

**2019 GEOLOGICAL AND GEOCHEMICAL EXPLORATION
ON THE
BRAEBURN LAKE PROPERTY**

WHITEHORSE MINING DISTRICT, YUKON

Grant Numbers: HL 1-26 (YF46142-YF46167)

Geographic Coordinates
61°32' N to 61°35' N
135°44' W to 135°48' W

NTS Sheet 105E12

Owner: J. Dahrouge (Client ID 4002813)
103, 10183 – 112th Street
Edmonton, Alberta T5K 1M1

Operator: Graymont Western Canada Inc.
260, 4311 – 12th Street NE
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Consultant: Dahrouge Geological Consulting Ltd.
103, 10183 – 112th Street
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A. Shumilak, B.Sc., G.I.T.

Field Work Completed: August 1, 2019

Date Submitted: March 31, 2020

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1. INTRODUCTION

The Braeburn Lake quartz claims were staked by Henry Lole in June 2014 and transferred to Jody Dahrouge in April 2019. Dahrouge Geological Consulting Ltd. (Dahrouge) completed a surface sampling program on August 1, 2019. Exploration consisted of collecting four rock samples, representing approximately 4 m of stratigraphy. A traverse totalling 8.61 km was completed on the Property in order to map geologic units and identify outcrops. The majority of the 2019 work on the claims focused on identifying access routes, mapping geological contacts and identifying high-calcium limestone outcrops on the Braeburn Lake Property. This report describes the 2019 exploration and provides an interpretation of the results. Appendix 1 is an itemized cost breakdown of the 2019 work completed on the Braeburn Lake Property. The operator for the 2019 exploration was Graymont Western Canada Inc (Graymont).

The Braeburn Lake Property is comprised of 26 contiguous quartz claims; the Property has been grouped as per Grouping Certificate HW07730.

Structural measurements were obtained at stations throughout the Property. A magnetic declination of 24° 2' E was used. Attitudes of bedding and other planar features are given as A°/B° NW, where A° is the azimuth of the strike (right-hand rule) and B° is the amount of dip in the direction indicated. Where bedding has been obscured by structure, stratigraphic thicknesses were calculated using orientations from adjacent units. Where more than one bedding orientation was measured, the mean orientation was used.

1.1 GEOGRAPHIC SETTING

1.1.1 Location and Access

The Braeburn Lake Property is located approximately 110 km northwest of Whitehorse, Yukon at Mile 55 along the Klondike Highway (Yukon Highway 2). The Property is roughly 2.5 km east of the Highway, north of Braeburn Lodge (Fig.'s 3.1 and 3.2). There is a maintained gravel aerodrome across the highway opposite the lodge, known as the Braeburn Airport, or Cinnamon Bun Airport, where flights can be chartered. A well-maintained ATV trail, which is approximately 2 km in length exists north of Highway 2 and can be used to access the claims. Several pre-existing helicopter pads atop the higher peaks on the Property were noted in 2014, and could be utilized for access in the future, if required.

1.1.2 Topography, Vegetation, Wildlife and Climate

Topography in the Braeburn Lake area is characterized by northwest trending broad U-shaped glacial valleys and ridges of relatively low relief. Elevations in the claims group range from 880 m in the westernmost block up to approximately 1,070 m atop the highest eastern peak within claim HL 10 (Fig. 4.1).

Tree cover in the Braeburn Lake area is moderate to dense. The most common trees are evergreen (spruce, pine and fir), with common birch, poplar, willow, cottonwood and aspen. There is no evidence of recent clear-cutting and logging in the area. A series of past forest fires have left several large areas of burnt timber in the Braeburn Lake vicinity.

The abundance of wetlands and small ponds in the Braeburn Lake area make it an ideal habitat for variety of ungulates, birds and small mammals. The Yukon Government has identified a year-round elk range in the Braeburn Lake Property area. To the authors' knowledge, there are no restrictions on the area due to the presence of wildlife. During exploration, Dahrouge endeavored to minimize the disturbance to local flora and fauna.

The area is part of the Boreal Cordillera Eco-zone with generally dry and cool conditions. Climate is alpine to sub-arctic with average summer temperatures of 20° to 25°C and winter temperatures of -15° to -25°C, with extremes of 32°C and -55°C. Rainfall averages about 15 cm per year and maximum snowfall occurs from November to February with an average total of 128 cm. Snow often falls as early as September and as late as April.

1.2 PROPERTY

The Braeburn Lake claims are being held in trust for Graymont Western Canada Inc. by Jody Dahrouge of Dahrouge, based out of Edmonton, AB. The claims were staked from June 25th to 26th, 2014 by a four-person crew based out of Whitehorse, YT. The Braeburn Lake Property consists of 26 quartz claims (HL 1-26) with a combined area of 543.5 ha.

TABLE 1.1 LIST OF BRAEBURN LAKE CLAIMS

Grant Number	Claim Name	Original Size (ha)	Record Date	New Good To Date	Required Spending
YF46142	HL 1	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46143	HL 2	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46144	HL 3	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46145	HL 4	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46146	HL 5	20.9	14-Jul-14	14-Jul-2022	\$100.00

YF46147	HL 6	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46148	HL 7	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46149	HL 8	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46150	HL 9	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46151	HL 10	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46152	HL 11	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46153	HL 12	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46154	HL 13	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46155	HL 14	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46156	HL 15	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46157	HL 16	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46158	HL 17	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46159	HL 18	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46160	HL 19	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46161	HL 20	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46162	HL 21	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46163	HL 22	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46164	HL 23	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46165	HL 24	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46166	HL 25	20.9	14-Jul-14	14-Jul-2022	\$100.00
YF46167	HL 26	20.9	14-Jul-14	14-Jul-2022	\$100.00
Total Area:		543.5	Representation Work Cost:		\$2,600.00
					Certification Cost: \$130.00
					Total: \$2,730.00

1.3 HISTORY AND PREVIOUS INVESTIGATIONS

Initial prospecting of the area was completed by Dahrouge during the summer of 2012 to assess the quality of the limestone; the Braeburn Lake claims were later staked in 2014. Dahrouge completed a sampling program in September 2014 to investigate carbonate quality on the Property. Historic exploration in the Braeburn Lake area has dominantly been focused on limestone.

