## 2014 GEOLOGICAL AND GEOCHEMICAL EXPLORATION ON THE CANYON MOUNTAIN PROPERTY

## WHITEHORSE MINING DISTRICT, YUKON

Grant Numbers: CM 1-112 (YF46168-YF46279)

Geographic Coordinates 60°38' N to 60°44' N 134°49' W to 134°56' W

NTS Sheet 105D10

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Field Work:	September 10 <sup>th</sup> -14 <sup>th</sup> , 2014
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1.

#### INTRODUCTION

The Canyon Mountain quartz claims were staked by Henry Lole in late June 2014; Dahrouge Geological Consulting (Dahrouge) completed a surface sampling program from September 10<sup>th</sup> to 14<sup>th</sup>, 2014. Exploration consisted of collecting 120 limestone samples, representing approximately 335 m of stratigraphy. The majority of the 2014 work on the claims focused on identifying access routes, mapping geological contacts and locating high-calcium limestone outcrops on the Canyon Mountain Property. This report describes the 2014 exploration and provides an interpretation of the results. Appendix 1 is an itemized cost breakdown of the 2014 work completed on the Canyon Mountain Property. The operator for the 2014 exploration was Graymont Western Canada Inc.

The Canyon Mountain Property is comprised of 112 contiguous quartz claims; the Property has been grouped as per Grouping Certificate HW07570.

Structural measurements were obtained at stations throughout the Property. A magnetic declination of  $24^{\circ} 2'$  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 Canyon Mountain Property is located approximately 11 km east of Whitehorse, Yukon along the Grey Mountain Road. The Property is roughly 600 m east of the Grey Mountain Radio Tower (Fig.'s 3.1 and 3.2). The majority of Grey Mountain Road is paved and well-maintained, with the exception of the last 2 km, which is a rough gravel road. A well-maintained ATV trail, which is approximately 10 km in length, exists south of the Property and can be used to access the southern half of the Property. There is a helicopter pad at the Radio Tower on top of Grey Mountain which could be utilized for access in the future, if needed.

## 1.1.2 Topography, Vegetation, Wildlife and Climate

Topography in the Canyon Mountain Property area is characterized by northwest trending broad U-shaped glacial valleys and ridges of significant relief. Elevations on the Property range from 840 m in the eastern portion near Cantlie Lake up to approximately 1,400 m atop Grey Mountain at the Radio Tower (Fig. 4.1).

Tree cover in the Whitehorse 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 rugged mountainous terrane and wetlands in the Canyon Mountain Property area make it an ideal habitat for variety of ungulates, birds and small mammals. The Yukon Government has identified golden eagle, thin-horn sheep and woodland caribou seasonal ranges in the 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 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 Canyon Mountain claims are being held in trust for Graymont Western Canada Inc. by Henry Lole of Dahrouge Geological Consulting Ltd., based out of Edmonton, AB. The claims were staked from June 27<sup>th</sup> to July 2<sup>nd</sup>, 2014 by a four person crew based out of Whitehorse. The Canyon Mountain Property consists of 112 quartz claims (CM 1-112) with a combined area of 2,340.8 ha.

Grant Number	Claim Name	Original Size (ha)	Record Date	New Good To Date	Required Spending
YF46168	CM 1	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46169	CM 2	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46170	CM 3	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46171	CM 4	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46172	CM 5	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46173	CM 6	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46174	CM 7	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46175	CM 8	20.9	14-Jul-14	14-Jul-17	\$200.00

TABLE 1.1

## LIST OF CANYON MOUNTAIN CLAIMS

YF46176	CM 9	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46177	CM 10	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46178	CM 11	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46179	CM 12	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46180	CM 13	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46181	CM 14	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46182	CM 15	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46183	CM 16	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46184	CM 17	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46185	CM 18	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46186	CM 19	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46187	CM 20	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46188	CM 21	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46189	CM 22	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46190	CM 23	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46191	CM 24	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46192	CM 25	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46193	CM 26	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46194	CM 27	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46195	CM 28	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46196	CM 29	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46197	CM 30	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46198	CM 31	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46199	CM 32	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46200	CM 33	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46201	CM 34	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46202	CM 35	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46203	CM 36	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46204	CM 37	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46205	CM 38	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46206	CM 39	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46207	CM 40	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46208	CM 41	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46209	CM 42	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46210	CM 43	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46211	CM 44	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46212	CM 45	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46213	CM 46	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46214	CM 47	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46215	CM 48	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46216	CM 49	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46217	CM 50	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46218	CM 51	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46219	CM 52	20.9	14-Jul-14	14-Jul-17	\$200.00

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YF46220	CM 53	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46221	CM 54	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46222	CM 55	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46223	CM 56	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46224	CM 57	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46225	CM 58	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46226	CM 59	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46227	CM 60	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46228	CM 61	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46229	CM 62	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46230	CM 63	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46231	CM 64	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46232	CM 65	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46233	CM 66	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46234	CM 67	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46235	CM 68	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46236	CM 69	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46237	CM 70	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46238	CM 71	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46239	CM 72	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46240	CM 73	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46241	CM 74	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46242	CM 75	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46243	CM 76	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46244	CM 77	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46245	CM 78	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46246	CM 79	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46247	CM 80	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46248	CM 81	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46249	CM 82	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46250	CM 83	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46251	CM 84	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46252	CM 85	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46253	CM 86	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46254	CM 87	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46255	CM 88	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46256	CM 89	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46257	CM 90	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46258	CM 91	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46259	CM 92	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46260	CM 93	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46261	CM 94	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46262	CM 95	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46263	CM 96	20.9	14-Jul-14	14-Jul-17	\$200.00

				Total:	\$23,520.00
			C	ertification Cost:	\$1,120.00
	Total Area:	2,340.8	Representation Work Cost:		\$22,400.00
YF46279	CM 112	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46278	CM 111	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46277	CM 110	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46276	CM 109	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46275	CM 108	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46274	CM 107	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46273	CM 106	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46272	CM 105	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46271	CM 104	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46270	CM 103	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46269	CM 102	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46268	CM 101	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46267	CM 100	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46266	CM 99	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46265	CM 98	20.9	14-Jul-14	14-Jul-17	\$200.00
YF46264	CM 97	20.9	14-Jul-14	14-Jul-17	\$200.00

## 1.3 HISTORY AND PREVIOUS INVESTIGATIONS

The Canyon Mountain claims were staked in 2014 by Henry Lole and a team from Dahrouge Geological Consulting Ltd. Initial prospecting of the area was completed by Dahrouge during the summer of 2012 to assess the quality of the limestone. To the knowledge of the authors, no historic exploration for high-calcium limestone has occurred in the Canyon Mountain Property area. Four quartz claims were acquired in the south (Golcondo, Florence, Concord and Mohawk) prior to the Canyon Mountain Property staking, but it is unknown whether the owner registered work for them.

