

**2020 GEOLOGICAL AND GEOCHEMICAL EXPLORATION  
ON THE  
SUMMIT LAKE PROPERTY**

**WHITEHORSE MINING DISTRICT, YUKON**

Quartz Claims: WOLF 57-91(YF46062-YF46096)

Geographic Coordinates  
60°23' N to 60°25' N  
133°42' W to 133°48' W

NTS Sheet 105C05

|                       |                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------|
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| Operator:             | Graymont Western Canada Inc.<br>260, 4311 – 12 <sup>th</sup> Street NE<br>Calgary, Alberta T2E 4P9        |
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| Field Work Completed: | August 23, 2020                                                                                           |
| Date Submitted:       | June 15, 2021                                                                                             |

## TABLE OF CONTENTS

|                                                         | <u>Page</u> |
|---------------------------------------------------------|-------------|
| 1. Introduction .....                                   | 1           |
| 1.1 Geographic Setting .....                            | 1           |
| 1.1.1 Location and Access.....                          | 1           |
| 1.1.2 Topography, Vegetation, Wildlife and Climate..... | 1           |
| 1.2 Property .....                                      | 2           |
| 1.3 History and Previous Investigations .....           | 2           |
| 1.4 Purpose of Work.....                                | 4           |
| 1.5 Summary of Work.....                                | 5           |
| 2. Regional Geology .....                               | 5           |
| 2.1 Stratigraphy .....                                  | 5           |
| 2.1.1 Cache Creek Group .....                           | 6           |
| 2.1.2 Lewes River Group .....                           | 6           |
| 2.1.3 Intrusives .....                                  | 7           |
| 2.2 Structure.....                                      | 7           |
| 3. Property Geology .....                               | 8           |
| 3.1 Stratigraphy and Lithology .....                    | 8           |
| 3.1.1 Horsefeed Formation .....                         | 8           |
| 3.1.2 Nakina Formation .....                            | 8           |
| 3.2 Structure.....                                      | 8           |
| 4. Results of 2020 Exploration .....                    | 8           |
| 5. Discussion and Conclusions .....                     | 9           |
| 6. Statement of Qualifications .....                    | 10          |
| 7. References .....                                     | 12          |

## LIST OF TABLES

|                                                      | <u>Page</u> |
|------------------------------------------------------|-------------|
| Table 1.1 List of Summit Lake Claims.....            | 3           |
| Table 2.1 Stratigraphy of the Summit Lake Area ..... | 7           |

## LIST OF APPENDICES

|                                                                                                |    |
|------------------------------------------------------------------------------------------------|----|
| Appendix 1: Itemized Cost Statement.....                                                       | A1 |
| Appendix 2: Analytical Laboratory Information and Techniques.....                              | A3 |
| Appendix 3: Assay Results – Central Analytical Laboratory of Graymont<br>Western U.S. Inc..... | A4 |
| Appendix 4: 2020 Sample Descriptions and Assay Results from the<br>Summit Lake Property .....  | A6 |

## LIST OF FIGURES

|                                          |    |
|------------------------------------------|----|
| Fig. 3.1 Property Location .....         | F1 |
| Fig. 3.2 Access Map.....                 | F2 |
| Fig. 4.1 Claim Map .....                 | F3 |
| Fig. 4.2 Geology & Sample Locations..... | F4 |
| Fig. 4.3 Regional Geology Map .....      | F5 |

## **1. INTRODUCTION**

The Summit 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 23<sup>rd</sup>, 2020. Exploration consisted of collecting 14 rock samples and completing a 15.43 km traverse to map geologic units and identify outcrops. The majority of the 2020 work on the claims focused on identifying access routes, mapping geological contacts, and identifying high-calcium limestone outcrops on the Summit Lake Property. This report describes the 2020 exploration and provides an interpretation of the results. Appendix 1 is an itemized cost breakdown of the 2020 work completed on the Summit Lake Property. The operator for the 2020 exploration was Graymont Western Canada Inc. (Graymont).

The Summit Lake Property is comprised of 35 contiguous quartz claims; the Property has been grouped as per Grouping Certificate HW07731.

Structural measurements were obtained at stations throughout the Property. A magnetic declination of 18° 46' 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 Summit Lake Property is located approximately 95 km southeast of Whitehorse, Yukon and 35 km east of the small community of Tagish, Yukon. Tagish has a population of approximately 390 with minimal amenities. Access to the Summit Lake Property from Whitehorse is by driving south, then east along Alaska Hwy 1 (Klondike Hwy) for approximately 95 km. A left-turn off Hwy 1 onto the Property is located directly north of Squan Lake (Fig.'s 3.2 and 4.1). A network of ATV trails exist and can be used for access within the Property.

#### **1.1.2 Topography, Vegetation, Wildlife and Climate**

Topography in the Summit Lake area is characterized by broad U-shaped glacial valleys and ridges of relatively low relief. Elevations in the claims group range from 885 m along Highway 1 up to approximately 1,000 m in the westernmost portion.

Tree cover in the Summit 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.

