4-Acid	ICP-AES
As-OG62	Ore Grade As - Four Acid	
Au-AA26	Ore Grade Au 50g FA AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Peter Neville, Laboratory Manager