## 1.4 PURPOSE OF WORK

The work described herein was undertaken to accurately identify the location and extent of limestone units throughout the Canyon Mountain Property. Mapping and sampling were conducted in order to determine the quality and abundance of the limestone units on the Property.

#### 1.5 SUMMARY OF WORK

In September 2014, Dahrouge conducted a 5-day geologic mapping and sampling program on the Canyon Mountain Property.

A total of 120 limestone samples were obtained within the Canyon Mountain Property, representing approximately 335 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 (Appendix 4). A solution of 10% HCl was used to assess carbonate quality in the field. Samples were shipped to a lab in Salt Lake City, 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 ATV's and extensive hiking.

## 2. REGIONAL GEOLOGY

#### 2.1 STRATIGRAPHY

The Canyon Mountain 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 175 km north of the Canyon Mountain Property. The area of the 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, Nordenskiold 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 Whitehorse area. The Nordenskiold 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, and has not been seen in outcrop near the Canyon Mountain Property to date. The Richthofen, Nordenskiold 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 3 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 2 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). Large areas of the sedimentary sequence were subsequently intruded by granitic rocks during the Cretaceous.

## 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).

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

## TABLE 2.1 STRATIGRAPHY OF THE WHITEHORSE AREA\*

\*Adapted from Clapham et al., 2002.

3.

## PROPERTY GEOLOGY

## 3.1 STRATIGRAPHY & LITHOLOGY

As only initial prospecting work has been performed on the Canyon Mountain Property, a

detailed description of the property geology is not yet possible. In the Whitehorse area, carbonate lithologies are known to occur within Triassic sequences. The Triassic limestones encountered within the Canyon Mountain Property are from the Hancock and Casca members of the Carnian-Norian Aksala Formation (Fig. 4.2). The massive, resistant limestone exposures in the Whitehorse area are likely part of the Hancock Member. The following is a brief summary of the units encountered at the Canyon Mountain Property.

#### 3.1.1 Aksala Formation – Casca Member

Exposures of the Casca Member were mapped and sampled within the Canyon Mountain Property. The member outcrops consist of light-grey weathered, medium-grey to dark-grey fresh, micritic to coarse-grained lime mudstones. Outcrops are typically massive and somewhat resistant with minor calcite veining. The 2014 exploration program revealed significant amounts of silica contamination in the Casca Member.

#### 3.1.2 Aksala Formation – Hancock Member

The cliff-forming Hancock Member has been mapped within the southern half of the Canyon Mountain Property. The member consists of very light-grey to medium-grey weathered, light-grey to medium-grey fresh, cryptocrystalline to micritic lime mudstones. Both massive and resistant, the Hancock Member limestones have minor carbonaceous stringers and oxide alteration along fractures.

## 3.2 STRUCTURE

Given the early stage of exploration on the Property, the structure is currently largely unknown.

#### 4.

## **RESULTS OF 2014 EXPLORATION**

The 2014 exploration program was conducted in order to further assess the limestone 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 southern portion of Grey Mountain, covered by the Property. In total, 120 limestone samples were collected at thirteen separate locations (Fig. 4.2).

During the program, geological observations were recorded, including lithologic information, measurements of structural elements, and other pertinent details (Appendix 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 2014 program were shipped to a lab in Salt Lake City, Utah for preparation and analyses by standard ICP techniques, and LOI (Appendices 2 and 3). Overall, this initial exploration of the southern portion of the Canyon Mountain Property returned favourable results. The best Hancock Member interval examined in 2014 was Section 2014-03, which averaged 96.39% CaCO<sub>3</sub>, 1.96% MgCO<sub>3</sub> and 1.01% SiO<sub>2</sub> over an estimated 201.75 m. Another notable section averaged 97.17% CaCO<sub>3</sub>, 1.31% MgCO<sub>3</sub> and 0.99% SiO<sub>2</sub> over approximately 43.25 m (Section 2014-04). The poorest quality limestones, including slightly dolomitic and highly silicified limestones, were located along the southern edge of the Property (Fig. 4.2).

5.

## **DISCUSSION AND CONCLUSIONS**

Within the Canyon Mountain Property, limestones of the Norian-Carnian Casca and Hancock members of the Aksala Formation were mapped and tested by measuring and sampling stratigraphic sections. A total of 120 samples were collected, from the Hancock Member in the southern half of the Property. Samples collected from the Hancock Member varied in quality, generally averaging in excess of 95% CaCO<sub>3</sub> over up to approximately 200 m, with a few shorter sections in the south resulting in averages well below 40% CaCO<sub>3</sub>. The best section of Hancock Member (Section 2014-04) averaged over 96% CaCO<sub>3</sub> across an estimated 201.75 m. Unfortunately, limited time prevented a conclusive analysis of the quality of the Aksala members.

The next phase of exploration on the Canyon Mountain Property should consist of additional mapping and sampling, focusing on the northern half of the Property. Identifying and mapping the contact between the Hancock and Casca members should also be a priority. Southernmost claims CM 38-57 should be allowed to lapse if, during the next exploration program, higher quality limestones are not discovered.

# 6. STATEMENT OF QUALIFICATIONS

I, Henry Lole, residing at 11023 96 Street, Edmonton, Alberta, do hereby certify that:

- I am a geologist of Dahrouge Geological Consulting Ltd., Suite 18, 10509 81 Ave., Edmonton, Alberta, T6E 1X7.
- I am a 2011 graduate of Cardiff University, Cardiff, Wales, with a B.Sc. (Hons) in Exploration and Resource Geology.
- I have practiced my profession as a geologist continuously since 2011.
- I am a registered Fellow of The Geological Society, member 1019264.
- I co-managed the 2014 work described in this report.
- I am co-author of the report entitled "2014 Geological and Geochemical Exploration on the Canyon Mountain 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 4<sup>th</sup> day of May, 2015.

Henry Lole, B.Sc., FGS

FGS 1019264

I, Kelly Krueger, residing at 1820 Rutherford Road, Edmonton, Alberta, do hereby certify that:

- I am a geologist of Dahrouge Geological Consulting Ltd., Suite 18, 10509 81 Ave., Edmonton, Alberta, T6E 1X7.
- 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 Geologist in Training with the Association of Professional Engineers and Geoscientists of Alberta, member M96506.
- I co-managed the 2014 work described in this report.
- I am co-author of the report entitled "2014 Geological and Geochemical Exploration on the Canyon Mountain 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 4<sup>th</sup> day of May, 2015.

Kelly Krueger, B.Sc., Geo.I.T.

APEGA M96506

## REFERENCES

7.

