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ASSESSMENT REPORT

describing

LIDAR ACQUISITION AND DATA COMPILATION

Lidar acquisition June 28, 2019

at the

KLUANE PROPERTY

Arc 1-74	YD09459-YD09532	Malou 7-14	YB37727-YB37734
Delor 1-10	YB37735-YB37744	15-20	YB38136-YB38141
11-24	YB38302-YB38315	21-26	YB38218-YB38223
25-48	YB47116-YB47139	27-40	YB38316-YB38329
49-129	YB54418-YB54498	41-52	YB47140-YB47151
130-135	YE66361-YE66366	Shut 5	YB38330
Malou 1-6	YB35901-YB35906	Wasp 47-58	YD09447-YD09458

Latitude 61°12'N, Longitude 137°45'W
NTS 115H/4

in the
Whitehorse Mining District
Yukon Territory

prepared by
Archer, Cathro & Associates (1981) Limited

For

STRATEGIC METALS LTD.

by

S. Israel, PhD
March 2020

CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
PROPERTY LOCATION, CLAIM DATA AND ACCESS	1
HISTORY AND PREVIOUS WORK	2
GEOMORPHOLOGY	4
REGIONAL GEOLOGY	5
PROPERTY GEOLOGY	6
MINERALIZATION	8
SOIL GEOCHEMISTRY	16
LIDAR	17
DISCUSSION	18
CONCLUSIONS AND RECOMMENDATIONS	21
REFERENCES	22

APPENDICES

- I STATEMENT OF QUALIFICATIONS
- II STATEMENT OF EXPENDITURES
- III LIDAR DATASET

FIGURES

<u>No.</u>	<u>Description</u>	<u>Follows Page</u>
1	Property Location	1
2	Claim Locations	In Pocket
3	Regional geology	5
4	Outcrop exposure	6
5	Property geology	7
6	Mineralized Zones and Showings	In Pocket
7	Argon gas release spectra	15
8	Gold Soil Geochemistry	In Pocket
9	Arsenic Soil Geochemistry	In Pocket
10	Lidar image and interpretation	In Pocket
11	1 st vertical derivative of the total magnetic intensity	In Pocket
12	Juneau – Kluane tectonic comparison	19
13	Orogenic gold model	20
14	Total magnetic intensity	In Pocket

TABLES

I	Significant Drill Intersections from the Rikus Zone	10
II	2009 Trench Highlights from the Rikus Zone	11
III	Rock geochemical correlation matrix for selected elements	15
IV	Soil geochemical correlation matrix for selected elements	16
V	Soil Geochemical Thresholds and Peak Values	17

INTRODUCTION

The Kluane property covers high-grade gold veins that are located in the Ruby Range, about 45 km north of Haines Junction in southwestern Yukon Territory. The property is wholly owned by Strategic Metals Ltd., subject to a 1% net smelter return royalty payable to the estate of J.P. Ross. One-half of the royalty can be purchased for \$500,000.

This report is a compilation and interpretation of previous work over the past several decades as well as the presentation and interpretation of a newly acquired Lidar dataset. The author has interpreted all resulting data. His Statement of Qualifications is in Appendix I. A Statement of Expenditures is located in Appendix II.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The Kluane property is an amalgamation of 274 contiguous Arc, Delor, Malou, Shut and Wasp claims, which are located on NTS map sheet 115H/4, at latitude 61°12'N and longitude 137°45'W (Figure 1). The property covers an area of approximately 5550 ha (55 sq km). The claims are registered with the Whitehorse Mining Recorder in the name of Archer, Cathro & Associates (1981) Limited, which holds them in trust for Strategic Metals. Claim registration data are listed below while the locations of individual claims are shown on Figure 2.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
Arc 1-74	YD09459-YD09532	March 10, 2021
Delor 1-10	YB37735-YB37744	March 10, 2021
11-24	YB38302-YB38315	March 10, 2021
25-48	YB47116-YB47139	March 10, 2021
49-129	YB54418-YB54498	March 10, 2021
130-135	YE66361-YE66366	March 10, 2021
Malou 1-6	YB35901-YB35906	March 10, 2021
7-14	YB37727-YB37734	March 10, 2021
15-20	YB38136-YB38141	March 10, 2021
21-26	YB38218-YB38223	March 10, 2021
27-40	YB38316-YB38329	March 10, 2021
41-52	YB47140-YB47151	March 10, 2021
Shut 5	YB38330	March 10, 2021
Wasp 47-58	YD09447-YD09458	March 10, 2021

* Expiry dates do not include 2019 work which has been filed for assessment credit, but has not yet been accepted.

The Kluane property lies approximately 148 km west-northwest of Whitehorse and 45 km north of Haines Junction. The closest road access is a local placer mining road that extends from the Alaska Highway to Fourth of July Creek. This road comes within 10 km of the southwest corner of the property. Access to the property is by helicopter, usually staging out of an area at the south end of Canyon Lake, 35 km east of the Kluane property. The Aishihik Hydroelectric Dam is located 29 km east of the property.

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FIGURE 1
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

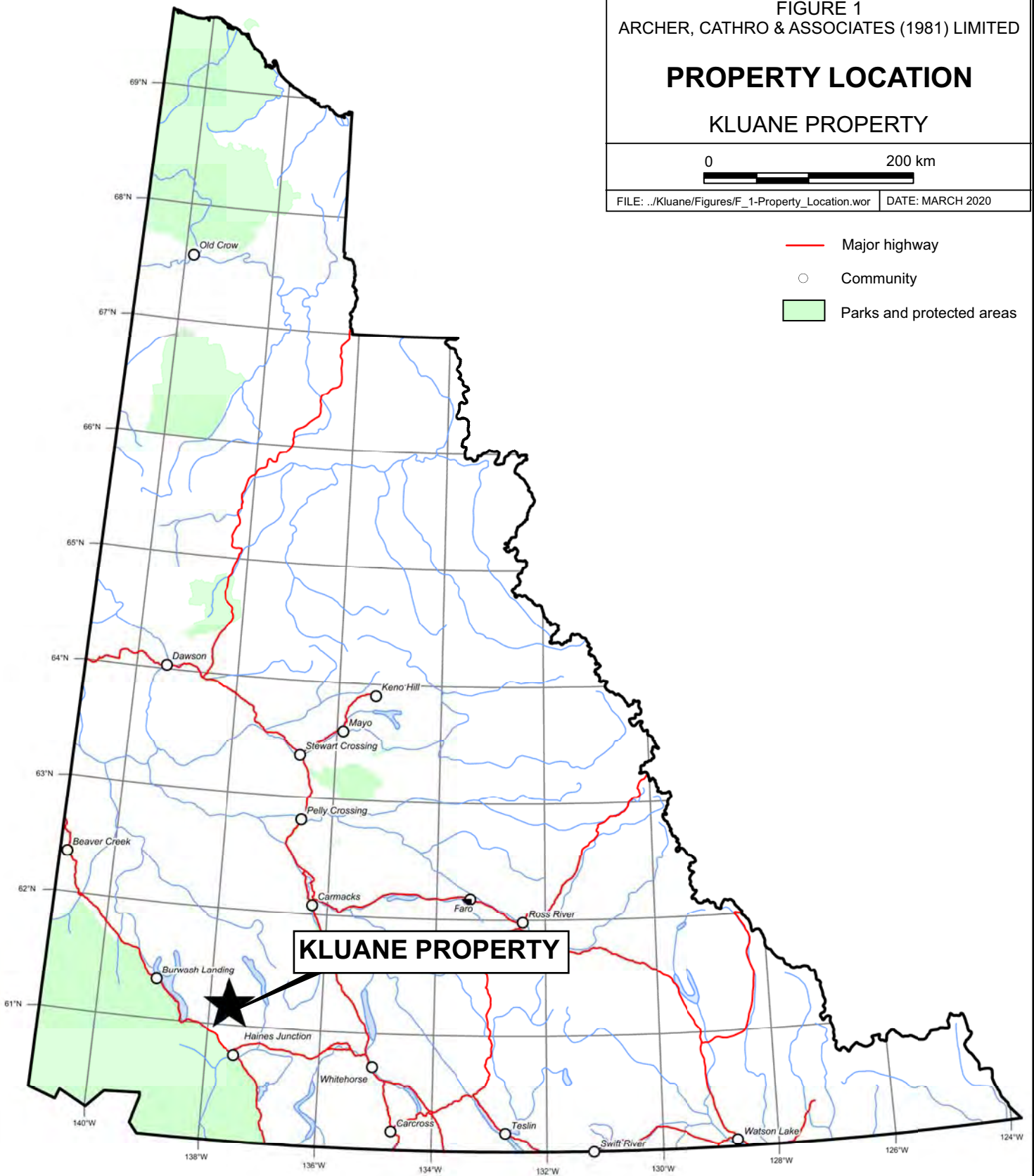
PROPERTY LOCATION

KLUANE PROPERTY

0 200 km

FILE: ../Kluane/Figures/F_1-Property_Location.wor DATE: MARCH 2020

- Major highway
- Community
- Parks and protected areas



The Kluane property lies within the traditional territory of the Champagne and Aishihik First Nations, which have concluded their land claim agreement with Canada and Yukon.

HISTORY AND PREVIOUS WORK

Placer gold occurrences are documented on Ruby, Granite, Dixie, Fourth of July and Twelfth of July creeks to the south and west of the Kluane property. These creeks have been explored intermittently since the early 1900s. Gladstone Creek, which lies 30 km northwest of the property, is the most productive creek in the area, reportedly producing 35,606 ounces of gold from 1978 to 2009. Fourth of July Creek reportedly produced 14,288 ounces of gold from 1978 to 2009 (Bond and Van Loon, 2014). Mining is still active on these creeks.

Hard rock exploration in the Kluane property area began after a Geological Survey of Canada (GSC) stream sediment survey on the Aishihik map sheet reported anomalous gold and arsenic values from several drainages in the Ruby Range (Hornbrook and Friske, 1985). Immediately following the release of the geochemical data, Silverquest Resources Ltd., (which later changed its name to Cash Resources Ltd. and subsequently to Cash Minerals Ltd. – collectively referred to as “Cash” in this report,) staked the Shut, Kil, Kin and Live claim blocks to cover four of the anomalous drainages. Nearby anomalies were staked by United Keno Hill Mines Limited (UKHM) as four separate blocks of Ruby claims and by independent prospector J.P. Ross as the Spruce, Cliff and Wall claims.

In 1986, Cash performed reconnaissance geochemical sampling and prospecting. A number of gold and arsenic anomalies were identified in the vicinity of the Shut claims, but this follow-up work did not substantiate the GSC anomalies on the Kil, Kin and Live properties.

In 1987, Cash added 16 claims to the Shut claim block to cover the new soil geochemical anomalies, and performed more reconnaissance contour geochemical sampling and prospecting. The best result from this work was from a specimen of arsenopyrite-bearing quartz-carbonate float that assayed 125 g/t gold (Main, 1988). That same year, UKHM performed soil sampling and prospecting, which outlined significant gold and arsenic anomalies on its Ruby 7-12 claims immediately south of the Shut claim block. Surprisingly, the Ruby 7-12 claims were allowed to lapse.

In August 1987, DalBianco Exploration Syndicate staked the Lib and Beth claims, and carried out a program of hand trenching on the Lib claims, which resulted in the first lode gold discovery on what is now the Kluane property. Four hand trenches exposed an arsenopyrite-rich quartz-carbonate vein system with a strike length of 50 m, in an area now referred to as the DalBianco Showing (Figure 2). Selected specimens returned up to 89 g/t gold (Main, 1988). The Lib claims covered what is now the southeastern corner of the Kluane property.

In September 1987, Ross staked a large block of Arc claims, three kilometres northeast of the Shut property.

In March 1988, DalBianco Exploration Syndicate optioned its Lib and Beth claims to Cash. In June that same year, Cash optioned the Lib, Beth and Shut claims to Pezgold Resource Corp.

Exploration by Pezgold in 1988 consisted of grid soil geochemical sampling and prospecting on the Lib and Shut claims. This work outlined coincident north-trending gold and arsenic anomalies on both properties and located more arsenopyrite-rich veins at the DalBianco Showing. In July 1988, Pezgold staked the Angus and Topgun claims to provide additional coverage around the anomalies on the Shut and Lib claim blocks (Main, 1988). The Lib and Beth claims were subsequently allowed to lapse.

Also in 1988, Ross staked the Stroker claims contiguously to the east of the Arc claim block, and additional Cliff claims on the east side of Killermun Lake. Prospecting on the Arc claims discovered quartz-carbonate vein float that assayed 86 g/t gold (Main, 1988).

In 1989, Ross optioned the Arc and Stroker claims to Noranda Exploration Co. Ltd., which performed geological mapping, soil sampling and geophysical surveys. Soil sampling performed by Noranada outlined widespread arsenic anomalies and scattered elevated gold values, but no significant mineral occurrences were identified and the option was dropped.

Between 1991 and 1993, Ross restaked the Ruby 7-12 and Beth claims as the Malou claims, and the Lib claims as the Delor claims. In late summer 1993, Cash optioned the Malou and Delor claims, which it added to its Shut and Angus claim blocks to form the Ruby Range property.

