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**ASSESSMENT REPORT**

describing

**ROCK GEOCHEMICAL SAMPLING**

Field work performed on August 26, 2019

at the

**SHADOW PROPERTY**

Shadow 1-36 claims      YF47941–YF47976

NTS 115J/08

Latitude 62°19'N; Longitude 138°8'W

located in the

Whitehorse Mining District  
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

**STRATEGIC METALS LTD.**

by

K. Willms, B.Sc., GIT

April 2020

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## **INTRODUCTION**

The Shadow property is located within the Dawson Range Gold Belt of southwestern Yukon. The property covers elevated gold, silver, arsenic, antimony, lead and zinc values from rock and soil samples, which are thought to represent the signature of a high level epithermal environment. The property is wholly owned by Strategic Metals Ltd.

This report describes a single day of rock geochemical sampling performed on August 26, 2019 by Archer, Cathro & Associates (1981) Limited on behalf of Strategic Metals. The author did not participate in the program, but interpreted results from the work. A Statement of Qualifications can be found in Appendix I, while a Statement of Expenditures appears in Appendix II.

## **PROPERTY LOCATION, CLAIM DATA AND ACCESS**

The Shadow property is located in southwestern Yukon at latitude 62°19' north and longitude 138°8' west on NTS map sheet 115J/08 (Figure 1). It comprises 36 contiguous quartz claims that cover an area of approximately 750 hectares (7.5 km<sup>2</sup>). The claims are registered with the Whitehorse Mining Recorder in the name of Archer Cathro, which holds them in trust for Strategic Metals. Specifics concerning claim registration are given below, while the locations of individual claims are illustrated on Figure 2.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
Shadow 1-36	YF47941-YF47976	April 25, 2023

\* Expiry date includes 2019 work which has been filed and accepted by the Whitehorse Mining Recorder.

In 2019, access to the property was provided by a Bell 206B Jet Ranger operated by Capital Helicopters (1995) Inc. The Shadow property is situated 101 km west-northwest of the village of Carmacks, the nearest community and supply centre.

The Shadow property is located within the traditional territories of Selkirk First Nation, which has concluded land claim agreements with Canada and Yukon. Neither the property nor access routes overlie First Nation Settlement Land.

## **HISTORY AND PREVIOUS WORK**

In 1985, Kerr Addison Mines Ltd. staked 24 claims after a preliminary 1:50,000 scale mapping program discovered the Shadow Zone, an intensely silicified rhyolite breccia zone situated along a north trending lineament. Rock, soil and silt samples collected at the shadow zone returned elevated values for several elements (Pautler, 1986).

In 1986, Kerr Addison completed follow up geological mapping, soil sampling and chip sampling around the Shadow Zone. Geological mapping at a 1:5,000 scale traced the zone for 200 m along strike and mapped a linear associated with the zone over a 2,000 m length. A total

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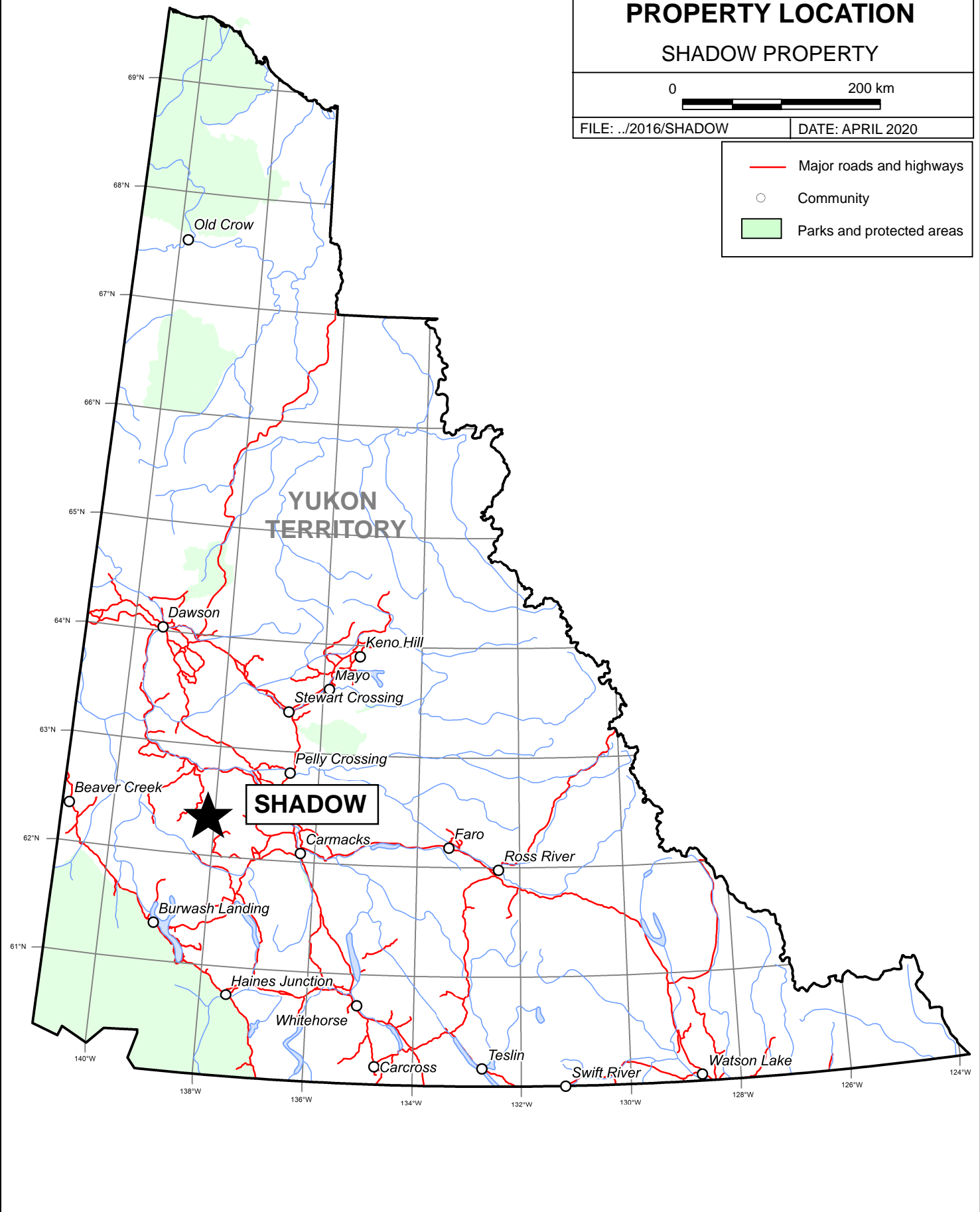
FIGURE 1  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**PROPERTY LOCATION**  
SHADOW PROPERTY

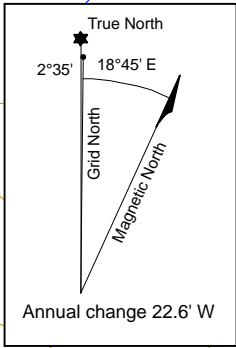
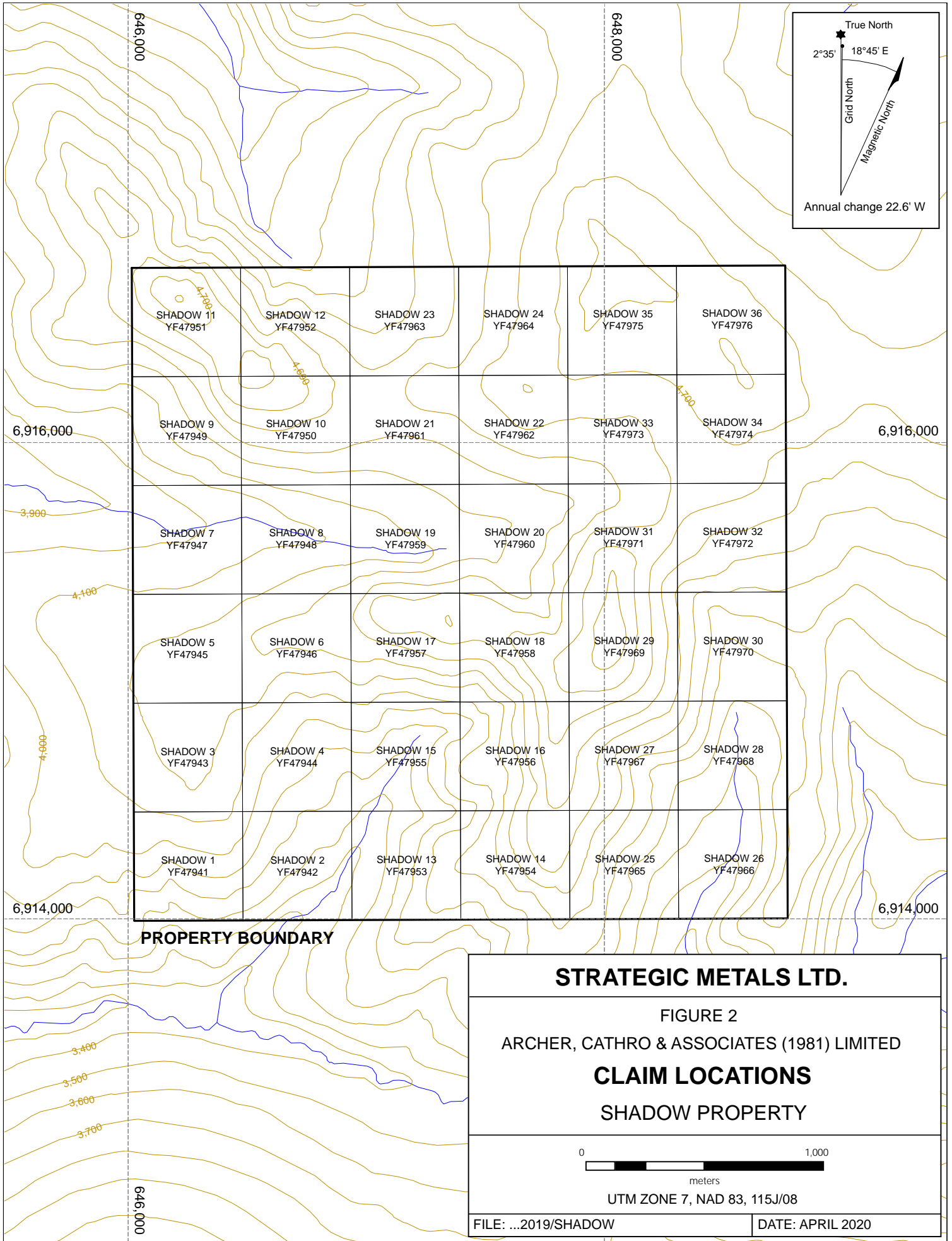