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# ITEMIZED COST STATEMENT FOR THE 2014 EXPLORATION - CANYON MOUNTAIN

# a) <u>Personnel</u>

H. Lole,	geologist		
2.2	days	Office work, reporting	
2.2	days	@ \$ 570.00	\$ 1,254.00
K. Krueg	jer, geolog	jist	
4.7	days	Field work and travel Sept 10-14	
8.3	days	Project planning & preparations, reporting	
13.0	days	@ \$ 465.00	\$ 6,045.00
M. Osino	owski, geo	logist	
4.7	days	Field work and travel Sept 10-14	
0.9	days	Office work, data compilation	
5.6	days	@ \$ 465.00	\$ 2,604.00
B. Hage	n, assista	nt	
4.7	days	Field work and travel Sept 10-14	
4.7	days	@ \$ 410.00	\$ 1,927.00
J. Amun	dsen, geo	logist	
1.1	days	Data entry, reporting	
1.1	days	@ \$ 490.00	\$ 539.00

\$ 12,369.00

<ul> <li>b) Food and Accommodation</li> <li>12 man-days @ \$ 159.19 Accommodations</li> <li>14 man-days @ \$ 89.12 Meals</li> </ul>	\$ 1,910.33 <u>\$ 1,256.56</u> \$ 3,166.89
c) <u>Transportation</u> Vehicles: SUV Rental (Whitehorse) ATV Rental (Whitehorse) Mileage Fuel	\$ 846.68 \$ 2,844.57 \$ 10.47 \$ 254.68 \$ 3,956.40
d) Instrument Rental Laptop Radios Satellite Phone GPS Rental	\$ 70.57 \$ 56.45 \$ 78.28 \$ 62.78 \$ 268.08
<ul> <li>e) <u>Analyses</u></li> <li>Central Lab of Graymont Western U.S. Inc. (120 rock samples)</li> <li>120 samples @ \$ 4.50 Preparation fee</li> <li>120 samples @ \$ 25.00 Sample analysis</li> </ul>	\$ 540.00 <u>\$ 3,000.00</u> \$ 3,540.00
f) <u>Other</u> Software Rental Disposable Supplies Courier & Shipping Plots and Prints Telephone charges Overhead & Supply	\$ 106.85 \$ 326.34 \$ 22.75 \$ 56.01 \$ 4.40 \$ 444.18
Total	\$ 960.54 \$ 24,260.90

Kelly Krueger, B.Sc., Geo. I.T.

A2

Edmonton, Alberta May 4, 2015

# APPENDIX 2: ANALYTICAL LABORATORY INFORMATION AND TECHNIQUES

#### Name and Address of the Lab:

Graymont Western US Inc., Central Laboratory. 670 East 3900 South, Suite 200 Salt Lake City, Utah, 84107

### Statement of Qualifications:

Jared Leikam 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 two and a half years, under the direct supervision of Carl Paystrup (Lab Supervisor).

Vonda Stuart obtained a B.S. in Chemistry from Weber State University in 2004. Vonda started with Graymont in August of 2007 and started working in the ICP Lab the following September.

## 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 riffles and then splits the stone down to a manageable size (roughly 200 g). The stone is then dried in an oven at 120°C. Once the samples have been dried they get pulverized to a -200 mesh size. A split of this pulverized material is then sent for testing in the main part of the lab.

#### **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 the batch to ensure the accuracy of our Na and P numbers. Every element being analyzed in a sample is backed up by data from the certified reference materials. 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