The LS Property (YC82804-82823) is located approximately 1 km west of the southern half of the Braeburn Lake Property and has been historically explored for high-calcium limestone. The LS claims were first staked in 1995 by 14844 Yukon Inc. as the Mac and Jeannie claims, then optioned to 145976 Yukon Inc. in 1996, and are currently held by Archer, Cathro and Associates Ltd. on behalf of Strategic Metals Ltd, whom staked the claims in 2008. Exploration completed in 1997 by 145976 Yukon Inc. consisted of trenching, sampling and the completion of seven RC drill holes which totalled 193.55 m. Only one of the drill holes returned a significant interval (10.67 m) within the Hancock Member limestones with greater than 95% CaCO₃, but all other holes assayed

well below industrial grade (Doherty, 1999).

From 2005 to 2006, Archer, Cathro, and Associates held the Lime 1-4 claims. These claims overlap much of the same area as the current HL 1-4 claims on the Braeburn Lake Property. Reports regarding the historic Lime 1-4 claims have yet to be discovered, and thus previous work completed on the claims is unknown.

In 2008, Western Copper Corporation staked the BL claims, which were divided into two blocks, north and south. The south block is adjacent to the south of Archer, Cathro and Associates Ltd.'s LS Property. The north block, which has since expired, was adjacent to the north of the LS Property. Work completed on the BL claims in 2009 consisted of mapping, sampling, and prospecting. In total, 66 rock samples were taken, 55 of which were Hancock Member limestone. Out of these 55 samples, 90% of them assayed between 85-98% CaCO₃. In 2010, a bulk sampling project was done to determine the Hancock Formation's high-quality lime production potential. The testing resulted in favourable resistance to decrepitation, calcination rates and reactivity to slaking (Casselman, 2010). The BL claims are currently registered under Casino Mining Corp.

From 2005 to 2008, Cash Minerals Ltd. held a coal license (CYW0079) which overlapped the current Braeburn Lake Property. The license has since expired.

1.4 PURPOSE OF WORK

The work described herein was undertaken to accurately identify the location and extent of limestone units throughout the Braeburn Lake Property and consisted of mapping and sampling. The 2019 exploration program is a follow-up to work completed in 2014 and 2015 by Dahrouge (Krueger and Lole, 2014 and Krueger and Lole, 2015).

1.5 SUMMARY OF WORK

In August 2019, Dahrouge conducted a one-day geologic mapping and sampling program on the Braeburn Lake Property.

During a 9 km mapping and sampling traverse, a total of four limestone samples were obtained within the Braeburn Lake Property, representing approximately 4 m of stratigraphy (Fig. 4.2). Samples were collected by chipping outcrops perpendicular to defined or assumed bedding. Bedding was commonly difficult to identify due to the nondescript and cryptocrystalline nature of the limestone. Where bedding was uncertain or had been obscured by structure, stratigraphic thicknesses were calculated using the best estimated orientation from adjacent units. Where more than one bedding orientation was measured, the mean orientation was used.

Geological observations were recorded, including lithologic information, measurements of structural elements, and other pertinent details (App. 4). A solution of 10% HCl was used to assess carbonate quality in the field. Samples were shipped to a lab in Sandy, Utah for preparation and analyses by standard ICP techniques, and LOI. Analytical procedures are described in Appendix 2 and assay sheets are provided in Appendix 3.

Field personnel were based in a hotel in Whitehorse, and access to and from the Property was by rented four-wheel-drive vehicle. Access throughout the Property was by extensive hiking.

2. REGIONAL GEOLOGY

2.1 STRATIGRAPHY

The Braeburn Lake Property is located within the Whitehorse Trough, part of the Stikine Terrane. The Whitehorse Trough is a 500 km long, northwest-trending intermontane basin located in south-central Yukon, which originated as a forearc basin, but progressively developed into a piggy-back basin near the end of the Pliensbachian during orogenic events (Colpron, 2014). The basin straddles the Yukon-British Columbia border, with its northernmost margin in the Carmacks area, approximately 70 km north of the Braeburn Lake Property. The area of the Whitehorse Trough covers approximately 2.44 million hectares. The basin contains up to 3 km thick Jurassic Laberge Group sedimentary rocks, underlain by Triassic Lewes River Group sediments. Overlying the sedimentary sequences are Cretaceous and Neogene volcanics (Fig. 4.3).

2.1.1 Laberge Group

The Jurassic Laberge Group has been informally subdivided into the Richthofen, Nordenskiöld and Tanglefoot formations. The Richthofen Formation is characterized by thin- to medium-bedded turbidite beds, massive sandstone intervals, and fossiliferous conglomerates. It ranges from 500-10,000 m in thickness and is restricted to the southern half of the basin, so is not present in the Braeburn Lake area. The Nordenskiöld Formation consists of dark grey, massive dacites with quartz, plagioclase, biotite and hornblende phenocrysts in a cryptocrystalline groundmass. The Tanglefoot Formation consists of coal-bearing, fluvial to marginal marine interbedded sandstones and mudstones, conglomerates, and rare bioclastic limestones. The limestones locally contain abundant ammonites, pelecypods, and carbonaceous material. It is at least 600 m thick and is restricted to the northern half of the Whitehorse Trough, so is present in the Braeburn Lake area, but has not been seen in outcrop to date. The Richthofen, Nordenskiöld

and Tanglefoot formations unconformably overlie the Triassic Lewes River Group and are unconformably overlain by the Jurassic-Cretaceous Tantalus Formation (Colpron, 2011).

2.1.2 Lewes River Group

The Lewes River Group was determined to range in age from Carnian to Norian, based on dating of spiriferids, pelecypods, ammonites and cerioid corals. It generally consists of limestone, argillite, greywacke and sandstone. Lees (1934) recognized the presence of three units: a lower limestone sequence, middle sequence of greywacke and argillite with interbedded limestone intervals, and an upper limestone unit. The Lewes River Group is informally subdivided into the Povoas and Aksala formations. The Povoas Formation is a volcanic unit that consists of basalts and andesites, with minor carbonate rocks. It is overlain by the Carnian-Norian Aksala Formation, which has been subdivided into two main members: Casca and Hancock. Sequences of sandstones, conglomerates and mudstones comprise the Casca Member, which overlies the reefal carbonates of the Hancock Member (Colpron, 2011).

