2015 GEOLOGICAL AND GEOCHEMICAL EXPLORATION ON THE SHADOW LAKE PROPERTY

WHITEHORSE MINING DISTRICT, YUKON

Grant Numbers: WL 1-45 (YF46097-YF46141)

Geographic Coordinates
60°33’ N to 60°35’ N
134°46’ W to 134°49' W

NTS Sheet 105D10

Owner:	H. Lole (Client ID 4001170) 18, 10509 - 81 Avenue Edmonton, Alberta T6E 1X7
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Consultant:	Dahrouge Geological Consulting Ltd. 18, 10509 - 81 Avenue Edmonton, Alberta T6E 1X7
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Field Work:	September 11, 2015
Date Submitted:	April 4, 2016

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1. INTRODUCTION

The Shadow Lake quartz claims were staked by Henry Lole in late June 2014; Dahrouge Geological Consulting (Dahrouge) completed a surface sampling program on September 11th, 2015. Exploration consisted of collecting nine limestone samples, representing approximately 21.75 m of stratigraphy. A traverse totalling 0.91 km was completed on the Property in order to map geologic units and identify outcrops. The majority of the 2015 work focused on identifying access routes, mapping geological contacts and identifying high-calcium limestone outcrops on the Shadow Lake Property. This report describes the 2015 exploration and provides an interpretation of the results. Appendix 1 is an itemized cost breakdown of the 2015 work completed on the Shadow Lake Property. The operator for the 2015 exploration was Graymont Western Canada Inc.

The Shadow Lake Property is comprised of 45 contiguous quartz claims; the Property has been grouped as per Grouping Certificate HW07571.

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

1.1 GEOGRAPHIC SETTING

1.1.1 Location and Access

The Shadow Lake Property can be accessed by travelling approximately 18 km southeast of Whitehorse, Yukon along the Alaska Highway (Hwy 1), then spurring off south onto the Klondike Highway (Hwy 2) for approximately 2 km (Fig.'s 3.1 and 3.2). A network of well-maintained ATV trails bisect the northern portion of the Property, and can be used to further access the claims. Extensive hiking is also required, as much of the southern half of the Property has no pre-existing ATV trails.

1.1.2 Topography, Vegetation, Wildlife and Climate

Topography in the Shadow Lake Property area is characterized by northwest trending broad U-shaped glacial valleys and ridges of significant relief. Elevations on the Property range from

730 m in the north, nearest the Alaska Highway, up to approximately 1,300 m on the highest peak in the SE corner of the Property (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 industry clear-cutting and logging in the area. There is, however, a public municipal firewood area overlapping the northern portion of the Property.

The abundance of wetlands and small ponds in the Shadow Lake area make it an ideal habitat for variety of ungulates, birds and small mammals. The Yukon Government has identified a woodland caribou winter range in the Shadow 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 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 Shadow Lake claims are being held in trust for Graymont Western Canada Inc. by Henry Lole of Dahrouge, based out of Edmonton, AB. The claims were staked from June 22nd to 24th, 2014 by a four person crew based out of Whitehorse, YT. The Shadow Lake Property consists of 45 quartz claims (WL 1-45) with a combined area of 940.5 ha.

TABLE 1 .1 LIST OF SHADOW LAKE CLAIMS

Grant Number	Claim Name	Original Size (ha)	Record Date	New Good To Date	Required Spending
YF46097	WL 1	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46098	WL 2	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46099	WL 3	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46100	WL 4	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46101	WL 5	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46102	WL 6	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46103	WL 7	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46104	WL 8	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46105	WL 9	20.9	14-Jul-14	14-Jan-2021	$100.00

YF46106	WL 10	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46107	WL 11	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46108	WL 12	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46109	WL 13	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46110	WL 14	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46111	WL 15	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46112	WL 16	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46113	WL 17	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46114	WL 18	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46115	WL 19	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46116	WL 20	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46117	WL 21	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46118	WL 22	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46119	WL 23	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46120	WL 24	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46121	WL 25	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46122	WL 26	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46123	WL 27	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46124	WL 28	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46125	WL 29	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46126	WL 30	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46127	WL 31	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46128	WL 32	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46129	WL 33	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46130	WL 34	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46131	WL 35	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46132	WL 36	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46133	WL 37	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46134	WL 38	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46135	WL 39	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46136	WL 40	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46137	WL 41	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46138	WL 42	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46139	WL 43	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46140	WL 44	20.9	14-Jul-14	14-Jan-2021	$100.00
YF46141	WL 45	20.9	14-Jul-14	14-Jan-2021	$100.00
	Total Area:	940.5		**Representation Work Cost:**	$4,500.00
				Certification Cost:	$225.00
				Total:	**$4725.00**

1.3 HISTORY AND PREVIOUS INVESTIGATIONS

The Shadow Lake claims were staked in 2014 by a team from Dahrouge; a exploration program was then completed in September 2014 to investigate carbonate quality on the Property. Historic exploration surrounding the Shadow Lake Property has dominantly been focused on copper mineralization of the Whitehorse Copper Belt, a 30 km northwest trending zone of skarn deposits, which is located west of the Property. To the knowledge of the authors, there has been no previous exploration for high-calcium limestone in the Shadow Lake Property area.