The abundance of wetlands in the Summit Lake area make it an ideal habitat for a variety of ungulates, birds, and small mammals. The Yukon Government has identified seasonal riparian raptor and year-round muskrat ranges in the Summit Lake Property area. To the authors' knowledge, there are no restrictions on the area due to the presence of these animals. During exploration, Dahrouge endeavored to minimize 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 Summit Lake Property is being held in trust for Graymont by Jody Dahrouge, based out of Edmonton, AB. The claims were staked between June 18<sup>th</sup> and 20<sup>th</sup>, 2014 by a four-person crew based out of Tagish, YT. The Summit Lake Property consists of 35 quartz claims (WOLF 57-91) with a combined area of 731.5 ha.

## **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 Summit Lake claims were later staked in 2014. Dahrouge completed sampling programs in 2014, 2015, and 2019 to assess carbonate quality on the Property. There are no known published previous investigations for high-calcium limestone on the Property. Historic exploration in the area surrounding the Summit Lake Property has dominantly been focused on gold and copper.

**TABLE 1.1 LIST OF SUMMIT LAKE CLAIMS**

| <b>Grant Number</b> | <b>Claim Name</b> | <b>Original Size (ha)</b> | <b>Record Date</b> | <b>Current Good To Date</b>      | <b>New Good to Date</b> | <b>Required Spending</b> |
|---------------------|-------------------|---------------------------|--------------------|----------------------------------|-------------------------|--------------------------|
| YF46062             | WOLF 57           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46063             | WOLF 58           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46064             | WOLF 59           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46065             | WOLF 60           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46066             | WOLF 61           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46067             | WOLF 62           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46068             | WOLF 63           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46069             | WOLF 64           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46070             | WOLF 65           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46071             | WOLF 66           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46072             | WOLF 67           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46073             | WOLF 68           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46074             | WOLF 69           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46075             | WOLF 70           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46076             | WOLF 71           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46077             | WOLF 72           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46078             | WOLF 73           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46079             | WOLF 74           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46080             | WOLF 75           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46081             | WOLF 76           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46082             | WOLF 77           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46083             | WOLF 78           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46084             | WOLF 79           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46085             | WOLF 80           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46086             | WOLF 81           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46087             | WOLF 82           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46088             | WOLF 83           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46089             | WOLF 84           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46090             | WOLF 85           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46091             | WOLF 86           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46092             | WOLF 87           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46093             | WOLF 88           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46094             | WOLF 89           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46095             | WOLF 90           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| YF46096             | WOLF 91           | 20.9                      | 14-Jul-14          | 14-Jul-2021                      | 14-Jul-2022             | \$100.00                 |
| <b>Total Area:</b>  |                   | 731.5                     |                    | <b>Representation Work Cost:</b> |                         | \$3,500.00               |
|                     |                   |                           |                    | <b>Certification Cost:</b>       |                         | \$175.00                 |
|                     |                   |                           |                    | <b>Total:</b>                    |                         | <b>\$3675.00</b>         |

The TOG Property is adjacent to the northeast boundary of the Wolf Lake Property and has been explored in previous years for vein-hosted gold deposits. The TOG claims were first staked in 1972 by prospector Gord McLeod and are currently held by Dunvegan Exploration Ltd. The Property is now comprised of the TOG and GOT claims. Investigations have been done in 1979 by Archer Cathro and Associates, in 1982 by Noranda Exploration Co. Ltd. From 1985-1988 several geologists and companies sampled the site and reported values of 0.244 ounce/ton gold and higher. Newman Exploration also sampled pits on the Property but reported low gold values. Dunvegan Exploration began their investigations of the Property in 1989 with road construction, sampling, magnetometer, and VLF-EM surveys, as well as detailed mapping. In 1990, they ran an 8-hole (262.5 m) drill program and bulk sampling of the main showing vein. The bulk sample analysis returned values of 3.16 ounce/ton gold. Dunvegan's 2003 exploration program consisted of trench sampling.

The historic MUNG claims, staked in 1971, were located southeast of the Summit Lake Property, south of the Alaska Highway and west of Wolf Lake. These claims were held by the Wolf Lake Joint Venture Group and explored by induced polarization survey in 1972 and found trace copper-molybdenum mineralization.

Adjacent to the northwest corner and extending around the TOG/GOT claims is the MAG Property, which was staked by Sourdough Resources in 2011. Sourdough performed reconnaissance geological mapping, sampling, and a ground magnetometer survey in 2011. The claims expired in June 2017.

Underlying portions of active quartz claims WOLF 60, 62, 81 and 82 is the historic DISCOVERY placer claim, which was staked by Dan Robert Walker in 2011 and subsequently expired in August 2012. No assessment report was submitted.

Northwest of the Summit Lake Property, a block of 32 quartz claims (JAKES 1-32) were staked in October 2014 by Nicolai Goeppel of Higher Ground Exploration Services Inc. In 2015 Higher Ground completed a summer field program to map lithologies and trench sample new and historic targets. The claims expired in October 2016.

## **1.4 PURPOSE OF WORK**

The work described herein was undertaken to accurately identify the location and extent of limestone units throughout the Summit Lake Property; it consisted of mapping and sampling. The 2020 exploration program is a follow-up to work completed in 2014, 2015 and 2019 by Dahrouge (Krueger and Lole, 2014, Krueger and Lole, 2015, Krueger and Shumilak, 2020).

## **1.5 SUMMARY OF WORK**

In August 2020, Dahrouge completed a one-day geologic mapping and sampling program on the Summit Lake Property.