2.2 STRUCTURE

The structural geology of the area is dominated by two major sub-parallel, north-northwest trending faults that divide and define the boundaries between the Cache Creek Terrane (to the east) and the Whitehorse Trough and between the Whitehorse Trough and the Yukon-Tanana Terrane (to the west). The Nahlin Fault more or less marks the western extent of the Cache Creek Terrane and eastern extent of the Whitehorse Trough. It is a steeply dipping to vertical fault, or series of faults, and has seen intermittent activity from the Late Triassic to Tertiary time. The Llewellyn fault marks the boundary between the regionally metamorphosed Yukon-Tanana Terrane and the Whitehorse Trough. It is also steeply dipping and appears to have been active from Late Triassic to Tertiary time (Shaw, 1989).

3. PROPERTY GEOLOGY

3.1 STRATIGRAPHY AND LITHOLOGY

As only initial prospecting work has been performed on the Braeburn Lake Property, a detailed description of the property geology is not yet possible. In the Braeburn Lake area, carbonate lithologies are known to occur within Triassic sequences. The Triassic limestones encountered within the Braeburn Lake Property are from the Hancock and Casca members of the Carnian-

Norian Aksala Formation (Fig. 4.2). The massive, resistant limestone exposures in the Braeburn Lake area are likely part of the Hancock Member. The following is a brief summary of the units encountered near Braeburn Lake.

3.1.1 Aksala Formation – Casca Member

Outcrops of the Casca Member were mapped and sampled between 3.5 km to 3.8 km east of the Klondike Hwy within the Braeburn Lake Property. The member consists of light-grey weathered, medium-grey to dark-grey fresh, micritic to coarse-grained lime mudstones and siliciclastics. Outcrops are typically massive and somewhat resistant with minor calcite veining. Previous exploration has revealed significant amounts of silica contamination in the Casca Member. The Casca Member was mapped and sampled during the 2019 exploration program.

TABLE 2.1 STRATIGRAPHY OF THE BRAEBURN LAKE AREA*

Period	Stage/Age	Stratigraphic Unit		Lithological Description	Approx. Thickness (m)	
		Group	Formation/ Member			
Jurassic	Bathenian		Tantalus Fm.	Quartzite, chert and pebble conglomerate, minor sandstone, shale and minor coal	200-300	
	Bajocian	Laberge Gp.	Tanglefoot Fm.	Interbedded sandstones and mudstones, conglomerates, rare limestones	Up to 600 m	
	Aalenian					
	Toarcian		Nordenskiold Fm.	Volcanics including dacites	unknown	
	Pliensbachian					
	Sinemurian		Richtofen Fm.	Massive sandstones, conglomerates	500-900 m	
	Hettangian					
Triassic	Norian	Lewes River Gp.	Aksala Fm.	Casca Mbr.	Sandstones, conglomerates and mudstones, limestone	unknown
				Hancock Mbr.	Massive to thick-bedded limestone	Up to 600
	Carnian		Povoas Fm.		Volcanics including basalts and andesites, minor carbonates	

*Adapted from Clapham et al., 2002.

3.1.2 Aksala Formation – Hancock Member

The cliff-forming Hancock Member can be traced from between 1.7 km to 3.5 km east of the Klondike Hwy, within the south to central portion of the Braeburn Lake Property. It was mapped during the 2019 exploration program. The member consists of very light-grey to tan weathered, medium-grey to dark-grey fresh, fine-grained lime mudstones. Both massive and resistant, the Hancock Member limestones have minor carbonaceous stringers and oxide staining along fractures.

3.2 STRUCTURE

Given the early stage of exploration on the Property, the structure is largely unknown. The massive nature of the Hancock and Casca members makes bedding orientations difficult to obtain. Geological information provided by the Yukon Geological Survey confirms a northwest trending fault bisecting the southern portion of the Braeburn Lake Property.

4. RESULTS OF 2019 EXPLORATION

The 2019 exploration program was conducted in order to further assess the quality of the Aksala Formation limestones and provide more constraint on geologic contacts with other units in the area.

The groundwork involved mapping and sampling at several locations along the north-central portion of the ridge covered by the Property. In total, four separate outcrops of the Casca Member were examined and sampled (Fig. 4.2).

During the program, geological observations were recorded, including lithologic information, measurements of structural elements, and other pertinent details (App. 4). A solution of 10% HCl was used to assess carbonate quality in the field. In some instances, interval thicknesses were determined by measuring outcrops perpendicular to bedding, where it could be identified. In many cases the interval thickness can only be considered approximate (at best) due to the lack of reliable bedding surfaces.

All samples from the 2019 program were shipped to a lab in Sandy, Utah for preparation and analyses by standard ICP techniques, and LOI (App.'s 2 and 3). The best Casca Member sample (132653) examined in 2019 averaged 37.64% CaCO₃, 4.75% MgCO₃ and 27.63% SiO₂ over an estimated 1.5 m (Fig. 4.2 and App. 4).

Dahrouge was able to further delineate the contact between the Casca and Hancock members

in the western portion of the Braeburn Lake Property during the 2019 exploration. The Casca Member extends further to the east than previously mapped. The regional geology map has been updated accordingly.

5. DISCUSSION AND CONCLUSIONS

Within the Braeburn Lake Property, outcrops of the Norian-Carnian Casca Member of the Aksala Formation were mapped and tested by measuring and sampling stratigraphic sections. A total of four samples were collected along the west-central portion of the Property, all from the Casca Member. The highest quality Casca Member sample averaged 37.64% CaCO₃ over a 1.5 m interval. All four Casca Member samples collected and tested in 2019 were considered poor quality carbonates; all had significant dolomite and significant silica impurities (up to 38.84% SiO₂ in sample 132654). Limited time and outcrop exposure prevented a conclusive analysis of the quality of the Hancock member on the Braeburn Lake Property. Identifying the contact between the Hancock and Casca Members has also proven difficult due to a lack of outcrop exposure. Based on the 2019 sample results, the Casca Member of the Aksala Formation should no longer be considered a unit of interest.