FILE: ../2016/SHADOW

DATE: APRIL 2020

- Major roads and highways
- Community
- Parks and protected areas



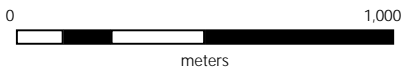


SHADOW 11 YF47951	SHADOW 12 YF47952	SHADOW 23 YF47963	SHADOW 24 YF47964	SHADOW 35 YF47975	SHADOW 36 YF47976
SHADOW 9 YF47949	SHADOW 10 YF47950	SHADOW 21 YF47961	SHADOW 22 YF47962	SHADOW 33 YF47973	SHADOW 34 YF47974
SHADOW 7 YF47947	SHADOW 8 YF47948	SHADOW 19 YF47959	SHADOW 20 YF47960	SHADOW 31 YF47971	SHADOW 32 YF47972
SHADOW 5 YF47945	SHADOW 6 YF47946	SHADOW 17 YF47957	SHADOW 18 YF47958	SHADOW 29 YF47969	SHADOW 30 YF47970
SHADOW 3 YF47943	SHADOW 4 YF47944	SHADOW 15 YF47955	SHADOW 16 YF47956	SHADOW 27 YF47967	SHADOW 28 YF47968
SHADOW 1 YF47941	SHADOW 2 YF47942	SHADOW 13 YF47953	SHADOW 14 YF47954	SHADOW 25 YF47965	SHADOW 26 YF47966

**PROPERTY BOUNDARY**

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FIGURE 2  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**CLAIM LOCATIONS**  
SHADOW PROPERTY



UTM ZONE 7, NAD 83, 115J/08

FILE: ...2019/SHADOW

DATE: APRIL 2020

of 54 rock samples were collected, which peak values of 440 ppb gold, 460 ppm arsenic and 310 ppm antimony. These results lead to the staking of five more claims, which extended the claim block to the southeast (Pautler, 1986).

In 1988, Kerr Addison conducted soil and VLF-EM16 surveys on the property, focussing on the linear structure hosting the Shadow Zone. Soil samples returned values up to 90 ppb gold, 680 ppm arsenic and 45 ppm antimony, but overall geochemical response was low. The VLF survey identified two conductors that trend sub-parallel to the Shadow Zone; however their profiles are subtle, suggesting the sources are either weak or deep. One of the conductors lies 250 m to the east of the Shadow Zone and the other is roughly 100 m to the west, lining up with a northwest-trending arsenic-in-soil anomaly (Grextan, 1988). No further work was completed by Kerr Addison and the claims were allowed to lapse.

In 2010, Beringia Gold Corp. staked the Hay claims to cover the Shadow Zone and surrounding area. A portion of these claims overlap with the current Shadow property. A soil sampling program was conducted, from which 410 samples were collected. Soil samples returned weakly elevated values for gold, arsenic and antimony (Lindsay, 2010).

In 2011, the Geological Survey of Canada (GSC) conducted high resolution First Vertical Derivative (FVD) and Residual Total Magnetic Field (RTMF) surveys over the Nisling River area, which includes the Shadow property (Kiss, F. and Coyle, M., 2011). Interpretation of data from these surveys in regards to the property is found in the Geophysics section, below.

In 2016, Strategic Metals staked the current Shadow claims and conducted a program of prospecting and soil geochemical sampling. A total of two rock and 142 grid and contour soil samples were collected. Rock samples returned background levels for all elements of interest, while soil samples confirmed anomalous values from previous programs at the Shadow Lineament and the northwesterly trending arsenic anomaly.

### **GEOMORPHOLOGY AND CLIMATE**

The Shadow property is situated within the Klondike Plateau of southwestern Yukon. It is drained by small tributaries of the Klotassin River, which is part of the Yukon River watershed.

The property is situated on a broad gentle ridge that is flanked to the south by a system of headwater gullies. Elevations on the property range from approximately 1065 to 1465 m above sea level (asl). Outcrop is restricted to the ridgetop and deeply incised creek cuts. Most of the property lies above treeline, which is about 1280 m asl. Vegetation in low-lying areas typically consists of stunted spruce, willow and alder shrubs, buckbrush and grasses. Above tree-line, moss, grasses and lichen are interspersed with outcrop and felsenmeer. The property experienced glaciation during the Pliocene to early Pleistocene (Duk-Rodkin, 1999). Ice movement in this area arced from southeast to southwest following major river valleys.

The climate at the Shadow property is typical of northern continental regions with long, cold winters, truncated fall and spring seasons and short, mild summers. The property is mostly snow free from late May to late September.

## REGIONAL GEOLOGY

The Shadow property is located within the Yukon-Tanana Terrane (YTT) as shown on Figure 3. The YTT is a mid to late Paleozoic continental arc system composed of a variety of back-arc metavolcanic and metasedimentary rocks overlying a lower sequence of arc-type metavolcanics and meta-sediments (Colpron et al., 2006; Piercey et al., 2006). This terrane represents a continental arc that developed along the ancient Pacific margin of North America from Late Devonian to Permian.

In 2003, Gordey and Makepeace completed a Yukon-wide geological compilation that updated lithological unit names in the area. The Yukon Geological Survey (YGS) maintains a website illustrating regional geology, which is updated when new information becomes available (YGS, 2019). The main lithological units are described below in Table I, while regional geology is shown on Figure 4.

**Table I – Lithological Units (Gordey and Makepeace, 2003, and YGS, 2019)**

Unit Name	Age	Map Name	Description
Carmacks Group	Upper Cretaceous (73-68Ma)	uKCa	Volcanic succession dominated by intermediate andesite porphyry.
		uKCv	Volcanic succession dominated by basic volcanic strata (augite olivine basalt and breccia; hornblende feldspar porphyry andesite and dacite flows; augite phyric andesite and trachyte; minor sandy tuff, granite boulder conglomerate, agglomerate and associated epiclastic rocks).
Windy-Table Group	Upper Cretaceous (85-80 Ma)	uKW	Resistant, columnar jointed, quartz-phyric dacite flows, ash and lapilli tuff; maroon weathering, basal sedimentary and epiclastic rocks; dacite flows and flow breccia; brown basalt flows; includes dykes of quartz-feldspar porphyry.
Casino Suite	Late Cretaceous (78-74 Ma)	LKfC	Grey, fine to coarse-grained, massive, granitic rocks of quartz-feldspar porphyry composition and related felsic dykes.
Mount Nansen Group	Lower Cretaceous (110-90 Ma)	mKN	Massive aphyric or feldspar-phyric andesite to dacite flows, breccia and tuff; massive, heterolithic, quartz and feldspar-phyric, felsic lapilli tuff; flow-banded quartz-phyric rhyolite and quartz-feldspar porphyry plugs, dykes, sills and breccias.
Whitehorse Suite	Early Cretaceous (117-85 Ma)	mKgW	Grey, medium to coarse grained, generally equigranular granitic rocks of locally intermediate composition (biotite-hornblende granodiorite, hornblende-quartz diorite and hornblende diorite;

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FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

