

**2017 GEOLOGICAL AND GEOCHEMICAL EXPLORATION ON THE
MOUNT CAMERON PROPERTY**

MAYO MINING DISTRICT, YUKON

Grant Numbers: CAM 1 – CAM 74 (YF 46282 – YF 46355), CAM 75 – CAM 148 (YF 50565 – YF 50638)

Geographic Coordinates

64° 6' N

134° 58' W

NTS Sheet 106D02 and 106D03

Owner:	Henry Lole (Client ID 4001170) Suite 18, 10509 - 81 Avenue Edmonton, Alberta T6E 1X7
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Field Work:	June 29 th - July 4 th , 2017.
Date Submitted:	December 4, 2017

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1. INTRODUCTION

The Mount Cameron quartz claims (the 'Property') were staked by Henry Lole in July 2016. Dahrouge Geological Consulting Ltd. ('Dahrouge') completed a sampling and mapping program on the Property on behalf of Guardian Exploration Inc. from June 29th to July 4th, 2017. The primary objective of the 2017 field exploration was to locate and sample Zn-Pb-Ag sulphide mineralization from known historic occurrences, as well as to further prospect and evaluate the potential of the area to host additional sulphide occurrences of interest.

This report summarizes the work completed during the 2017 field exploration program and the geochemical results. A total of 68 rock samples (grab) were collected and sent for geochemical analysis. An itemized cost breakdown of the 2017 work completed on the Property has been provided in Appendix 1.

The Property is comprised of 148 adjacent quartz claims and has been grouped as per Grouping Certificate HW03207. Work was completed on 20 of these claims during the 2017 field exploration.

Some structural measurements were obtained at the Mount Cameron Property. A magnetic declination of +20° 33' E was used. Attitudes of bedding are given as A°/B° NW in Appendix 4, where A° is the azimuth of the strike (right-hand rule) and B° is the dip in the direction indicated.

1.1 GEOGRAPHIC SETTING

1.1.1 Location and Access

The Mount Cameron Property is located approximately 24 km northeast of Keno City, Yukon (Figure 1). Primary access to and from the Property was by helicopter, based out of the Mayo Airport located roughly 70 km southwest of the Property. The remainder of access within the Property was by foot. There are several historic helicopter pads located on the Property that were utilized during the exploration program. Alternatively, there is a historic trail/winter road which extends roughly 40 km northward from Keno City and runs parallel and adjacent to the northern property boundary; however, the condition of this trail is currently unknown. Historic trails, now overgrown with vegetation, were observed in flatter areas of the Property and are expected to have provided off-road vehicle access for historic exploration programs.