Three in-situ outcrop samples and 11 float samples were obtained within the Summit Lake Property (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. A 15.43 km traverse was completed on the Property to map geological units and identify outcrops.

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 Graymont's 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.

Personnel were based in a hotel in Whitehorse, Yukon, 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 Summit Lake Property is underlain by Carboniferous to Jurassic Cache Creek Group rocks. The Cache Creek Group is located within the central part of the morpho-tectonic Intermontane Belt of the Canadian Cordillera (Fig. 4.3). It extends almost continuously over a distance of more than 1,000 km, from south-central Yukon Territory, through the Stuart Lake Belt of Armstrong in central British Columbia, to the type area near the village of Cache Creek in the Interior Plateau of south-central British Columbia (Beyers and Orchard, 1991).

Outcrops of the Carnian to Norian Lewes River Group are also seen proximal to the Summit Lake Property.

### **2.1.1 Cache Creek Group**

The Cache Creek Group consists of oceanic shale, siltstone, chert, carbonates, and ultramafic rocks. These are overlain by Upper Triassic rocks of the Aksala Group northwest of the Property.

In the Atlin Terrane of southern Yukon and northern British Columbia, Monger (1969, 1975) included the Kedahda, French Range, Teslin, Nakina and Horsefeed formations as part of the Cache Creek Group.

The Late Mississippian to Late Permian Horsefeed Formation generally consists of a basal, massive, pale grey-weathering calc-arenite overlain by a thick succession of pale grey, porcelaneous, crinoidal and foraminiferal calc-arenite. This member grades upwards into dark grey, very fine-grained detrital limestone and dolomitic limestone. The uppermost member of the Horsefeed Formation is an aggregate of foraminiferal calcarenite and, in the lower part, local breccia. Between Koshin and Nahlin rivers the most common lithology is pale grey, unsorted, massive limestone breccia (Monger, 1975) (Gabrielse, 1998).

The Mississippian to Permian Nakina Formation is tan or brown to green weathering, grey green, or rarely maroon, very fine-grained altered basalt, in places with small chlorite amygdules and calcite veins. The rocks are generally massive and the only planar structures recognizable are fractures and faults with slickensides. Other less common rock types are diabase and fine-grained basalt porphyry with small feldspar phenocrysts and very rarely, fine-grained gabbro, basaltic flow breccia and tuff (Monger, 1975).

### **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).

The Aksala Formation consists of mixed clastic and carbonate rocks that are divisible into three dominant facies: calcareous greywacke; thick carbonate; and red colored clastics (Shaw,

1989).

### 2.1.3 Intrusives

The nearest known intrusive rocks occur 4 km east of the Property and are Early Cretaceous intrusions of the Teslin Suite. They are comprised of leucocratic, fine to coarse-grained, equigranular, hornblende-biotite granite, granodiorite, quartz monzonite, and quartz monzodiorite (Shaw, 1989).

## 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 roughly 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).

**TABLE 2.1 STRATIGRAPHY OF THE SUMMIT LAKE AREA**

| Period              | Stage/Age | Stratigraphic Unit |                   |              | Lithological Description                                    | Approx. Thickness (m) |
|---------------------|-----------|--------------------|-------------------|--------------|-------------------------------------------------------------|-----------------------|
|                     |           | Group              | Formation/ Member |              |                                                             |                       |
| 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 |                       |
| Devonian to Permian |           | Cache Creek Gp.    | Horsefeed Fm.     |              | Massive to thick-bedded limestone, dolomitic limestone      | Up to 1,500           |
|                     |           |                    | Nakina Fm.        |              | Massive altered basalts, minor diabase                      | unknown               |

\*Adapted from Clapham et al., 2002.

### **3. PROPERTY GEOLOGY**

#### **3.1 STRATIGRAPHY AND LITHOLOGY**

As only initial prospecting work has been performed on the Summit Lake Property, a detailed description of the property geology is not yet possible. During the 2015 exploration, the volcanic Nakina Formation and carbonate Horsefeed Formation were both encountered on the Summit Lake Property. As other formations were not encountered on the Property, their detailed descriptions will not be included herein.

##### **3.1.1 Horsefeed Formation**

Exposures of the Horsefeed Formation were mapped and sampled in 2012 from between 2,900 m to 3,100 m north of the Alaska Hwy within the Summit Lake Property. During the 2020 exploration program, three outcrops of the Horsefeed Formation were encountered (Fig. 4.2). The outcrops generally consist of light- to medium-grey to rusty weathered, medium-grey to dark-grey fresh, micritic to fine-grained lime mudstones. Outcrops are typically massive and somewhat resistant with minor calcite veining.

##### **3.1.2 Nakina Formation**

During previous exploration, four outcrops of the Nakina Formation have been encountered and sampled. The outcrops generally consist of orange to rusty brown weathered, light-grey to olive-grey fresh, very-fine-grained basalts. Nakina Formation outcrops are typically massive, hard, and fairly resistant.

#### **3.2 STRUCTURE**

Given the early stage of exploration on the Property, the structure is currently largely unknown. A previously mapped regional fault trends NE-SW along the Horsefeed-Nakina contact throughout the Property, however no evidence of this fault was found during any of Dahrouge's exploration programs.