The YT Property is located approximately 4 km northwest along Alaska Highway of the Shadow Lake Property and has been historically explored for copper minerals such as bornite and chalcopyrite. The YT claims were first staked in 1967 by Lewes River Mines Ltd., then optioned to Arcturus Ventures Inc. in 2006, who currently holds them. Exploration completed between 1967 and 1970 by Lewes River Mines Ltd. consisted of an induced polarization survey, geochemical sampling and line cutting. In 2006, 2007, and 2008 Arcturus Ventures Inc. completed magnetic surveys in order to confirm the Triassic Aksala Formation limestone - Coast Intrusive contact.

The JIM (85337-8, 85355-8), SUE (75653-6) and ACE (85476) claims held by Lobo del Norte Ltd. are located at the southeast end of the Whitehorse Copper Belt, and is approximately 4.5 km west of the Shadow Lake Property. Historic exploration on the JIM claims in 1998 included trenching, outcrop, float and soil sampling.

The Dorian Miner claims were first staked in 2013 by Karl Ziehe, Carl Schulze, Robert Sterling, and Kluane Drilling Ltd. They are located approximately 1 km south of the southeast corner of the Shadow Lake Property. Results from the 2013 geological mapping, rock and silt sampling program are still confidential, but highlights of the exploration are available on their website. Nickel, gold, and copper mineralization has been noted in skarn deposits throughout the Dorian Miner claims. Abundant felsic and mafic dykes cut through the Lewes River Group limestones on the claims.

1.4 PURPOSE OF WORK

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

1.5 SUMMARY OF WORK

In September 2015, Dahrouge conducted a 1-day geologic mapping and sampling program on the Shadow Lake Property.

A total of nine limestone samples were obtained within the Shadow Lake Property, representing approximately 21.75 m of stratigraphy (Fig. 4.2). A 0.91 km traverse was completed on the Property in order to map geologic units and identify outcrops. 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, YT, 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 Shadow Lake Property is located within the Whitehorse Trough, part of the Stikine Terrane. The Whitehorse Trough is a 500 km long, northwest-trending intermontane basin located in south-central Yukon, which originated as a fore-arc 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 200 km north of the Shadow Lake 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 (Table 2.1). 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 Shadow Lake 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 (Table 2.1). 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).

TABLE 2.1 STRATIGRAPHY OF THE SHADOW LAKE PROPERTY AREA*

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

*Adapted from Clapham et al., 2002.

3. PROPERTY GEOLOGY

3.1 STRATIGRAPHY & LITHOLOGY

As only initial prospecting work has been performed on the Shadow Lake 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 Shadow Lake Property are from the Hancock and Casca members of the Carnian-Norian Aksala Formation (Fig. 4.2). The massive, resistant limestone exposures in the Whitehorse area are likely part of the Hancock Member. The following is a brief summary of the units underlying the Shadow Lake Property.

3.1.1 Laberge Group – Richtofen Formation

Exposures of the Richtofen Formation of the Laberge Group have not been confirmed on the Shadow Lake Property during previous exploration programs completed by Dahrouge. However, mapping completed by the Yukon Geological Survey suggests the unit outcrops in the eastern-most claims of the Property. Typical lithology for the formation consists of massive sandstones and conglomerates.

3.1.2 Aksala Formation – Casca Member

Exposures of the Casca Member were mapped and sampled during previous exploration programs within the Shadow Lake Property. The member outcrops consist of light-grey weathered, medium-grey to dark-grey fresh, micritic to fine-grained lime mudstones and argillaceous lime mudstones. Outcrops are typically massive and somewhat resistant with minor calcite veining. Significant silica contamination ranging from 2.95 to 38.19% has previously been observed in the Casca Member of the Aksala Formation.

3.1.3 Aksala Formation – Hancock Member

The cliff-forming Hancock Member of the Aksala Formation has been mapped within the western and northern claims of the Shadow Lake Property. The member outcrops consist 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. The Hancock Member is the high-calcium limestone unit targeted by Dahrouge in exploration projects.

3.2 STRUCTURE

Given the early stage of exploration on the Property, the structure is currently largely unknown. Several structural measurements were taken in the 2015 exploration program,

specifically within the western portion of the Property (Appendix 4). Outcrops were observed to strike north, with dips ranging from 30 to 40° eastward.

4. RESULTS OF 2015 EXPLORATION

The 2015 exploration program was conducted in order to further assess the quality of the Aksala Formation limestones and provide more constraint on geologic contacts with other units in the area.

The groundwork involved mapping and sampling at several locations along the northwest portion of the Shadow Lake Property. A total of nine limestone outcrops of the Hancock Member were examined and sampled at four locations (Fig. 4.2).

During the programs, 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.

Samples were shipped to Graymont's Central Lab in Salt Lake City, Utah for preparation and analyses by standard ICP techniques, and LOI (Appendices 2 and 3).

The highest-quality Hancock Member sample section (Section 2015-01) averaged 97.54% $CaCO_3$, 1.02% $MgCO_3$ and 0.64% SiO_2 over an estimated 9.5 m. Another notable Hancock sample section (Section 2015-02) averaged 97.86% $CaCO_3$, 0.89% $MgCO_3$ and 0.45% SiO_2 over approximately 5.25 m.