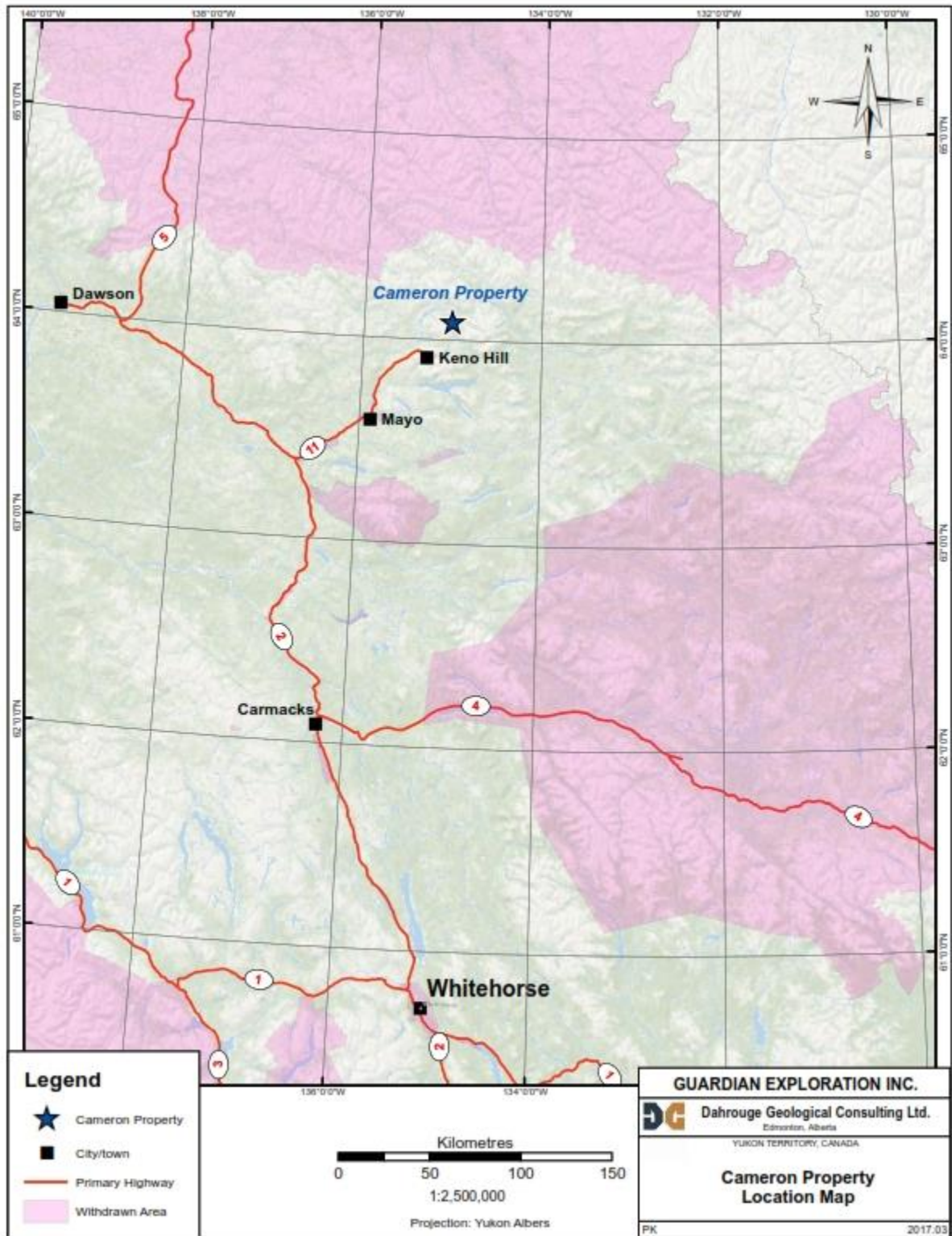


Figure 1

Location Map

1.1.2 Topography, Vegetation, Wildlife and Climate

Topography in the Mount Cameron Property area is characterized by north-south and east-west trending broad U-shaped glacial valleys and ridges. Elevations at the Property range from approximately 720 m at the northern property boundary to roughly 1,800 m near the southern property boundary on one of Mount Cameron's ridges (Figure 2).

Tree cover on the Property is limited to the lower elevations and consists of spruce, pine and willow trees, with dense moss and lichen in the mid-elevations and the upper peaks and ridges being bare.

The Property is located in the Yukon Plateau - North ecoregion of the Boreal Cordillera Eco-zone (Yukon Ecoregions Working Group, 2004). The Boreal Cordillera Eco-zone provides a habitat to a diverse range of wildlife. Wildlife common to the Property may include moose, black bear, fox, wolf, coyote, gopher, marmots, eagles, and hawks (Steffen Robertson and Kirsten (Canada) Inc., 1997). To the author's knowledge, there are no restrictions on the area due to the presence of wildlife. During exploration, Dahrouge endeavored to minimize disturbance to local flora and fauna.

The Yukon Plateau North ecoregion generally has a sub-arctic climate. Summers are short and warm, with average daily highs ranging from 10°C to 15°C, with extreme highs of 25°C. Winters are long and cold, with average daily lows ranging from -2°C to -27°C, and extreme lows of -30°C. Rainfall averages approximately 400 mm per year; snowfall averages approximately 160 cm a year.