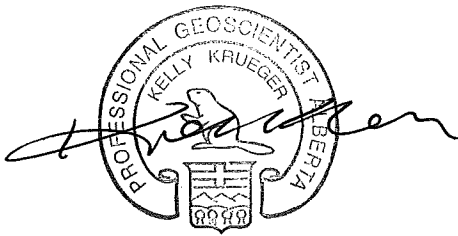
The next phase of exploration on the Braeburn Lake Property should consist of additional mapping and sampling, focusing on the central portion of the Property. Identifying and mapping the contact between the Hancock and Casca members should continue to be a priority. Future sampling should focus solely on the Hancock Member of the Aksala Formation.

6. STATEMENT OF QUALIFICATIONS

I, Kelly Krueger, residing at 10550 Ellerslie Road SW, Edmonton, Alberta, do hereby certify that:

- I am a geologist of Dahrouge Geological Consulting Ltd., Suite 103, 10183 - 112 St., Edmonton, Alberta, T5K 1M1.
- I am a 2012 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology.
- I have practiced my profession as a geologist continuously since 2012.
- I am a registered Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta, member M96506.
- I managed the 2019 work described in this report.
- I am co-author of the report entitled "2019 Geological and Geochemical Exploration on the Braeburn Lake Property" and accept responsibility for the veracity of technical data and results.
- I hereby consent to the copying or reproduction of this Assessment Report following the confidentiality period.

Dated this 31st day of March, 2020.



Kelly Krueger, B.Sc., P. Geo.

APEGA M96506

I, Andrew Shumilak, residing at 7446 Ellesmere Way, Sherwood Park, Alberta, do hereby certify that:

- I am a geologist of Dahrouge Geological Consulting Ltd., Suite 103, 10183 - 112 St., Edmonton, Alberta, T5K 1M1.
- I am a 2016 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology.
- I am a registered Geologist in Training with the Association of Professional Engineers and Geoscientists of Alberta, member 214310.
- I co-managed the 2019 work described in this report.
- I am co-author of the report entitled "2019 Geological and Geochemical Exploration on the Braeburn Lake Property" and accept responsibility for the veracity of technical data and results.
- I hereby consent to the copying or reproduction of this Assessment Report following the confidentiality period.

Dated this 31st day of March, 2020.



Andrew Shumilak, B.Sc., G.I.T.

APEGA 214310

7. REFERENCES

- Casselman, S.G., et al. (2009) 2009 Assessment Report for the Braeburn Limestone Project. Assessment Report 095228 prepared for Western Copper Corporation.
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APPENDIX 1: ITEMIZED COST STATEMENT FOR THE 2019 EXPLORATION

a) **Personnel**

K. Krueger, geologist

6.36	hrs		project management, field work and travel		
<u>2.03</u>	hrs		project planning & preparations, reporting		
8.39	hrs	@	\$ 80.00	\$	671.03

A. Shumilak, geologist

8.41	hrs		field work and travel		
<u>3.66</u>	hrs		project preparations, data entry		
12.07	hrs	@	\$ 59.00	\$	712.01

P. Mickelsen, student

7.65	hrs		field work and travel		
<u>0.24</u>	hrs		project preparations, data entry		
7.89	hrs	@	\$ 45.00	\$	354.87

T. Anderson, student

8.41	hrs		field work and travel		
<u>8.41</u>	hrs	@	\$ 45.00	\$	378.53

J. Kerr, receptionist

0.31	hrs		logistics, prepare shipments		
<u>0.31</u>	hrs	@	\$ 39.38	\$	12.23

\$ 2,128.68

b) **Food and Accommodation**

2.58	man-days	@	\$ 156.45	accommodations (hotel rooms)	\$ 403.78
3.15	man-days	@	\$ 70.00	meals	\$ 220.33

\$ 624.11

c) **Transportation**

Vehicles:	Truck rental	Driving Force (Whitehorse)	\$ 137.36
	Fuel		\$ 22.18

\$ 159.53

d) **Analyses**Central Lab of Graymont Western U.S. Inc.
(4 rock samples)


4	samples	@	\$ 4.50	Preparation fee	\$ 18.00
4	samples	@	\$ 25.00	Sample analysis	\$ 100.00

\$ 118.00

e) **Other**

Shipping	\$ 35.02
Disposable Supplies	\$ 13.41

\$ 48.44

Total\$ 3,078.76Edmonton, Alberta
March 31, 2020


 Kelly Krueger, B.Sc., P. Geo.

APPENDIX 2: ANALYTICAL LABORATORY INFORMATION AND TECHNIQUES

Name and Address of the Lab:

Graymont Western US Inc., Western Region Office
585 W Southridge Way
Sandy, Utah, 84070

Statement of Qualifications:

Jared Leikam, Graymont Central Lab Supervisor, obtained a B.S. in Chemistry from the University of Utah in the class of 2003. Jared started working for Graymont in February of 2004 and has been working with the ICP Spectrometer for 14 years.

Sample Preparation, Procedures, Reagents, Equipment, etc.:

For the ICP sample preparation, 0.5 grams of the sample is mixed with 3 g of lithium carbonate. The sample and the lithium carbonate are then fused together in a muffle furnace at 850°C. Following the fusion process, the samples are dissolved in 1:1 HCl; a total of 40 mL 1:1 HCl is used in the dissolving process. The samples are then diluted to 200 mL and spiked with 10 ppm Co. Cobalt is used as an internal standard. At this point the samples are ready for analysis on the Perkin Elmer, Optima 7300V.

Mesh Size Fraction, Split and Weight of Sample:

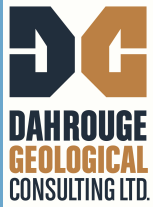
Upon receiving the samples, the prep room technician crushes the stone down to a -3/8-inch sizing. The technician then riffles and splits the stone down to a manageable size (roughly 200 g). The stone is then dried in an oven at 105°C. Once the samples have been dried, they get pulverized in a Bico Disc Mill, so that 90% of the powder is passing a 75µm screen. A split of this pulverized material is bagged up, given a barcode label and then set to the analytical lab for testing.

Quality Control Procedures:

The ICP spectrometer is calibrated with two certified reference materials prior to analyzing a batch of samples. A batch typically contains 96 samples. Every 12th sample in a batch is a certified limestone reference sample. In addition to the 8 reference samples imbedded in the batch, there are 2 limestone reference samples analyzed at the beginning and at the end of each batch. Every element being analyzed in a sample is backed up by data that we collect from the certified reference materials being analyzed within each batch of samples. We also use an internal standard (10 ppm Co) to further ensure the quality and accuracy of the analysis.