					% CaCO3 %	MgCO3 %	6 Fe2O3 🖇	% Al2O3 p	pm SrO p	pm MnO	% SiO2	opm BaO pp	om K2O p	pm Na2O pp	m P2O5 pp	m TiO2	% Total	% Sulfur	% LOI(1000)
Lab ID	Sample Date	Plant L	ab Owner Sample Typ	e Remarks															
2014106635			202 Limestone	DahrougeYukon_Territory120065	79.49	3.54	1.253	1.187	1297	971	10.38	39	3018	3868	503	536	96.9	0.037	36.0
2014106636			202 Limestone	DahrougeYukon_Territory120066	79.73	3.47	1.143	1.142	1318	922	9.77	41	2834	3373	526	517	96.2	0.043	36.2
2014106637			202 Limestone	DahrougeYukon_Territory120067	12.65	7.28	4.517	8.789	302	919	35.2	134	8317	19037	570	2053	71.6	0.006	5.5
2014106638			202 Limestone	DahrougeYukon_Territory120068	12.46	7.11	4.478	7.806	294	926	35.38	129	8457	18952	598	1999	70.4	0.005	5.7
2014106639			202 Limestone	DahrougeYukon_Territory120069	12.35	6.95	4.447	8.35	284	912	34.8	123	8386	18404	574	1971	70.0	0.006	5.7
2014106640 2014106641			202 Limestone	DahrougeYukon_Territory120070	12.30 12.33	6.99 7.24	4.463 4.496	8.104 8.111	286 299	917 923	34.52 33.05	125 128	8415 8368	18368 18651	530 601	1993 1993	69.4 68.3	<.005 <.005	5.7 5.5
2014106641			202 Limestone 202 Limestone	DahrougeYukon_Territory120071 Dahrouge -Yukon Territory - 120072	12.33	6.95	4.496	6.944	299	925	33.05 31.13	128	8785	19008	588	1993	64.9	<.005	5.6
2014106644			202 Limestone	DahrougeYukon_Territory120072	12.42	6.51	4.334	7.132	306	912	36.05	132	7217	22580	609	2022	70.1	<.005	5.5
2014106645			202 Limestone	DahrougeYukon_Territory120074	13.48	6.88	4.047	5.537	305	927	33.13	127	7541	24361	601	1862	66.6	<.005	5.5
2014106646			202 Limestone	DahrougeYukon_Territory120075	12.67	7.01	4.105	6.312	300	920	34.31	128	7639	24358	578	1977	68.0	<.005	5.5
2014106650	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120078	67.57	7.30	2.003	2.245	465	528	14.64	70	3231	12033	2839	2834	96.0	0.01	29.1
2014106651	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120079	63.04	7.87	2.38	2.598	446	596	16.93	78	3777	14453	2620	3528	95.4	0.014	27.9
2014106652	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120080	62.56	7.80	2.657	2.537	449	648	16.48	80	3801	14442	2621	3562	94.6	0.013	27.5
2014106653			202 Limestone	DahrougeYukon_Territory120081	61.06	7.78	2.499	2.595	439	621	17.05	82	3878	14742	2647	3686	93.6	0.014	27.9
2014106654			202 Limestone	DahrougeYukon_Territory120082	61.68	7.66	2.463	2.477	448	614	17.59	85	4096	14621	2722	3607	94.5	0.011	28.3
2014106656			202 Limestone	DahrougeYukon_Territory120083	89.86	4.96	0.417	0.805	461	154	3.35	25	834	1919	1319	535	99.9	<.005	41.7
2014106657			202 Limestone	DahrougeYukon_Territory120084	90.20	4.77	0.402	0.784	458	151	3.25	24	811	1830	1315	501	99.9	<.005	41.6
2014106659			202 Limestone	DahrougeYukon_Territory120085	89.12	5.00	0.509	0.953	468	173	3.8	29	829	2170	1353 1350	677	100.0	<.005 0.007	41.3
2014106660 2014106661			202 Limestone 202 Limestone	DahrougeYukon_Territory120086 DahrougeYukon_Territory120087	89.76 90.08	4.90 4.85	0.447 0.394	0.87 0.747	460 459	166 152	3.48 3.34	25 25	773 780	1962 1908	1350	561 529	100.0 99.9	0.007	41.2 41.6
2014106663			202 Limestone	Dahrouge -Yukon Territory - 120087	90.63	4.60	0.394	0.747	439	152	3.12	23	700	1683	1205	468	99.9	0.007	41.8
2014106664			202 Limestone	DahrougeYukon_Territory120089	90.47	4.54	0.461	0.76	440	155	3.26	24	704	1761	1205	566	100.0	0.008	41.7
2014106666			202 Limestone	DahrougeYukon_Territory120090	91.06	4.37	0.35	0.706	438	141	3.08	23	680	1609	1189	472	100.0	0.006	41.7
2014106667			202 Limestone	Dahrouge -Yukon Territory - 120091	90.51	4.48	0.406	0.755	440	154	3.38	25	721	1858	1196	522	100.0	0.008	41.5
2014106668			202 Limestone	DahrougeYukon_Territory120092	96.68	1.59	0.133	0.3	283	88	1.06	16	383	469	547	121	100.0	0.006	42.9
2014106669	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120093	96.72	1.61	0.129	0.317	274	81	1.02	15	341	471	527	132	100.0	<.005	43.0
2014106670	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120094	96.79	1.59	0.158	0.318	279	94	1	16	331	421	478	120	100.0	<.005	43.0
2014106671	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120095	97.63	1.30	0.177	0.145	320	98	0.54	14	238	58	530	51	99.9	0.007	43.5
2014106672			202 Limestone	DahrougeYukon_Territory120096	97.75	1.30	0.098	0.152	325	75	0.55	15	267	52	533	40	100.0	0.012	43.4
2014106673			202 Limestone	DahrougeYukon_Territory120097	97.68	1.30	0.128	0.155	325	80	0.55	14	260	55	532	56	99.9	0.005	43.4
2014106674			202 Limestone	DahrougeYukon_Territory120098	97.75	1.28	0.088	0.153	323	69	0.55	15	268	52	538	50	100.0	0.008	43.5
2014106675			202 Limestone	DahrougeYukon_Territory120099	97.79	1.23	0.105	0.158	315	75	0.6	15	288	59	494	42	100.0	0.008	43.4
2014106676 2014106677			202 Limestone	DahrougeYukon_Territory120100	97.77 97.72	1.28 1.30	0.124 0.107	0.15 0.153	327 325	78 77	0.55 0.55	14	255	53 60	509 575	52 41	100.0 100.0	0.009 0.01	43.4
2014106677			202 Limestone 202 Limestone	DahrougeYukon_Territory120101 Dahrouge -Yukon Territory - 120102	97.72	1.30	0.107	0.155	325	84	0.55	14 15	265 246	54	575	53	100.0	0.01	43.5 43.5
2014106679			202 Limestone	DahrougeYukon_Territory120102	97.66	1.30	0.115	0.140	324	77	0.56	15	240	56	506	42	99.9	0.012	43.3
2014106680			202 Limestone	Dahrouge -Yukon Territory - 120104	97.70	1.26	0.099	0.154	319	69	0.57	15	286	60	471	50	99.9	0.009	43.4
2014106681			202 Limestone	DahrougeYukon_Territory120105	97.66	1.26	0.126	0.153	332	74	0.64	14	275	59	535	39	100.0	0.009	43.5
2014106682			202 Limestone	DahrougeYukon_Territory120106	97.74	1.30	0.112	0.151	324	73	0.55	17	271	58	562		100.0	0.009	43.5
2014106683	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120107	97.74	1.28	0.097	0.152	320	69	0.54	16	276	56	503	41	99.9	0.006	43.5
2014106684	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120108	97.72	1.30	0.111	0.152	328	71	0.61	14	284	65	552	49	100.0	0.009	43.5
2014106685	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120109	97.74	1.30	0.1	0.157	332	69	0.57	17	281	56	525	42	100.0	0.009	43.5
2014106686	- , - , -		202 Limestone	DahrougeYukon_Territory120110	97.79	1.26	0.108	0.157	326	68	0.55	18	274	58	519	48	100.0	0.009	43.5
2014106687			202 Limestone	DahrougeYukon_Territory120111	97.66	1.32	0.076	0.153	325	66	0.6	14	276	58	550		100.0	0.009	43.5
2014106688			202 Limestone	DahrougeYukon_Territory120112	97.81	1.26	0.088	0.154	323	68	0.56	17	290	60	534		100.0	0.011	43.4
2014106689			202 Limestone	DahrougeYukon_Territory120113	97.81	1.28	0.091	0.145	316	69	0.53	15	267	57	512	48	100.0	0.009	43.6
2014106690			202 Limestone	DahrougeYukon_Territory120114	97.81	1.28	0.127	0.149	340	76	0.55	15	277	56 60	533	45	100.0 100.0	0.01	43.7
2014106691 2014106692			202 Limestone 202 Limestone	Dahrouge_Yukon_Territory120115	97.72 97.27	1.28 1.67	0.078 0.146	0.159 0.199	320 309	65 62	0.61 0.59	15 18	279 368	76	543 447	40 73	100.0	0.008 0.012	43.5 43.5
2014106693			202 Limestone	DahrougeYukon_Territory120116 Dahrouge -Yukon Territory - 120117	97.31	1.07	0.140	0.133	309	57	0.53	10	316	70	447		100.0	0.012	43.5
2014106694			202 Limestone	DahrougeYukon_Territory120119	97.34	1.69	0.102	0.174	307	57	0.53	14	326	75	390		100.0	0.011	43.5
2014106695			202 Limestone	DahrougeYukon_Territory120119	97.27	1.72	0.102	0.169	311	62	0.53	13	306	76	393	45	99.9	0.01	43.5
2014106696			202 Limestone	DahrougeYukon_Territory120120	97.31	1.69	0.105	0.18	307	55	0.54	13	322	78	384		100.0	0.009	43.3
2014106697			202 Limestone	DahrougeYukon_Territory120121	97.27	1.69	0.104	0.179	307	57	0.61	13	320	75	422	52	100.0	0.009	43.6
2014106698	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120122	97.41	1.67	0.097	0.182	304	56	0.55	14	348	80	409	54	100.0	0.01	43.8
2014106699	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120123	97.27	1.72	0.097	0.185	313	57	0.56	16	332	82	421	55	100.0	0.009	43.7
2014106700			202 Limestone	DahrougeYukon_Territory120124	97.27	1.67	0.115	0.183	312	63	0.64	15	354	86	446	57	100.0	0.009	43.7
2014106701			202 Limestone	DahrougeYukon_Territory120125	97.36	1.69	0.099	0.181	312	57	0.56	15	335	76	413		100.0	0.009	43.7
2014106702	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120126	97.29	1.72	0.104	0.18	315	55	0.56	22	325	77	367	59	100.0	0.009	43.7