Limestone samples from the 2015 exploration program were generally consistent in their quality, averaging from 94.59 to 98.52% $CaCO_3$. The lease favourable sample (127026) contained minor siliceous content, but still averaged 94.59% $CaCO_3$ over an estimated 4 m (Fig. 4.2).

5. DISCUSSION AND CONCLUSIONS

Within the Shadow Lake Property, limestones of the Norian-Carnian Hancock member of the Aksala Formation were mapped and tested by measuring and sampling stratigraphic sections. A total of nine samples were collected in the northwest portion of the Property. Samples collected from the Hancock Member were fairly consistent in quality, generally averaging in excess of

97% $CaCO_3$. The best section of Hancock Member limestone (Section 2015-01) averaged 97.54% $CaCO_3$ across an estimated 9.5 m. Limited time and challenging access routes prevented a conclusive determination of the quality of the Aksala Formation members.

The next phase of exploration on the Shadow Lake Property should consist of additional mapping and sampling, focusing on the southern and eastern portions of the Property. Confirming the contact with the Richtofen Formation in the east portion of the Property would also be beneficial. Identifying and mapping contacts between the Hancock and Casca members of the Aksala Formation throughout the Property should also be a priority. Southwest claims WL 1-6 should be allowed to lapse if higher quality limestones are not discovered in the future.

6. STATEMENT OF QUALIFICATIONS

I, Kelly Krueger, residing at 1820 Rutherford Rd., 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 managed the 2015 work described in this report.
- I am co-author of the report entitled "2015 Geological and Geochemical Exploration on the Shadow 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 4th day of April, 2016.

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

APEGA M96506

I, Henry Lole, residing at 11140 36a Ave, 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 2015 work described in this report.
- I am co-author of the report entitled "2015 Geological and Geochemical Exploration on the Shadow 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 4th day of April, 2016.

Henry Lole, B.Sc., FGS

FGS 1019264

7. REFERENCES

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ITEMIZED COST STATEMENT FOR THE 2015 EXPLORATION - SHADOW LAKE

a) Personnel

J. Dahrouge, geologist					
0.01	days		Project management		
0.01	days	@	$ 990.00	$	9.90
P. Kluczny, geologist					
0.02	days		Project management		
0.02	days	@	$ 795.00	$	15.90
H. Lole, geologist					
0.50	days		Field work and travel Sept 11		
0.03	days		Office work, reporting		
0.53	days	@	$ 580.00	$	307.40
K. Krueger, geologist					
0.50	days		Field work and travel Sept 11		
0.10	days		Project planning & preparations, reporting		
0.60	days	@	$ 520.00	$	312.00
D. Hayes, geologist					
2.32	days		Office work, data entry, reporting		
2.32	days	@	$ 475.00	$	1,102.00
A. Molella, receptionist					
0.15	hours		Data entry, research, reporting		
0.15	hours	@	$ 42.00	$	6.30

$ 1,727.70

b) Food and Accommodation

1	man-days	@	$	126.50	Accommodations	$ 126.50	
1	man-days	@	$	60.45	Meals	$ 55.62	
							$ 182.12

c) Transportation

Vehicles:	SUV Rental (Whitehorse)	$ -	
	ATV Rental (Whitehorse)	$ -	
	Parking	$ 6.33	
	Fuel	$ 8.45	
			$ 14.77

d) Instrument Rental

GPS Rental (2)	$ 2.81	
SPOT Locator (1)	$ 1.41	
Satellite Phone (1)	$ 5.07	
		$ 9.29

e) Analyses Central Lab of Graymont Western U.S. Inc.
(9 rock samples)

9	samples	@	$	4.50	Preparation fee	$ 40.50	
9	samples	@	$	25.00	Sample analysis	$ 225.00	
							$ 265.50

f) Other

Software Rental	$ 79.25	
Disposable Supplies	$ 14.73	
Overhead & Supply	$ 50.81	
		$ 144.79

Total $ 2,344.17

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

Edmonton, Alberta
March 24, 2016

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 120ºC. 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^{th} 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.