**APPENDIX 3: ASSAY RESULTS – CENTRAL ANALYTICAL LABORATORY OF
GRAYMONT WESTERN U.S. INC**

Lab ID	Date	Type	Sample	Status	CaCO ₃	MgCO ₃	Fe ₂ O ₃	Al ₂ O ₃	SrO	MnO	SiO ₂	BaO	K ₂ O	Na ₂ O	P ₂ O ₅	TiO ₂	ICP Total	Sulfur	LOI 1000 C
					%	%	%	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	%
2019105749	9/8/2019	Limestone	132651	B	27.77	4.94	3.851	4.418	745	1452	28.58	926	25652	28956	2648	3324	75.93	0.030	8.32
2019105750	9/8/2019	Limestone	132652	B	9.55	5.73	5.714	8.427	593	1474	38.44	750	23393	25858	3122	5159	73.90	0.022	3.27
2019105751	9/8/2019	Limestone	132653	B	37.64	4.75	3.906	5.172	533	1388	27.63	924	16505	18361	2396	3387	83.45	0.047	12.09
2019105752	9/8/2019	Limestone	132654	B	16.49	5.82	4.784	8.511	676	1228	38.84	811	22518	27733	3343	5083	80.58	0.028	6.25

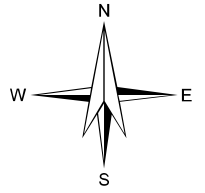


APPENDIX 4: 2019 SAMPLE DESCRIPTIONS AND ASSAY RESULTS FROM THE BRAEBURN LAKE PROPERTY

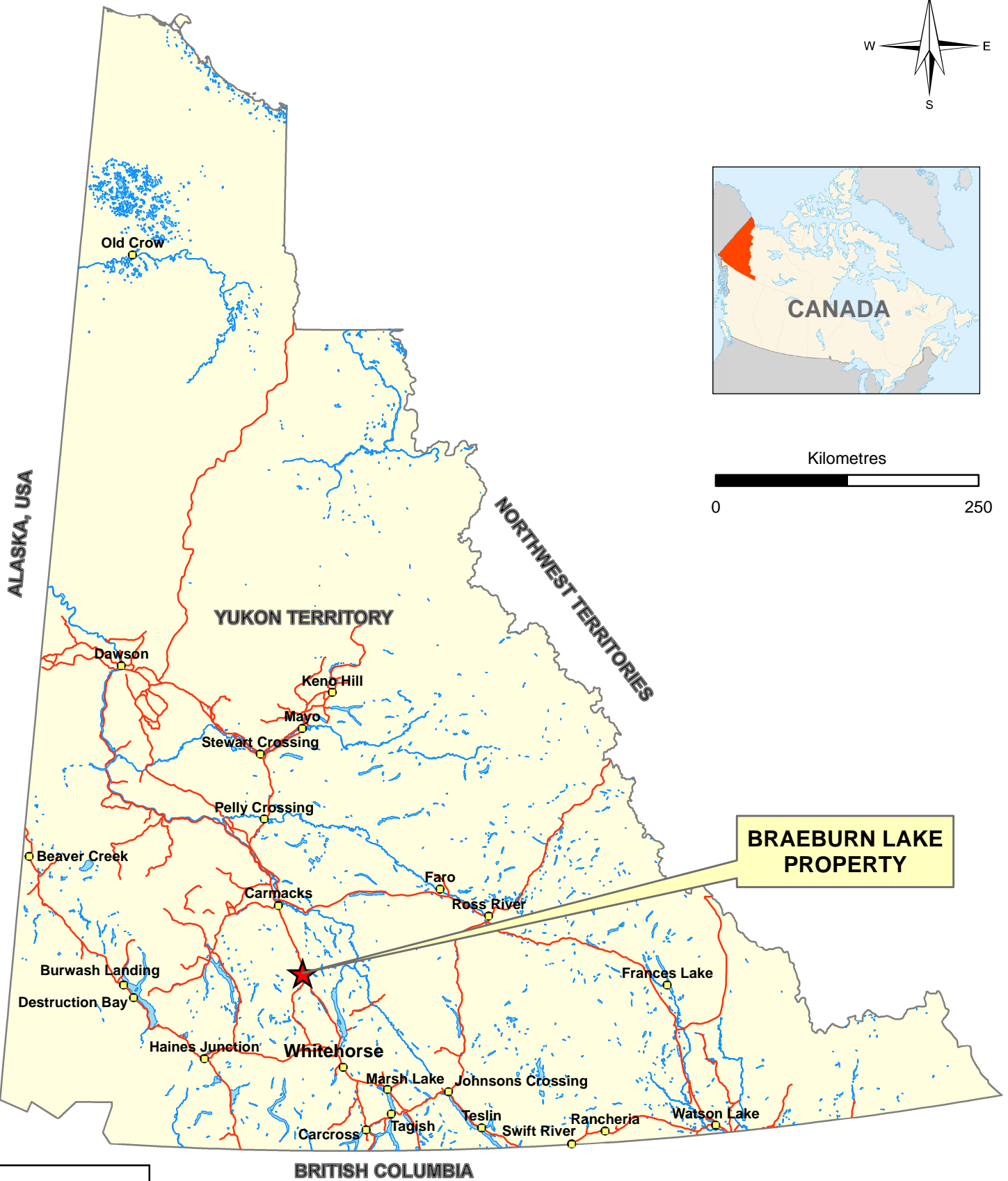
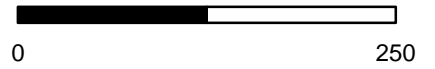


Notes: Stratigraphic thicknesses are based on measured attitudes of bedding listed below, with appropriate interpolations. Attitudes are strike and dip (right-hand rule). Sections are listed in numerical order of samples, which does not necessarily represent stratigraphic order. Most samples consist of chips at 30 cm intervals. UTM coordinates are NAD83, Zone 8N. Sample locations are shown in Figure 4.2. Stratigraphy Abbreviations: Th - Triassic Aksala Formation (Hancock Member); Tc - Triassic Aksala Formation (Casca Member)