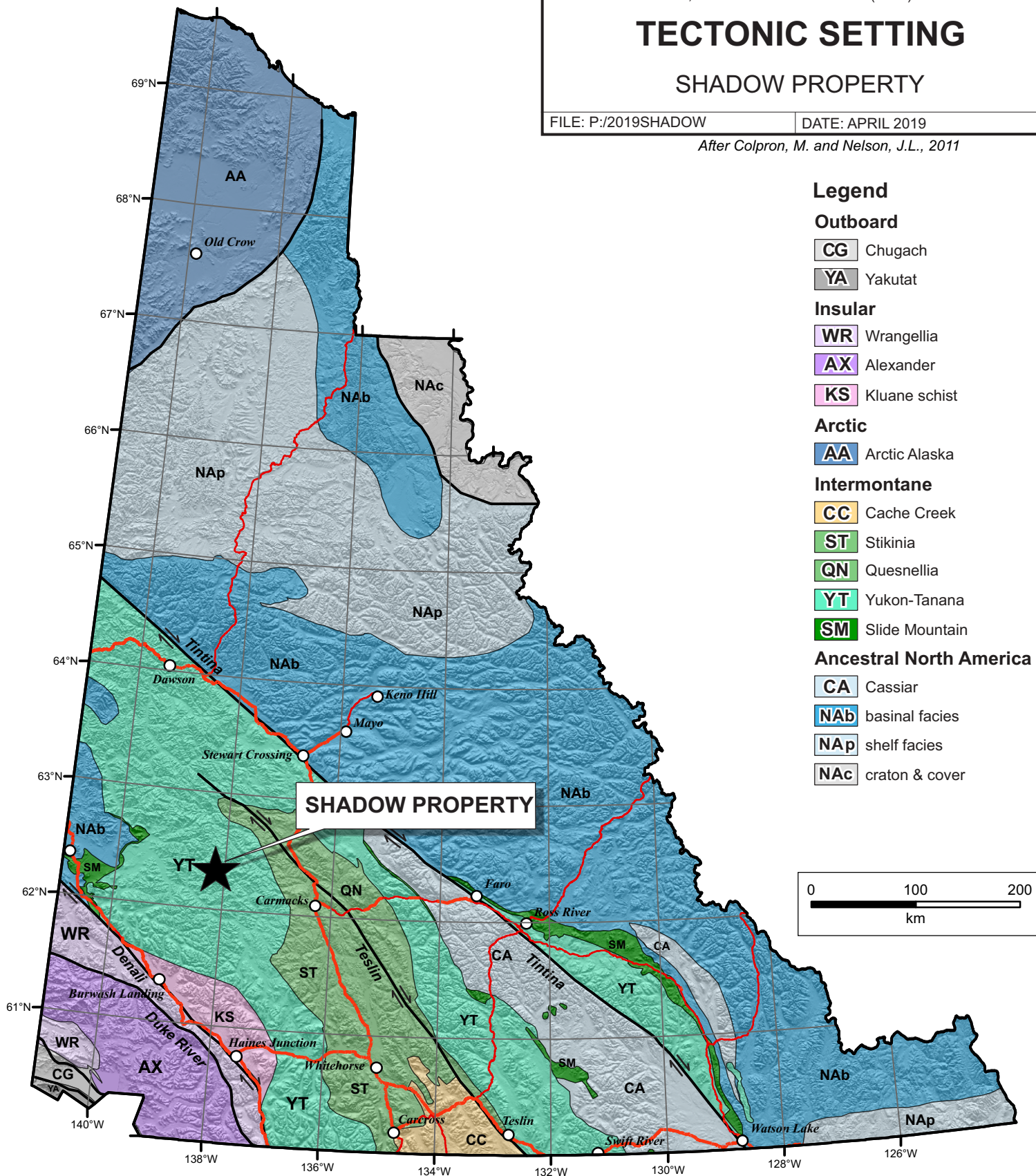
## TECTONIC SETTING

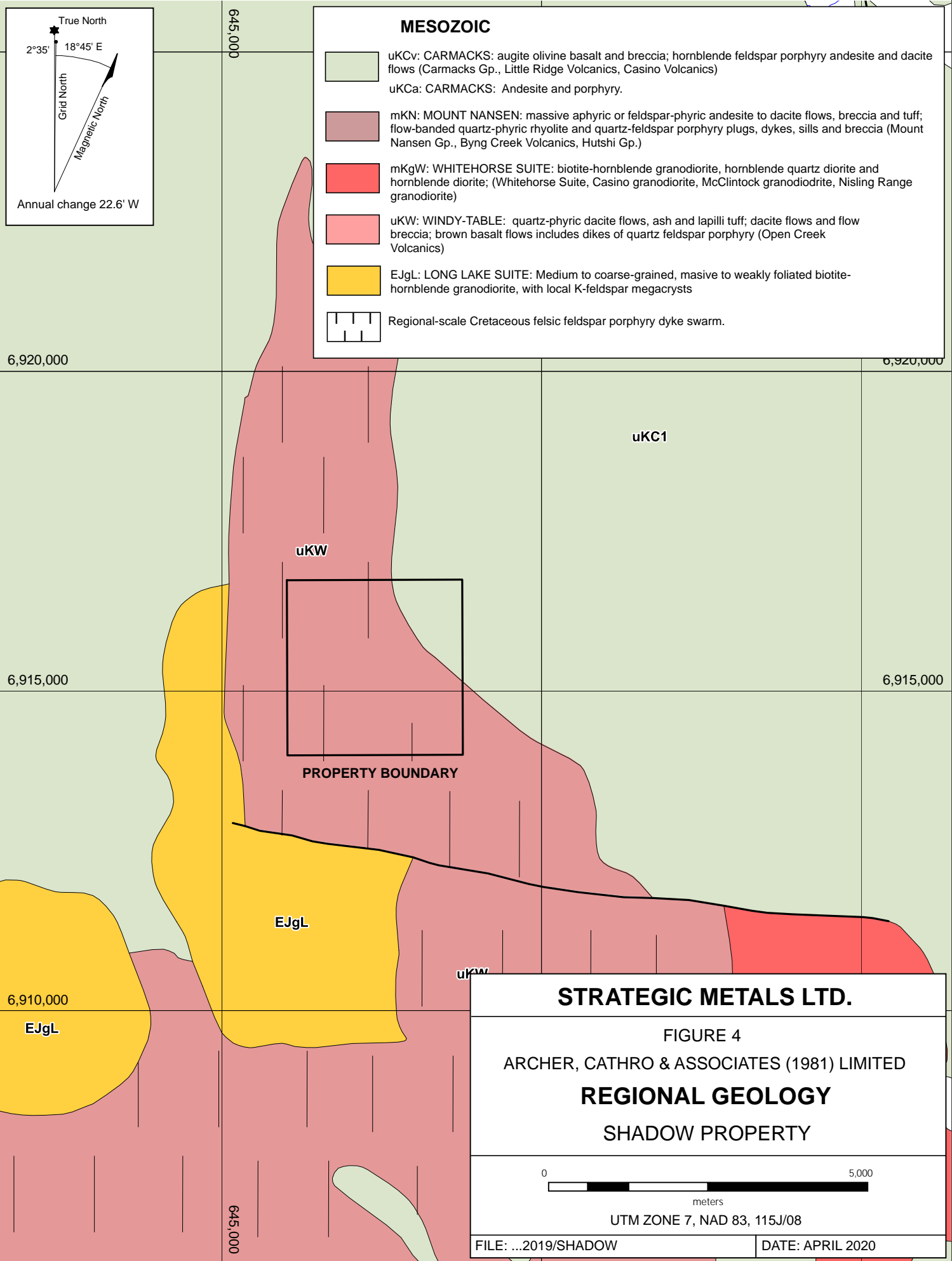
### SHADOW PROPERTY

FILE: P:/2019SHADOW

DATE: APRIL 2019

After Colpron, M. and Nelson, J.L., 2011





**MESOZOIC**



uKv: CARMACKS: augite olivine basalt and breccia; hornblende feldspar porphyry andesite and dacite flows (Carmacks Gp., Little Ridge Volcanics, Casino Volcanics)

uKCa: CARMACKS: Andesite and porphyry.



mKN: MOUNT NANSEN: massive aphyric or feldspar-phyric andesite to dacite flows, breccia and tuff; flow-banded quartz-phyric rhyolite and quartz-feldspar porphyry plugs, dykes, sills and breccia (Mount Nansen Gp., Byng Creek Volcanics, Hutshi Gp.)



mKgW: WHITEHORSE SUITE: biotite-hornblende granodiorite, hornblende quartz diorite and hornblende diorite; (Whitehorse Suite, Casino granodiorite, McClintock granodiorite, Nisling Range granodiorite)



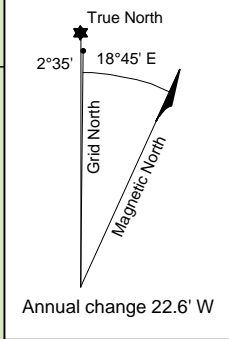
uKW: WINDY-TABLE: quartz-phyric dacite flows, ash and lapilli tuff; dacite flows and flow breccia; brown basalt flows includes dikes of quartz feldspar porphyry (Open Creek Volcanics)



EJgL: LONG LAKE SUITE: Medium to coarse-grained, massive to weakly foliated biotite-hornblende granodiorite, with local K-feldspar megacrysts



Regional-scale Cretaceous felsic feldspar porphyry dyke swarm.



6,920,000

645,000

6,920,000

6,915,000

6,915,000

6,910,000

645,000

uKC1

uKW

PROPERTY BOUNDARY

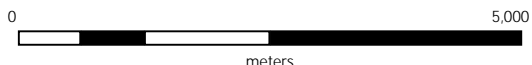
EJgL

uKW

EJgL

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FIGURE 4  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**REGIONAL GEOLOGY**  
 SHADOW PROPERTY



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FILE: ...2019/SHADOW

DATE: APRIL 2020

			leucocratic, biotite-hornblende granodiorite, locally contains sparse grey and pink potassium feldspar phenocrysts).
Long Lake Suite	Early Jurassic (188-178 Ma)	EJgL	Medium to coarse-grained, massive to weakly foliated biotite-hornblende granodiorite, with local K-feldspar megacrysts.

Regional-scale mapping shows the Shadow property is underlain by Windy-Table Group dacite flows and lapilli tuff, which are bordered by Carmacks Group augite olivine basalts and breccias to the east and north, and Long Lake Suite granodiorite to the west and south (YGS, 2019). A regional-scale swarm of north-south trending feldspar porphyry dykes cuts through the Windy-Table Group rocks, include those that underlie the property (Tempelman-Kluit, 1974). A major west-northwesterly trending sinistral fault offsets the dyke swarm about 2,000 m south of the property.

Throughout the Dawson Range Gold Belt a Late Cretaceous felsic intrusive unit, named the Casino Suite, is associated with a number of significant copper-gold porphyry and gold-silver epithermal vein deposits. Casino Suite intrusions were emplaced approximately 74 to 78 million years ago and typically consist of quartz porphyry, quartz-feldspar porphyry or feldspar porphyry dykes and plugs. Most intrusions relating to this suite were previously assigned to the Prospector Mountain Suite (67-69 Ma) or the Mount Nansen Group. Intrusive rocks on the Shadow property have not been dated, but some dykes observed on the property resemble Casino Suite rocks observed elsewhere in the Dawson Range.

### **PROPERTY GEOLOGY**

In 1986 and 1988, detailed geological mapping was performed at 1:5,000 scale by Kerr Addison across much of the current Shadow property. The following descriptions are based on Kerr Addison's mapping and regional mapping performed by the YGS and GSC. Detailed mapping of the property can be found in Pautler, (1986).

The most common units at surface on the Shadow property are pyroclastic andesite and plagioclase porphyry. These units are underlain by rhyolite flows, which outcrop in the southeastern part of the property. Numerous quartz and feldspar porphyry dykes cut the volcanic units. These dykes are likely part of a north-trending feldspar porphyry dyke swarm that has been mapped regionally. Along the eastern side of the property, Carmacks Group basalt flows cap Windy-Table volcanics. These basalts are not cut by the dyke swarm.

The pyroclastic andesite unit is comprised of green tuff and lapilli tuff that are interbedded with sporadically calcareous, plagioclase porphyry. Rhyolite flows on the property commonly display spherulitic and flow-banded textures. The quartz and feldspar porphyry dykes display chloritic and clay alteration.

## **MINERALIZATION**

The Shadow property covers northerly and northwesterly trending structures. The strongest structure is a 2000 m long north-south trending lineament, known as the Shadow Lineament. Mapping has identified silicified rhyolite breccia within the Shadow Lineament for a length of 1300 m, of which 200 m is characterized as intensely silicified brecciation  $\pm$  hematization. A northwesterly-trending linear that cuts the Shadow Lineament has been traced for 1,500 m. Rock samples taken from this linear are consistently elevated for antimony and arsenic. A large cluster of strongly silicified breccia boulders are mapped where the northwesterly linear crosses the Shadow Lineament.

Rock sampling conducted on the property by Kerr Addison in 1985, 1986 and 1988 yielded peak values of 400 ppb gold, 460 ppm arsenic, 310 ppm antimony and 0.3 ppm silver. Full details for previous sampling can be found in Pautler (1986) and Grexton (1988).