1.2 PROPERTY

The Mount Cameron quartz claims (the 'Property') are being held in trust for Guardian Exploration Inc. by Henry Lole of Dahrouge, based out of Edmonton, AB. The claims were staked from July 13th, 2016 to July 16th, 2016 by a two-person crew based out of Mayo, YT. The Property consists of 148 quartz claims (CAM 1 – CAM 148) with a combined area of 3,093.2 hectares (Table 1; Figure 2). The Property wholly surrounds Tanana Exploration Inc.'s Clark Property, which consists of two quartz claims.

A total of at least \$50,000 of representation work has been claimed for the 2017 exploration program, which will provide for 3 years of representation work requirements. The new good-to-date for the claims will be July 21, 2020.

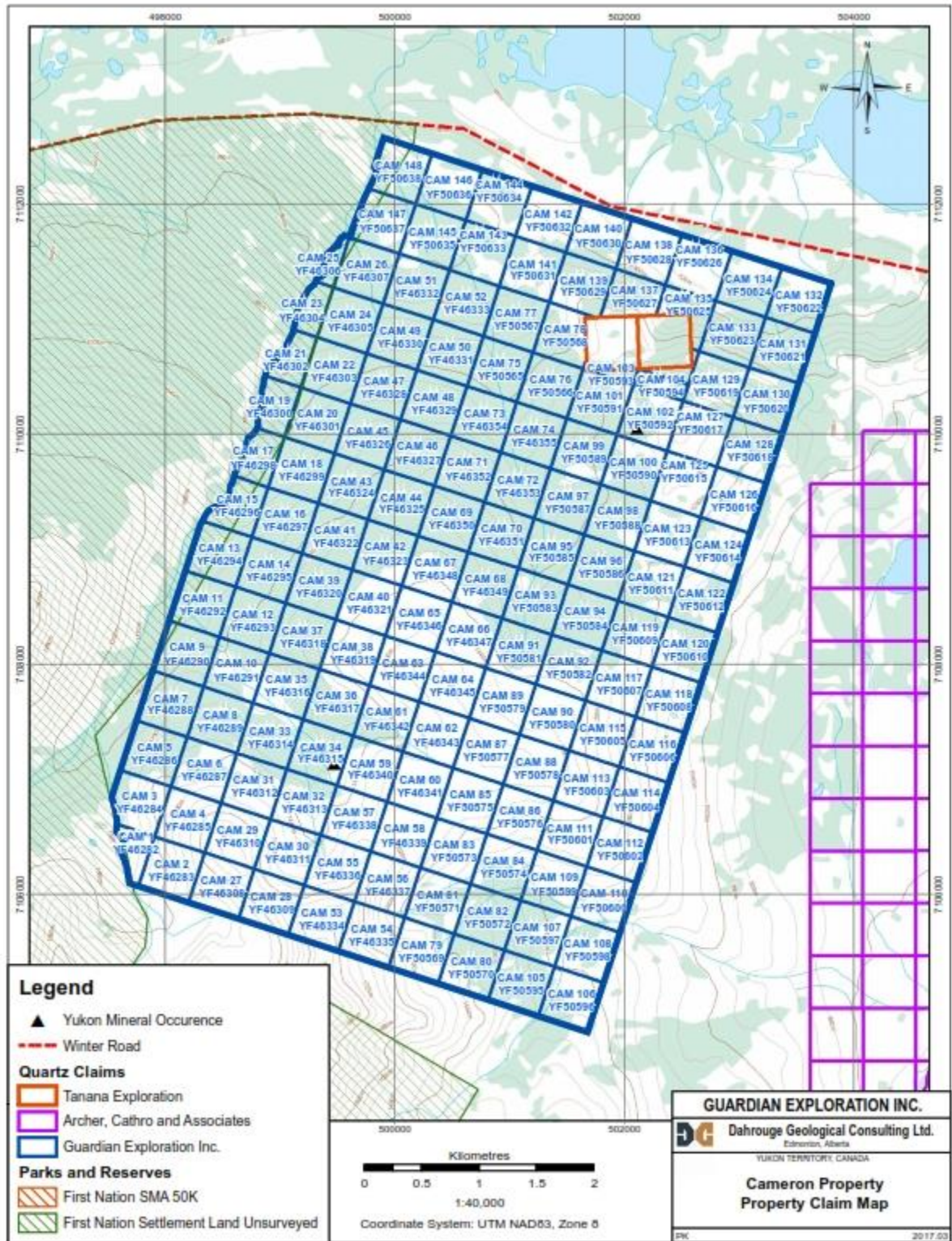


Figure 2

Property Map

TABLE 1

MOUNT CAMERON CLAIMS

Grant No.	Claim Name	Size (ha)	Record Date	Good to Date	New Good to Date	Required Spending (3 yrs)
YF 46282	CAM 1	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46283	CAM 2	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46284	CAM 3	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46285	CAM 4	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46286	CAM 5	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46287	CAM 6	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46288	CAM 7	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46289	CAM 8	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46290	CAM 9	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46291	CAM 10	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46292	CAM 11	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46293	CAM 12	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46294	CAM 13	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46295	CAM 14	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46296	CAM 15	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46297	CAM 16	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46298	CAM 17	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46299	CAM 18	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46300	CAM 19	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46301	CAM 20	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46302	CAM 21	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46303	CAM 22	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46304	CAM 23	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46305	CAM 24	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46306	CAM 25	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46307	CAM 26	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46308	CAM 27	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46309	CAM 28	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46310	CAM 29	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46311	CAM 30	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46312	CAM 31	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46313	CAM 32	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46314	CAM 33	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46315	CAM 34	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46316	CAM 35	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46317	CAM 36	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46318	CAM 37	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00