2014106703	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120127	97.29	1.69	0.133	0.175	312	60	0.54	13	316	78	397	57	100.0	0.009	43.6
2014106704	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120128	97.29	1.67	0.135	0.178	308	62	0.56	14	350	80	415	48	100.0	0.008	43.6
2014106705	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120129	97.33	1.69	0.142	0.182	315	63	0.55	16	336	78	359	53	100.0	0.009	43.6
2014106706	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120130	97.29	1.69	0.151	0.185	310	64	0.57	16	333	82	385	56	100.0	0.006	43.5
2014106707	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120131	97.27	1.67	0.102	0.18	313	57	0.65	15	362	92	423	59	100.0	0.006	43.5
2014106708	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120132	97.22	1.74	0.207	0.179	314	78	0.55	14	329	80	391	58	100.0	0.011	43.4
2014106709	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120133	97.27	1.72	0.158	0.176	314	67	0.55	13	336	79	424	58	100.0	0.009	43.4
2014106710	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120134	97.36	1.67	0.095	0.177	310	55	0.59	14	340	87	408	61	100.0	0.01	43.4
2014106711	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120135	97.50	1.57	0.095	0.165	292	54	0.5	13	267	61	413	48	100.0	0.008	43.4
2014106712	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120136	97.45	1.59	0.096	0.169	299	52	0.49	13	292	68	417	47	99.9	0.007	43.5
2014106713	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120137	97.29	1.69	0.107	0.178	315	55	0.56	14	329	94	407	67	100.0	0.006	43.4
2014106714	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120138	96.41	1.49	0.143	0.28	729	96	1.35	31	552	100	775	83	99.9	0.011	43.0
2014106715	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120139	96.43	1.51	0.141	0.289	690	94	1.42	30	624	182	826	87	100.0	0.009	43.1
2014106716	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120140	96.38	1.51	0.167	0.28	710	102	1.34	29	576	97	794	88	99.9	0.009	43.1
2014106717	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120141	96.15	1.57	0.205	0.252	820	111	1.29	21	378	67	753	70	99.7	0.012	43.1
2014106718	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120142	96.54	1.53	0.111	0.257	757	92	1.3	25	499	83	712	77	100.0	0.008	43.0
2014106719	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120143	96.54	1.51	0.129	0.259	718	96	1.33	27	527	94	749	79	100.0	0.011	43.0
2014106720	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120144	96.41	1.49	0.161	0.279	699	99	1.38	30	600	89	791	86	100.0	0.009	43.2
2014106721	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120145	96.45	1.51	0.123	0.281	729	94	1.38	32	536	88	766	83	100.0	0.008	43.1
2014106722	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120146	97.75	1.15	0.078	0.133	353	69	0.69	14	218	38	469	34	99.9	0.007	43.4
2014106723	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120147	97.81	1.13	0.078	0.134	353	68	0.71	15	229	43	482	37	100.0	0.005	43.4
2014106724	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120148	97.82	1.13	0.094	0.134	354	68	0.67	18	209	41	474	35	100.0	<.005	43.5
2014106725	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120149	97.88	1.13	0.102	0.128	352	74	0.67	15	211	50	482	37	100.0	<.005	43.5
2014106726	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120150	97.79	1.15	0.104	0.135	354	72	0.7	15	212	36	520	32	100.0	0.006	43.4
2014106727	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120151	97.79	1.13	0.121	0.13	349	75	0.67	15	209	33	479	76	100.0	0.005	42.9
2014106728	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120152	97.84	1.13	0.073	0.133	351	65	0.67	18	214	37	477	35	100.0	0.005	43.4
2014106729	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120153	97.90	1.13	0.072	0.135	350	65	0.68	15	198	33	502	34	100.0	0.006	43.3
2014106731	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120154	97.84	1.13	0.108	0.13	353	77	0.67	14	211	36	499	44	100.0	0.005	43.3
2014106732	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120155	97.93	1.13	0.077	0.128	350	66	0.66	14	200	31	440	27	100.0	<.005	43.6
2014106733	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120156	97.82	1.15	0.095	0.139	356	71	0.7	15	218	45	534	38	100.0	<.005	43.6
2014106734	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120157	97.82	1.13	0.08	0.123	344	67	0.65	14	191	39	451	30	99.9	0.006	43.5
2014106736	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120158	97.86	1.13	0.151	0.123	375	86	0.65	14	186	34	441	37	100.0	0.006	43.5
2014106737	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120159	78.03	6.63	1.475	2.112	611	402	10.2	93	1959	4841	940	1560	99.5	0.023	35.4
2014106738	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120160	75.62	6.28	1.789	1.854	619	402	11.23	90	1885	5036	1114	1820	97.9	0.033	34.3
2014106739	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120161	78.44	6.09	1.595	1.975	608	383	10.24	85	1911	4470	1099	1638	99.4	0.028	35.3
2014106740	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120162	76.34	6.46	1.689	2.099	599	398	10.52	89	1928	4661	1171	1699	98.2	0.025	35.0
2014106741	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120163	74.03	6.78	1.898	2.011	600	435	11.56	101	1953	5290	1077	1857	97.4	0.031	34.2
2014106742	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120164	75.91	6.57	1.704	1.859	594	404	10.44	93	1862	4618	1084	1660	97.5	0.022	35.1
2014106743	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120165	74.98	6.53	1.69	1.911	594	401	10.44	91	1887	4718	1106	1703	96.6	0.017	35.0
2014106744	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120166	79.21	6.80	1.655	1.806	593	410	9.72	90	1888	4241	1102		100.2	0.016	35.9
2014106745	9/25/2014	202	202 Limestone	DahrougeYukon_Territory120167	77.50	6.69	1.537	1.758	584	393	9.95	90	1891	4265	1053	1501	98.4	0.019	35.5



## APPENDIX 4: SAMPLE DESCRIPTIONS AND ASSAY RESULTS FROM THE CANYON MOUNTAIN 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. Section locations are shown in Figure 4.2. Stratigraphy Abbreviations: Th - Triassic Aksala Formation (Hancock Member)