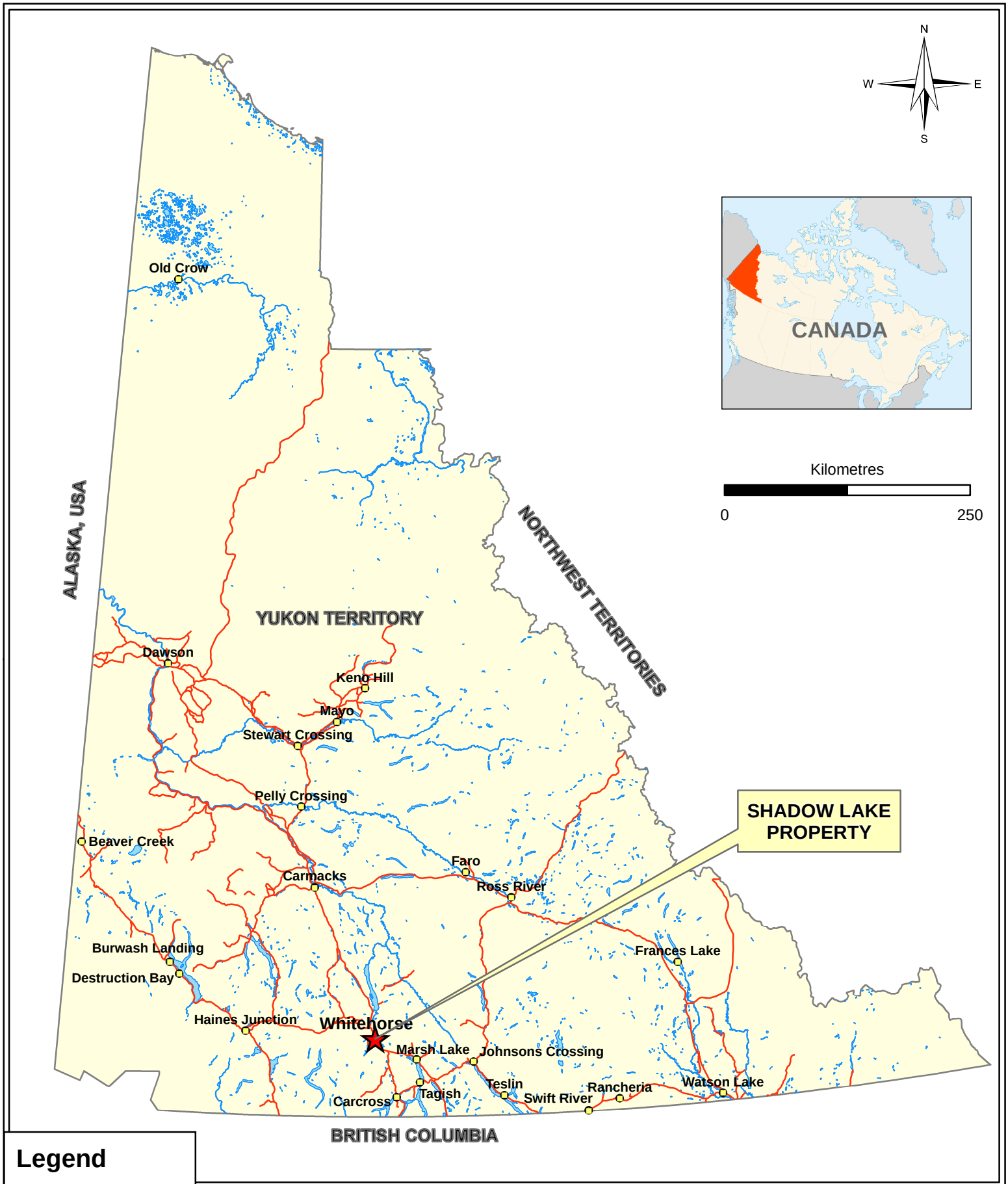
APPENDIX 3: ASSAY RESULTS – CENTRAL ANALYTICAL LABORATORY OF GRAYMONT WESTERN U.S. INC

LabID	Location	Tag #	% $CaCO_3$	% CaO	% $MgCO_3$	% MgO	% Fe_2O_3	% Al_2O_3	ppm SrO	ppm MnO	% SiO_2	ppm BaO	ppm K_2O	ppm Na_2O	ppm P_2O_5	ppm TiO_2	% ICP Total	% LOI	% Sulfur
2015122036	Shadow Lake	127026	94.6	53.0	1.17	0.56	0.14	0.34	734	177	4.28	22	302	1066	337	90	100.5	41.19	0.000
2015122037	Shadow Lake	127027	97.4	54.6	0.98	0.47	0.28	0.18	290	50	0.58	19	383	239	460	171	99.5	43.69	0.000
2015122038	Shadow Lake	127028	98.5	55.2	1.07	0.51	0.08	0.10	286	69	0.20	7	113	204	316	42	100.0	43.75	0.000
2015122039	Shadow Lake	127029	97.3	54.5	1.05	0.50	0.13	0.29	225	71	0.73	14	563	258	347	84	99.5	43.59	0.000
2015122040	Shadow Lake	127030	97.8	54.8	0.96	0.46	0.10	0.18	344	57	0.67	13	371	217	309	283	99.7	43.56	0.000
2015122041	Shadow Lake	127031	97.4	54.6	0.96	0.46	0.07	0.16	308	46	0.98	13	327	281	285	21	99.6	43.63	0.000
2015122042	Shadow Lake	127032	97.4	54.6	1.02	0.49	0.26	0.17	353	49	0.46	17	214	204	310	117	99.4	43.85	0.000
2015122043	Shadow Lake	127033	98.0	54.9	0.88	0.42	0.12	0.20	259	60	0.40	16	404	228	287	50	99.6	43.74	0.000
2015122044	Shadow Lake	127034	97.6	54.7	0.92	0.44	0.09	0.18	288	43	0.54	15	351	221	558	30	99.4	43.86	0.000