YF 46319	CAM 38	20.9	13/07/2016	21/07/2017	21/07/2020	\$300.00

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YF 50613	CAM 123	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50614	CAM 124	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50615	CAM 125	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50616	CAM 126	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50617	CAM 127	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50618	CAM 128	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50619	CAM 129	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50620	CAM 130	20.9	15/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50621	CAM 131	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50622	CAM 132	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50623	CAM 133	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50624	CAM 134	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50625	CAM 135	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50626	CAM 136	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50627	CAM 137	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50628	CAM 138	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50629	CAM 139	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50630	CAM 140	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50631	CAM 141	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50632	CAM 142	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50633	CAM 143	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50634	CAM 144	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50635	CAM 145	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50636	CAM 146	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50637	CAM 147	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
YF 50638	CAM 148	20.9	16/07/2016	21/07/2017	21/07/2020	\$300.00
Total Area:		3093.2	Total Representation Work Cost:			\$44,400.00

1.3 HISTORY AND PREVIOUS INVESTIGATIONS

The Mount Cameron showing was first discovered and prospected in 1917 (Carrell, 2005). The area was further mapped and sampled by the Geological Survey of Canada (GSC) before being taken to lease by Falconbridge in 1956 (Carrell, 2005).

In 1967, the GSC discovered the Clark showing during a regional stream sediment sampling program in the area (Carrell, 2005). Trenching, construction, prospecting, and soil sampling were then completed during 1968 and 1969 (Carrell, 2005).

During the 1970's, the Clark and Mount Cameron showings were staked and explored by several different companies. Diamond drilling was initiated in 1972 by Scurry-Rainbow Oil Ltd. (Tully, 1974). Geochemical analysis of Ag-rich galena samples obtained from trenches at the

Clark showing suggested high-grade values of Ag up to 75.0 oz. (per ton?), 56.0% Pb, and 10.0% Zn (Tully, 1974). Assay results from the 1972 GSC Memoir 364 determined that samples collected from the waste piles at the Cameron showing contained material with up to 40.5 oz/t Ag, 40.9% Pb, and 10.7% Zn (Smith, 2002).