In fall 1994, Cash optioned the Arc and Stroker claims from Ross, and added these claims to its Ruby Range property.

In spring 1995, NDU Resources Ltd. optioned the Ruby Range property from Cash. That summer, NDU performed claim staking, geological mapping, 934 m of excavator trenching, 31.6 line km of horizontal loop electromagnetic (HLEM) Max-Min surveys and 1874 m of diamond drilling in 14 holes (Becker, 1996). Both companies later relinquished their options, leaving Ross with the Delor, Malou, Shut 5, Arc and Stroker claims and Cash with the Angus and the remainder of the Shut claims.

In spring 2002, Cash re-optioned the Delor, Malou and Shut 5 claims from Ross and again combined them with its Shut and Angus claims. Exploration that summer consisted of additional prospecting and hand trenching (Eaton, 2003).

In fall 2004, Cash performed a 45.6 line km HLEM Max-Min geophysical survey across the central part of the current property. This survey identified nine multi-line anomalies (A-1 to A-9) and three isolated anomalies, all of which were interpreted to be caused by weak, steeply dipping, tabular conductors. Most of the conductors were found to coincide with subtle linear depressions associated with known veins or strong soil geochemical anomalies. The most extensive system of conductors was identified in an area with little soil sample coverage in the northern part of the survey area (Eaton, 2004). Cash subsequently terminated the option.

In June 2009, Rockhaven Resources Ltd. purchased the core of the current Kluane property, which comprised the Delor 1-129, Malou 1-52 and Shut 5 claims, from the estate of J. P. Ross.

In September 2009, Rockhaven Resources conducted a short hand trenching and soil sampling program on the property. The best result from this work was from a grab sample of scorodite-stained quartz-carbonate vein that returned 50.2 g/t gold (Turner, 2010).

In January 2010, the Arc 1 to 74 and Wasp 47 to 58 claims were staked by Rockhaven Resources. Later that year, Cash changed its name to Pitchblack Resources Ltd.

In late 2011, Rockhaven Resources optioned the property to West Point Resources Inc., which conducted helicopter-borne versatile time electromagnetic (VTEM) and magnetic surveys over the property in 2012 before dropping its option in 2013.

In 2014, Rockhaven Resources staked an additional six claims (Delor 130 to 135), and performed prospecting, soil sampling, and hand trenching on the property. The 2014 program focused on expanding soil sample coverage and re-evaluating historical hand trenches and mineralized float occurrences. The best result from the 2014 program came from the Delor Showing and assayed 225 g/t gold (Burrell, 2014).

In October 2015, ownership of the Kluane property was transferred to Strategic Metals from Rockhaven Resources, as part of a larger property exchange agreement.

In the summer of 2019, Strategic Metals acquired a Lidar survey that encompassed the entire Kluane property.

GEOMORPHOLOGY

The property is situated in the Ruby Range Mountains about 25 km northeast of the Shakwak Valley. The area lies in the rain shadow of the St. Elias Mountains, which are located to the southwest. Average annual precipitation is less than 50 cm. Creeks draining the property are tributaries of the Aishihik River, which connects to the Pacific Ocean via the Alsek River.

Topography in much of the area is strongly influenced by Pleistocene to recent valley and alpine glaciation. As a result, the Kluane area is characterized by gently undulating uplands cut by broad, north trending U-shaped valleys, which are flanked by hanging valleys that terminate in cirques. Valley bottoms in the vicinity of Killermun Lake, immediately southeast of the claim block, are well treed with black spruce. Elsewhere, valley floors and lower slopes are typically vegetated with scattered buckbrush, stunted spruce and slide alder. Alpine grasses and open talus slopes predominate at higher elevations.

Bedrock exposures are rare on the valley floors, due to a blanket of glaciofluvial outwash and till. Lower slopes are generally covered by lateral moraines up to 1500 m thick and bedrock is only seen where creeks have made deep incisions through this material. Relief between 1500 and 1800 m is moderate to steep and outcrops are common where slopes exceed 30°. Ridge crests and upland plateaus above 1800 m appear to have escaped glaciation and are capped with slabby felsenmeer boulder fields. Although outcrop is locally abundant, it comprises less than 5% of the property. Soil development on the property is poor.

REGIONAL GEOLOGY

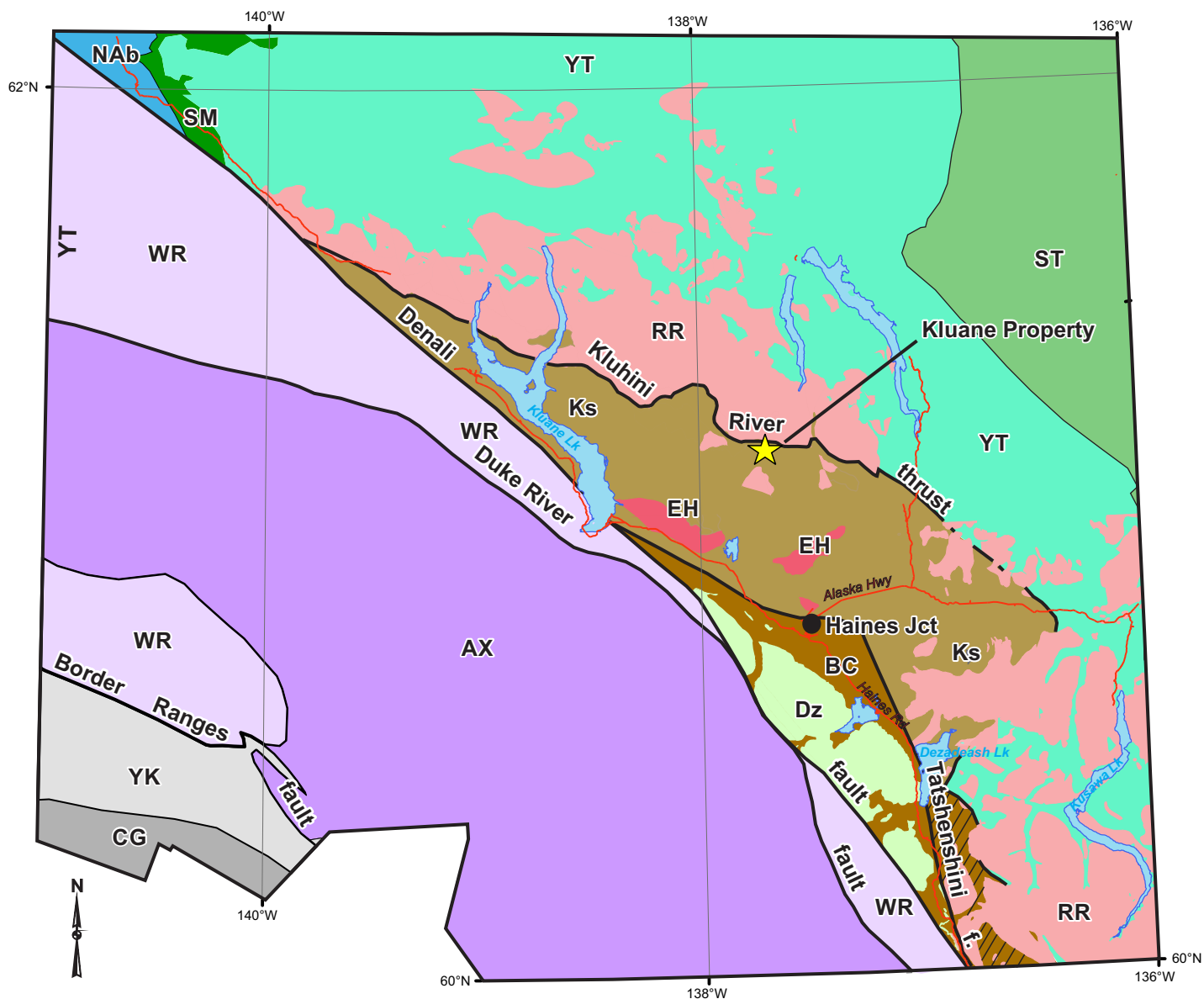
The Kluane property is underlain by Late Mesozoic metasedimentary rocks of the informally named Kluane schist and Latest Cretaceous to Eocene rocks of the Ruby Range and Hayden Lakes suites (Figure 3).

North and east, the Kluane schist is separated from the Yukon-Tanana terrane across the Kluhini River thrust, a Late Cretaceous structure that has mostly been intruded by voluminous bodies of diorite to granodiorite of the Ruby Range suite (Vice, 2017). To the west and southwest the Kluane schist is in fault contact with Paleozoic to Mesozoic rocks of the Insular terranes and various intervening slivers of metavolcanic and metasedimentary rocks of unclear origin (Israel et al., 2010; Israel et al., 2014). This structural contact is defined by the Denali fault, a large-scale transcurrent fault system with as much as 450 km of Latest Cretaceous to Tertiary, right-lateral offset (Murphy, 2018). To the south the continuation of the Kluane schist is not as well constrained and may be structurally interleaved with, or laterally grade into, Jurassic to Early Cretaceous metasedimentary rocks of the Vand Creek and Blanchard River assemblages (Vice, 2017).

The Yukon-Tanana terrane, in southwest Yukon, is characterized by Late Proterozoic to Devonian quartz-muscovite schist, quartzite and marble of the Snowcap assemblage and mafic metavolcanic rocks, metapelitic rocks and marbles of the Finlayson assemblage (Figure 3). These rocks, together with the Stikine terrane in British Columbia formed much of the North American margin during the latter half of Mesozoic (Nelson et al., 2013). Deformation and metamorphism of the Yukon-Tanana terrane occurred sporadically during the Permian to mid-Cretaceous and resulted in amphibolite facies grade rocks and a regional transposition foliation (Staples et al., 2016).

The Kluane schist consists of a fairly monotonous package of biotite-quartz schist, muscovite-quartz schist and rare lenses of altered and strongly deformed ultramafic rock and marble. Metamorphic grade reaches upper greenschist with local zones of amphibolite. A mappable unit of paragneiss is included in the Kluane schist and is found near the structural contact with the overlying Yukon-Tanana terrane. The paragneiss is believed to be the higher-grade equivalent of the biotite-quartz schist that has undergone partial migmatization during burial and intrusion of the earliest phases of the Ruby Range suite.

The Kluane schist has been interpreted as forming as a forearc basin, outboard of the North American margin during the Jurassic to Late Cretaceous (Israel et al., 2010). Detritus from the exhuming Yukon-Tanana terrane was shed into the basin, along with eroding volcanic rocks and mid-Cretaceous intrusions formed during subduction-related magmatism. A limited number of samples analyzed for detrital zircon geochronology suggest a depositional age for a portion of the schist of ~95 Ma indicating that the basin was actively receiving input into the mid-Cretaceous (Israel et al., 2010). At least three phases of ductile deformation have been observed within the Kluane schist (Stanley, 2012). The general structural grain is defined by a northwest-striking, northeast dipping transposition foliation that was formed during Late Cretaceous southwest directed thrusting of Yukon-Tanana terrane over the Kluane schist. This occurred during the latter stages of subduction, as the arc and its crustal underpinnings overrode their own



Outboard terranes

- YK** Yakutat terrane
- CG** Chugach terrane

Overlap assemblages

- RR** Ruby Range suite
- EH** Hayden Lake suite
- Dz** Dezadeash Formation
- Ks** Kluane schist
- Blanchard River assemblage**

Insular terranes

- WR** Wrangellia
- AX** Alexander terrane

Intermontane terranes

- YT** Yukon-Tanana terrane
- ST** Stikine terrane

Terrane affinity unknown

- BC** Bear Creek assemblage

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FIGURE 3
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

REGIONAL GEOLOGY

KLUANE PROPERTY

0 25 50
Km

DATE: MARCH 2020

forearc deposits (the Kluane schist). Southwest directed overturned, isoclinal folds associated with this compressional event are found throughout the region. Peak metamorphism within the Kluane schist occurred at ca. 82 Ma, reached a maximum temperature and pressure of 7 kb and 500-700°C which is thought to be related to crustal thickening related to thrusting (Mezger et al., 2001; Vice, 2017). Thrusting continued to at least Latest Cretaceous (~65 Ma) and possibly younger, shown by the foliated nature of the early phases of the Ruby Range suite that intruded along the Klühini River thrust (Israel et al., 2010; Vice 2017). Subsequent deformation related to the Denali fault and exhumation is characterized by broad tight to open folds and through going dextral oblique brittle/ductile faults that cross-cut earlier formed ductile fabrics.

The Kluane schist and the Yukon-Tanana terrane are intruded by intrusions of the Ruby Range and Hayden Lakes suites (Figure 3). The Ruby Range suite ranges in age from ca 65 Ma to 52 Ma and consists of biotite granodiorite and hornblende quartz-diorite (Israel et al., 2010). The Ruby Range suite forms a large batholith that straddles the contact between the Kluane schist and the Yukon-Tanana terrane. The oldest phase of the suite is foliated to gneiss and intrudes along the structural contact between the schist and YTT rocks. Younger phase are massive and cross-cut all ductile fabrics.