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO ₃ (%)	MgCO ₃ (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	SrO (ppm)	MnO (ppm)	P ₂ O ₅ (ppm)	
Isolated Samples												
132651 UTM 458983E, 6825878N	Tc	0.75	Mudstone , medium grey weathered, dark grey fresh, micritic to fine-grained, recessive, hard, cherty, alteration: oxide, strong intensity, moderate HCl reaction	27.77	4.94	28.58	4.418	3.851	745	1452	2648	
132652 UTM 458984E, 6825891N	Tc	1.25	Mudstone , medium grey weathered, dark grey fresh, fine-grained, recessive, alteration: oxide, strong intensity, no HCl reaction	9.55	5.73	38.44	8.427	5.714	593	1474	3122	
132653 UTM 458987E, 6825820N	Tc	1.5	Mudstone , medium grey to tan weathered, medium grey to dark grey fresh, fine-grained, resistant, hard, alteration: oxide, strong intensity, no HCl reaction	37.64	4.75	27.63	5.172	3.906	533	1388	2396	
132654 UTM 458953E, 6825839N	Tc	0.5	Mudstone , medium grey weathered, medium grey to dark grey fresh, fine-grained, recessive, alteration: oxide, moderate intensity, moderate HCl reaction	16.49	5.82	38.84	8.511	4.784	676	1228	3343	








Kilometres



**BRAEBURN LAKE
PROPERTY**

Legend

-  Cities/Towns
-  Highway
-  Rivers
-  Lakes
-  Territorial Boundary

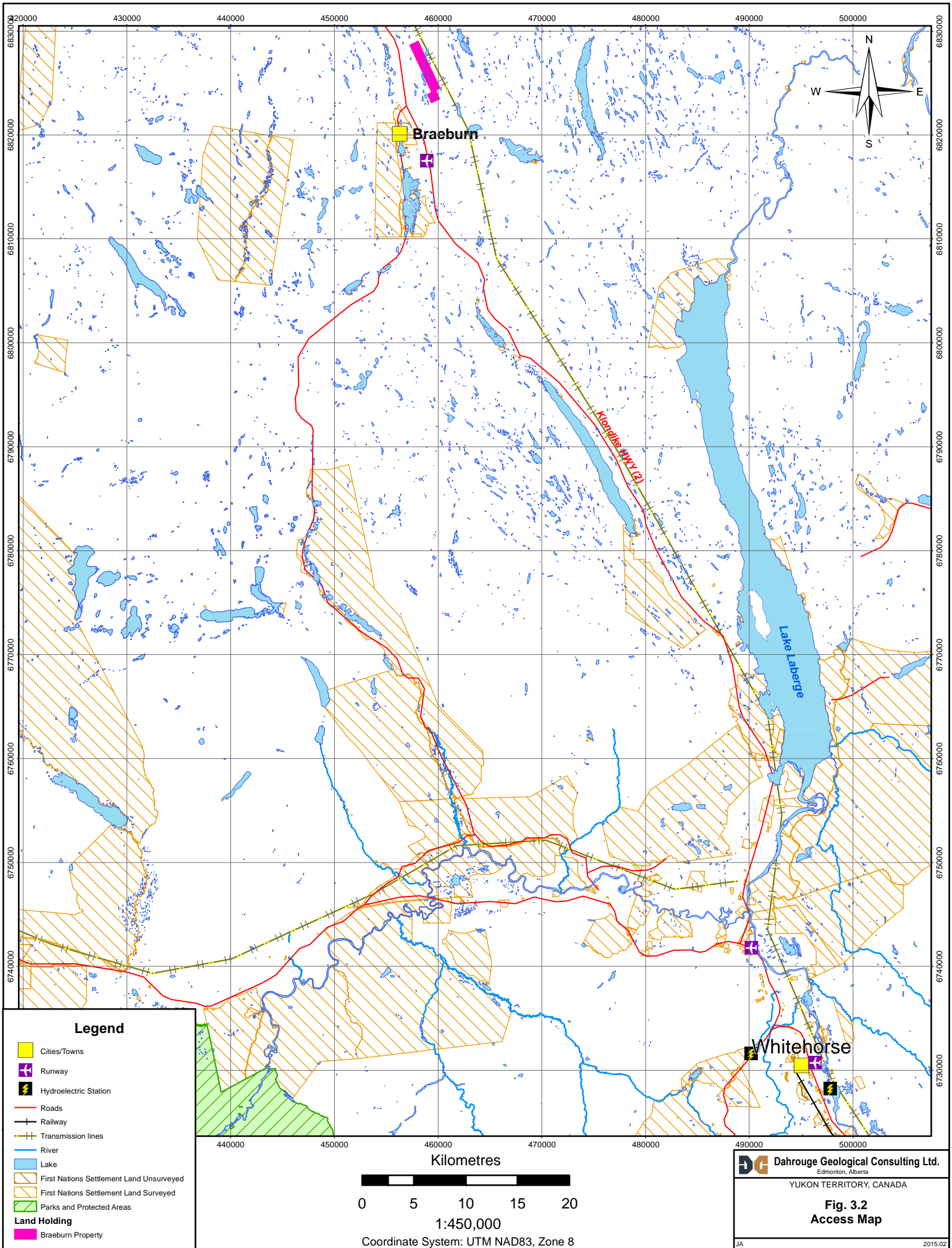
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Coordinate System: UTM NAD83, Zone 8