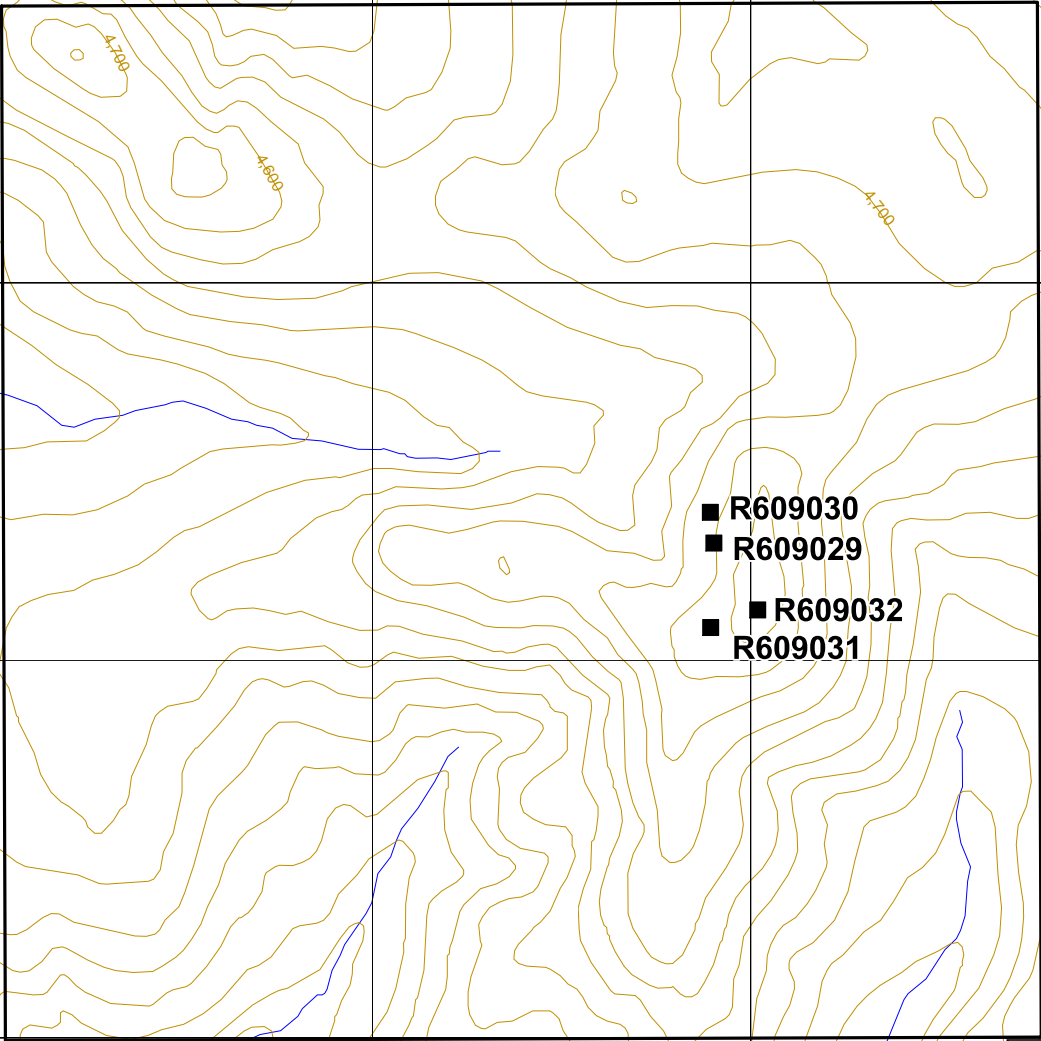
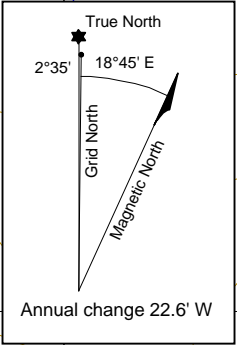
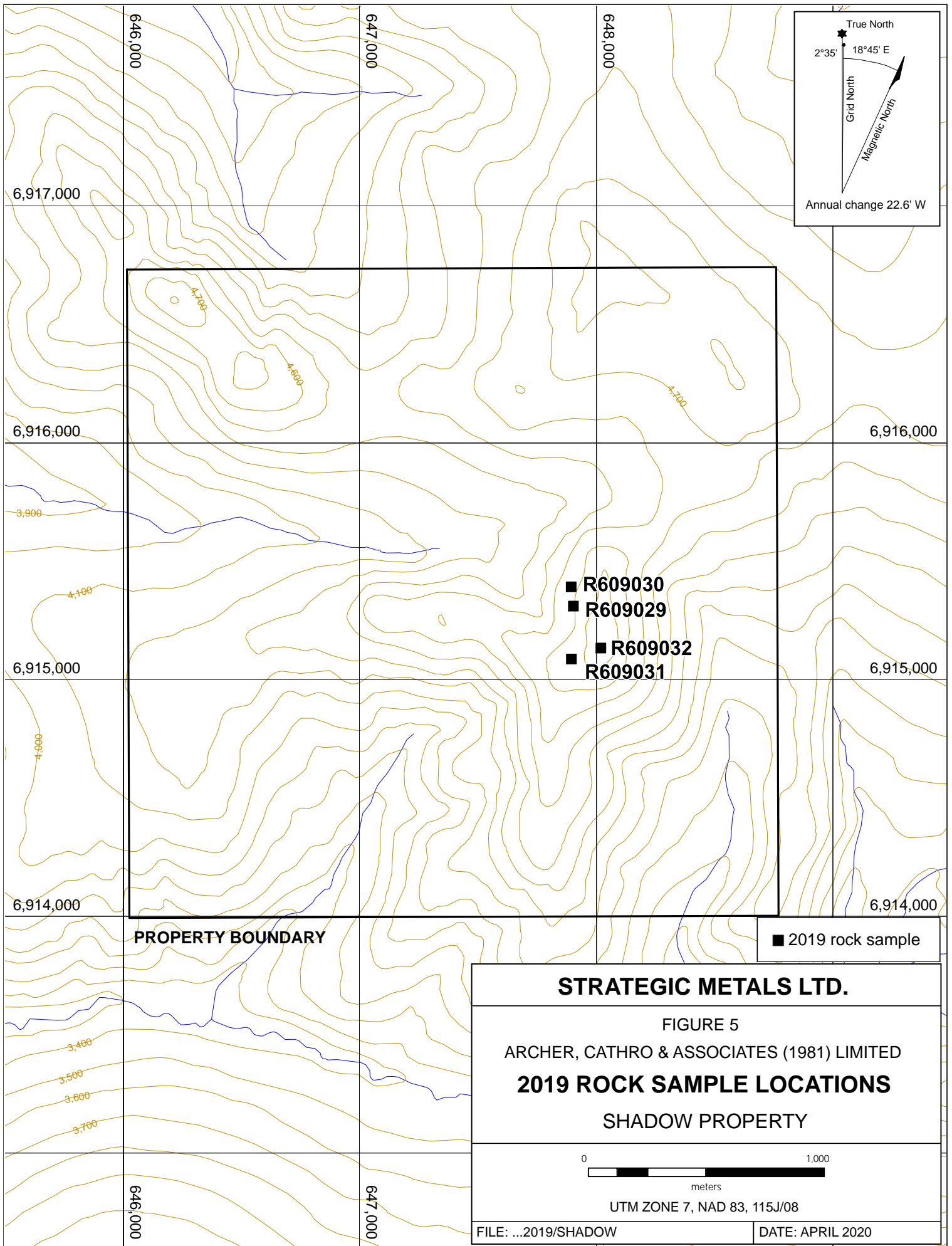
A total of four rock samples were collected during the 2019 season from near the Shadow Zone. The samples returned background levels for all elements of interest. Rock sample locations are found in Figure 5.

Rock geochemical sample sites were marked with orange flagging tape labelled with the sample number. The location of each sample was recorded using a handheld GPS unit. Rock sample preparation and multi-element analyses were carried out at ALS Minerals' laboratories in North Vancouver, B.C. 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 52 elements using an aqua regia digestion followed by inductively coupled plasma combined with mass spectroscopy and atomic emission spectroscopy (ME-MS41). An additional 30 g charge was further analyzed for gold by fire assay followed by inductively coupled plasma-atomic emissions spectroscopy (Au-ICP21). Rock Sample Descriptions are provided in Appendix III, while Certificates of Analysis are included in Appendix IV.

## **SOIL GEOCHEMISTRY**

In 1986, a total of 417 soil samples were collected from the property by Kerr Addison. These samples were analyzed for gold, silver and arsenic. In 2010, a total of 296 grid soil samples were collected and underwent multi-element analysis. In 2016, Strategic Metals collected 122 grid soil samples that underwent 51 element analysis. Thematic results, for gold, silver, copper, arsenic, lead and zinc, where available, are illustrated on Figures 6 to 11.

Anomalous thresholds and peak values for the metals of interest are listed in Table II