The Hayden Lakes suite is comprised of several isolated plutons found almost entirely within the Kluane schist. The suite ranges in age from ca 48 Ma to 45 Ma, but is not very well dated and may overlap with the youngest phases of the Ruby Range suite (Israel et al., 2010). The suite is characterized by range of compositions from two mica granites to diorite. Garnet is found locally within the granite.

PROPERTY GEOLOGY

Systematic geological mapping on the property is hindered by a lack of bedrock exposures. In most areas, contacts are inferred from the distribution of lithologies in talus and felsenmeer (Figure 4).



Figure 4 – Typical outcrop exposure and felsenmeer field

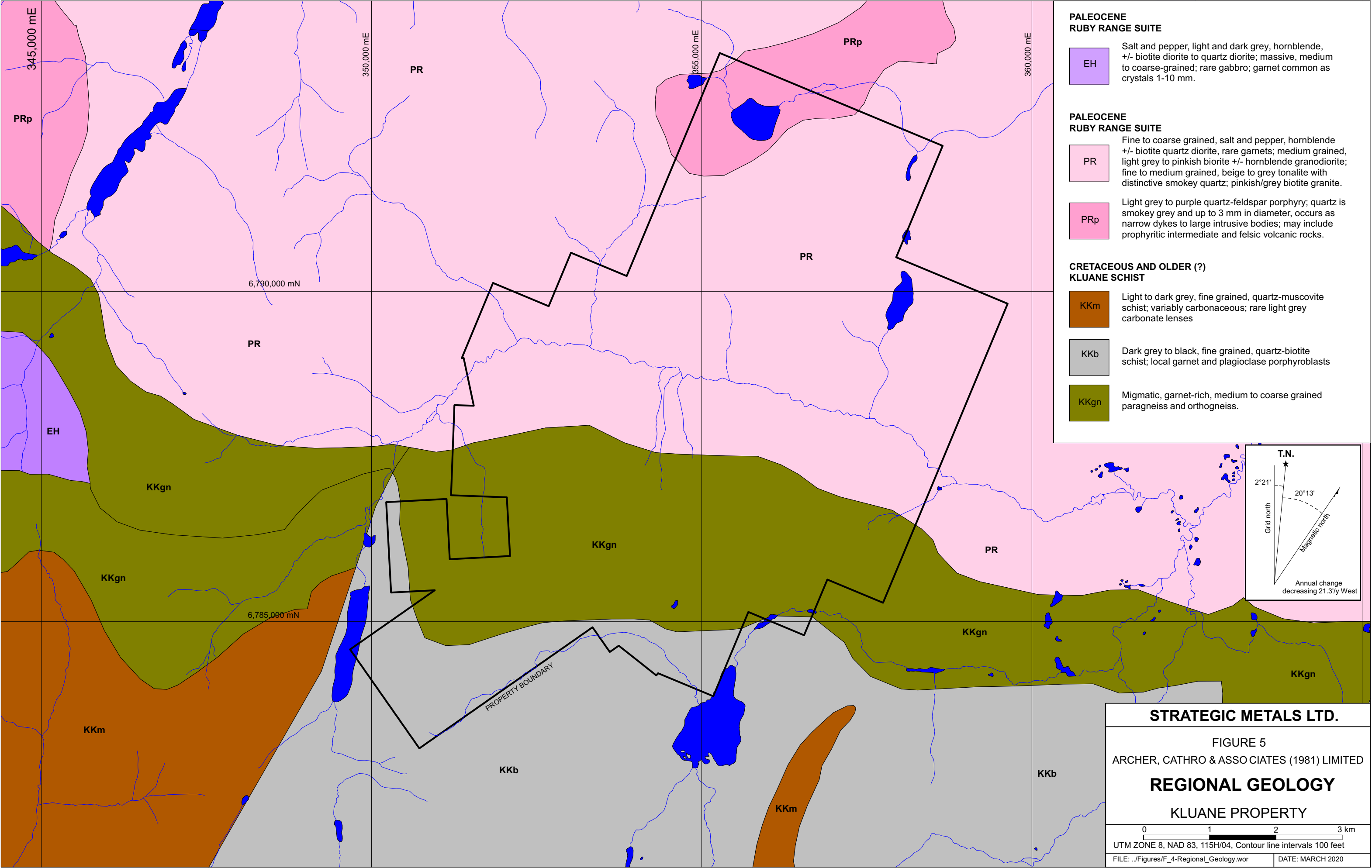
Lithology

Three main rock types underlie the Kluane property; 1) biotite-quartz schist of the Kluane schist; 2) migmatitic paragneiss of the Kluane schist; and 3) granodiorite to quartz-diorite of the Ruby Range suite (Figure 5). In the southernmost portion of the claim block, dark grey to black biotite-quartz schist dominates. The schist often forms blocky outcrops that locally weather a brown-orange colour along fractures and joints. Biotite and quartz are the main minerals with the biotite forming the main foliation surfaces. Minor amounts of garnet and staurolite are found as accessory minerals. White to slightly rusty quartz veins of varying widths are ubiquitous and many veins are laterally discontinuous and often have sigmoidal or lozenge shapes. Structurally overlying the schist is a relatively thick package of dark-grey to black and orange weathered migmatitic paragneiss. The paragneiss is characterized by biotite and quartz layers separated by more leucocratic layers comprised of feldspar and quartz. The leucocratic layers appear to be injected melts that may be derived by local partial melting or by melts sourced by intrusions that have migrated along foliation planes.

Marble lenses and rare skarn zones are found within the gneiss on the east-facing slope above Killermun Lake. Exposures of marble are typically white to pale green on both weathered and fresh surfaces, display weak silicification, and range up to 7 m thick and 100 m long. Skarns consist of medium to coarse-grained garnet and diopside. The marbles are often rusty weathering and difficult to distinguish from the surrounding gneiss, unless the rock is broken.

The northern half of the property is comprised of coarse to medium-grained, biotite, granodiorite and hornblende +/- biotite, quartz-diorite of the Ruby Range suite. These rocks generally weather a light grey to white and are locally feldspar porphyritic. Smokey grey quartz grains are common in the granodiorite and less so in the quartz-diorite. The granitic rocks are unfoliated and cross-cut all ductile fabrics found in the Kluane schist except for a strongly foliated border phase that is sporadically observed in outcrop near the boundary with the paragneiss. Foliation in the border phase parallels those found in the Kluane schist and has been attributed to syn-deformation intrusion of the earliest phases of the Ruby Range suite (Israel et al., 2010). The younger phases of the suite intrude across the contact with the schist; however, it is on the floor of a broad valley and is mostly obscured by glacial till and glaciofluvial outwash. Where observed, this contact is sharp.

Two sets of narrow unfoliated dykes have been noted on the property in several areas underlain by Kluane schist. The dykes are up to one metre wide and are best distinguished by grain size. One set of dykes is andesitic in composition, tan to medium grey and microcrystalline. They strike 160 to 190°, dip 60 to 70° to the west and occasionally follow north-trending shear zones. The other dyke set is fine to medium grained and dioritic in composition. These dykes are pale green-grey, strike 080 to 100° and dip steeply to the south or north. One of these dykes, from the central part of the property, has been dated at 55.3 Ma. This overlaps a 55.8 Ma age obtained from the main phase of the Ruby Range found just outside the northern portion of the property.



Structure

Airphoto analysis and ground mapping have recognized numerous small north- and northeast-trending recessive topographic linears on the property. Where exposed in outcrops and trenches, these linears contain one or more gouge zones surrounded by a few metres of weakly altered wallrock exhibiting moderate to strong fracturing parallel to the trend of the linear. Quartz veins or andesitic dykes have been emplaced along several of the linears.

Three sets of veins have been identified on the property. Two sets are conformable to foliation in the gneiss, while the third set, which is often gold bearing, is discordant to foliation.

The most common set of veins on the property are quartz-carbonate veins that are conformable to foliation. They generally strike 110° to 125° , dip 40 to 80° northeast and range up to 1.5 m in width. A second conformable vein set exhibits a more complex mineral assemblage that typically comprises glassy granular quartz masses with andalusite, amphibolite, garnet and/or tourmaline. These veins range up to 70 cm in width and sometimes cut foliation at a shallow angle. Vein selvages often contain andalusite, muscovite and chlorite.

The third, discordant vein set hosts most of the gold mineralization. It consists of: quartz that is typically milky white, granular to massive and weakly to strongly fractured parallel to the vein walls; lesser carbonate that is tan to cream coloured where fresh, but is often leached from surface samples, leaving a powdery white residue in cavities; and minor muscovite. These veins cut foliation at a high angle, striking northerly and dipping moderately to steeply westward. In a few locations these veins cut the andesitic dyke set.

A few unmineralized faults appear to slightly offset all three of the vein sets. A good example of these faults is found in the eastern part of the property, where an unmineralized fault crosses the Rikus Zone. This fault strikes northwesterly, dips steeply and has produced about 25 m of apparent dextral offset.

MINERALIZATION

Prospecting, trenching and drilling on the Kluane property have identified nine named showings, and three zones (zones are showings where drilling has confirmed the depth extent of mineralization). Nine of the mineral occurrences – the Rikus, Ross and Malou zones, and the Delor, DalBianco, Sack, Switchback, Shut, and North Shut showings – are located within a 5500 by 3500 m area underlain by Kluane schist in the southern and central parts of the Kluane property (Figure 6). The remaining three showings – the Arc, Slayer and Metallica – are located three kilometres to the north, within the Ruby Range Batholith.

Gold mineralization at all occurrences is hosted almost exclusively in discordant quartz-carbonate veins with scorodite staining. Arsenopyrite is by far the most abundant sulphide mineral in the veins, but traces of galena, chalcopyrite and pyrite have also been noted and tungsten-rich skarn occurrences are found adjacent to veins at the Rikus and DalBianco zones and elsewhere in float. Sulphides are generally one to four millimetres in diameter and occur as disseminations or in semi-massive to massive bands. Rare native gold grains have been

observed in oxidized and unoxidized veins. Individual veins range up to 85 cm in width, but they can occur in swarms that are up to 9.5 m across, where sub-parallel veins are separated by narrow gouge zones. The gold bearing veins rarely outcrop and are usually marked by north-trending recessive topographic linears.

Rock geochemical sample sites on the property were marked with orange flagging tape labelled with the sample number. The location of each sample was determined using a handheld GPS unit. Rock sample preparation and multi-element analyses were carried out at ALS Minerals laboratories in Whitehorse, Yukon and North Vancouver, BC, respectively. Each sample was dried, fine crushed to better than 70% passing 2 mm and then a 250 g split was pulverized to better than 85% passing 75 microns. The fine fraction was analyzed for 48 elements using an aqua regia digestion followed by inductively coupled plasma combined with mass spectroscopy and atomic emission spectroscopy (ME-MS61). An additional 30 g charge was further analyzed for gold by fire assay followed by atomic absorption spectroscopy (Au-AA24).

During the most recent field program (2015) work focused on the northern part of the property, in an area underlain by Ruby Range Batholith. The program identified two new areas of gold-bearing quartz-carbonate veins: the Slayer and Metallica showings. Descriptions of all zones and showings on the Kluane property are provided in the following paragraphs.

The **Rikus Zone** lies on a moderately steep, south-facing slope in the eastern part of the claim block. It is one of three zones that have been drilled. The zone consists of two sub-parallel veins located about 50 m apart, plus smaller veins and veinlets in the adjacent wallrock. The two main veins contain massive milky white quartz bands featuring microfractures that parallel the vein-wallrock contacts. The quartz bands range from 8 to 75 cm in width and contain trace to 20% fine-grained arsenopyrite with trace pyrite and rare grains of native gold. At surface, scorodite and limonite replace sulphide minerals. Although the quartz bands are often narrow, they are generally high grade. The veins often contain clay-altered gouge and are commonly flanked by weakly clay-altered halos that are up to two metres wide. Mineralization has been traced over a length of 700 m, and the zone is open to extension along strike to the north and south.

In 1995, eight diamond drill holes were completed on five section lines spaced 100 m apart in the north-central part of this zone. All eight of the holes intersected one or more mineralized intervals. Table I shows the drilling highlights from 1995.