DG Dahrouge Geological Consulting Ltd.
Edmonton, Alberta

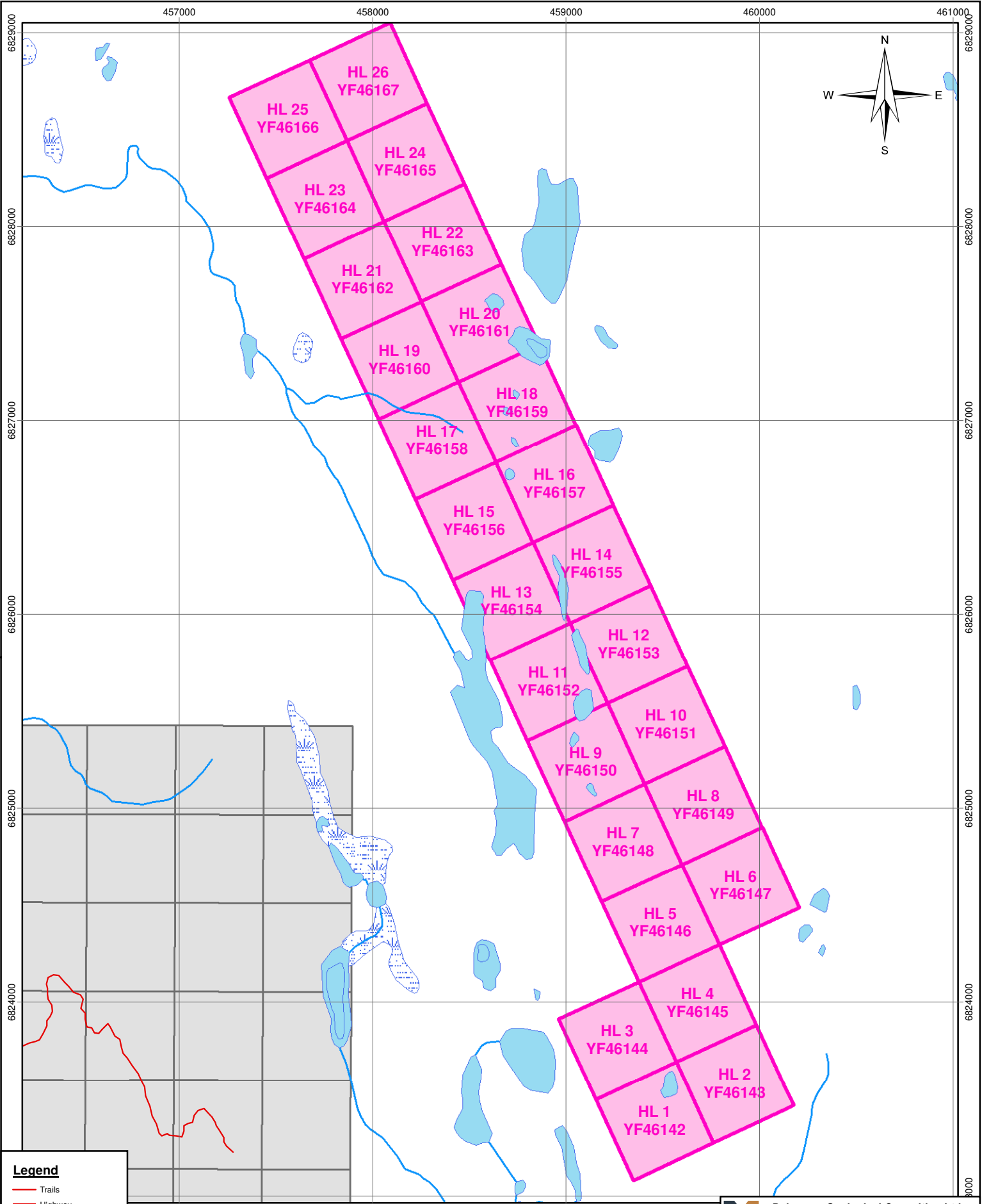
YUKON TERRITORY, CANADA

**Fig. 3.1
Property Location**



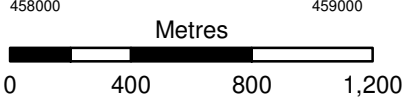
DG Dahrouge Geological Consulting Ltd.
 Edmonton, Alberta
 YUKON TERRITORY, CANADA

Fig. 3.2
Access Map



Legend

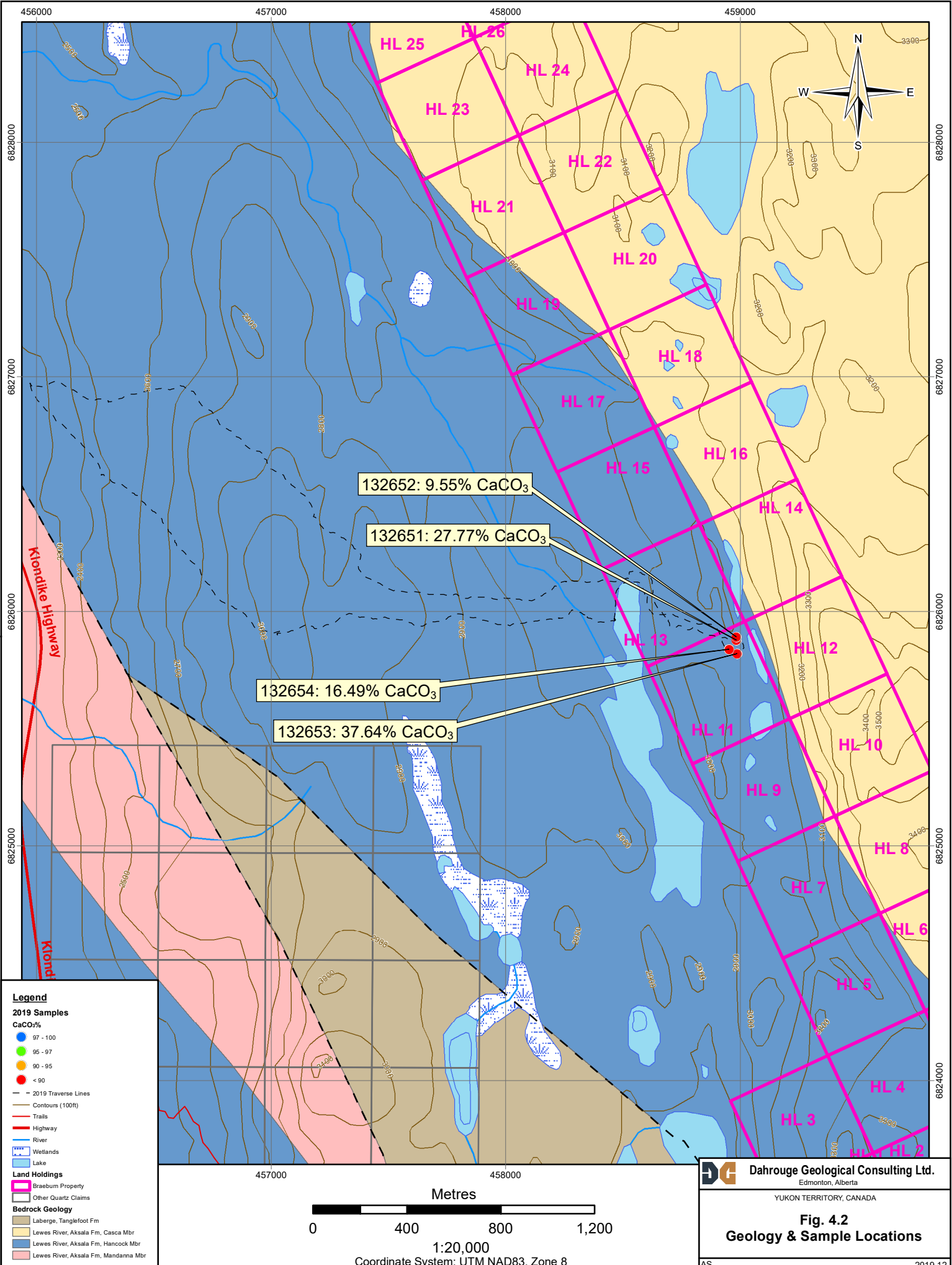
- Trails
- Highway
- River
- Wetlands
- Lake
- Land Holdings
 - Braeburn Property
 - Other Quartz Claims