In 1974, a six-hole drill program was carried out at the Cameron showing by Bullion Mountain Mining Ltd. Assay results from the drill samples found up to 286 g/t Ag, 5.78% Pb, and 26.5% Zn (Smith, 2002). In 1986 additional exploration was conducted at the Clark showing by Archer Cathro and Associates (1981) Limited (Archer Cathro). Drilling results from 1987 indicated weighted average values of 273 g/t Ag, 6.51% Pb, and 9.30% Zn over 1.80 m (Eaton, 1988).

Tanana Exploration Inc. (Tanana) staked the Mount Cameron Property in 2001 and the Clark Property in 2002 (Carrell, 2005). In 2001 a three-hole drill program was expedited near the Cameron showing. Results of the geochemical analyses indicated that values up to 36.2 g/t Ag, 0.57% Pb, and 20.4% Zn exist at shallow depths across 13.4 m (Smith, 2002). Tanana consolidated the Clark and Mount Cameron properties in 2004 (Carrell, 2005) and holds the Clark Property to the current day.

Henry Lole staked the Mount Cameron claims in 2016, with 2017 exploration work being completed on behalf of Guardian Exploration Inc.

1.4 PURPOSE OF WORK

The work described herein was undertaken to locate historic trenches and verify historic mineralization on the Property.

1.5 SUMMARY OF WORK

Between June 29th and July 4th, 2017, a four-person crew from Dahrouge completed a geochemical rock sampling and prospecting program on the Property. A total of 68 rock samples were collected and shipped to Activation Laboratories Ltd. in Kamloops, British Columbia, for preparation and analyses by ICP techniques. Samples were typically collected as grab samples from outcrop (42), boulders (16), historic trenches and/or waste piles (10) (Figure 3). Analytical procedures are described in Appendix 2 and assay sheets are provided in Appendix 3. Detailed geological observations such as lithologic information, bedding orientations, and structural elements were recorded (Appendix 4).

The field crew were based out of a lodge in Mayo, Yukon, for the duration of the exploration field program. Transportation to and from the Property was by helicopter from the Mayo Airport.