Table I: Significant drill intersections from the Rikus Zone

Hole Number	Coordinates N E		Length (m)	Azimuth (°)	Dip (°)	From (m)	To (m)	Width (m)	Uncut Grade Gold (g/t)
95-1	10+000	10+000	162.76	090	-50	36.45	37.45	1.00	4.20
						45.94	49.99	4.05	2.92
						46.94	47.07	0.13	80.00
						54.56	56.08	1.52	1.19
						79.44	80.44	1.00	1.89
						84.17	93.43	9.26	1.03
						92.15	93.43	1.28	4.79
95-2	9+900	10+023	141.43	090	-50	32.07	34.75	2.68	1.32
						39.32	40.23	0.91	4.49
						64.55	68.88	4.33	2.11
						81.99	82.99	1.00	1.50
95-3	9+900	10+022	170.08	090	-75	32.92	35.96	3.04	1.05
						46.63	48.62	1.99	2.49
						68.27	75.07	6.80	2.83
						71.32	74.07	2.75	5.32
						73.97	74.07	0.10	54.00
95-4	10+105	9+984	148.44	090	-50	31.78	35.58	3.80	2.29
						61.87	65.19	3.32	2.72
						65.11	65.19	0.08	48.60
95-5	10+192	9+982	134.72	090	-50	48.46	50.44	1.98	1.69
95-12	9+785	9+976	145.39	090	-50	32.38	33.57	1.19	4.56
						32.38	32.57	0.19	29.19
						68.05	69.15	1.10	1.49
						69.05	69.15	0.10	10.60
						71.69	72.89	1.20	1.87
						71.69	71.89	0.20	9.26
95-13	10+001	9+900	224.64	090	-50	99.27	100.44	1.17	2.01
						150.47	154.54	4.07	1.95
						150.47	151.47	1.00	4.69
95-14	10+105	9+939	156.36	090	-60	72.11	74.25	2.14	1.63
						142.64	144.12	1.48	3.06

In drill core, quartz bands are up to 20 cm thick and contain up to 20% arsenopyrite. Altered wallrocks are bleached and chloritized, and they typically exhibit disseminated fine-grained

arsenopyrite and calcite. The degree of alteration is proportional to the degree of fracturing and the abundance of quartz veinlets.

The highest grade intercept was 80.00 g/t gold over 13 cm, which was intersected in hole 95-1. Five other intervals graded between 9.26 and 54.00 g/t gold across widths of 8 to 20 cm. The thickest intervals were 2.83 g/t gold over 6.80 m in Hole 95-3 and 1.03 g/t gold over 9.26 m in Hole 95-1. Fourteen core samples of altered wallrock taken on either side of the quartz bands returned a weighted average of 0.93 g/t gold over 1.35 m.

In 2002, mapping and sampling suggests that the best mineralized vein intervals occur adjacent to unmineralized cross faults. Immediately west of the northwest-trending cross fault that offsets the Rikus Zone, the vein widens to 75 cm of massive quartz. A chip sample across this exposure assayed 22.40 g/t gold. On the east side of this cross fault, the vein bifurcates into a swarm of sub-parallel, 0.5 to 2 cm veinlets. A chip sample across this vein swarm returned 7.37 g/t gold over 9.5 m. The cross fault is located between holes 95-2 and 95-12, but both holes did not adequately test the structure.

In 2009, confirmation chip sampling was done in four previously dug hand trenches located 25 to 230 m north of the cross fault described in the previous paragraph. The trenches were cleaned, mapped and sampled. Table II lists significant intervals from 2009 trench sampling at the Rikus Zone.

Table II: 2009 Trench highlights from the Rikus Zone

Trench	From (mW)	To (mW)	Length (m)	Au (g/t)
TR-KL-09-01	1.70	2.88	1.18	9.49
including	1.70	1.89	0.19	25.60
TR-KL-09-02	1.00	5.72	4.72	3.18
including	1.76	1.84	0.08	31.50
& including	4.90	5.11	0.21	38.40
TR-KL-09-03	1.50	3.60	2.10	6.67
including	3.18	3.38	0.20	36.50
TR-KL-09-04	0.00	2.29	2.29	3.72
including	1.00	1.29	0.29	13.05

In 2014, chip samples were taken across the surface traces of mineralized quartz veins exposed in two historical hand trenches near hole 95-1. Two chip samples from separate trenches both returned 51.6 g/t gold, over 28 cm and 30 cm. A specimen sample of quartz vein float collected along strike and to the north of the trenches returned 23.2 g/t gold.

The **Delor Showing** is situated about 2000 m west-northwest of the Rikus Zone and covers a 300 by 200 m area. This occurrence consists of one trenched bedrock exposure and boulders of quartz-carbonate vein material and mineralized garnet-rich orthogneiss wallrock. It is located on a frozen north-facing slope with no outcrop. cursory sampling by prospectors included vein fragments collected in 1995 from frost heaves, which yielded up to 193.57 g/t gold (Wengzynowski, 1995).

In 2009, hand trenching targeted a previously unprospected recessive topographic linear that was traced for a length of over 200 m. Trenching failed to reach bedrock, but boulders of quartz vein and mineralized biotite schist/gneiss wallrock were sampled prior to sloughing of trench walls. Seven samples of quartz-carbonate vein with scorodite and arsenopyrite returned between 8.61 and 50.20 g/t gold (Turner, 2010).

In 2014, the 2009 hand trench was re-opened and bedrock was reached. Prior to exposing bedrock, a number of samples were collected from loose rocks removed from the trench. One of these samples yielded 225 g/t gold. A chip sample collected across an arsenopyrite-bearing quartz vein exposed on the trench floor returned 9.22 g/t gold over two metres (Burrell, 2014).

Prospecting along strike from the vein exposed in the trench resulted in the discovery of additional mineralized quartz vein float. Three samples collected about 200 m northwest of the trench returned 3.33, 8.92 and 12.75 g/t gold, respectively (Burrell, 2014).

The **DalBianco Showing** is located 1000 m southwest of the Rikus Zone. No drilling has been done at this occurrence, but hand trenching was performed at various times between 1987 and 2009. The DalBianco Showing comprises three sub-parallel veins, about 100 m apart, which have been traced for 350 m along strike. The veins consist of barren to moderately mineralized quartz-carbonate gangue flanked by one to three metre wide, weakly silicified and rusty alteration halos that host minor disseminated arsenopyrite. Mineralization within the quartz-carbonate occurs as 5 to 35 cm wide bands of coarse grained arsenopyrite. Chip samples of arsenopyrite-rich quartz-carbonate assayed up to 41.07 g/t gold across 15 cm, but most returned less than 9 g/t gold. Gold assays from the weakly mineralized halos normally returned between 0.20 and 1.00 g/t, but yielded up to 2.26 g/t (Wengyznowski, 1995). Gold to arsenic ratios in this showing are the lowest on the property.

The **Ross Zone** is located 2100 m west of the Rikus Zone. This zone is marked by a small soil geochemical anomaly. In 1995, the anomaly was tested by two excavator trenches and three diamond drill holes.

Trenching exposed a one metre wide mineralized structure consisting of light grey to dark brown clay gouge, small quartz clasts and angular wallrock fragments. The first trench returned 19.06 g/t gold over one metre, but the other trench, which is situated 100 m to the south, did not expose significant mineralization (Becker, 1996).

The diamond drill holes targeted down-dip projections of the mineralized structure that was exposed in the first trench. The first hole was abandoned short of the target. The second hole was drilled from the same site, with the same azimuth, but at a slightly steeper angle. It intersected a section of clay gouge with quartz clasts, which assayed 4.16 g/t gold over 1.44 m. Only 27% of the material from this interval was recovered. The third hole was collared 50 m west of the other holes. It intersected weakly mineralized structures near the top of the hole, which are correlated with subsidiary structures encountered near the tops of the first two holes, but it failed to intersect the main vein (Becker, 1996).

The **Malou Zone** lies between the Ross and Rikus zones. It is marked by two areas of anomalous soil geochemical response and three recessive topographic linears (L1 to L3). In 1995, nine excavator trenches and three diamond drill holes tested this zone. Trenching across L1 identified a 30 cm wide band of stockwork quartz-arsenopyrite veinlets within strongly altered wallrock. At surface, the altered wallrock comprises white clay gouge surrounding one to five centimetre wide quartz bands with up to 15% coarse grained arsenopyrite. A chip sample from one trench across the zone returned 1.39 g/t gold over 30 cm, but two other trenches, located 105 m and 250 m to the north, failed to expose the mineralized structure.

Two diamond drill holes tested the down-dip projection of the vein exposed in L1. The first hole intersected strongly altered biotite schist hosting a stockwork of <1 mm wide quartz-arsenopyrite veinlets, which returned 2.74 g/t gold over 33 cm. The other hole intersected quartz-arsenopyrite veins and stockwork veinlets within weakly altered wallrock, but returned near background gold values (Becker, 1996).

The second recessive linear (L2) at the Malou Zone is located 600 m east of L1. Bedrock beneath this linear hosts a one metre wide band of altered and brecciated wallrock containing a stockwork zone of narrow quartz-arsenopyrite veinlets and a three to five centimetre wide quartz-arsenopyrite vein. A composite sample of five vein float fragments collected in the vicinity of L2 returned 5.31 g/t gold, but a sample of mineralized vein material from a trench dug at this site returned only slightly anomalous gold values. A drill hole that tested below this trench intercepted altered and brecciated biotite schist with narrow quartz veinlets, including a 3.5 cm wide quartz-arsenopyrite vein. Results from this hole included 1.06 g/t gold over 1.13 m (Becker, 1996). Two other trenches located 100 m north and south of the drill collar did not intersect mineralization.

Trenches dug across the third recessive linear (L3) and other geochemical anomalies at the Malou Zone failed to intersect significant mineralization and returned low gold assays.

The **Sack Showing** lies 1400 m east of the Rikus Zone and is the easternmost occurrence on the property. It is located on a broad hummock separating two glacial valleys. In 1995, mineralized vein float was discovered along a series of poorly exposed recessive topographic linears. These samples yielded gold values ranging from 3 to 9 g/t (Becker, 1996). In 2014, another two samples were collected from bedrock at the Sack Showing, which returned 6.85 and 2.48 g/t gold (Burrell, 2014). The Sack Showing is arsenopyrite-rich and most resembles the DalBianco Showing.

The **Switchback Showing** is located 700 m north of the Delor Showing and lies on a vegetated north-facing slope. This occurrence comprises a small talus train of weakly mineralized quartz and altered biotite schist/gneiss. There is no outcrop in the area. Historically, 12 samples of weakly mineralized quartz vein material and wallrock were collected. These samples yielded 0.15 to 10.15 g/t gold (Eaton, 2003).

The **Shut Showing** lies about three kilometres southwest of the Delor Showing. Mineralization at the Shut Showing is hosted in milky white, glassy or grey quartz-carbonate veins containing 2 to 20% fine grained disseminated arsenopyrite and rare galena. In 1994, four of 20 quartz

specimen samples collected over a length of 2500 m along Shut Creek returned greater than 80 g/t gold, while the arithmetic average grade for all 20 samples was 21 g/t gold (Wengzynowski, 1995). Follow up sampling of additional quartz-carbonate vein float produced assays of 103 and 122 g/t gold (Eaton, 2003).

The **North Shut Showing** was discovered in 2014. It is located about two kilometres west of the Delor Showing and two kilometres north of the Shut Showing. A specimen sample of arsenopyrite-rich quartz vein float returned 2.39 g/t gold (Burrell, 2014).

The **Arc Showing** is located in the northern part of the property, about 3.5 km north of the Delor Showing. It is underlain by the Ruby Range Batholith and was discovered by J. P. Ross in 1988. Two hand trenches, located 180 m apart, exposed gold-bearing quartz-carbonate vein float within a prominent recessive linear. Both trenches failed to reach bedrock.

In 2015, a sample from one of the historical trenches, which comprised chlorite- and clay-altered fault breccia, with angular white quartz clasts, returned 9.95 g/t gold.

The **Metallica Showing** is located about 1000 m northeast of the Arc Showing, along a northwest trending ridge. In 2015, mineralized float was discovered in a subtle recessive topographic linear with an approximate strike of 130°. Two composite samples, consisting of scorodite-stained quartz float with bands and clots of arsenopyrite, were collected from the linear about 330 m apart. These samples yielded values of 8.71 and 5.69 g/t gold, and 55.3 and 77.7 g/t silver, respectively.

The **Slayer Showing** was also discovered in 2015, and features two north-northwest striking sub-parallel quartz-carbonate veins. The occurrence is located about 880 m southeast of the Metallica Showing. A sample from the eastern vein, comprising scorodite-stained quartz with 20% banded fine- to medium-grained arsenopyrite and 1% medium- to coarse-grained galena, yielded 11.8 g/t gold and 89 g/t silver. A 10 cm wide chip sample of the same vein, collected 280 m to the north-northwest, returned 3.9 g/t gold and 107 g/t silver. Samples collected from the second vein returned up to 2.31 g/t gold and 63 g/t silver.

Element Associations

Table III shows a correlation matrix for several elements from rock samples taken throughout the Kluane property. There is a moderate to strong association between base metals and arsenic. Gold on the other hand does not show a strong correlation with arsenic but has moderate correlation with both bismuth and tellurium. This is a little surprising given the amount of arsenopyrite in the veins. There is a spatial association between gold and arsenic as can be seen in the soil geochemistry (see next section); however, in some areas like the Delor showing soil response is quite muted with respect to rock values. Silver shows a moderate to strong correlation with the base metals, as well as with bismuth and arsenic but only a weak association with gold.