**PROPERTY BOUNDARY**

■ 2019 rock sample

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FIGURE 5

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

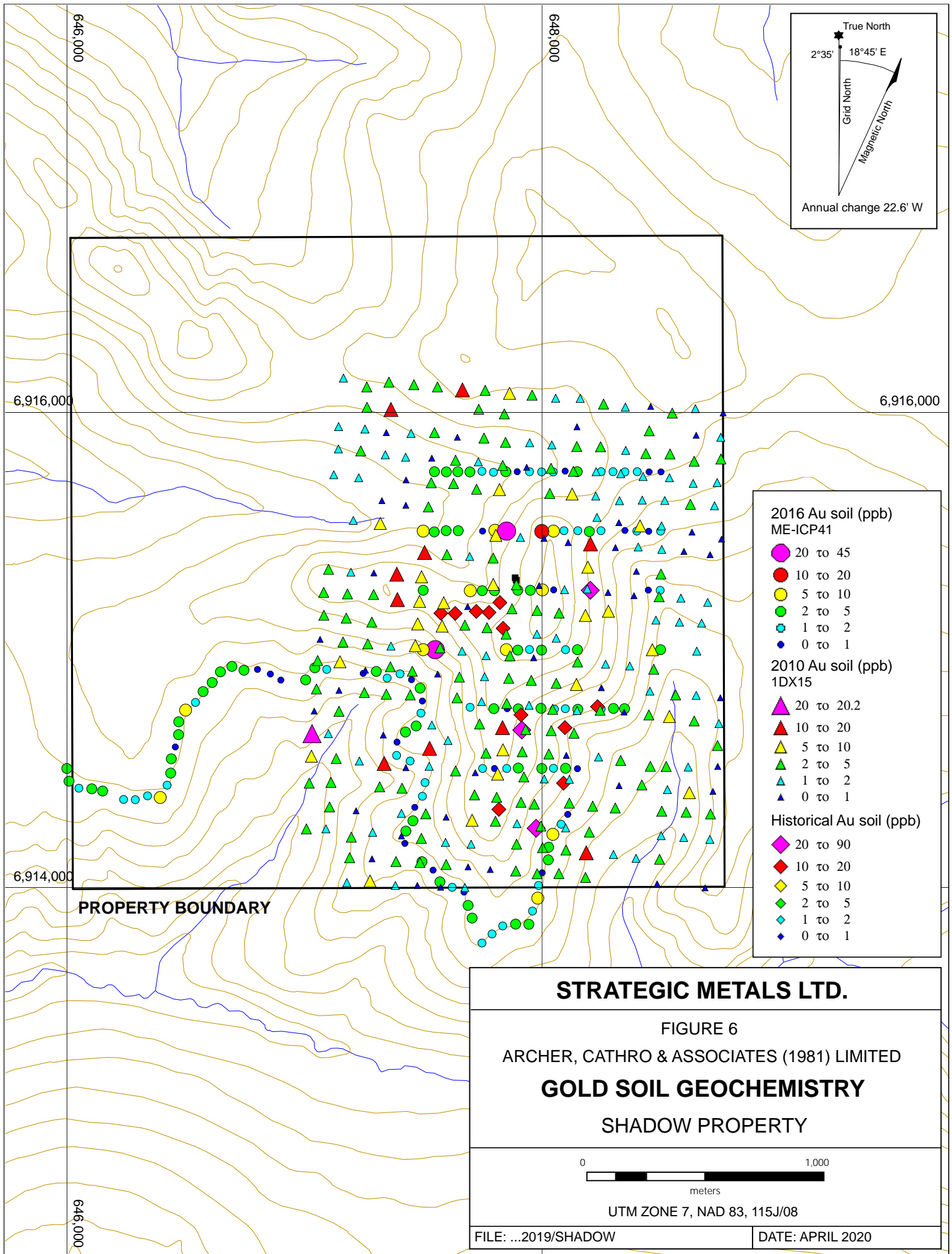
**2019 ROCK SAMPLE LOCATIONS**

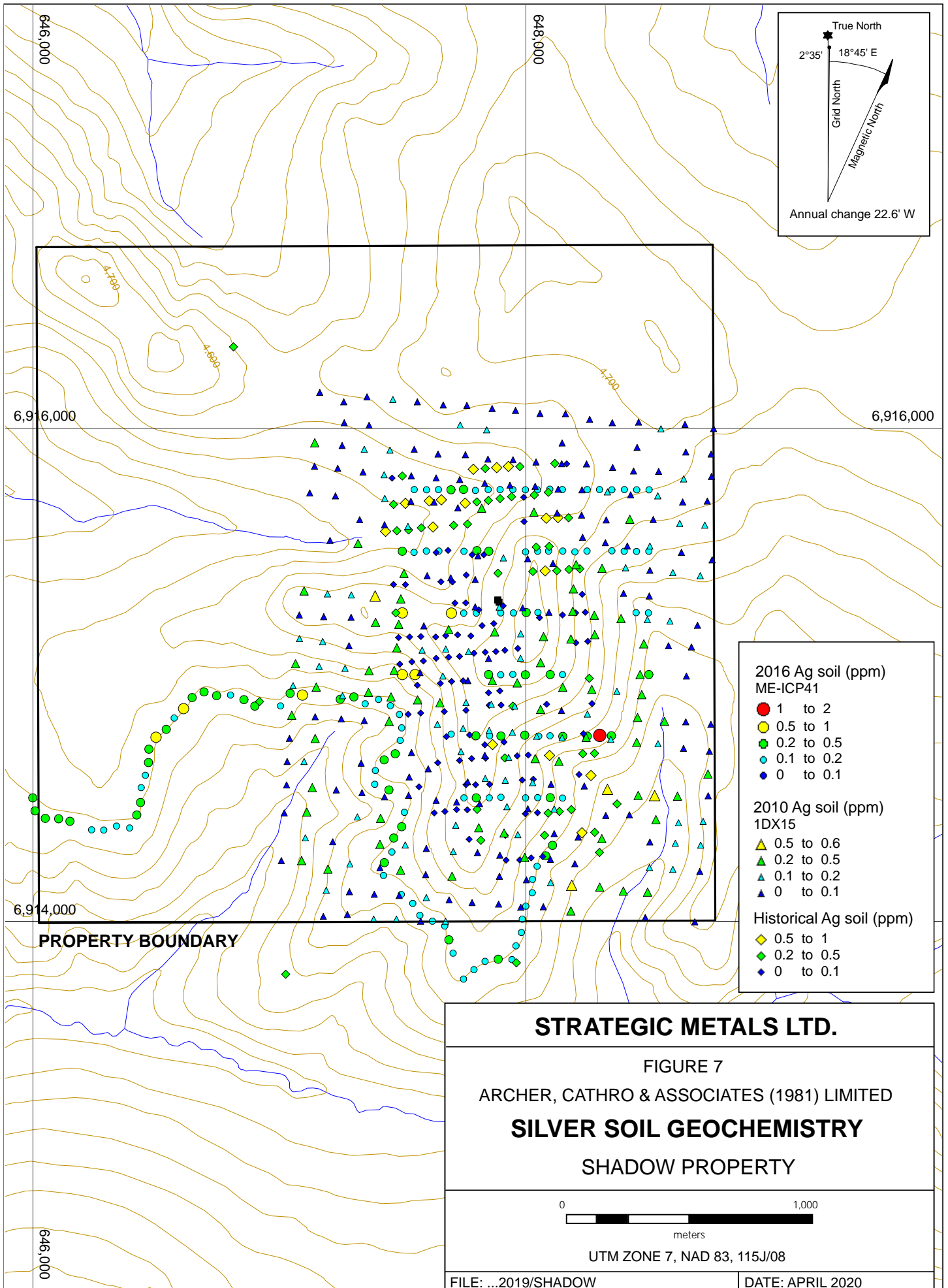
SHADOW PROPERTY

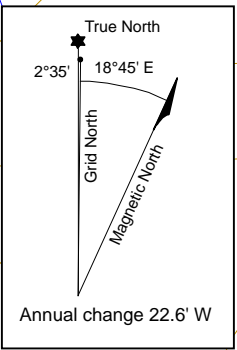
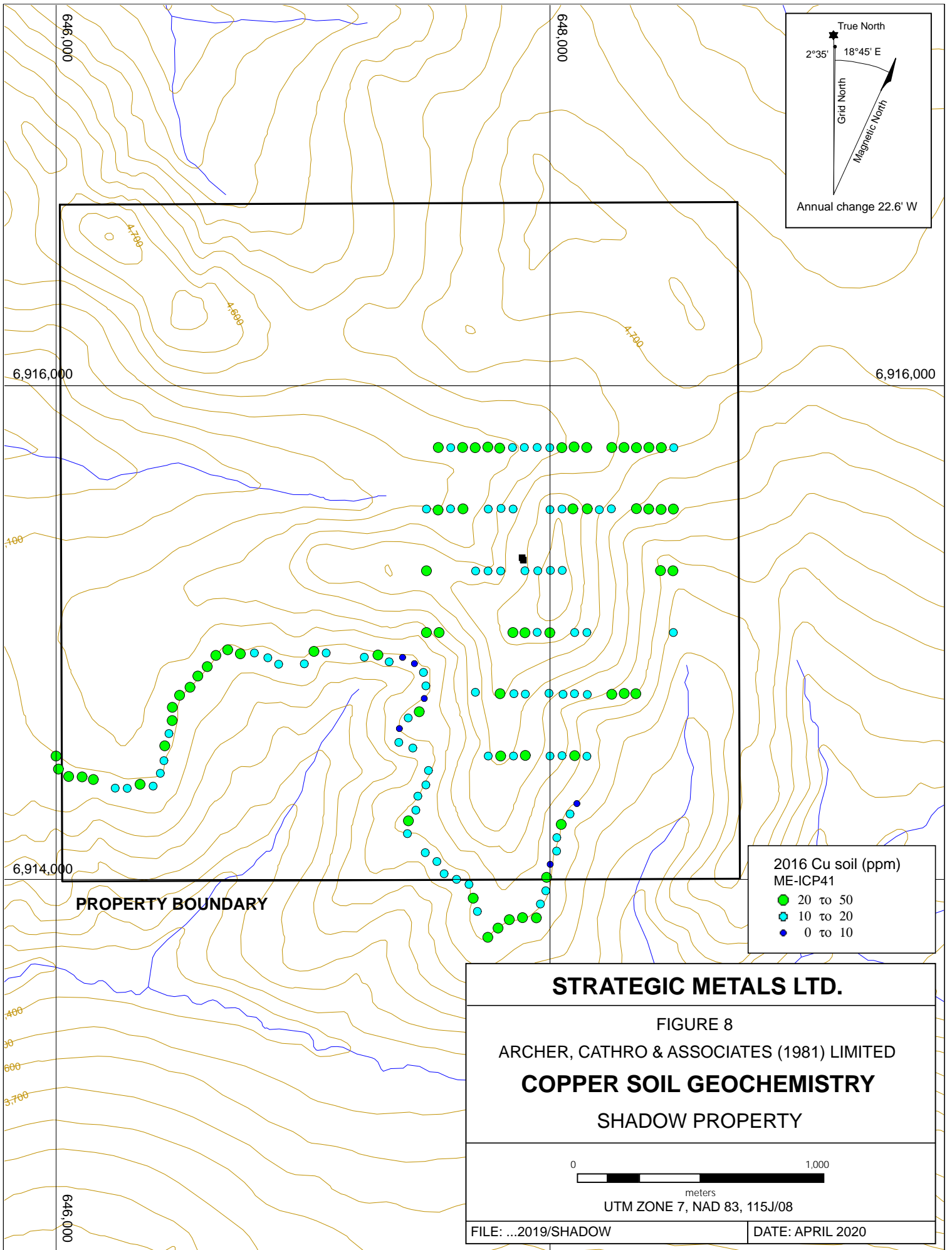
0 1,000  
 meters