APPENDIX 4: 2015 SAMPLE DESCRIPTIONS AND ASSAY RESULTS FROM THE SHADOW LAKE PROPERTY

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

Sample	Strat Unit	Strat Tkns (m)	Description	$CaCO_3$ (%)	$MgCO_3$ (%)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	SrO (ppm)	MnO (ppm)	P_2O_5 (ppm)
Isolated Samples											
127026 UTM 510959E, 6716336N	Th	3	**Lime Mudstone to Argillaceous Lime Mudstone,** medium grey to light grey weathered, medium grey to dark grey fresh, micritic, thinly-bedded, resistant, alteration: oxide, contact-related, strong HCl reaction, structure(s): calcite veinlet, outcrop-scale, weak; bedding (definite), outcrop-scale, 329/42 E	94.59	1.17	4.28	0.340	0.140	734	177	337
127027 UTM 510895E, 6716305N	Th	4	**Lime Mudstone,** very-light grey to white weathered, medium grey to white fresh, micritic, thinly-bedded to thickly-bedded, resistant, blocky, fissile, strong HCl reaction, structure(s): joint, outcrop-scale, 192/88 W; bedding (undulatory), outcrop-scale, 14/38 E	97.45	0.98	0.58	0.180	0.280	290	50	460
Section 2015-01 (UTM 510793E, 6716230N)											
127028	Th	1	**Lime Mudstone,** very-light grey to tan weathered, light grey to medium grey fresh, micritic, moderately-bedded, resistant, alteration: oxide, pervasive, strong intensity, strong HCl reaction, structure(s): fracture, outcrop-scale, moderate; calcite veinlet, outcrop-scale, moderate; bedding (definite), outcrop-scale, 340/30 E	98.52	1.07	0.20	0.100	0.080	286	69	316
127029	Th	3.25	**Lime Mudstone,** very-light grey to tan weathered, light grey to medium grey fresh, micritic, moderately-bedded, resistant, alteration: oxide, pervasive, strong intensity, strong HCl reaction, structure(s): fracture, outcrop-scale, moderate; calcite vein, outcrop-scale, strong	97.27	1.05	0.73	0.290	0.130	225	71	347
127030	Th	1	**Lime Mudstone,** very-light grey to light grey weathered, white to light grey fresh, cryptocrystalline to micritic, thickly-bedded, resistant, alteration: oxide, fracture-related, moderate intensity, strong HCl reaction, structure(s): fracture, outcrop-scale, moderate; calcite vein, outcrop-scale, strong	97.81	0.96	0.67	0.180	0.100	344	57	309
127031	Th	1.75	**Lime Mudstone,** very-light grey to light grey weathered, white to light grey fresh, cryptocrystalline to micritic, thickly-bedded, resistant, alteration: oxide, fracture-related, moderate intensity, strong HCl reaction, structure(s): fracture, outcrop-scale, moderate; calcite vein, outcrop-scale, strong; bedding (definite), outcrop-scale, 8/40 E	97.45	0.96	0.98	0.160	0.070	308	46	285
127032	Th	2.5	**Lime Mudstone,** very-light grey to light grey weathered, white to light grey fresh, cryptocrystalline to micritic, thickly-bedded, resistant, alteration: oxide, fracture-related, moderate intensity, strong HCl reaction, structure(s): fracture, outcrop-scale, moderate; calcite vein, outcrop-scale, strong	97.45	1.02	0.46	0.170	0.260	353	49	310
Section 2015-02 (UTM 510800E, 6716157N)											
127033	Th	3.5	**Lime Mudstone,** very-light grey to light grey weathered, white to light grey fresh, cryptocrystalline to micritic, thickly-bedded, resistant, alteration: oxide, fracture-related, moderate intensity, strong HCl reaction, structure(s): fracture, outcrop-scale, moderate; calcite vein, outcrop-scale, strong; bedding (definite), outcrop-scale, 0/34 E	97.98	0.88	0.40	0.200	0.120	259	60	287
127034	Th	1.75	**Lime Mudstone,** very-light grey to light grey weathered, white to light grey fresh, cryptocrystalline to micritic, thickly-bedded, resistant, alteration: oxide, fracture-related, moderate intensity, strong HCl reaction, structure(s): fracture, outcrop-scale, moderate; calcite vein, outcrop-scale, strong; bedding (definite), outcrop-scale, 0/42 E	97.63	0.92	0.54	0.180	0.090	288	43	558