Table III: Rock geochemical correlation matrix for selected elements

Element	Ag	As	Au	Bi	Cu	Pb	Sn	Te	W	Zn
Ag	1	0.720361	0.115855	0.601172	0.57106	0.809168	0.246318	0.106549	-0.02383	0.588917
As	0.720361	1	0.023699	0.70293	0.588723	0.371789	0.178354	0.160844	-0.01068	0.476591
Au	0.115855	0.023699	1	0.498249	0.000197	0.014556	-0.0333	0.429836	0.07397	-0.00837
Bi	0.601172	0.70293	0.498249	1	0.387211	0.253314	0.120128	0.18752	0.053664	0.321188
Cu	0.57106	0.588723	0.000197	0.387211	1	0.250572	0.068033	0.07292	-0.03029	0.163249
Pb	0.809168	0.371789	0.014556	0.253314	0.250572	1	0.183022	-0.00083	-0.0235	0.514356
Sn	0.246318	0.178354	-0.0333	0.120128	0.068033	0.183022	1	-0.00847	0.000452	0.240994
Te	0.106549	0.160844	0.429836	0.18752	0.07292	-0.00083	-0.00847	1	0.239309	-0.02274
W	-0.02383	-0.01068	0.07397	0.053664	-0.03029	-0.0235	0.000452	0.239309	1	0.017759
Zn	0.588917	0.476591	-0.00837	0.321188	0.163249	0.514356	0.240994	-0.02274	0.017759	1

Age of Mineralization

Gold mineralization at the Kluane property has been determined to be 57.1 ± 0.4 Ma. This is based upon Ar-Ar age determination from a sample of muscovite collected from a mineralized vein found at the Rikus zone (Figure 7).

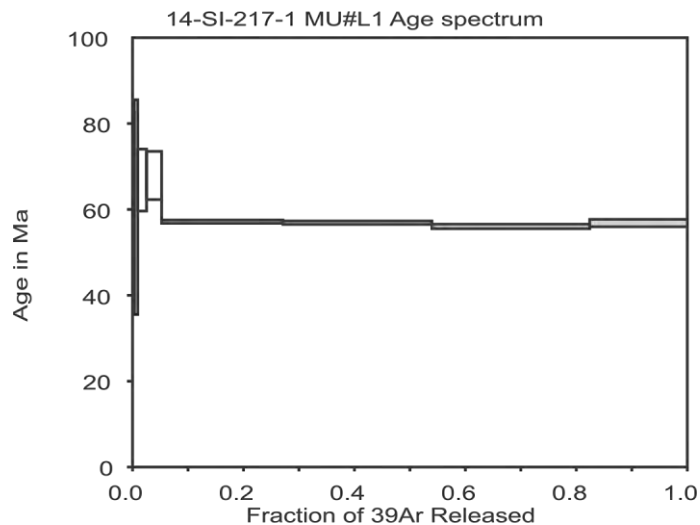


Figure 7. Argon gas release spectra for muscovite from within mineralized quartz vein at the Rikus Zone.

It is possible that this age is a reflection of reheating of the muscovite during emplacement of the Ruby Range suite; however, this seems unlikely as U/Pb zircon ages for a large dyke near the Rikus zone and the large intrusive phase covering the northern portion of the property are younger at ca. 55 Ma.

SOIL GEOCHEMISTRY

About 40-50% of the property has been covered by soil surveys, the majority of which occur overtop of and adjacent to known zones or showings and exhibit several linear trends of high gold and arsenic values (Figures 8 and 9). In almost all cases there is a moderately strong spatial relationship between arsenic and gold; however, there are areas where gold values are higher than arsenic values. A correlation matrix shows a moderate association between gold and arsenic in soil analyses (Table IV). Gold also has a moderate correlation with bismuth, similar to what was found in rock samples. Tellurium was not analyzed for in the soils so no direct comparison can be made as was done for rock samples.

Table IV: Soil Geochemical Correlation Matrix for Selected Elements

Element	Ag	As	Au	Bi	Cu	Pb	Sb	Zn
Ag	1	0.23537603	0.04638861	0.01044551	0.13186496	0.1603677	0.07588713	0.15147297
As	0.235376	1	0.34391311	0.13941595	0.20654528	0.62342802	0.51237474	0.63750251
Au	0.046389	0.34391311	1	0.22035808	0.08145597	0.07664116	0.03200912	0.07093655
Bi	0.010446	0.13941595	0.22035808	1	0.08822756	0.14022132	-0.02036151	0.16686834
Cu	0.131865	0.20654528	0.08145597	0.08822756	1	0.10090745	0.07530454	0.44283757
Pb	0.160368	0.62342802	0.07664116	0.14022132	0.10090745	1	0.24533395	0.72028009
Sb	0.075887	0.51237474	0.03200912	-0.02036151	0.07530454	0.24533395	1	0.16480625
Zn	0.151473	0.63750251	0.07093655	0.16686834	0.44283757	0.72028009	0.16480625	1

During that last field program in 2015, a total of 274 soil samples were collected from widely spaced contour lines in the northern part of the property, near the Arc, Metallica and Slayer showings.

The 2015 soil sample locations were recorded using hand-held GPS units. Sample sites are marked by aluminum tags inscribed with the sample numbers and affixed to 0.5 m wooden lath that were driven into the ground. Soil samples were collected from 5 to 75 cm deep holes dug by hand-held auger. They were placed into individually pre-numbered Kraft paper bags. The soil samples were sent to ALS Minerals in Whitehorse, where they were dried and screened to -180 microns. The fine fractions were then shipped to ALS Minerals in North Vancouver where they were analysed for 35 elements using the inductively coupled plasma-atomic emission spectroscopy technique (ME-ICP41). An additional 30 g charge was further analysed for gold by fire assay with inductively coupled plasma-atomic emissions spectroscopy finish (Au-ICP21). Anomalous thresholds and peak values for gold and arsenic are listed in Table V.

Soil sampling has identified a 2700 by 500 m wide, northeast-trending gold- and arsenic-in-soil anomaly that encompasses the **DalBianco Showing** and the **Rikus Zone**.

Table V: Anomalous thresholds and peak values for Gold and Arsenic

Element	Anomalous Thresholds				Peak Values
	Weak	Moderate	Strong	Very Strong	Historical
Gold (ppb)	$\geq 10 < 20$	$\geq 20 < 50$	$\geq 50 < 100$	≥ 100	3,284
Arsenic (ppm)	$\geq 100 < 200$	$\geq 200 < 500$	$\geq 500 < 1000$	≥ 1000	7,350

A smaller cluster of elevated gold and arsenic soil values at the **Malou Zone** is coincident with a strong HLEM geophysical conductor (A-9).

The **Shut Showing** is marked by a broad area of scattered strongly anomalous gold-in-soil values with moderately anomalous arsenic support.

Scattered strongly anomalous gold soil values are also found in the vicinity of the **Ross Zone**, with a subdued response for arsenic.

Soil sampling at the **Switchback Zone** returned numerous strongly elevated gold-in-soil values along trend from HLEM conductors A-4 and A-5. The strongly elevated values extend to the northern edge of the grid, which suggests the mineralization continues northward onto the valley floor.

The 2015 contour soil sampling yielded scattered coincident gold- and arsenic-in-soil anomalies downslope and to the east of the **Slayer Showing**, and smaller clusters of elevated gold and arsenic response near the **Arc and Metallica** showings.

LIDAR

In the summer of 2019 a Lidar survey was completed over the full Kluane property and the dataset can be found in Appendix III. Because of the little actual outcrop exposure, the Lidar has been extremely useful for picking out aspects of the geology that would otherwise not be visible. All recorded vein occurrences to date are located within or near recessive linears which are easily observed on the Lidar data. Numerous topographic linears were identified with clusters located around several of the known showings (Figure 10). The linears are dominantly northeast to north striking except in the northern portion of the property (underlain by intrusions of the Ruby Range suite) where they are northwest striking with only localized northeast strikes.

Not surprisingly, many of the linear trends observed within the Lidar dataset correspond to high gold and arsenic soil trends (Figures 8 and 9). This is especially notable in the DalBianco and Rikus zones where a well-defined northeast striking linear near a ridge crest that joins the two zones is coincident with very strong gold in soil values. Also in both the DelBianco and Rikus

zones the north and northeast striking linears correspond with known vein occurrences described previously by Wengzynowski (1995).

Similarly portions of the HLEM conductors previously identified also line up with Lidar linear features. This is shown at the Melou zone and west of the Switchback showing where HLEM conductors fall within linears identified in the Lidar data (Figure 8). In the same regions and just east of the Shut showing, magnetic anomalies shown on the first vertical derivative of the total magnetic field for the Kluane property are also coincident with linears (Figure 11). Elsewhere linears appear to bound or offset magnetic anomalies (e.g. near the Sack showing).

DISCUSSION

Regional Correlations and Implications for Mineralization

The Kluane schist is part of a belt of Jurassic to Cretaceous basinal rocks that is found within British Columbia, through Yukon and into Alaska. This belt of rocks includes: the McLaren schist, Kahiltna and Nutzotin assemblages (East Central Alaska); Kluane schist, Dezadeash Formation and Vand Creek and Blanchard River assemblages (Yukon); Gravina assemblage (SE Alaska) and Tyaughton and Methow basins (British Columbia). These sedimentary assemblages record the development and subsequent closure of marine basins initially formed between the Intermontane and Insular terranes. The final closure of these basins in the Late Cretaceous led to the formation of compressional faults, metamorphism of the overthickened crust and intrusion of Late Cretaceous to Paleocene granitic rocks. Post-Late Cretaceous orogen parallel dextral displacement along the Denali and other faults has dissected these basins, offsetting them along the Cordilleran margin. Former and more current studies have shown that these basins, in part, were once together and formed a series of depocenters that received detritus from both the Intermontane and Insular terranes. Knowing the original tectonic and stratigraphic position of the basins is important in deciphering the type of mineral deposits expected.

In southeast Alaska, the eastern Gravina belt and mid-Cretaceous intrusions of the Coast Belt, host mineralization of the Juneau gold belt (e.g. Kensington, Comet and Jualin). Mining and exploration have occurred in Juneau gold belt for over 100 years with 6.7 Moz of gold mined prior to 1945 and current resource estimates at the Kensington mine of 1.58 Moz (at year end-2014). These vein systems have been interpreted to be associated with deformation and metamorphism following the final closure of the Gravina basin in the Latest Cretaceous early Tertiary (Miller, 1995; Goldfarb et al., 2005). Mineralized veins are found within north striking shear zones as well as discrete veins that strike both east-west and northwest (Miller et al., 1995). Shear hosted veins have been associated with west to southwest verging thrust faults (e.g. Sumdum fault) and some of the discrete veins related to late dextral oblique thrusting. Age of mineralization at the Juneau gold camp has been determined to be ca. 55 Ma based on Ar-Ar analyses of muscovite from within gold bearing veins (Miller et al., 1995). Restoration of the approximately 450 km of right lateral displacement along the Denali fault brings together the rocks of the Kluane schist and the McLaren schist (Murphy, 2018). Several gold occurrences and placer operations are found within the McLaren schist indicating that gold mineralization is consistent through the Kluane/McLaren schist belt.

The large-scale tectonic setting, property scale structural character and timing of mineralization is nearly identical between the Kluane property and the Juneau gold belt (Figure 12). This idea is not new as previous workers have suggested this same correlation (Wengzynowski, 1995; Israel et al., 2010); however, the new data collected by workers analysis of recent Lidar solidifies the similarities (e.g. Stanley, 2012; Vice 2017).