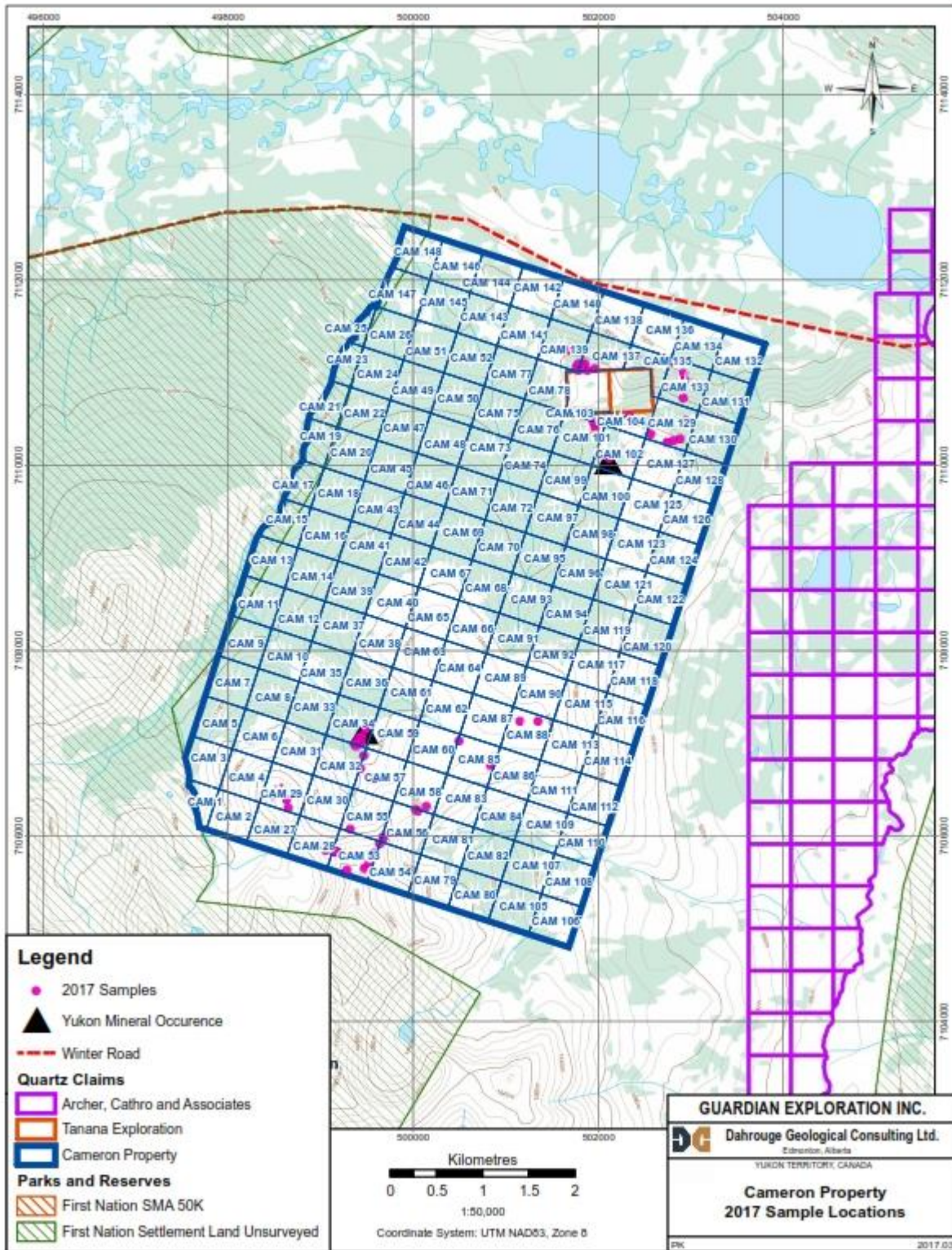


Figure 3

2017 Sample Locations

2. REGIONAL GEOLOGY

2.1 STRATIGRAPHY

The Mount Cameron Property is located at the northern boundary of the Selwyn Basin within the basinal facies of Ancestral North America (Laurentia). The Selwyn Basin is an off-shelf metasedimentary and metavolcanics sequence comprised of middle Proterozoic shelf sequence carbonates (Wernecke Supergroup); upper Proterozoic to lower Cambrian off-shelf rocks (Hyland Group); and Devonian to Mississippian rocks (Earn Group and Keno Hill Quartzite) (Carrell, 2005). These rocks have been intruded by sills and lens-shaped bodies of diorite, gabbro and peridotite. These groups are described in detail in the following sub-sections of this report.

2.1.1 Wernecke Supergroup

The middle Proterozoic Wernecke Supergroup as described by Thorkelson et al. (2005) is approximately 13 km thick and consists of three groups: the Fairchild Lake Group, the Quartet Group, and the Gillespie Lake Group. The supergroup is represented by clastic to carbonate grand cycles but has locally undergone greenschist grade metamorphism.

The Fairchild Lake Group is characterized by a gradational sequence of siltstone and minor carbonate into carbonate and shale. The lower Quartet Group is comprised of pyritic shales which grade into interbedded shale and siltstone in the upper Quartet Group. The Gillespie Lake Group can be identified by a thick carbonate sequence.

2.1.2 Hyland Group

The Hyland Group, which hosts both the Clark and Mount Cameron mineral occurrences, is comprised of upper Proterozoic to lower Cambrian off-shelf facies (Carrell, 2005). This group has been subdivided into the Yusezyu Formation and the Narchilla Formation which are separated by a sharp conformable contact (Gordey, 2013).

The Yusezyu Formation is characterized by a thick, medium grey, fine to very coarse grained, gritty quartzose sandstone bed, interbedded siltstone and shale capped by a light grey to white-weathering limestone member. Sandstone beds are typically 1 m to 4 m wide with interbedded siltstone and shale members reaching a scale up to several meters thick. The limestone member ranges in thickness from 0 m up to 250 m thick in the northwest.