### **4. RESULTS OF 2020 EXPLORATION**

The 2020 exploration program was completed to further assess the quality of the Mississippian to Permian Horsefeed Formation limestones on the Summit Lake Property. Further delineating the contact between the volcanic Nakina Formation and the high-calcium limestones

of the Horsefeed Formation was also a priority.

The groundwork involved sampling at several locations on the Property and completing a 15.43 km traverse to map geologic units and identify outcrops (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 due to the lack of reliable bedding surfaces.

All samples from the 2020 program were shipped from Whitehorse, YT to Graymont's Central Lab in Sandy, Utah for preparation and analyses by standard ICP techniques, and LOI (App.'s 2 and 3). The best in-situ Horsefeed Formation sample (75805) yielded 98.20%  $\text{CaCO}_3$ , 1.32%  $\text{MgCO}_3$  and 0.30%  $\text{SiO}_2$  over roughly 0.25 m. Another notable sample was 75808 which contained 97.80%  $\text{CaCO}_3$ , 0.73%  $\text{MgCO}_3$  and 0.43%  $\text{SiO}_2$  over approximately 1.50 m. Grab sample 75811 returned 99.80%  $\text{CaCO}_3$ , 0.88%  $\text{MgCO}_3$  and 0.11%  $\text{SiO}_2$  from a recrystallized limestone boulder that was likely sourced from nearby. As illustrated in Fig. 4.2, the 2020 samples returned variable concentrations of  $\text{CaCO}_3$  (App. 4).

## **5. DISCUSSION AND CONCLUSIONS**

Within the Summit Lake Property, limestones of the Horsefeed Formation were mapped and tested by measuring and sampling stratigraphic sections. A total of 14 samples were collected from the Horsefeed Formation. Unfortunately, limited time and outcrop exposure prevented further exploration for high-calcium limestone outcrops of the Horsefeed Formation. The abundance of overburden makes it difficult to obtain conclusive results for the quality of the Horsefeed Formation limestone on the Property.

The next phase of exploration on the Summit Lake Property should consist of diamond drilling, to determine the thickness and lateral extent of the high-calcium Horsefeed Formation on the Property. A cost-effective alternative to diamond drilling would be to conduct a backpack drill program with minimal ground disturbance and environmental impact. As outcrop exposure is limited throughout the Property, drilling would be best to determine limestone quality.

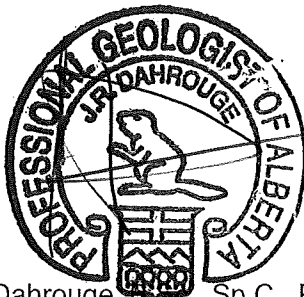
Any future ground sampling and mapping should focus on areas that have seen only limited exploration during previous exploration programs, to identify any other outcrop locations.

## 6. STATEMENT OF QUALIFICATIONS

I, Jody Dahrouge, residing at 11 Country Lane, Stony Plain, Alberta, do hereby certify that:

- I am a geologist and President of Dahrouge Geological Consulting Ltd., Suite 103, 10183 - 112 Street., Edmonton, Alberta, T5K 1M1.
- I am a 1988 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. specialized in Geology.
- I am a 1994 graduate of the University of Alberta, Edmonton, Alberta with a Sp.C. in Computing Science.
- I have practiced my profession as a geologist intermittently from 1988 to 1994, and continuously since 1994.
- I am a registered Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta, member M48123.
- I co-managed the 2020 work described in this report.
- I am co-author of the report entitled "2020 Geological and Geochemical Exploration on the Summit 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 15<sup>th</sup> day of June, 2021.



Jody Dahrouge, B.Sc., Sp.C., P.Geo.  
APEGA M48123

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 have practiced my profession as a geologist intermittently in 2017, and continuously since 2018.
- I am a registered Geologist in Training with the Association of Professional Engineers and Geoscientists of Alberta, member 214310.
- I co-managed the 2020 work described in this report.
- I am co-author of the report entitled "2020 Geological and Geochemical Exploration on the Summit 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 15<sup>th</sup> day of June, 2021.

A handwritten signature in black ink, appearing to read 'A. Shumilak', with a stylized, flowing script.

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

APEGA 214310

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## APPENDIX 1: ITEMIZED COST STATEMENT FOR THE 2020 EXPLORATION

**a) Personnel**

|                        |     |   |                                            |             |
|------------------------|-----|---|--------------------------------------------|-------------|
| A. Shumilak, geologist |     |   |                                            |             |
| 11.52                  | hrs |   | project management, field work and travel  |             |
| 5.11                   | hrs |   | project planning & preparations, reporting |             |
| 16.63                  | hrs | @ | \$ 59.00                                   | \$ 981.25   |
| A. Shumilak, geologist |     |   |                                            |             |
| 3.76                   | hrs |   | project planning & preparations, reporting |             |
| 3.76                   | hrs | @ | \$ 69.00                                   | \$ 259.70   |
| S. Holmes, geologist   |     |   |                                            |             |
| 11.00                  | hrs |   | field work and travel                      |             |
| 0.13                   | hrs |   | project preparations, data entry           |             |
| 11.13                  | hrs | @ | \$ 59.00                                   | \$ 656.70   |
| P. Mickelsen, student  |     |   |                                            |             |
| 0.29                   | hrs |   | project preparations, data entry           |             |
| 0.29                   | hrs | @ | \$ 45.00                                   | \$ 13.03    |
| A. Ullrich, student    |     |   |                                            |             |
| 11.19                  | hrs |   | field work and travel                      |             |
| 0.77                   | hrs |   | project preparations, data entry           |             |
| 11.97                  | hrs | @ | \$ 45.00                                   | \$ 538.51   |
| T. Anderson, student   |     |   |                                            |             |
| 11.00                  | hrs |   | field work and travel                      |             |
| 11.00                  | hrs | @ | \$ 39.00                                   | \$ 429.07   |
| J. Kerr, receptionist  |     |   |                                            |             |
| 0.23                   | hrs |   | logistics, prepare shipments               |             |
| 0.23                   | hrs | @ | \$ 40.00                                   | \$ 9.01     |
|                        |     |   |                                            | \$ 2,887.27 |