UTM ZONE 7, NAD 83, 115J/08

FILE: ...2019/SHADOW      DATE: APRIL 2020







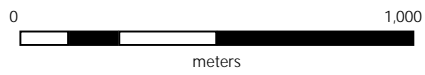
2016 Cu soil (ppm)  
 ME-ICP41

- 20 to 50
- 10 to 20
- 0 to 10

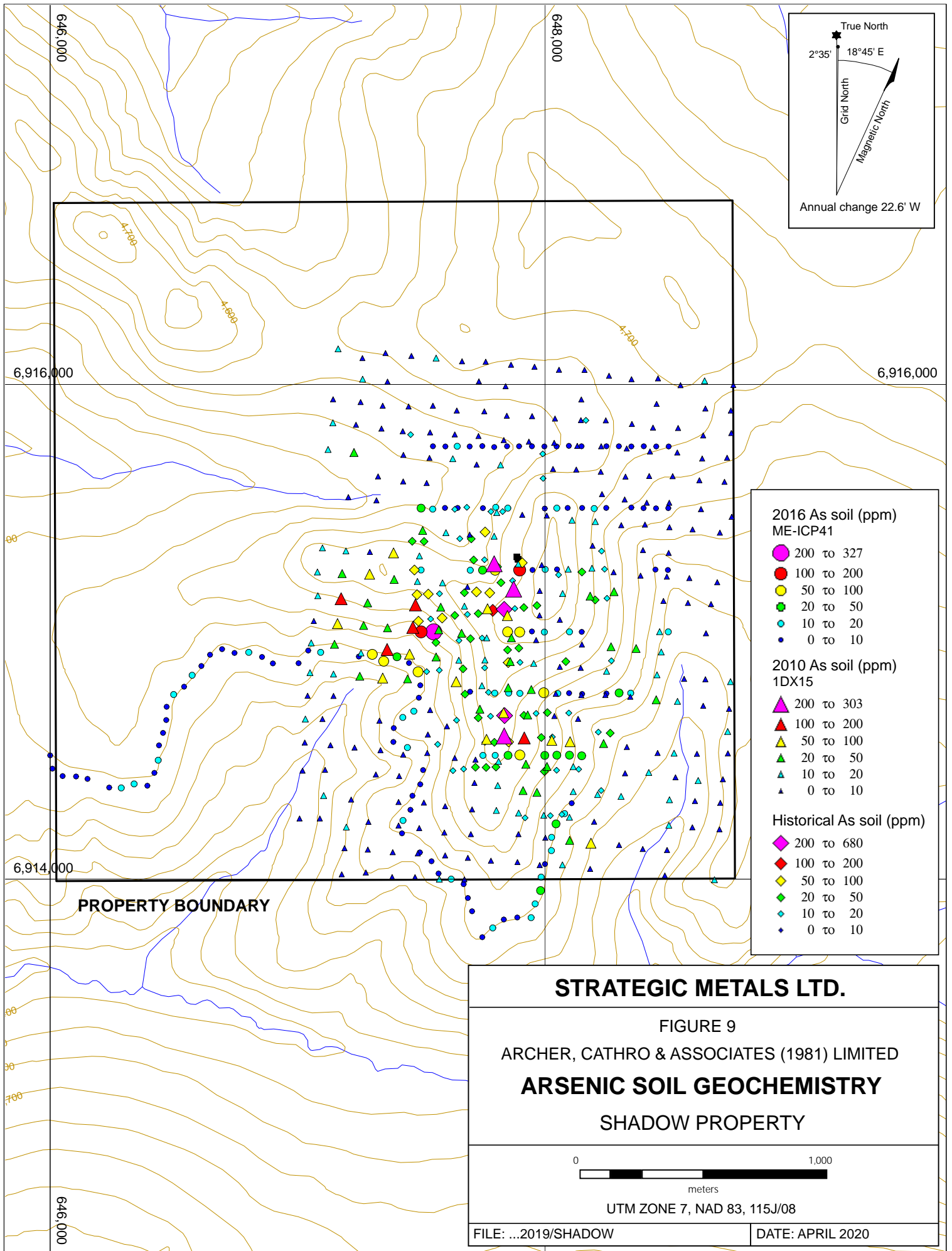
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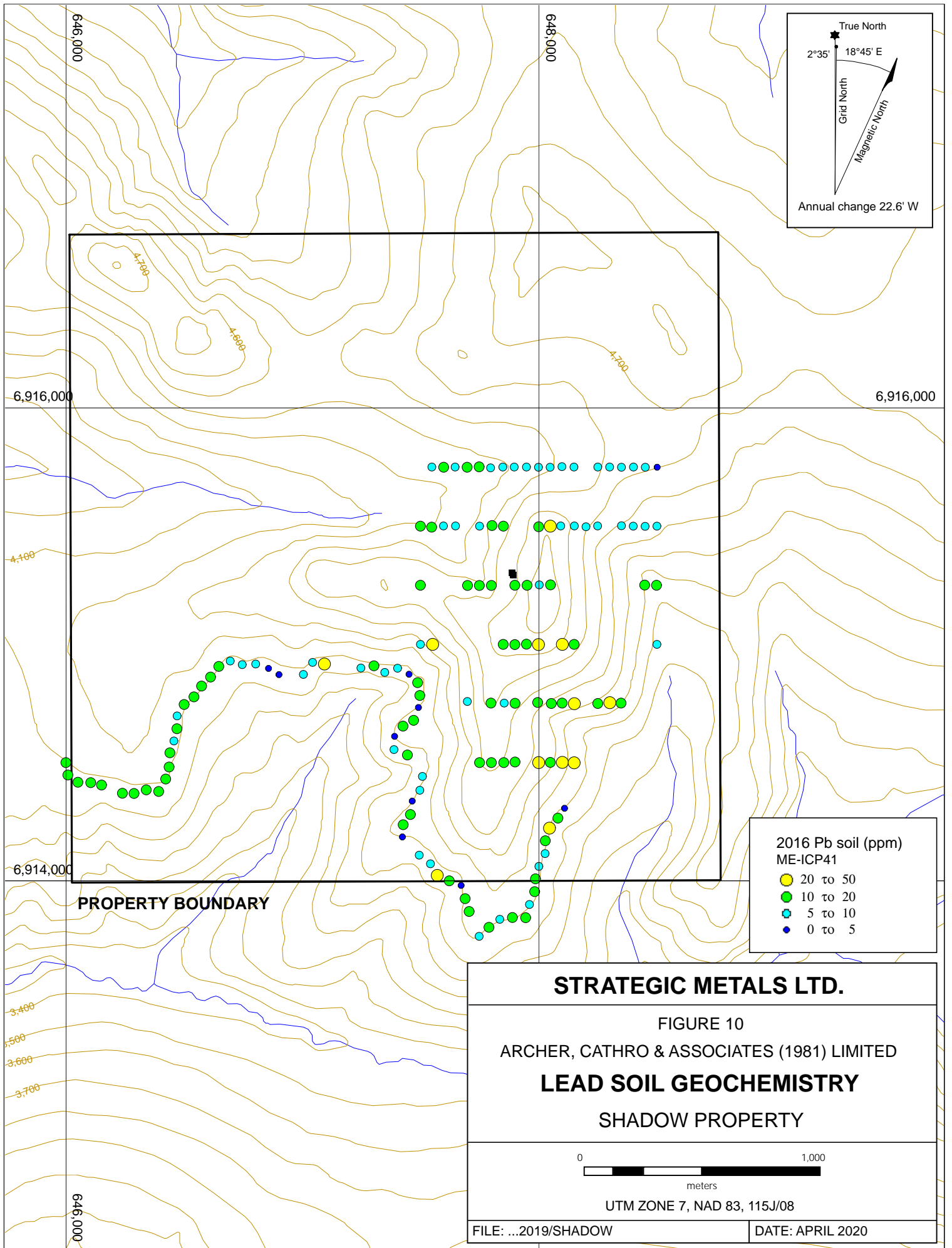
**STRATEGIC METALS LTD.**

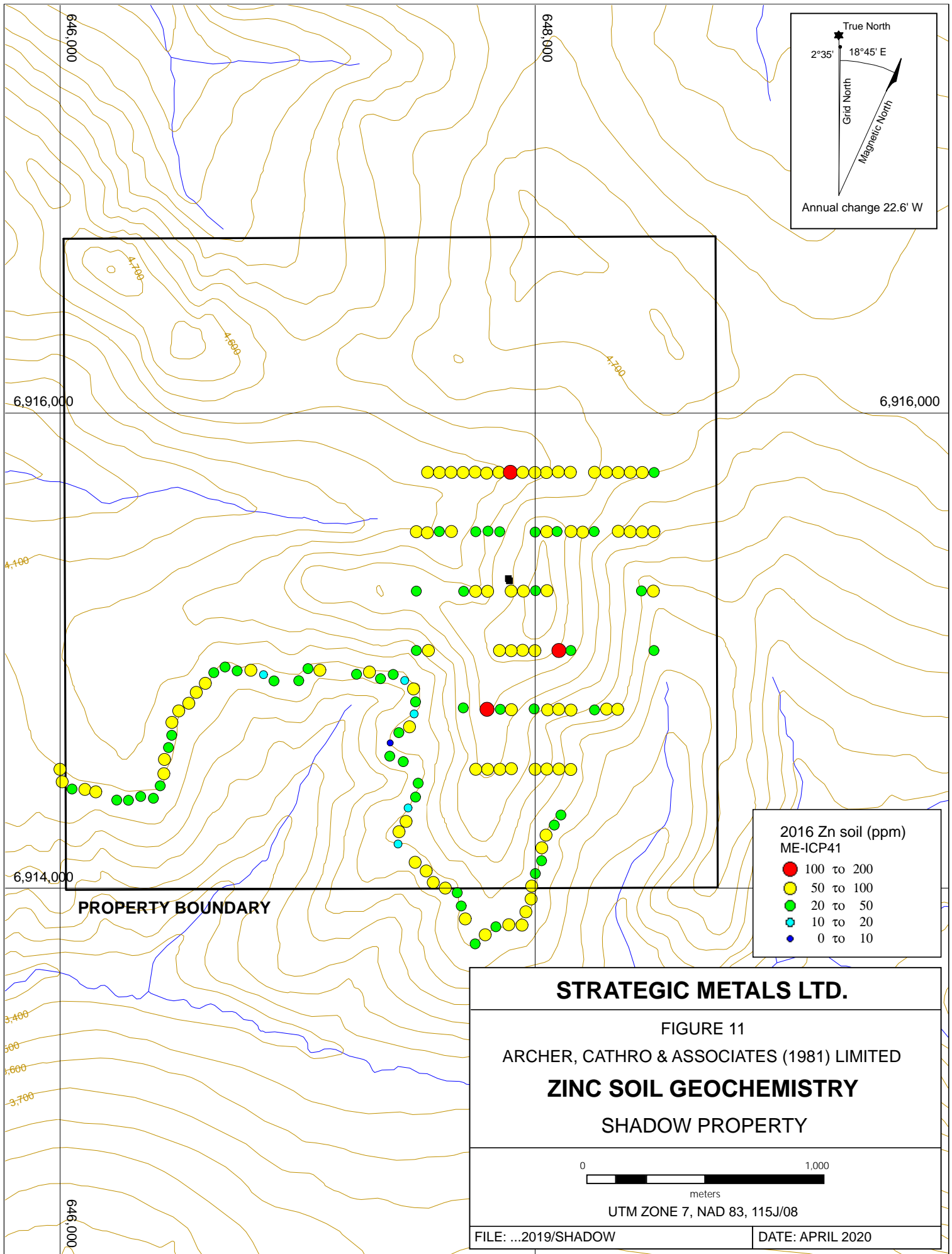
FIGURE 8  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**COPPER SOIL GEOCHEMISTRY**  
 SHADOW PROPERTY



UTM ZONE 7, NAD 83, 115J/08







**Table II – Soil Geochemical Thresholds**

<b>Element</b>	<b>Weak</b>	<b>Moderate</b>	<b>Strong</b>	<b>Peak value</b>
Gold (ppb)	$\geq 5 < 10$	$\geq 10 < 20$	$\geq 20 < 50$	90
Silver (ppm)	$\geq 0.2 < 0.5$	$\geq 0.5 < 1$	$\geq 1$	1
Arsenic (ppm)	$\geq 20 < 50$	$\geq 50 < 100$	$\geq 100 < 200$	680
Lead (ppm)	$\geq 20 < 50$	$\geq 50 < 100$	$\geq 100 < 200$	34
Zinc (ppm)	$\geq 20 < 50$	$\geq 50 < 100$	$\geq 100 < 200$	111

Coincident anomalous gold (up to 45 ppb), arsenic (up to 138 ppm), zinc (up to 100 ppm) and lead (up to 27 ppm) are found along strike of the north-trending Shadow Lineament. These results correlate well with historical rock sampling, which returned strong gold values (up to 440 ppb).

Soil samples collected from the northwesterly trending linear, beginning approximately 350 m southeast of the Shadow Lineament, returned concomitant values of gold (up to 20 ppb), arsenic (up to 327 ppm), lead (up to 32 ppm) and zinc (up to 101 ppm). Historical rock sampling along this linear yielded up to 570 ppm arsenic and 850 ppm antimony.