CONCOLINA	G LI D.										
Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm
solated Sar	nples										
120065	Тс	3	<u>Argillaceous Lime Mudstone to Lime Mudstone</u> , light grey to medium grey weathered, olive grey to medium grey fresh, micritic, massive, resistant, moderate HCI reaction, structure(s): calcite vein strong	79.49	3.54	10.38	1.187	1.253	1297	971	503
120066	Тс	1	Argillaceous Lime Mudstone to Lime Mudstone, light grey weathered and fresh, cryptocrystalline to micritic, massive, resistant, hard, moderate HCI reaction, structure(s): calcite veinlet weak	79.73	3.47	9.77	1.142	1.143	1318	922	526
122976	Th	1.5	<u>Mudstone</u> , olive grey to tan weathered, olive grey fresh, micritic, alteration: calcite, localized, weak intensity, very weak HCI reaction, structure(s): calcite veinlet weak; bedding (possible), outcrop-scale, 59/25 SE	14.21	9.33	25.61	4.970	8.930	205	1188	428
122985	Th	4	Lime Mudstone, light grey to medium grey weathered, light grey fresh, micritic, massive, resistant, moderate HCI reaction, structure(s): calcite veinlet moderate	98.40	0.84	0.23	0.070	0.060	233	41	156
122986	Th	1	Lime Mudstone, medium grey weathered and fresh, micritic, alteration: oxide, contact-related, weak intensity, strong HCl reaction, structure(s): calcite vein weak; bedding (approximate) 209/74 NW	95.24	1.38	1.80	0.510	0.340	490	113	996
122987	Th	1	Lime Mudstone, tan to light grey weathered, medium grey fresh, micritic, massive, alteration: oxide, contact-related, weak intensity, moderate HCl reaction, structure(s): fracture strong; calcite veinlet moderate; calcite vein moderate	96.20	1.26	1.92	0.360	0.130	976	123	880
122988	Th	3	Lime Mudstone, light grey to tan weathered, medium grey fresh, micritic, alteration: oxide, fracture-related, weak HCI reaction, structure(s): calcite veinlet weak; calcite vein	95.04	1.69	2.68	0.330	0.170	713	109	483
ection 201	<u>4-01 (UTM</u>	508475E, 672	<u>24127N)</u>								
120067	Тс	3	<u>Calcareous Mudstone</u> , very-light grey weathered, fresh, micritic to very fine-grained, massive, resistant, moderate HCI reaction, structure(s): foliation; calcite veinlet weak	12.65	7.28	35.20	8.789	4.517	302	919	570
120068	Тс	3	<u>Calcareous Mudstone</u> , very-light grey weathered, fresh, micritic to very fine-grained, massive, resistant, no HCI reaction, structure(s): foliation; calcite veinlet weak	12.46	7.11	35.38	7.806	4.478	294	926	598
120069	Тс	2.75	<u>Calcareous Mudstone</u> , very-light grey weathered, fresh, micritic to very fine-grained, massive, resistant, hard, weak HCI reaction, structure(s): foliation; calcite veinlet weak	12.35	6.95	34.80	8.350	4.447	284	912	574
120070	Тс	0.75	Calcareous Mudstone, very-light grey weathered, fresh, micritic to very fine-grained, massive, resistant, no HCI reaction, structure(s): foliation; calcite veinlet weak	12.30	6.99	34.52	8.104	4.463	286	917	530
ection 201	4-02 (UTM	508345E, 672	24125N)								
120071	Тс	3	<u>Calcareous Mudstone</u> , very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	12.33	7.24	33.05	8.111	4.496	299	923	601
120072	Тс	3.25	<u>Calcareous Mudstone</u> , very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	12.42	6.95	31.13	6.944	4.334	294	925	588

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm)
120073	Тс	3	Calcareous Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	12.94	6.51	36.05	7.132	4.111	306	912	609
120074	Тс	3	Calcareous Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	13.48	6.88	33.13	5.537	4.047	305	927	601
120075	Тс	3.5	Calcareous Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	12.67	7.01	34.31	6.312	4.105	300	920	578
120078	Тс	2.25	Argillaceous Lime Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	67.57	7.30	14.64	2.245	2.003	465	528	2839
120079	Тс	2.75	Argillaceous Lime Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	63.04	7.87	16.93	2.598	2.380	446	596	2620
120080	Тс	2.75	Argillaceous Lime Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	62.56	7.80	16.48	2.537	2.657	449	648	2621
120081	Тс	1.75	Argillaceous Lime Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	61.06	7.78	17.05	2.595	2.499	439	621	2647
120082	Тс	1.75	Argillaceous Lime Mudstone, very-light grey to light grey weathered, medium grey fresh, micritic, massive, resistant, strong HCI reaction, structure(s): calcite veinlet weak	61.68	7.66	17.59	2.477	2.463	448	614	2722
Section 201	4-03 (UTM	I 505037E, 672	<u>7844N)</u>								
120083	Th	3	<u><b>Dolomitic Lime Mudstone</b></u> , very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	89.86	4.96	3.35	0.805	0.417	461	154	1319 2
120084	Th	3	<u>Dolomitic Lime Mudstone</u> , very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	90.20	4.77	3.25	0.784	0.402	458	151	1315
120085	Th	2.75	<b>Dolomitic Lime Mudstone,</b> very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	89.12	5.00	3.80	0.953	0.509	468	173	1353
120086	Th	2.75	<b>Dolomitic Lime Mudstone,</b> very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	89.76	4.90	3.48	0.870	0.447	460	166	1350
120087	Th	2.25	<b>Dolomitic Lime Mudstone</b> , very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	90.08	4.85	3.34	0.747	0.394	459	152	1306
120088	Th	4	<b>Dolomitic Lime Mudstone</b> , very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	90.63	4.60	3.12	0.707	0.400	446	156	1205
120089	Th	3.75	<b>Dolomitic Lime Mudstone</b> , very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 300/73 NE	90.47	4.54	3.26	0.760	0.461	444	155	1227
120090	Th	3.5	<b>Dolomitic Lime Mudstone</b> , very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	91.06	4.37	3.08	0.706	0.350	438	141	1189

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm)	
120091	Th	4	<u>Dolomitic Lime Mudstone</u> , very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	90.51	4.48	3.38	0.755	0.406	440	154	1196	
120092	Th	3.5	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	96.68	1.59	1.06	0.300	0.133	283	88	547	
120093	Th	3.25	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	96.72	1.61	1.02	0.317	0.129	274	81	527	
120094	Th	2.5	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	96.79	1.59	1.00	0.318	0.158	279	94	478	
120095	Th	2.25	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.63	1.30	0.54	0.145	0.177	320	98	530	
120096	Th	2.5	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.75	1.30	0.55	0.152	0.098	325	75	533	
120097	Th	3.25	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.68	1.30	0.55	0.155	0.128	325	80	532	
120098	Th	2.75	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.75	1.28	0.55	0.153	0.088	323	69	538 A9	
120099	Th	2	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.79	1.23	0.60	0.158	0.105	315	75	494	
120100	Th	3.5	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.77	1.28	0.55	0.150	0.124	327	78	509	
120101	Th	3	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.72	1.30	0.55	0.153	0.107	325	77	575	
120102	Th	6	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.77	1.30	0.50	0.146	0.119	308	84	510	
120103	Th	5	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.66	1.30	0.56	0.154	0.126	324	77	506	
120104	Th	4.5	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.70	1.26	0.57	0.154	0.099	319	69	471	
120105	Th	5.5	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.66	1.26	0.64	0.153	0.126	332	74	535	