**b) Food and Accommodation**

|      |          |   |           |                              |           |           |
|------|----------|---|-----------|------------------------------|-----------|-----------|
| 4.12 | man-days | @ | \$ 103.95 | accommodations (hotel rooms) | \$ 428.03 |           |
| 4.63 | man-days | @ | \$ 70.00  | meals                        | \$ 324.26 | \$ 752.29 |

**c) Transportation**

|           |              |                            |           |           |
|-----------|--------------|----------------------------|-----------|-----------|
| Vehicles: | Truck rental | Driving Force (Whitehorse) | \$ 147.84 |           |
|           | Fuel         |                            | \$ 16.16  | \$ 164.00 |

**d) Instrument Rental**

|                 |          |          |
|-----------------|----------|----------|
| Laptop          | \$ 9.01  |          |
| Radios          | \$ 11.71 |          |
| Satellite Phone | \$ 5.40  | \$ 26.12 |

**e) Analyses**

| <u>Analyses</u> |         | Central Lab of Graymont Western U.S. Inc. |    |       |                 |    |        |
|-----------------|---------|-------------------------------------------|----|-------|-----------------|----|--------|
|                 |         | (14 rock samples)                         |    |       |                 |    |        |
| 14              | samples | @                                         | \$ | 4.50  | Preparation fee | \$ | 63.00  |
| 14              | samples | @                                         | \$ | 25.00 | Sample analysis | \$ | 350.00 |
|                 |         |                                           |    |       |                 |    |        |
|                 |         |                                           |    |       |                 | \$ | 413.00 |

f) Other

Shipping  
Disposable Supplies  
Overhead & Supply

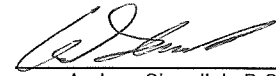
\$ 40.53  
\$ 37.02  
\$ 109.37

\$ 186.93

Total

\$ 4,429.62

Edmonton, Alberta  
June 15, 2021



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

## **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 75um 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 12<sup>th</sup> 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**