Legend

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

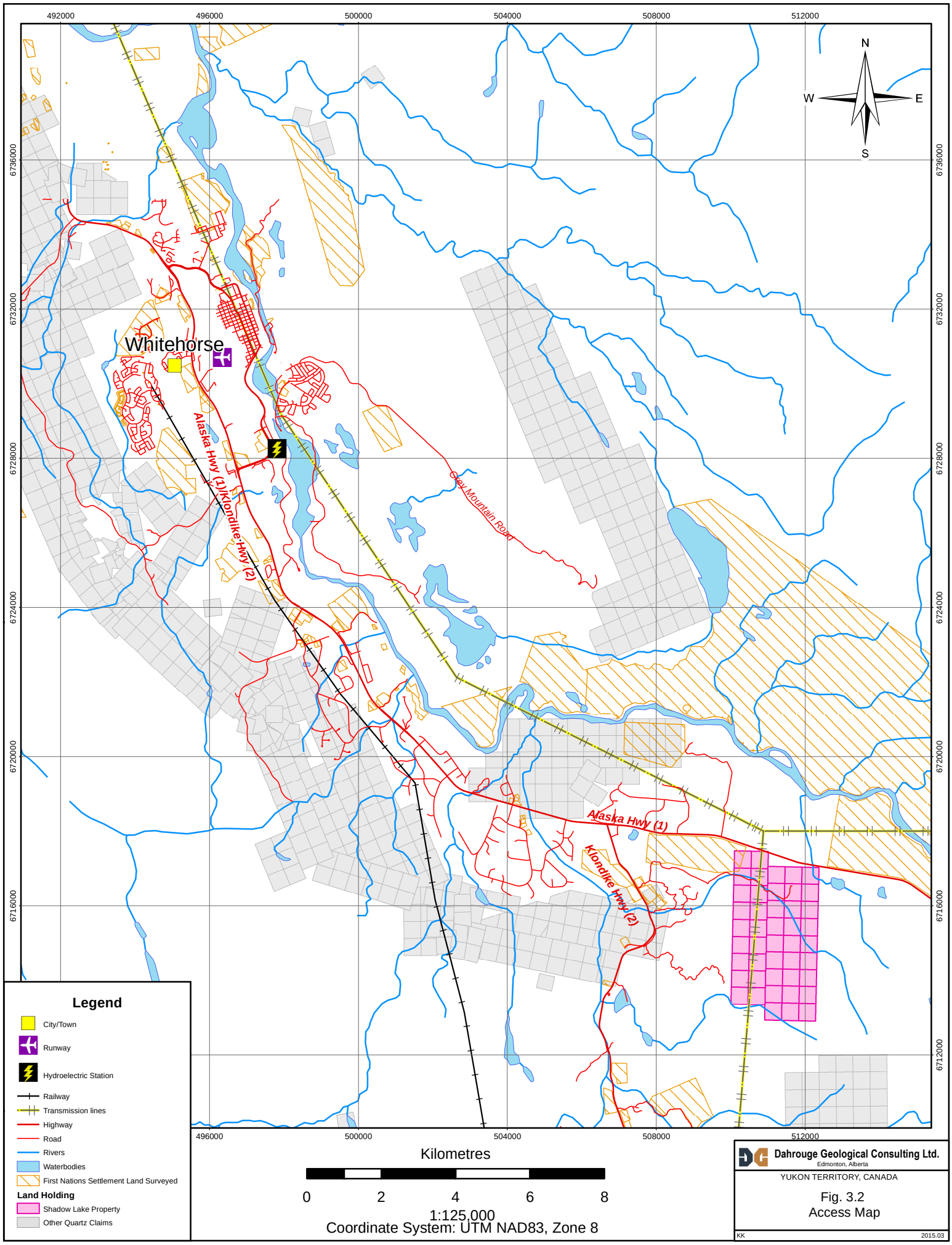
1:5,000,000
Coordinate System: UTM NAD83, Zone 8

Dahrouge Geological Consulting Ltd.
Edmonton, Alberta

YUKON TERRITORY, CANADA

Fig. 3.1
Property Location

KK 2015.02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512000
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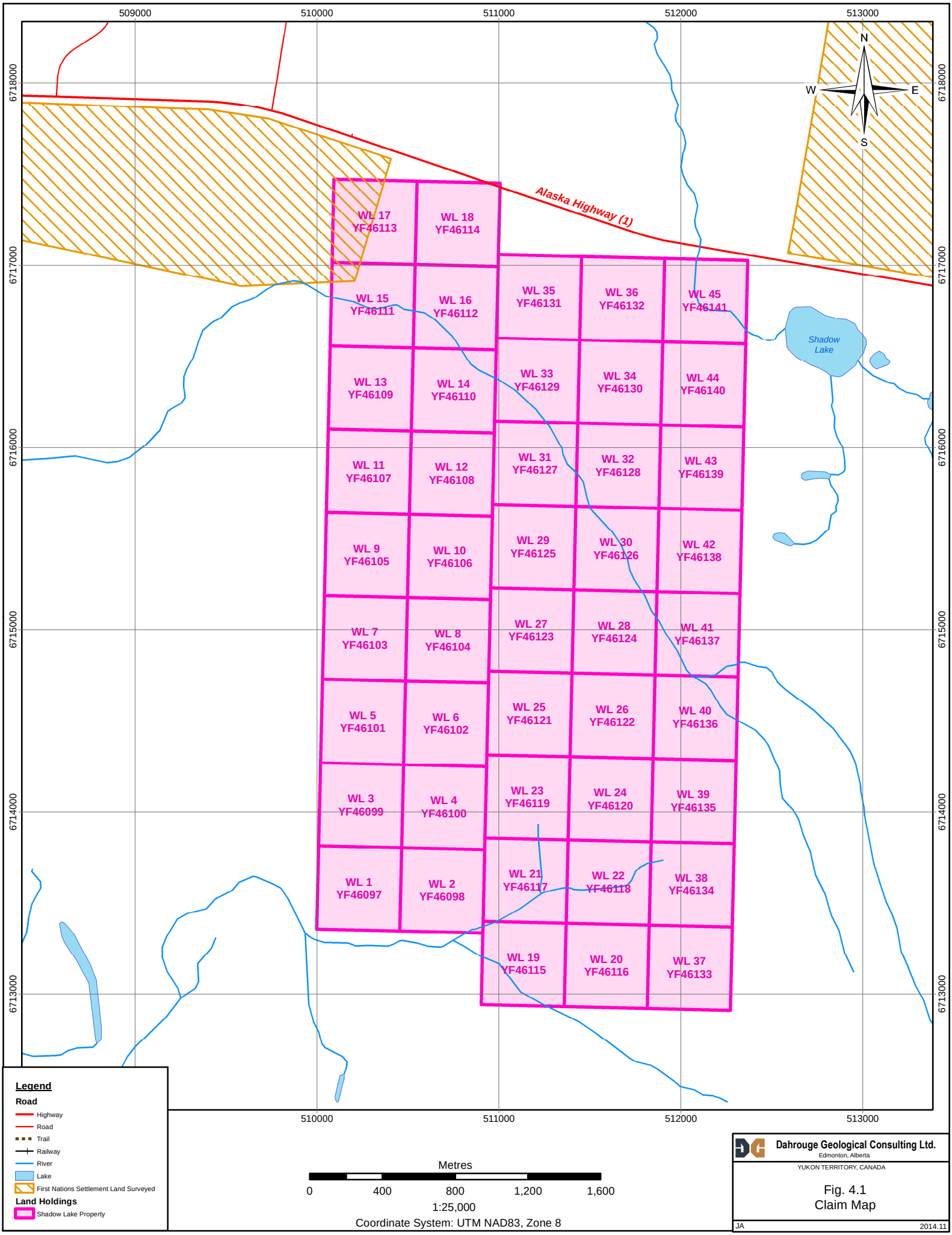
6728000
6724000
6720000
6716000
6712000
N
W
E
S
Whitehorse
Alaska Hwy (1)/Klondike Hwy (2)
Grey Mountain Road
Alaska Hwy (1)
Klondike Hwy (2)
Legend
City/Town
Runway
Hydroelectric Station
Railway
Transmission lines
Highway
Road
Rivers
Waterbodies
First Nations Settlement Land Surveyed
Land Holding
Shadow Lake Property
Other Quartz Claims
Kilometres
0 2 4 6 8
1:125,000
Coordinate System: UTM NAD83, Zone 8
Dahrouge Geological Consulting Ltd.
Edmonton, Alberta
YUKON TERRITORY, CANADA
Fig. 3.2
Access Map
KK
2015.03