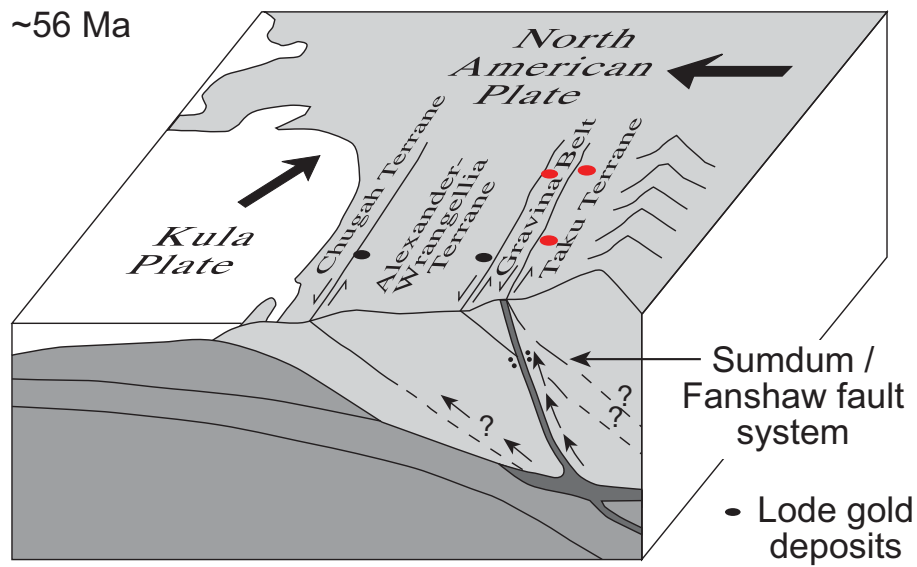
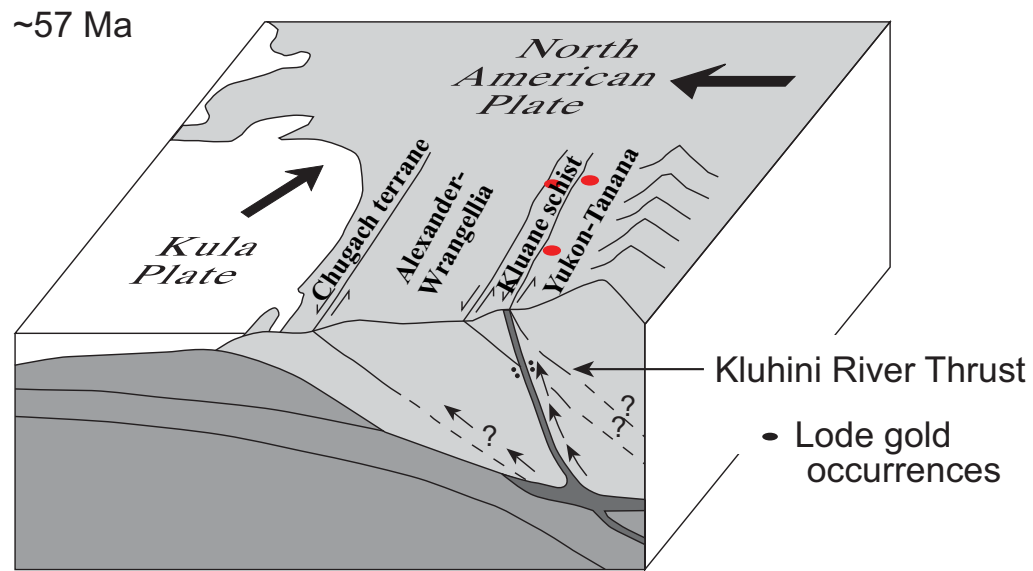
Deposit Type and Property Potential

The tectonic and depositional setting for the Jurassic to Cretaceous belt of rocks, including the Kluane schist are ideal for the development of orogenic gold systems (Groves et al., 2000). During the orogenic stage of accretionary margins, forearc deposits are accreted and deformed forming the structural pathways and metamorphic conditions needed to generate orogenic gold deposits (Figure 13).

Orogenic gold deposits characteristically comprise moderately to steeply dipping quartz-carbonate veins hosted in a variety of greenschist grade metamorphic rocks. Veins occur in brittle-ductile shear zones and faults, often with flanking shallow-dipping extensional veins and breccias. Individual veins range from a few centimetres up to five metres in thickness. They have sharp wallrock contacts and commonly exhibit narrow, proximal alteration envelopes of sericite and iron-carbonate. Further away from the veins, alteration is characterized by chlorite, calcite and locally magnetite. Ore minerals generally consist of native gold with lesser pyrite and arsenopyrite, and minor galena, sphalerite, chalcopyrite, molybdenite, pyrrhotite and tellurides (Dubé and Gosselin, 2007).

Chemically orogenic gold deposits are characterized by a vertical zoning of elements with varying amounts of gold (Figure 13). At higher crustal levels enrichment of mercury $\pm$ antimony passes downwards into gold + antimony, then gold + arsenic + tellurium and finally gold + arsenic. This zonation can be useful in targeting and determining the exhumation level of deposits or occurrences. At the Kluane property there is enrichment in arsenic, antimony and tellurium. Mercury was not analyzed; however it is unlikely that the mineralization on the property is high level based upon the metamorphic grade of the rocks.

Because most orogenic deposits are exhumed from deeper levels, a significant amount of material is eroded from the host rocks, and potentially parts of the deposit. This characteristic leads to the deposition of placer gold deposits on the flanks of most orogenic deposits. Examples of this is the Klondike gold fields in Yukon and Alaska where up to 12 Moz of placer gold has been mined. Jurassic orogenic lode gold has recently be discovered in the White Gold district south of the Klondike (Allen et al., 2013). At the Kluane property several creeks are currently being mined or have had a long history of placer production. These include Gladstone, Twelfth of July and Fourth of July creeks.



STRATEGIC METALS LTD.

FIGURE 12
TECTONIC COMPARISON BETWEEN
THE JUNEAU GOLD BELT AND THE
KLUANE PROPERTY

MARCH 2020

Modified from Goldfarb et al., (2005)

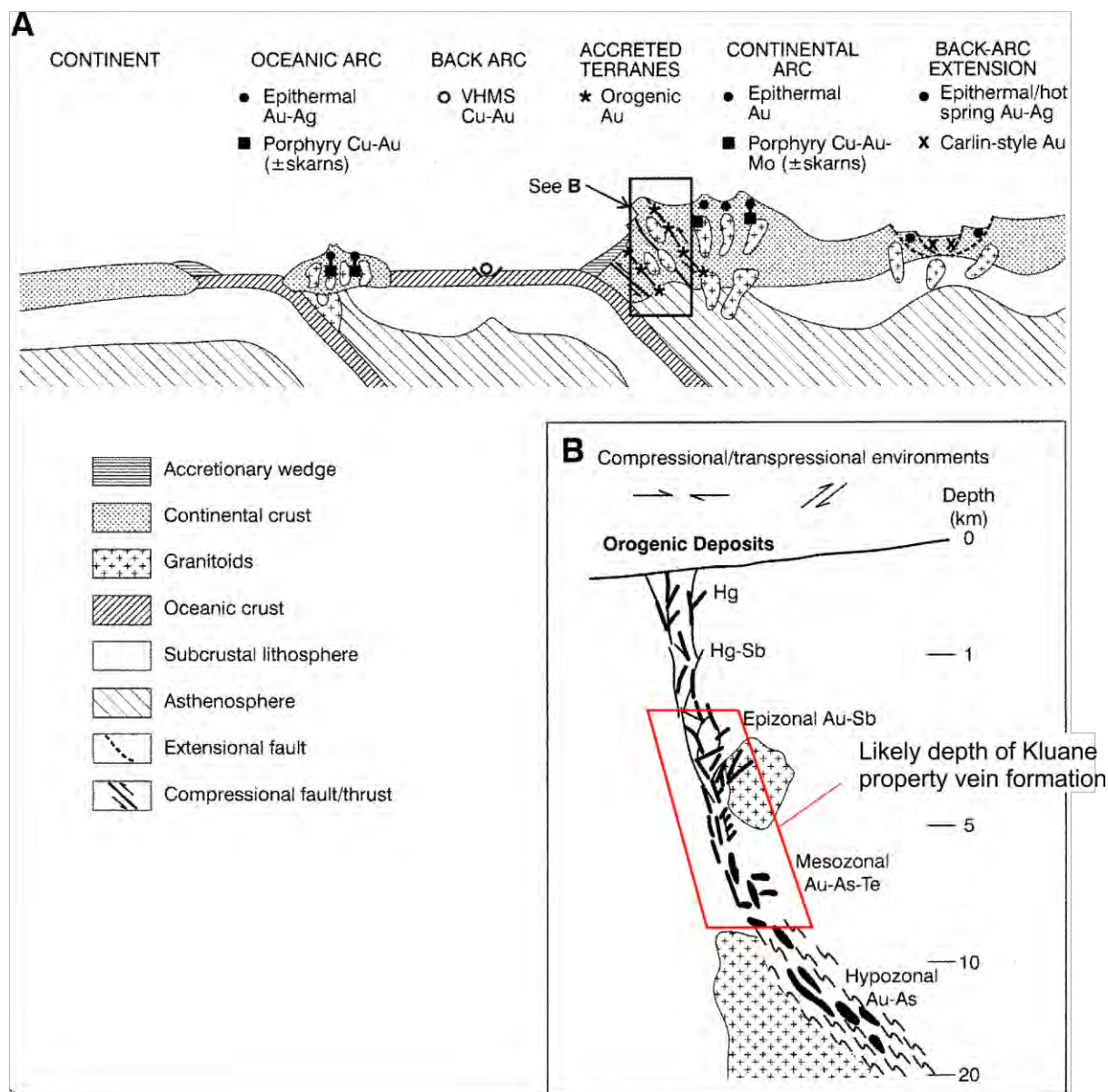


Figure 13. A) Location of mineral deposit formation within accretionary orogens; B) Vertical metal zonation within orogenic gold systems (From Groves et al., 2000).

Although gold mineralization at the Kluane property is almost certainly orogenic in nature, there is some evidence for possible coincident intrusion related mineralization. Chemically there is an enrichment of bismuth along with the arsenic and tellurium. This combination of element enrichment is more associated with reduced intrusion related gold systems (Hart, 2007). Interestingly a geophysical anomaly found in between the DalBianco showing and the Malou and Ross zones shows a magnetic low surrounded by a weak magnetic high (Figure 14), which is more evident in the first vertical derivative of the total magnetic intensity (Figure 11). This is also the area where up to 0.18% tungsten was found adjacent to veins at the DalBianco showing (Wengzynowski, 1995). Tungsten is also known to be associated with reduced intrusion related gold systems.

Intrusions of the Ruby Range suite are known to have porphyry mineralization associated with some phases. Approximately 50 km to the northwest of the Kluane property, the Meloy Cu-Mo porphyry is found within rocks of the Ruby Range. This system is rich in tungsten and gold. It is possible that a similar pluton is buried under the Kluane property and providing some metal-enriched fluids to an already forming orogenic system.

CONCLUSIONS AND RECOMMENTATIONS

The Kluane property covers twelve, widely separated occurrences of high-grade gold veins, including three zones where drilling has intersected mineralization at depth. Soil sampling and geophysical surveying on the property have identified numerous untested geochemical anomalies and HLEM conductors.

Strategic Metals' 2015 program successfully identified two new showings, the Slayer and Metallica showings, and relocated the Arc Showing. All three showings are located in the northern part of the property, in an area underlain by Ruby Range Batholith. This is important as veins formed in the more competent intrusive rocks have the opportunity to be larger compared to those formed in the less competent schists.

The Lidar survey has provided numerous new targets to investigate and can be used to further delineate the structural character of the property once the features have been ground truthed.

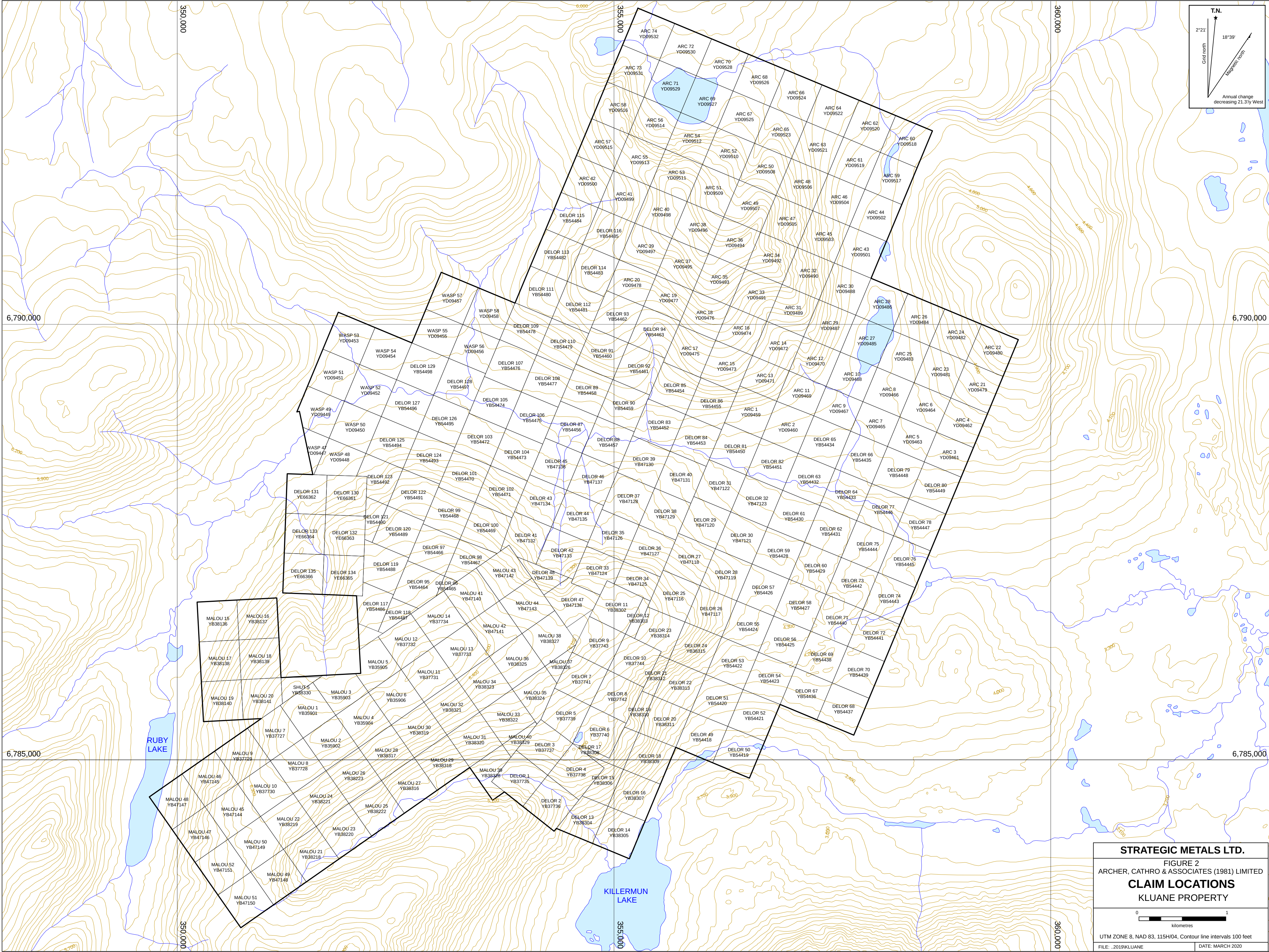
Further work on the property is highly recommended. Soil sample coverage should be extended around areas of known mineralization, including the three showings located in the northern part of the property. HLEM surveys have been effective at identifying structures associated with mineralized veins, and additional surveys should be performed to extend coverage northward into areas underlain by Ruby Range Batholith. Lidar features should be followed up in conjunction with detailed structural mapping of as much of the property as possible. Detailed prospecting and hand trenching should be done along the length of HLEM conductors and around mineralized float occurrences that have received only cursory attention. Hand trenches dug by previous workers at the Arc Showing failed to reach bedrock, and they should be extended and deepened. Diamond drilling should be performed in areas where high-grade veins have been identified in trenches, such as the Delor Showing.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



S. Israel, PhD



STRATEGIC METALS LTD.