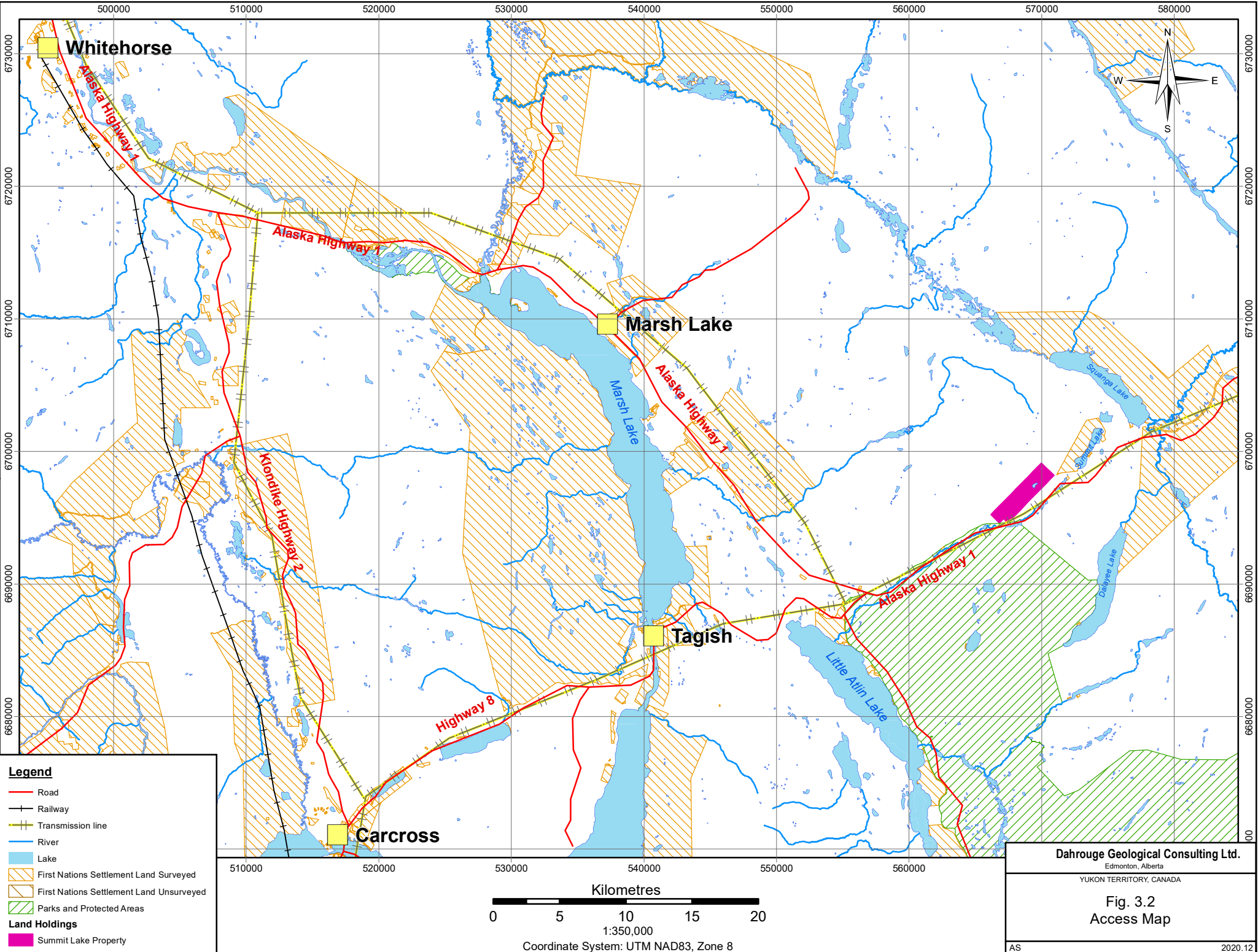
| Lab ID     | Date     | Type      | Sample | Status | CaCO <sub>3</sub> | MgCO <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | Al <sub>2</sub> O <sub>3</sub> | SrO  | MnO  | SiO <sub>2</sub> | BaO  | K <sub>2</sub> O | Na <sub>2</sub> O | P <sub>2</sub> O <sub>5</sub> | TiO <sub>2</sub> | ICP Total | Sulfur | LOI 1000 C |
|------------|----------|-----------|--------|--------|-------------------|-------------------|--------------------------------|--------------------------------|------|------|------------------|------|------------------|-------------------|-------------------------------|------------------|-----------|--------|------------|
|            |          |           |        |        | %                 | %                 | %                              | %                              | ppm  | ppm  | %                | ppm  | ppm              | ppm               | ppm                           | ppm              | %         | %      | %          |
| 2020111865 | 1/9/2020 | Limestone | 75785  | B      | 93.5              | 4.14              | 0.09                           | 0.25                           | 761  | 12   | 1.18             | 255  | 602              | 41                | 13                            | 115              | 99.4      | 0.01   | 43.3       |
| 2020111866 | 1/9/2020 | Limestone | 75786  | B      | 97.1              | 1.21              | 0.05                           | 0.17                           | 1470 | 9    | 0.83             | 167  | 397              | 90                | -31                           | 66               | 99.6      | 0.01   | 43.5       |
| 2020111867 | 1/9/2020 | Limestone | 75787  | B      | 24.1              | 4.39              | 5.34                           | 10.05                          | 653  | 1224 | 37.54            | 1626 | 14683            | 29007             | 2225                          | 4167             | 86.8      | 0.03   | 9.2        |
| 2020111881 | 1/9/2020 | Limestone | 75801  | B      | 91.2              | 7.05              | 0.04                           | 0.13                           | 687  | 8    | 0.42             | 207  | 281              | <20               | -30                           | 75               | 99.0      | 0.02   | 44.4       |
| 2020111882 | 1/9/2020 | Limestone | 75802  | B      | 89.2              | 3.20              | 0.84                           | 1.02                           | 972  | 147  | 5.28             | 428  | 1614             | 3174              | 504                           | 670              | 100.3     | 0.01   | 40.5       |
| 2020111883 | 1/9/2020 | Limestone | 75803  | B      | 97.5              | 1.42              | 0.04                           | 0.12                           | 266  | 27   | 0.31             | 173  | 226              | 116               | 204                           | 73               | 99.5      | 0.01   | 43.2       |
| 2020111884 | 1/9/2020 | Limestone | 75804  | B      | 78.2              | 1.11              | 0.06                           | 0.17                           | 801  | 91   | 19.67            | 73   | 401              | 43                | 105                           | 108              | 99.3      | 0.02   | 35.9       |
| 2020111885 | 1/9/2020 | Limestone | 75805  | B      | 98.2              | 1.32              | 0.00                           | 0.06                           | 728  | 1    | 0.30             | 107  | 111              | <20               | -33                           | 13               | 99.9      | 0.01   | 43.2       |
| 2020111886 | 1/9/2020 | Limestone | 75806  | B      | 84.8              | 13.68             | 0.06                           | 0.16                           | 431  | 14   | 0.37             | 184  | 387              | 128               | 123                           | 56               | 99.2      | 0.02   | 44.9       |
| 2020111887 | 1/9/2020 | Limestone | 75807  | B      | 71.2              | 3.83              | 2.06                           | 3.11                           | 494  | 348  | 17.37            | 844  | 8407             | 11593             | 1173                          | 1936             | 100.1     | 0.06   | 30.6       |
| 2020111888 | 1/9/2020 | Limestone | 75808  | B      | 97.8              | 0.73              | 0.07                           | 0.16                           | 252  | 19   | 0.43             | 111  | 345              | 151               | 128                           | 65               | 99.3      | 0.01   | 43.1       |
| 2020111889 | 1/9/2020 | Limestone | 75809  | B      | 93.2              | 0.63              | 0.04                           | 0.06                           | 299  | 96   | 5.72             | 248  | 115              | 51                | 680                           | 13               | 99.8      | 0.01   | 40.5       |
| 2020111890 | 1/9/2020 | Limestone | 75810  | B      | 92.5              | 8.03              | 0.03                           | 0.10                           | 588  | 9    | 0.19             | 239  | 211              | 52                | -15                           | 35               | 100.9     | 0.01   | 42.9       |
| 2020111891 | 1/9/2020 | Limestone | 75811  | B      | 99.8              | 0.88              | 0.00                           | 0.06                           | 284  | 2    | 0.11             | 49   | 115              | <20               | -36                           | 28               | 100.9     | 0.01   | 42.2       |