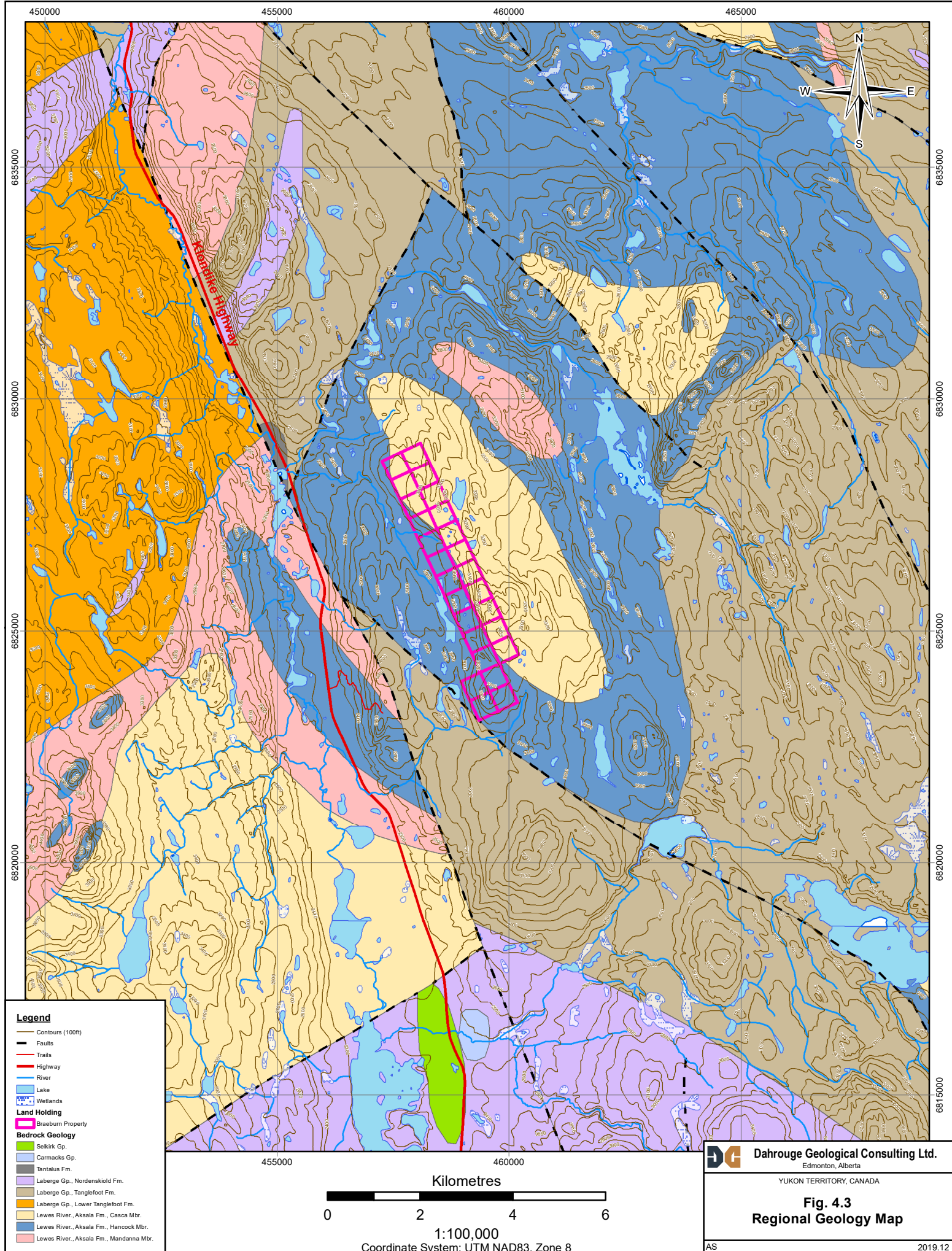


1:25,000
Coordinate System: UTM NAD83, Zone 8

DGC Dahrouge Geological Consulting Ltd.
Edmonton, Alberta
YUKON TERRITORY, CANADA

Fig. 4.1
Claim Map





- Legend**
- Contours (100ft)
 - Faults
 - Trails
 - Highway
 - River
 - Lake
 - Wetlands
 - Land Holding**
 - Braeburn Property
 - Bedrock Geology**
 - Sekirk Gp.
 - Carmacks Gp.
 - Tantalus Fm.
 - Laberge Gp., Nordenskiöld Fm.
 - Laberge Gp., Tanglefoot Fm.
 - Laberge Gp., Lower Tanglefoot Fm.
 - Lewes River, Aksala Fm., Casca Mbr.
 - Lewes River, Aksala Fm., Hancock Mbr.
 - Lewes River, Aksala Fm., Mandanna Mbr.

Dahrouge Geological Consulting Ltd.
Edmonton, Alberta
YUKON TERRITORY, CANADA

Fig. 4.3
Regional Geology Map

AS 2019.12

Coordinate System: UTM NAD83, Zone 8