FIGURE 2
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CLAIM LOCATIONS

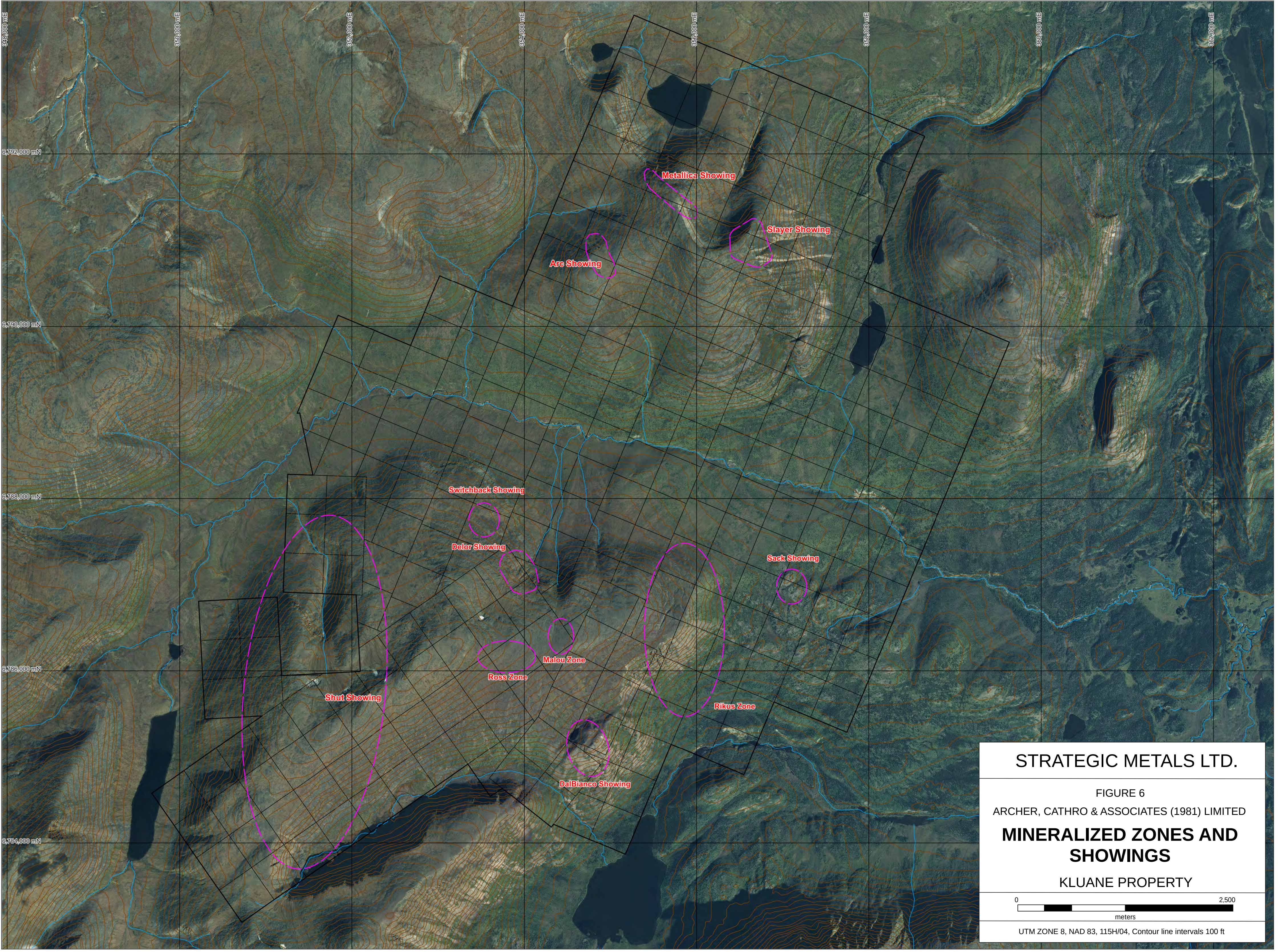
KLUANE PROPERTY

01 kilometres

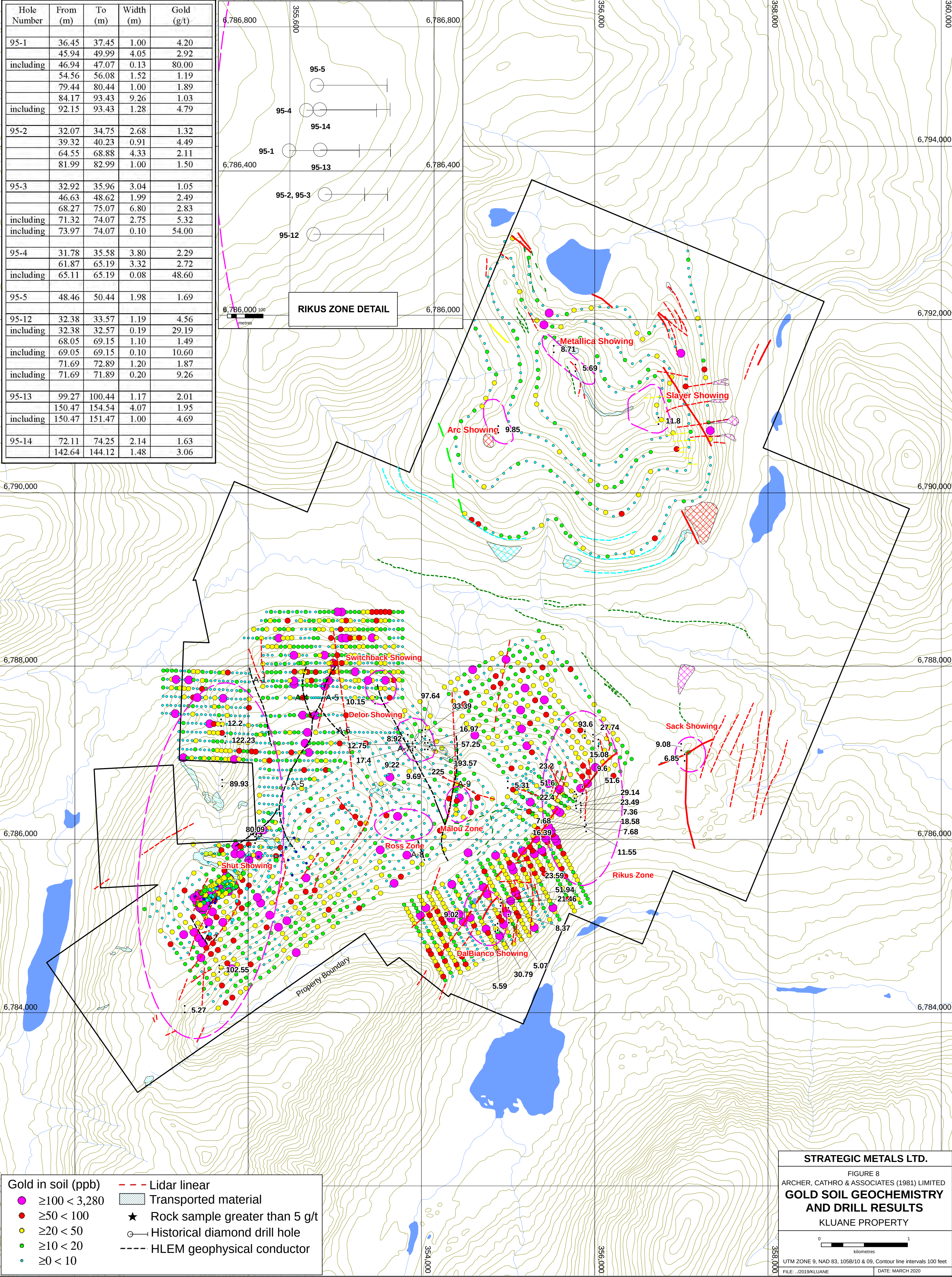
UTM ZONE 8, NAD 83, 11S/H/04, Contour line intervals 100 feet