**GRAYMONT**

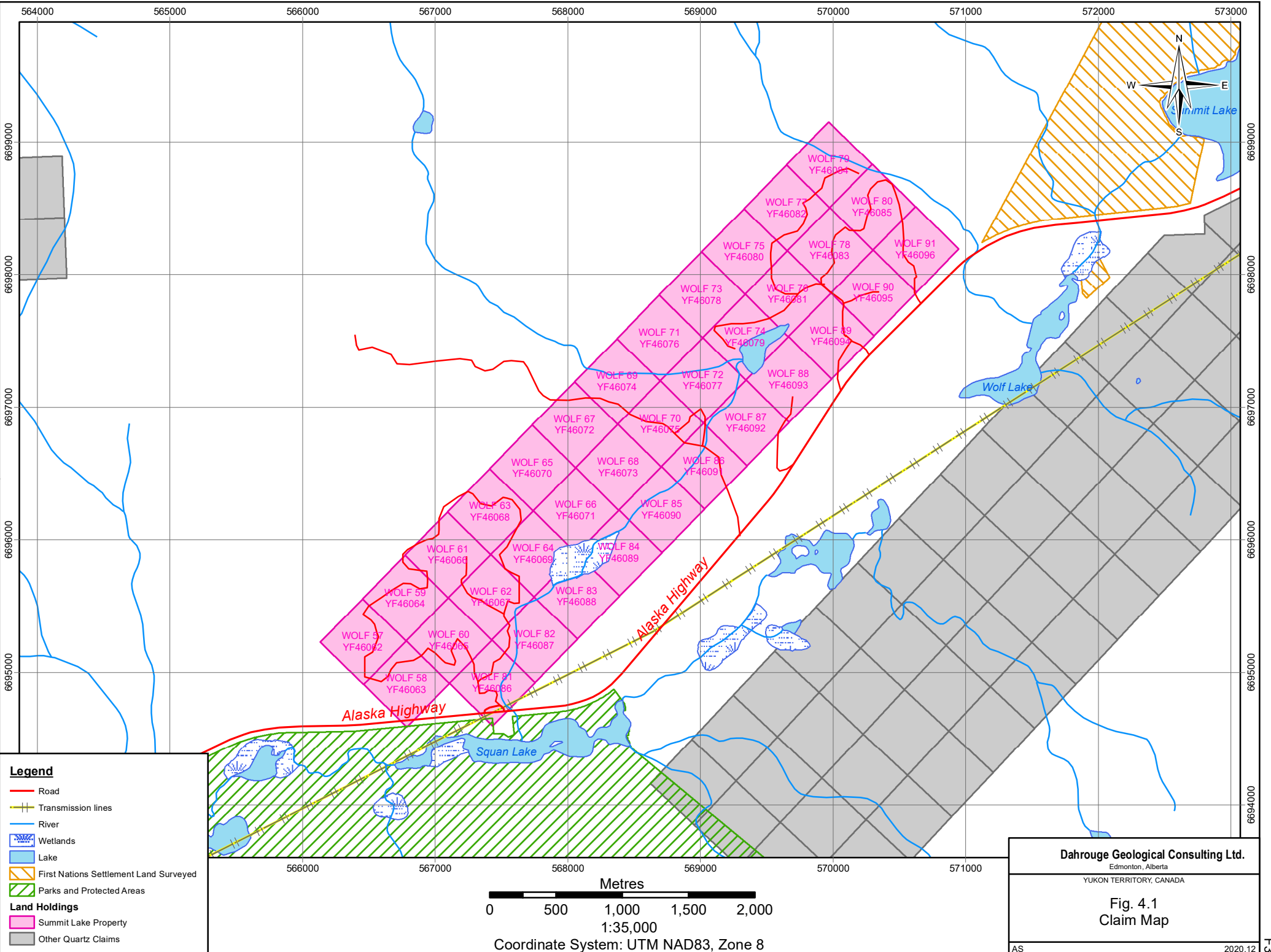
| Sample                         | Strat Unit | Strat Tkns (m) | Description                                                                                                                                                                                                                                                     | CaCO <sub>3</sub> (%) | MgCO <sub>3</sub> (%) | SiO <sub>2</sub> (%) | Al <sub>2</sub> O <sub>3</sub> (%) | Fe <sub>2</sub> O <sub>3</sub> (%) | SrO (ppm) | MnO (ppm) | P <sub>2</sub> O <sub>5</sub> (ppm) |
|--------------------------------|------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|----------------------|------------------------------------|------------------------------------|-----------|-----------|-------------------------------------|
| 75809<br>UTM 570423E, 6698373N | Mh         | grab           | <b><u>Lime Wackestone to Lime Mudstone</u></b> , medium grey to dark grey weathered and fresh, micritic to fine-grained, hard, alteration: silica, moderate HCl reaction, structure(s): calcite veinlet, local-scale, weak; calcite vein, local-scale, moderate | 93.20                 | 0.63                  | 5.72                 | 0.06                               | 0.040                              | 299       | 96        | 680                                 |
| 75810<br>UTM 570529E, 6698194N | Mh         | grab           | <b><u>Dolomitic Lime Mudstone</u></b> , dark grey weathered, medium grey fresh, micritic to fine-grained, hard, strong fetid odour, moderate HCl reaction, structure(s): calcite veinlet, local-scale, weak                                                     | 92.50                 | 8.03                  | 0.19                 | 0.10                               | 0.030                              | 588       | 9         | 15                                  |
| 75811<br>UTM 570604E, 6698008N | Mh         | grab           | <b><u>Recrystallized Limestone</u></b> , light grey to tan weathered, light grey fresh, micritic, hard, strong fetid odour, strong HCl reaction, structure(s): calcite veinlet, local-scale, weak                                                               | 99.80                 | 0.88                  | 0.11                 | 0.06                               | 0.000                              | 284       | 2         | 36                                  |