The Narchilla Formation consists of predominantly maroon shale and slate beds that are typically less than 1 m thick with some interbedded green slate or green quartzose siltstone up

to approximately 10 cm thick (Gordey, 2013). Triassic diorite, gabbro and greenstone lenses/sills have also been mapped in the Narchilla Formation (Roots, 1997).

2.1.3 Earn Group

The Earn Group is comprised of the lower Devonian to upper Devonian off-shelf Portrait Lake Formation and the upper Devonian to middle Mississippian Prevost Formation (Gordey, 2013). The Portrait Lake Formation is characterized by dark grey, black, or blue-black well bedded chert with shaley partings. Bed thickness typically ranges from 3 cm to 10 cm thick and local variances occur within the deposit such as 10 cm thick sandstone beds, conglomerate beds greater than 3 m thick, and quartz arenite beds. Due to limited outcrop exposure, the full thickness of the Portrait Lake Formation is unknown, however it is expected to be between 200 and 500 m thick (Gordey, 2013).

The Prevost Formation is comprised of chert-bearing clastic rocks including shale, siltstone, slate, sandstone, and conglomerate (Gordey, 2013). The finer clastic rocks are dark blue grey to black and range from laminated to massive. The coarser clastic rocks are typically grey, fine to coarse-grained with beds reaching up to tens of metres. Locally the Prevost Formation also includes a rare limestone member and some volcanic rocks. The upper stratigraphy of the formation is poorly preserved; however, the total thickness of the unit is calculated to be at least 500 m (Gordey, 2103).

2.1.4 Keno Hill Quartzite

The Devonian to Mississippian Keno Hill Quartzite consists predominantly of grey to blue-grey, weakly banded quartzite with thin beds of phyllite and graphitic phyllite (Green, 1971). Bed thickness range from cm to metre scale, and the total unit thickness is reported as being up to a thickness of up to 540 m (Green, 1971). Graphitic quartzite breccias are common northwest of Mount Cameron (Green, 1971).

TABLE 2 REGIONAL STRATIGRAPHY

Period	Group	Formation/Subgroup	Lithological Description	Approx. Thickness	
Mississippian	Keno Hill Quartzite		Quartzite with minor phyllite and graphic phyllite	540 m	
Lower Mississippian	Earn Group	Prevost Fm.	Chert-bearing clastic rocks. Shale, siltstone, sandstone, and conglomerate	Unknown	
Devonian		Portrait Lake Fm.	Sandstone, conglomerate, and quartz arenite beds throughout section	200-500 m	
Lower Cambrian	Hyland Group	Narchilla Fm.	Shale and slate bedded interbedded with green slate or green quartzose siltstone	Unknown	
Upper Proterozoic		Yusezyu Fm.	Limestone	250 m	
			Gritty sandstone with interbedded siltstone and shale	Unknown	
Middle Proterozoic	Wernecke Supergroup	Gillespie Group		Thick Carbonate Sequence	
		Quartet Group	Upper Quartet	Interbedded shales and siltstones	13,000 m
			Lower Quartet	Pyritic shales	
				Fairchild Lake Group	Gradational sequence of shales and carbonates
--- Unconformable Contact					

2.2 STRUCTURE

The metasedimentary and metavolcanics rocks of the Selwyn Basin are controlled by a series of imbricated thrust sheets. The older and more southerly Robert Service Thrust Fault, which hosts the Clark and Mount Cameron showings, places the rocks of the Hyland Group onto the Earn Group and Keno Hill Quartzite. Following this, the central Tombstone Thrust, which subsequently deformed the Robert Service Thrust Sheet, placed the Keno Hill Quartzite onto the highly strained rocks of the Earn Group. The more northerly Dawson Thrust separates the deep-water rocks of the Selwyn Basin (Hyland Group, Earn Group and Keno Hill Quartzite) from the shelf rocks of the Wernecke Supergroup (Carrell, 2005).