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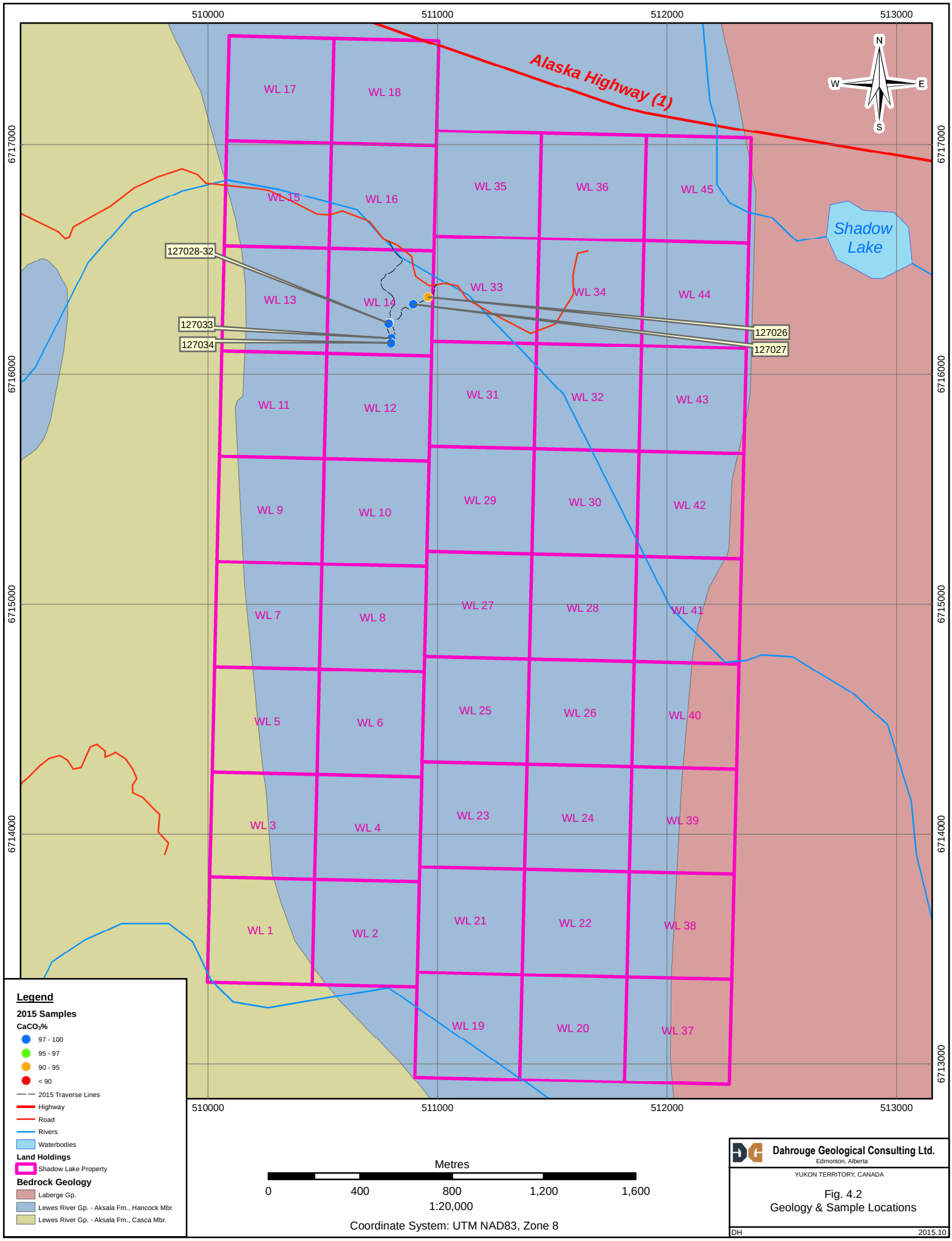
Edmonton, Alberta