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm)
120106	Th	5.25	Lime Mudstone, very-light grey weathered, very-light grey to light grey fresh, micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet weak; bedding (approximate) 310/87 NE	97.74	1.30	0.55	0.151	0.112	324	73	562
120107	Th	4	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.74	1.28	0.54	0.152	0.097	320	69	503
120108	Th	4.5	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.72	1.30	0.61	0.152	0.111	328	71	552
120109	Th	2.25	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak; bedding (approximate) 120/80 SW	97.74	1.30	0.57	0.157	0.100	332	69	525
120110	Th	2.5	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.79	1.26	0.55	0.157	0.108	326	68	519
120111	Th	3.5	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCl reaction, structure(s): calcite vein weak	97.66	1.32	0.60	0.153	0.076	325	66	550
120112	Th	3.25	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, alteration: oxide, moderate intensity, strong HCI reaction, structure(s): calcite vein weak	97.81	1.26	0.56	0.154	0.088	323	68	534
120113	Th	3.75	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCl reaction, structure(s): calcite vein weak	97.81	1.28	0.53	0.145	0.091	316	69	512
120114	Th	3.75	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCl reaction, structure(s): calcite vein weak	97.81	1.28	0.55	0.149	0.127	340	76	533
120115	Th	3	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.72	1.28	0.61	0.159	0.078	320	65	543
120116	Th	4.75	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.27	1.67	0.59	0.199	0.146	309	62	447
120117	Th	6	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.31	1.72	0.53	0.174	0.117	314	57	403
120118	Th	4.5	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.34	1.69	0.53	0.172	0.102	307	57	390
120119	Th	4.5	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.27	1.72	0.53	0.169	0.126	311	62	393
120120	Th	3.25	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.31	1.69	0.54	0.180	0.105	307	55	384

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm)	
120121	Th	4	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.27	1.69	0.61	0.179	0.104	307	57	422	
120122	Th	4.75	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.41	1.67	0.55	0.182	0.097	304	56	409	
120123	Th	3	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.27	1.72	0.56	0.185	0.097	313	57	421	
120124	Th	3	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.27	1.67	0.64	0.183	0.115	312	63	446	
120125	Th	3	Lime Mudstone, very-light grey weathered and fresh, cryptocrystalline to micritic, moderately-bedded to massively-bedded, resistant, strong HCI reaction, structure(s): calcite vein weak	97.36	1.69	0.56	0.181	0.099	312	57	413	
120126	Th	1	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCl reaction, structure(s): calcite veinlet very weak	97.29	1.72	0.56	0.180	0.104	315	55	367	
120127	Th	5.5	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCl reaction, structure(s): calcite veinlet very weak	97.29	1.69	0.54	0.175	0.133	312	60	397	
120128	Th	3.25	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCl reaction, structure(s): calcite veinlet very weak	97.29	1.67	0.56	0.178	0.135	308	62	415	A11
120129	Th	6	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCl reaction, structure(s): calcite veinlet very weak	97.33	1.69	0.55	0.182	0.142	315	63	359	
120130	Th	2	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCl reaction, structure(s): calcite veinlet very weak	97.29	1.69	0.57	0.185	0.151	310	64	385	
120131	Th	5.75	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCI reaction, structure(s): calcite veinlet very weak	97.27	1.67	0.65	0.180	0.102	313	57	423	
120132	Th	5	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCI reaction, structure(s): calcite veinlet very weak	97.22	1.74	0.55	0.179	0.207	314	78	391	
120133	Th	3.25	Lime Mudstone, light grey weathered, medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, very strong HCI reaction, structure(s): calcite veinlet very weak	97.27	1.72	0.55	0.176	0.158	314	67	424	
120134	Th	3	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCl reaction, structure(s): calcite veinlet very weak	97.36	1.67	0.59	0.177	0.095	310	55	408	
120135	Th	2.25	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCI reaction, structure(s): calcite veinlet very weak	97.50	1.57	0.50	0.165	0.095	292	54	413	

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm)
120136	Th	1.5	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, very strong HCI reaction, structure(s): calcite veinlet moderate	97.45	1.59	0.49	0.169	0.096	299	52	417
120137	Th	1	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCI reaction, structure(s): calcite veinlet very weak	97.29	1.69	0.56	0.178	0.107	315	55	407
120138	Th	3.5	Lime Mudstone, light grey weathered, medium grey to dark grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCl reaction, structure(s): calcite veinlet very weak; bedding (approximate) 305/88 NE	96.41	1.49	1.35	0.280	0.143	729	96	775
120139	Th	3.75	Lime Mudstone, light grey weathered, light grey to medium grey fresh, cryptocrystalline to micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, very weak intensity, strong HCI reaction, structure(s): calcite veinlet very weak	96.43	1.51	1.42	0.289	0.141	690	94	826
Section 201	4-04 (UTM	504851E, 672	7865N)								
120140	Th	3	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	96.38	1.51	1.34	0.280	0.167	710	102	794
120141	Th	2.5	Lime Mudstone, light grey weathered, very-dark grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	96.15	1.57	1.29	0.252	0.205	820	111	753
120142	Th	1.75	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCl reaction, structure(s): calcite vein moderate	96.54	1.53	1.30	0.257	0.111	757	92	712
120143	Th	4.75	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCl reaction, structure(s): calcite vein moderate	96.54	1.51	1.33	0.259	0.129	718	96	749
120144	Th	3.5	<u>Lime Mudstone</u> , light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCl reaction, structure(s): calcite vein moderate	96.41	1.49	1.38	0.279	0.161	699	99	791
120145	Th	4.5	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	96.45	1.51	1.38	0.281	0.123	729	94	766
120146	Th	3.75	<u>Lime Mudstone</u> , light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	97.75	1.15	0.69	0.133	0.078	353	69	469
120147	Th	4.25	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	97.81	1.13	0.71	0.134	0.078	353	68	482
120148	Th	3.75	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCl reaction, structure(s): calcite vein moderate	97.82	1.13	0.67	0.134	0.094	354	68	474
120149	Th	3.5	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	97.88	1.13	0.67	0.128	0.102	352	74	482