### **GEOPHYSICS**

In 2011, the GSC conducted high resolution FVD and RTMF surveys over the Nisling River area (Kiss, F and Coyle, M., 2011a). These surveys covered the Shadow property and have been used to interpret magnetic trends on the property. FVD and RTMF surveys are illustrated in Figures 12 and 13, respectively.

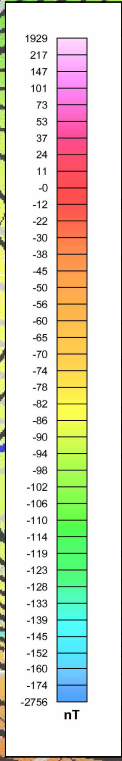
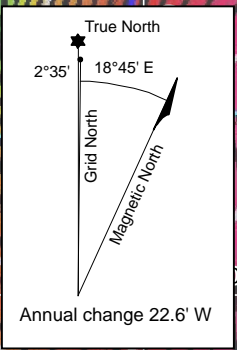
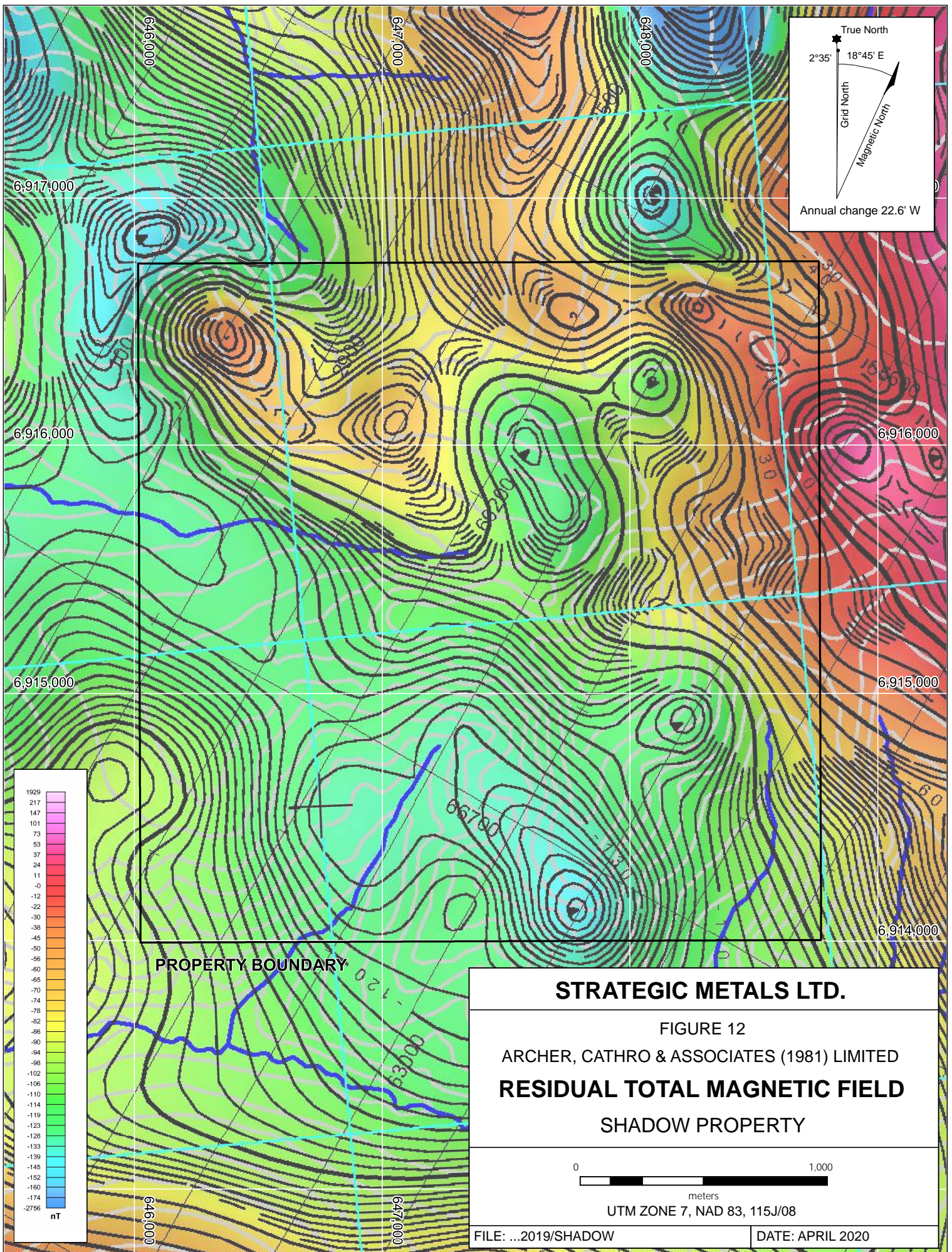
The RTMF survey data outlined elongated magnetic highs in the northeastern part of the property and a broad low in the southern part of the property. Sharp gradients between magnetic highs and lows follow the trace of the northwesterly trending lineament.

FVD data shows a series of sub-parallel magnetic highs trending northwesterly through the northeast part of the property. The northwesterly trending linear follows one of these magnetic highs. A discrete north-trending magnetic low roughly parallels the Shadow Lineament.

### **DISCUSSION AND CONCLUSIONS**

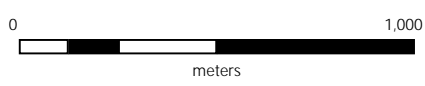
The Shadow property is located in the Dawson Range Gold Belt, which hosts a number of significant precious metal deposits and promising exploration projects, such as Newmont Goldcorp Corp.'s Coffee Gold deposit, Western Copper and Gold Corporation's Casino Deposit and Rockhaven Resources' Klaza project. The majority of precious metal projects in the Dawson Range Gold Belt are associated with Late Cretaceous dykes, including those of the Casino Suite, which are associated with the deposits listed above.

Rock sampling by Strategic Metals in 2019 did not return significant values for gold or other precious metals.

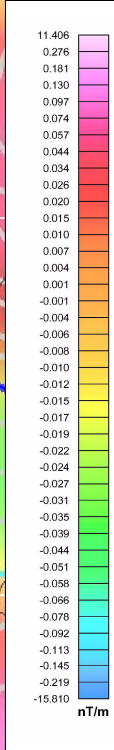
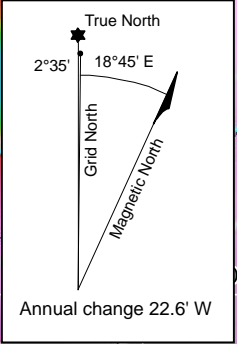
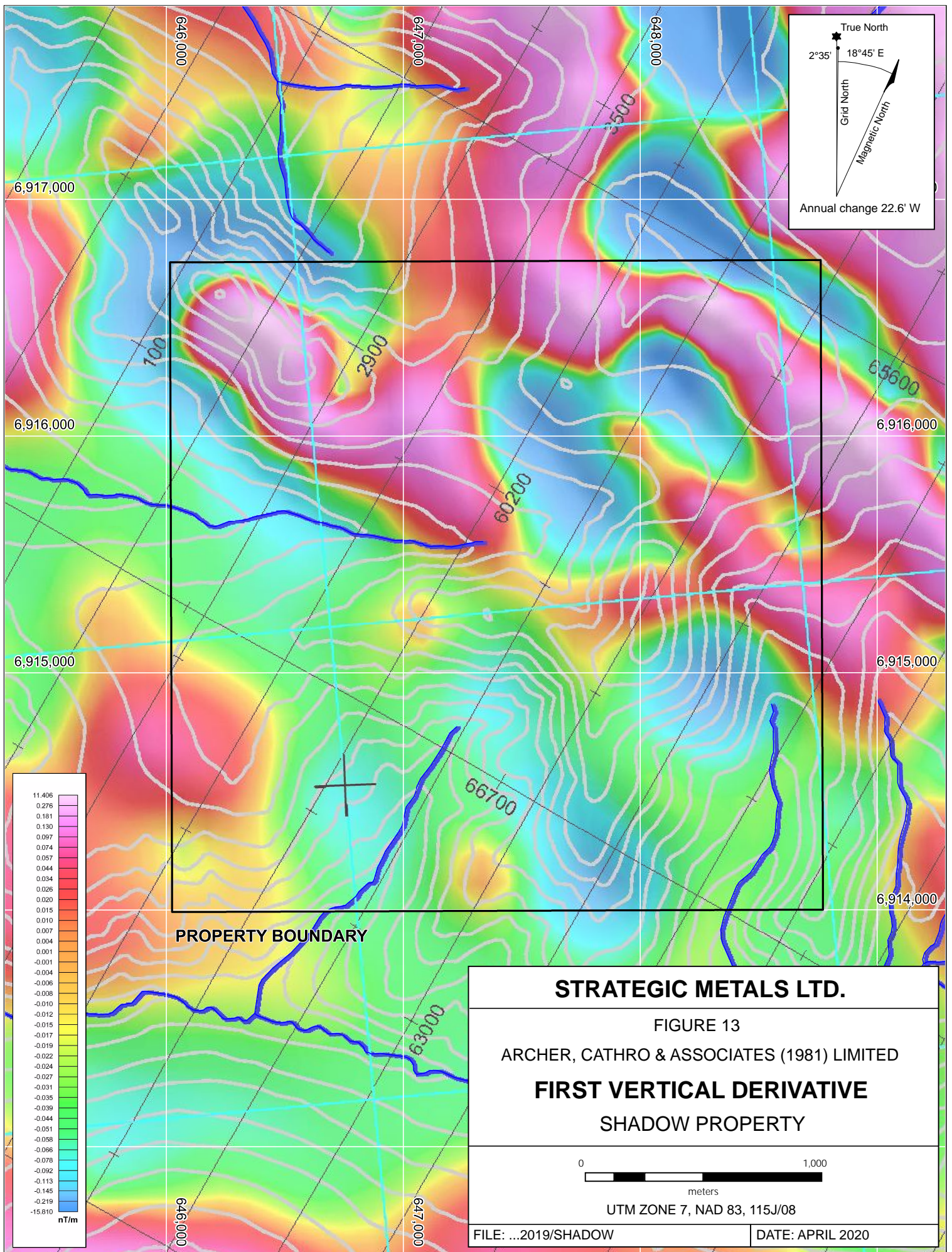


**STRATEGIC METALS LTD.**

FIGURE 12  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**RESIDUAL TOTAL MAGNETIC FIELD**  
 SHADOW PROPERTY



UTM ZONE 7, NAD 83, 115J/08



PROPERTY BOUNDARY

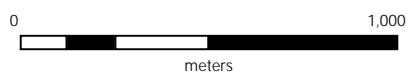
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FIGURE 13

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**FIRST VERTICAL DERIVATIVE**

SHADOW PROPERTY



UTM ZONE 7, NAD 83, 115J/08

FILE: ...2019/SHADOW

DATE: APRIL 2020

Geological mapping and prospecting has identified cryptocrystalline and chalcedonic quartz vein textures, elevated arsenic and antimony geochemical values (and coincidentally subdued gold and silver values) and significant silicification and hydrothermal alteration. The presence of these characteristics strongly suggests that surface mineralization is related to the upper levels of a Low to Intermediate sulphidation epithermal system. The upper levels of these systems are highly siliceous and enriched in mercury, arsenic and antimony, but contain only sparse gold and silver. At depth, they transition to zones of higher temperature that readily precipitate precious and base metals. It is unknown whether the Windy-Table Group and silicified breccias extend beneath surrounding basalt cap rocks.