FILE : .2019\KLUANE

DATE: MARCH 2020

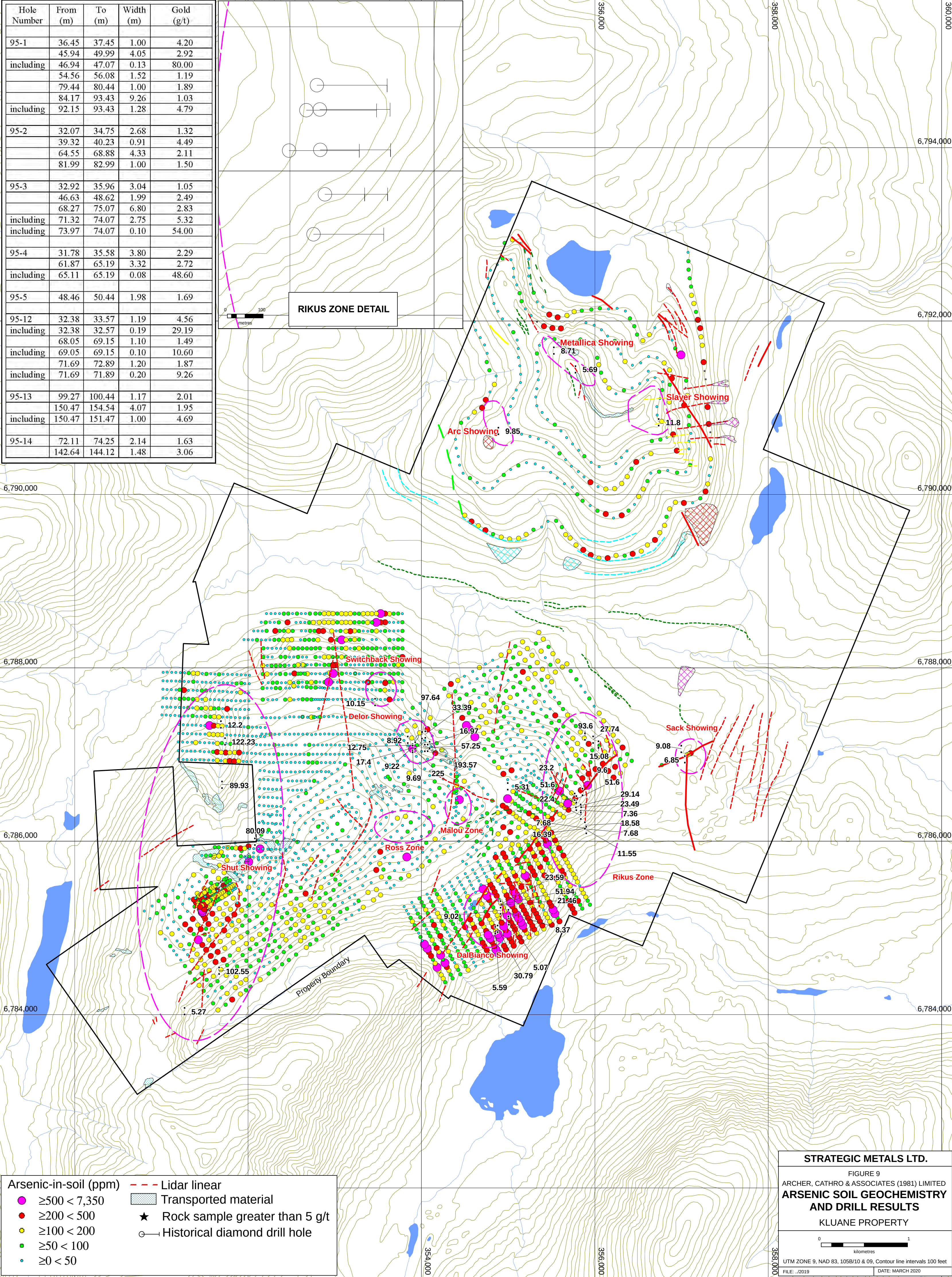


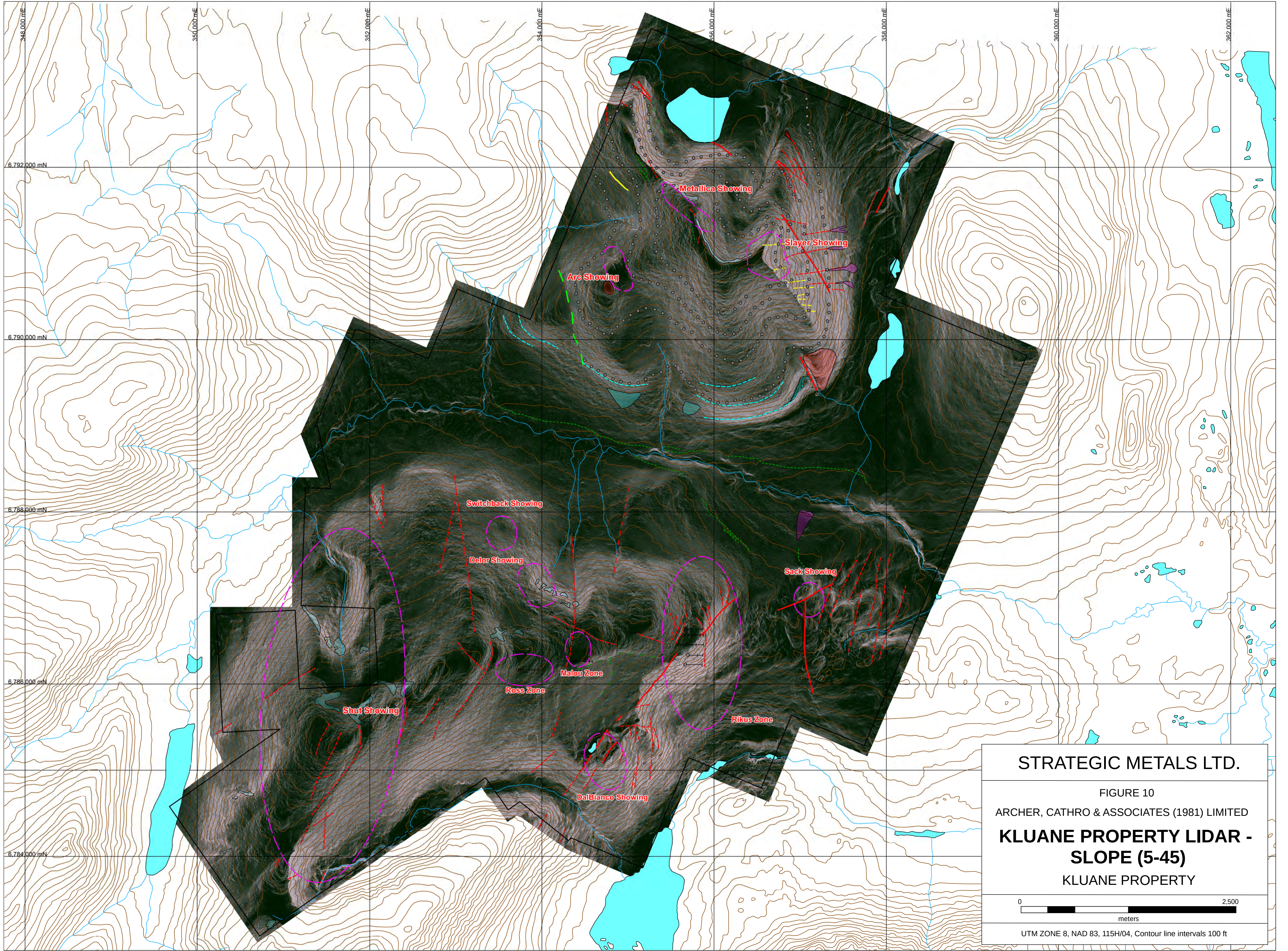
Hole Number	From (m)	To (m)	Width (m)	Gold (g/t)
95-1	36.45	37.45	1.00	4.20
	45.94	49.99	4.05	2.92
including	46.94	47.07	0.13	80.00
	54.56	56.08	1.52	1.19
	79.44	80.44	1.00	1.89
	84.17	93.43	9.26	1.03
including	92.15	93.43	1.28	4.79
95-2	32.07	34.75	2.68	1.32
	39.32	40.23	0.91	4.49
	64.55	68.88	4.33	2.11
	81.99	82.99	1.00	1.50
95-3	32.92	35.96	3.04	1.05
	46.63	48.62	1.99	2.49
	68.27	75.07	6.80	2.83
including	71.32	74.07	2.75	5.32
including	73.97	74.07	0.10	54.00
95-4	31.78	35.58	3.80	2.29
	61.87	65.19	3.32	2.72
including	65.11	65.19	0.08	48.60
95-5	48.46	50.44	1.98	1.69
95-12	32.38	33.57	1.19	4.56
including	32.38	32.57	0.19	29.19
	68.05	69.15	1.10	1.49
including	69.05	69.15	0.10	10.60
	71.69	72.89	1.20	1.87
including	71.69	71.89	0.20	9.26
95-13	99.27	100.44	1.17	2.01
	150.47	154.54	4.07	1.95
including	150.47	151.47	1.00	4.69
95-14	72.11	74.25	2.14	1.63
	142.64	144.12	1.48	3.06



Gold in soil (ppb)	LIDAR linear
● $\geq 100 < 3,280$	▨ Transported material
● $\geq 50 < 100$	★ Rock sample greater than 5 g/t
● $\geq 20 < 50$	○ Historical diamond drill hole
● $\geq 10 < 20$	--- HLEM geophysical conductor
● $\geq 0 < 10$	

Hole Number	From (m)	To (m)	Width (m)	Gold (g/t)
95-1	36.45	37.45	1.00	4.20
	45.94	49.99	4.05	2.92
including	46.94	47.07	0.13	80.00
	54.56	56.08	1.52	1.19
	79.44	80.44	1.00	1.89
	84.17	93.43	9.26	1.03
including	92.15	93.43	1.28	4.79
95-2	32.07	34.75	2.68	1.32
	39.32	40.23	0.91	4.49
	64.55	68.88	4.33	2.11
	81.99	82.99	1.00	1.50
95-3	32.92	35.96	3.04	1.05
	46.63	48.62	1.99	2.49
	68.27	75.07	6.80	2.83
including	71.32	74.07	2.75	5.32
including	73.97	74.07	0.10	54.00
95-4	31.78	35.58	3.80	2.29
	61.87	65.19	3.32	2.72
including	65.11	65.19	0.08	48.60
95-5	48.46	50.44	1.98	1.69
95-12	32.38	33.57	1.19	4.56
including	32.38	32.57	0.19	29.19
	68.05	69.15	1.10	1.49
including	69.05	69.15	0.10	10.60
	71.69	72.89	1.20	1.87
including	71.69	71.89	0.20	9.26
95-13	99.27	100.44	1.17	2.01
	150.47	154.54	4.07	1.95
including	150.47	151.47	1.00	4.69
95-14	72.11	74.25	2.14	1.63
	142.64	144.12	1.48	3.06





STRATEGIC METALS LTD.

FIGURE 10

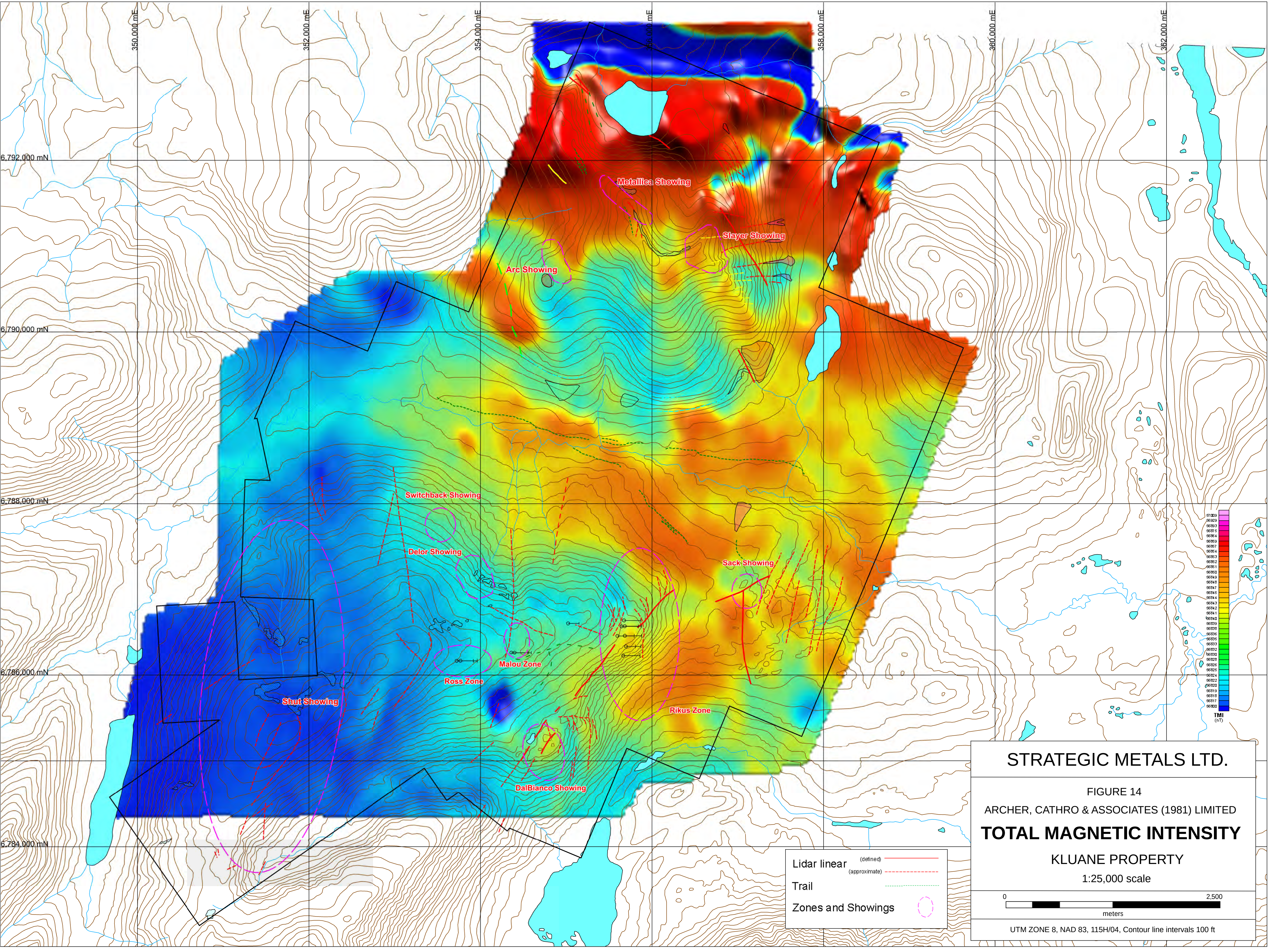
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**KLUANE PROPERTY LIDAR -
SLOPE (5-45)**

KLUANE PROPERTY

0 2,500
meters

UTM ZONE 8, NAD 83, 115H/04, Contour line intervals 100 ft



STRATEGIC METALS LTD.

FIGURE 14

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

TOTAL MAGNETIC INTENSITY

KLUANE PROPERTY

1:25,000 scale

0 2,500
meters

UTM ZONE 8, NAD 83, 115H/04, Contour line intervals 100 ft

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APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Steve Israel, geologist, with business addresses in Vancouver and Squamish, British Columbia and Whitehorse, Yukon Territory and residential address in Whitehorse, Yukon, do hereby certify that:

1. I graduated in 1998 from Memorial University of Newfoundland and Labrador with a B.Sc (hons) in Geological Sciences, and received a M.Sc. (2001) and Ph.D. (2008) from the University of British Columbia
2. From 2004 to 2018, I worked as a regional bedrock mapper for the Yukon Geological Survey and have considerable expertise in North American Cordilleran geology.
3. I have worked as a contractor for exploration companies in British Columbia, Yukon and Mexico.
4. I am a full-time employee of Archer, Cathro & Associates (1981) Limited.
5. I have interpreted all data resulting from this work.



S. Israel, PhD

APPENDIX II
STATEMENT OF EXPENDITURES

Statement of Expenditures

Kluane Property

March 6, 2020

Compilation Expenses

Steve Israel - November- December 2019, 38 hours @ \$113/hr	\$ 4,294.00
Steve Israel - January - March 2020, 100 hours @ \$115/hr	<u>\$ 11,500.00</u>
	\$ 15,794.00

Expences (Includes Management Fee)

Eagle Mapping	<u>\$ 29,160.00</u>
	\$ 29,160.00

Total Expenditures \$ 44,954.00

APPENDIX III
LIDAR DATASET

See Data Folder for
Digital Data