YUKON TERRITORY, CANADA

Fig. 4.1
Claim Map

JA 2014.11



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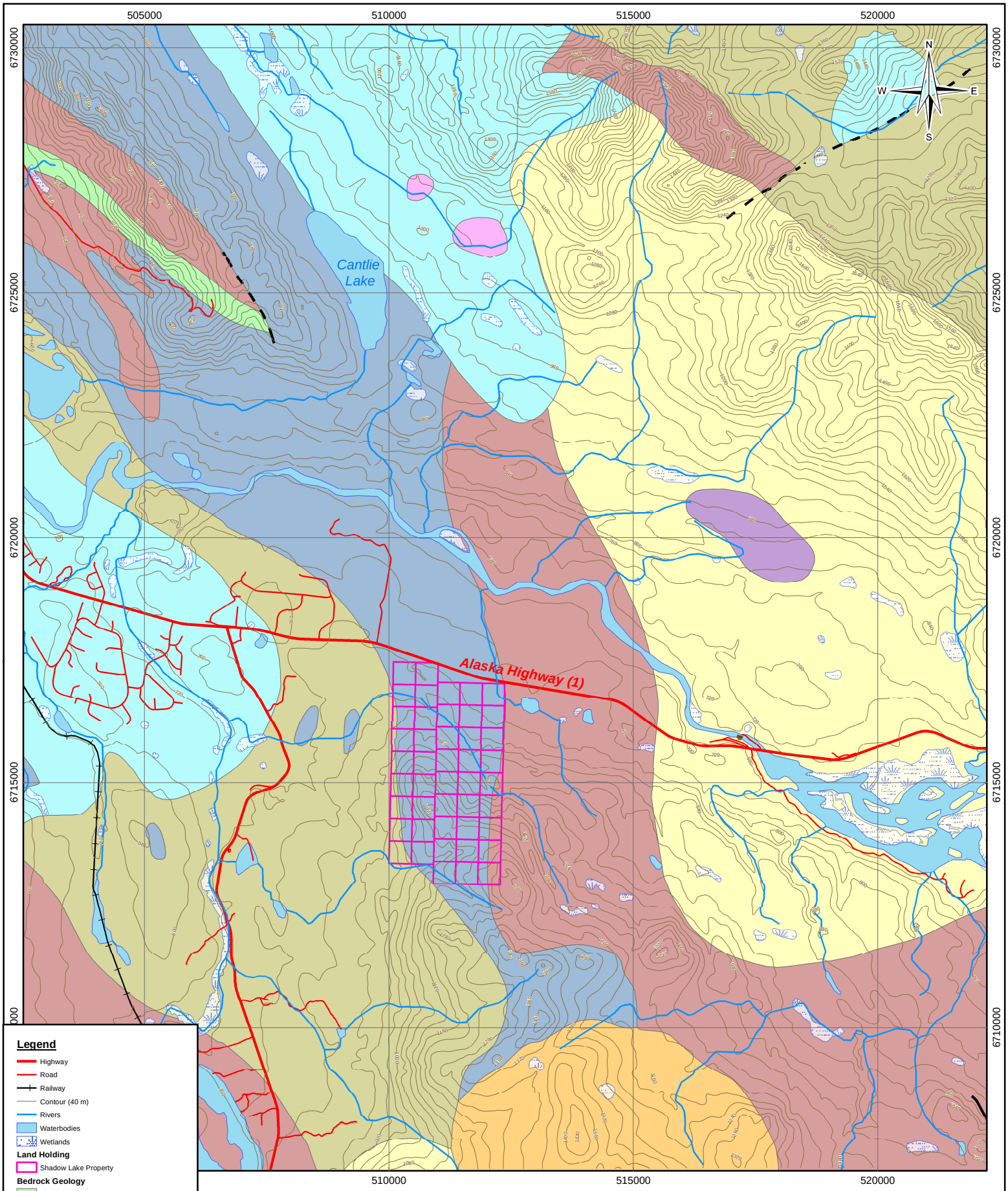
YUKON TERRITORY, CANADA

Fig. 4.2
Geology & Sample Locations

DH 2015.10



Legend

- Highway
- Road
- Railway
- Contour (40 m)
- Rivers
- Waterbodies
- Wetlands

Land Holding

- Shadow Lake Property

Bedrock Geology

- Mount Nansen Gp.
- Prospector Mountain Gp.
- Carmacks Gp.
- Whitehorse Gp.
- Cache Creeek Gp.
- Laberge Gp.
- Lewes River Gp., Povoas Fm.
- Lewes River Gp. - Aksala Fm., Hancock Mbr.
- Lewes River Gp. - Aksala Fm., Casca Mbr.

Kilometres

0 2 4 6

1:100,000

Coordinate System: UTM NAD83, Zone 8

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YUKON TERRITORY, CANADA

Fig. 4.3
Regional Geology Map

KK 2015.04