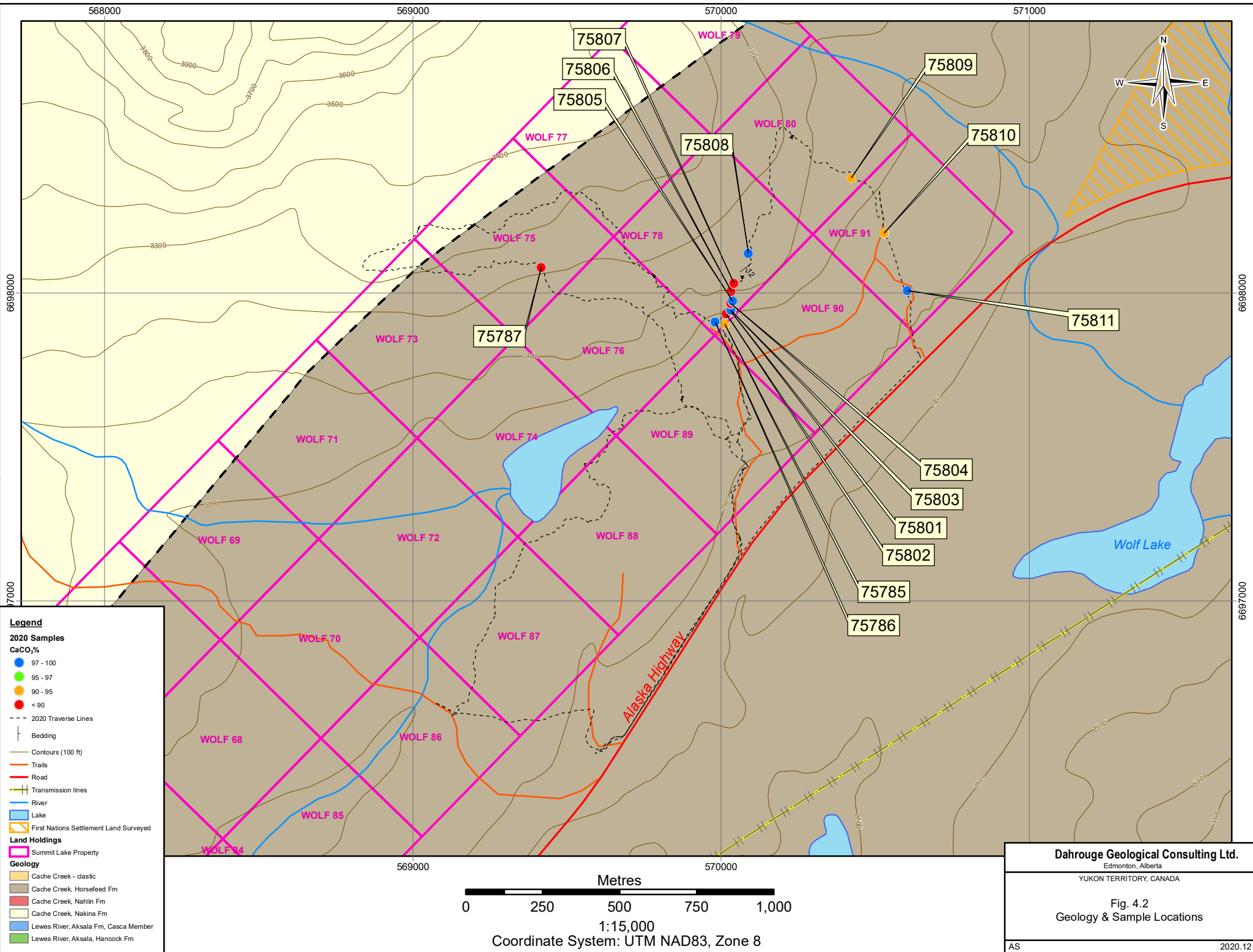




Dahrouge Geological Consulting Ltd.  
Edmonton, Alberta  
YUKON TERRITORY, CANADA

Fig. 3.2  
Access Map





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

Fig. 4.2  
Geology & Sample Locations