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm)
120150	Th	3.5	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	97.79	1.15	0.70	0.135	0.104	354	72	520
120151	Th	4.5	Lime Mudstone, light grey weathered, medium grey fresh, micritic, thickly-bedded to moderately-bedded, resistant, alteration: oxide, weak intensity, very strong HCI reaction, structure(s): calcite vein moderate	97.79	1.13	0.67	0.130	0.121	349	75	479
Section 201	4-05 (UTM	508085E, 672	<u>5908N)</u>								
120152	Th	2	Lime Mudstone, medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	97.84	1.13	0.67	0.133	0.073	351	65	477
120153	Th	2.5	Lime Mudstone, medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	97.90	1.13	0.68	0.135	0.072	350	65	502
120154	Th	3.5	Lime Mudstone, medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCI reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	97.84	1.13	0.67	0.130	0.108	353	77	499
120155	Th	3.5	<u>Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	97.93	1.13	0.66	0.128	0.077	350	66	440
120156	Th	2.75	<u>Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 310/72 NE	97.82	1.15	0.70	0.139	0.095	356	71	534
120157	Th	3.25	<u>Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, very strong HCI reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	97.82	1.13	0.65	0.123	0.080	344	67	451
120158	Th	3.25	<u>Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	97.86	1.13	0.65	0.123	0.151	375	86	441
120159	Тс	3.5	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, very strong HCI reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	78.03	6.63	10.20	2.112	1.475	611	402	940
120160	Тс	2	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	75.62	6.28	11.23	1.854	1.789	619	402	1114
120161	Тс	2.5	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	78.44	6.09	10.24	1.975	1.595	608	383	1099
120162	Тс	2	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, very strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	76.34	6.46	10.52	2.099	1.689	599	398	1171
120163	Тс	3.25	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	74.03	6.78	11.56	2.011	1.898	600	435	1077

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)	SrO (ppm)	MnO (ppm)	P₂O₅ (ppm)	
120164	Тс	3.75	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	75.91	6.57	10.44	1.859	1.704	594	404	1084	
120165	Тс	3	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	74.98	6.53	10.44	1.911	1.690	594	401	1106	
120166	Тс	3.75	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	79.21	6.80	9.72	1.806	1.655	593	410	1102	
120167	Тс	5	<u>Argillaceous Lime Mudstone</u> , medium grey weathered, medium grey to light grey fresh, micritic to cryptocrystalline, thinly-bedded to moderately-bedded, resistant, strong HCl reaction, structure(s): calcite veinlet moderate; bedding (approximate) 309/60 NE	77.50	6.69	9.95	1.758	1.537	584	393	1053	
Section 201	<u>4-06 (UTM</u>	504976E, 672	<u>9454N)</u>									
122977	Th	2.5	Lime Mudstone, white to light grey weathered, light grey to medium grey fresh, micritic, massive, resistant, sucrosic, strong HCI reaction, structure(s): calcite veinlet moderate; calcite vein moderate	97.74	1.05	0.63	0.180	0.170	627	259	498	
122978	Th	3.25	Lime Mudstone, light grey to medium grey weathered and fresh, micritic, massive, resistant, moderate HCI reaction, structure(s): fracture weak; calcite veinlet moderate; calcite vein moderate	97.54	1.07	0.51	0.140	0.140	549	163	570	
122979	Th	2.75	Lime Mudstone, light grey to medium grey weathered and fresh, micritic, massive, resistant, moderate HCI reaction, structure(s): fracture weak; calcite veinlet moderate; calcite vein moderate	97.40	0.96	0.94	0.140	0.120	554	167	529	_
122980	Th	3.25	Lime Mudstone, white to light grey weathered, light grey to medium grey fresh, micritic, massive, resistant, sucrosic, strong HCl reaction, structure(s): calcite veinlet moderate; calcite vein moderate	98.25	0.88	0.33	0.080	0.110	469	120	390	A14
122981	Th	3.5	Lime Mudstone, white to light grey weathered, light grey to medium grey fresh, micritic, massive, resistant, sucrosic, moderate HCl reaction, structure(s): calcite veinlet moderate; calcite vein moderate	97.95	0.90	0.76	0.080	0.170	479	225	659	
122982	Th	3.5	Lime Mudstone, white to light grey weathered, light grey to medium grey fresh, micritic, massive, resistant, sucrosic, moderate HCl reaction, structure(s): calcite veinlet moderate; calcite vein moderate	98.16	1.05	0.60	0.130	0.070	430	84	633	
122983	Th	4.5	<u>Lime Mudstone</u> , white to light grey weathered, light grey to medium grey fresh, micritic, massive, slightly resistant, sucrosic, alteration: oxide, fracture-related, very weak intensity, strong HCl reaction, structure(s): calcite veinlet moderate; calcite vein moderate	98.02	0.96	0.48	0.120	0.070	454	92	759	
122984	Th	5	Lime Mudstone, light grey weathered, light grey to medium grey fresh, micritic, massive, recessive, strong HCl reaction, structure(s): calcite veinlet weak; calcite vein weak	98.46	0.66	0.30	0.070	0.070	338	150	308	
Section 201	<u>4-07 (UTM</u>	506390E, 672	<u>7700N)</u>									
122989	Th	4.25	Lime Mudstone, medium grey weathered, light grey fresh, micritic, massive, recessive, fissile, moderate HCI reaction, structure(s): calcite veinlet weak; calcite vein weak	92.95	2.99	3.06	0.430	0.210	552	115	733	
122990	Th	4.25	<b>Dolomitic Lime Mudstone</b> , medium grey weathered, light grey fresh, micritic, massive, recessive, fissile, moderate HCI reaction	91.04	4.04	3.35	0.600	0.220	514	103	1633	
122991	Th	3.5	Lime Mudstone, medium grey weathered, light grey fresh, micritic, massive, recessive, fissile, cherty, moderate HCI reaction	93.52	1.61	3.85	0.430	0.220	471	91	914	

Sample	Strat Unit	Strat Tkns (m)	Description	CaCO₃ (%)	MgCO₃ (%)	SiO₂ (%)	Al₂O₃ (%)	Fe₂O₃ (%)		MnO (ppm)	P₂O₅ (ppm)
122992	Th	3.75	Lime Mudstone, medium grey weathered, light grey fresh, micritic, massive, recessive, fissile, cherty, moderate HCI reaction	89.31	2.55	5.21	1.450	0.800	511	147	748
122993	Th	3.5	Lime Mudstone, medium grey weathered, light grey fresh, micritic, massive, recessive, fissile, cherty, moderate HCI reaction	78.16	1.51	18.73	0.480	0.380	539	328	1685
122994	Th	2.75	Lime Mudstone, medium grey weathered, light grey fresh, micritic, massive, recessive, fissile, cherty, moderate HCI reaction, structure(s): bedding (possible) 318/71 NE	90.13	2.85	5.16	0.740	0.320	626	114	1220