Additional exploration is needed on the Shadow property to identify the source and controls of elevated soil geochemical results and to further delineate anomalous areas of the property. Follow up work should include but not be limited to: 1) hand trenching to better expose mineralization along linear structures; 2) detailed geological mapping, prospecting and petrography to categorize the alteration and mineralization, and to determine the probable depth of formation within the epithermal system; 3) closely-spaced contour soil sampling or pit sampling to extend geochemical coverage beyond historical work areas; and 4) pending encouraging results, diamond drilling to test the mineralization at depth.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



K. Willms, B.Sc., GIT.

## REFERENCES

- Colpron, M. and Nelson, J. L.  
 2011 A digital atlas of terranes for the Northern Cordillera; Yukon Geological Survey and BC Geology Survey, BCGS GeoFile 2011-11  
[http://www.geology.gov.yk.ca/pdf/CanCord\\_terranes\\_2011.pdf](http://www.geology.gov.yk.ca/pdf/CanCord_terranes_2011.pdf)
- Colpron, M., Nelson, J. L., and Murphy, D. C.  
 2006 A tectonostratigraphic framework for the pericratonic terranes of the northern Cordillera, in Colpron, M., and Nelson, J. L., eds., Paleozoic Evolution and Metallogeny of Pericratonic Terranes at the Ancient Pacific Margin of North America, Canadian and Alaskan Cordillera: Special Paper 45, Geological Association of Canada, p. 1-23.
- Duk-Rodkin, A.  
 1999 Glacial limits map of Yukon Territory; Geological Survey of Canada Geoscience Map 1999-2.
- Gordey, S.P. and Makepeace, A.J.  
 2003 Yukon Digital Geology, version 2.0, S.P. Gordey and A.J. Makepeace (comp); Geological Survey of Canada, Open File 1749 and Yukon Geological Survey, Open File 2003-9 (D).
- Grextton, L  
 1988 Assessment report describing soil and VLF surveys on the Shadow 1-24 claims; report prepared for Kerr Addison Mines Ltd.
- Kiss, F and Coyle, M.  
 2011 Residual total magnetic field, Aeromagnetic Survey of the Nisling River Area, NTS 115 J/7, 8, Yukon; Geological Survey of Canada, Open File 6911; Yukon Geological Survey, Open File 2011-25, scale 1:50,000.
- Kiss, F and Coyle, M.  
 2011a First vertical derivative of the magnetic field, Aeromagnetic Survey of the Nisling River Area, NTS 115 J/7, 8, Yukon; Geological Survey of Canada, Open File 6911; Yukon Geological Survey, Open File 2011-25, scale 1:50,000.
- Lindsay, M.  
 2010 Beringia Gold Corporation Mineral Exploration Summary; Hay Project – Yukon Territory (Report #096122).
- Pautler, J  
 1986 Geological and geochemical report on the Shadow 1-24 claims; report prepared for Kerr Addison Mines Ltd.

Piercey, S. J., Nelson, J. L., Colpron, M., Dusel-Bacon, C., Roots, C. F., and Simard, R.- L.,  
2006 Paleozoic magmatism and crustal recycling along the ancient Pacific margin of  
North America, northern Cordillera, in Colpron, M., and Nelson, J. L., eds.,  
Paleozoic Evolution and Metallogeny of Pericratonic Terranes at the Ancient  
Pacific Margin of North America, Canadian and Alaskan Cordillera: Special  
Paper 45, Geological Association of Canada, p. 281-322.

Tempelman-Kluit, D.J.

1974 Reconnaissance geology of Aishihik Lake, Snag and part of Stewart River map-  
areas, west-central Yukon; Natural Resources Canada, GEOSCAN ID 102542.

Yukon Geological Survey

2019 Yukon Digital Bedrock Geology.  
[http://www.geology.gov.yu.ca/update\\_yukon\\_bedrock\\_geology\\_map.html](http://www.geology.gov.yu.ca/update_yukon_bedrock_geology_map.html),  
accessed: October, 2019.

**APPENDIX I**  
**STATEMENT OF QUALIFICATIONS**

## **STATEMENT OF QUALIFICATIONS**

I, Kelson Willms, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Whitehorse, Yukon, hereby certify that:

1. I graduated from the University of British Columbia in 2017 with a B.Sc in Earth and Environmental Sciences.
2. From 2015 to present, I have been actively engaged in mineral exploration in the Yukon Territory and British Columbia.
3. I am registered and active as a geologist in training (GIT) with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).
4. I have interpreted all data resulting from work described in this report.



K. Willms, B.Sc., GIT.

**APPENDIX II**  
**STATEMENT OF EXPENDITURES**

**Statement of Expenditures  
Shadow Property  
January 30, 2020**

**Labour**

<b>Employee</b>	<b>Job Description</b>	<b>Hours</b>	<b>Time Period</b>	<b>Rate/hr</b>	<b>Total</b>
Jack Morton	Sr. Geologist, prospecting	5	August 2019	\$ 98.00	\$ 490.00
					\$ 490.00

**Expenses**

Capital Helicopters	\$ 3,357.50
ALS Chemex, as attached	\$ 153.93
	<u>\$ 3,511.43</u>

Total 2019 expenditures	<u>\$ 4,001.43</u>
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**APPENDIX III**  
**ROCK SAMPLE DESCRIPTIONS**

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**Rock Sample Descriptions**Property: Shadow

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Sample Number: R609029 Date Collected: 2019-08-26 UTM: 647902 mE Nad83, Zone 7  
Elevation: 4663 m Sampler: Jack Morton UTM: 6915311 mN

Comments: Float sample, removed from a 2m<sup>3</sup> boulder, comprising orange to tan weathering, pale grey, sugary silica (silicified rhyolite?), hosting trace disseminated grains of limonite and rare clots of white clay.

---

Sample Number: R609030 Date Collected: 2019-08-26 UTM: 647893 mE Nad83, Zone 7  
Elevation: 4620 m Sampler: Jack Morton UTM: 6915392 mN

Comments: Outcrop sample of rock with the same lithology as R609029.

---

Sample Number: R609031 Date Collected: 2019-08-26 UTM: 647894 mE Nad83, Zone 7  
Elevation: 4759 m Sampler: Jack Morton UTM: 6915087 mN

Comments: Float sample of punky, rusty-brown weathering, silicified and clay-altered rhyolite, with moderate clots of earthy orange oxide throughout.

---

Sample Number: R609032 Date Collected: 2019-08-26 UTM: 648018 mE Nad83, Zone 7  
Elevation: 4836 m Sampler: Jack Morton UTM: 6915134 mN

Comments: Float sample of weathered rhyodacite tuff, with amygdules filled with earthy tan clay.

---

**APPENDIX IV**  
**CERTIFICATES OF ANALYSIS**



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 Plus Appendix Pages  
 Finalized Date: 30-OCT-2019  
 Account: MTT

**CERTIFICATE WH19242476**

Project: SHADOW

This report is for 4 Rock samples submitted to our lab in Whitehorse, YT, Canada on 26-SEP-2019.

The following have access to data associated with this certificate:

HEATHER BURRELL JACK MORTON	ANDREW CARNE SCOTT NEWMAN	STEVE ISREAL
--------------------------------	------------------------------	--------------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS41	Ultra Trace Aqua Regia ICP-MS	

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:**   
 Saa Traxler, General Manager, North Vancouver



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<b>CERTIFICATE OF ANALYSIS WH19242476</b>
---

Sample Description	Method	Analyte	Units	LOD	WEI-21	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41			
					Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
					kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
					0.02	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
R609029					1.53	0.13	0.19	15.9	<0.02	<10	20	0.23	0.04	0.01	0.03	20.3	0.4	12	2.34
R609030					1.33	0.07	0.27	25.6	0.02	<10	30	0.27	0.03	0.04	0.07	81.7	0.6	11	3.75
R609031					1.01	0.03	1.45	38.1	<0.02	<10	40	0.43	0.36	0.98	0.01	44.9	0.2	3	3.17
R609032					0.58	0.03	0.49	10.4	<0.02	<10	30	0.50	0.09	0.08	0.30	47.9	0.4	2	2.69



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CERTIFICATE OF ANALYSIS	WH19242476
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Sample Description	Method	Analyte	Units	LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41			
					Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
					0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
R609029					2.8	0.37	0.95	<0.05	0.21	0.07	0.010	0.17	2.5	0.9	0.01	43	8.28	<0.01	0.53
R609030					2.4	0.44	1.72	<0.05	0.30	0.08	0.020	0.18	8.2	0.6	0.02	130	5.87	<0.01	0.47
R609031					1.7	0.28	6.52	0.07	1.21	0.06	0.044	0.50	20.3	2.4	0.06	29	3.96	<0.01	0.76
R609032					5.3	0.87	2.69	0.05	0.96	0.01	0.048	0.14	13.3	2.8	0.06	183	0.42	<0.01	1.16

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



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Sample Description	Method Analyte Units LOD	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005
R609029		0.9	<10	17.1	10.9	<0.001	0.01	4.77	0.3	<0.2	<0.2	1.6	<0.01	0.01	3.7	<0.005
R609030		0.8	10	20.7	9.7	<0.001	<0.01	4.49	0.6	<0.2	0.3	3.4	<0.01	<0.01	5.8	<0.005
R609031		0.5	60	9.7	30.3	<0.001	<0.01	4.58	1.5	<0.2	1.5	8.9	<0.01	0.01	10.1	<0.005
R609032		0.9	20	22.6	7.2	<0.001	0.01	0.68	0.3	<0.2	0.5	4.8	<0.01	<0.01	12.8	<0.005



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**CERTIFICATE OF ANALYSIS WH19242476**

Sample Description	Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Au-ICP21
		Tl	U	V	W	Y	Zn	Zr	Au
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.02	0.05	1	0.05	0.05	2	0.5	0.001
R609029		0.16	0.99	2	0.17	2.88	18	6.4	0.009
R609030		0.38	1.47	3	0.27	5.57	35	8.8	0.016
R609031		0.22	1.33	5	0.31	10.55	20	34.0	0.005
R609032		0.06	2.42	1	0.23	13.60	77	25.5	0.001