The Mayo Lake Anticline, which was formed post-thrusting, is a NW-SE trending, irregular, broad open fold. The western limb extends from Keno Lake to Mayo Lake and the eastern limb extending from Mayo Lake to Patterson Range.

Additional deformation of the Wernecke Supergroup, Hyland Group, Earn Group, and Keno Hill Quartzite can be attributed to two or three phases of deformation that occurred between the

Jurassic and Early Cretaceous (Carrell, 2005). These structures have been described as being generally ductile to brittle resulting in low to mid greenschist grade metamorphism.

3. PROPERTY GEOLOGY

3.1 STRATIGRAPHY

The Mount Cameron Property, which is located on the thrust sheet south of the Dawson Thrust, is underlain by rocks of the Hyland Group (Figure 4). Typical lithologies recorded in the area include quartzite, graphitic phyllite, schist, chert and limestone with beds striking NW-SE and dipping moderately to steeply to SW (Smith, 2002). Triassic greenstone, gabbro, and diorite sills/lenses have been identified in the southern part of the Property, although historic details on these rocks are sparse (Roots, 1997). Quartzite, the more dominant lithology on the Property, consists of massive, green to grey gritty quartzite, with biotite quartzite and chloritic quartzite also present (Eaton, 1988). The graphitic phyllite on the Property is light to metallic grey, fine-grained with some minor occurrences of galena - sphalerite veinlets 1-5mm thick, and stringer and disseminated pyrite (Smith, 2002). The limestone unit is medium to coarse-grained, dark grey to black, carbonaceous and discontinuous. Earlier reports suggest that the rocks on the Property are folded into a series of west trending, south dipping anticlines and synclines (Eaton, 1988). In the Mount Cameron area, several discontinuous coarse-grained, hornblende diorite sills have been recorded on the ridges, most of which are altered (Green, 1971).

Sulphide mineralization has historically been associated with the lens-like, discontinuous limestone horizons within the Hyland Group, with galena and sphalerite mineralization occurring with pyrite, chalcopyrite and arsenopyrite (Carrell, 2005). This horizon is commonly fault-brecciated, with evidence for at least two episodes of brecciation, and mineralization appears as carbonate replacement (Eaton, 1988). The limestone unit at the Cameron showing is reported by Smith, 2002, as being 250 m thick with mineralization exposed along a strike length of approximately 300 m and dipping between 60° and 70° to the southeast. Mineralization at the Clark showing has been traced over a length of 200 m and to a depth of 125 m below surface (Eaton, 1988). The 2017 exploration identified Ag-Pb-Zn mineralization at Mount Cameron near or within Triassic greenstones and tuffs within the Narchilla Formation (Hyland Group). Further detailed geological study of these rocks is highly recommended.



Figure 4

Property Geology

4. RESULTS OF 2017 EXPLORATION

The 2017 exploration program was conducted in order to identify historic showings and workings, and verify historic analytical results. A total of 68 samples (grab) were collected within the vicinity of the Clark and Cameron showings (Figure 5). Samples were collected from outcrop, boulders and historic trenches/waste piles associated with the Clark and Cameron mineral occurrences.

During the program, geological observations were recorded, including lithologic information, measurements of structural elements, and other pertinent details (Appendix 4). All samples from the 2017 program were shipped to Activation Laboratories Ltd., Kamloops, for preparation and analyses by standard ICP, ICP-MS & ICP-OES techniques (Appendices 2 and 3).

Samples collected from the Cameron showing in 2017 returned positive results for Zn, Au and Ag (Figure 5). Sample 123588, collected from a fine-grained greenstone, yielded 1.3 g/t Au and 3.39 g/t Ag. Other samples collected at the Cameron showing returned up to 20.3% and 26.4% Zn (Samples 123596 and 123594). The most promising results were all collected from greenstones or associated tuffs, in contrast to historic results within limestones. Additional samples were collected from the near the existing Clark Property to ascertain whether the historic sulphide mineralization extends into the Mount Cameron Property; however, no significant mineralization was identified.

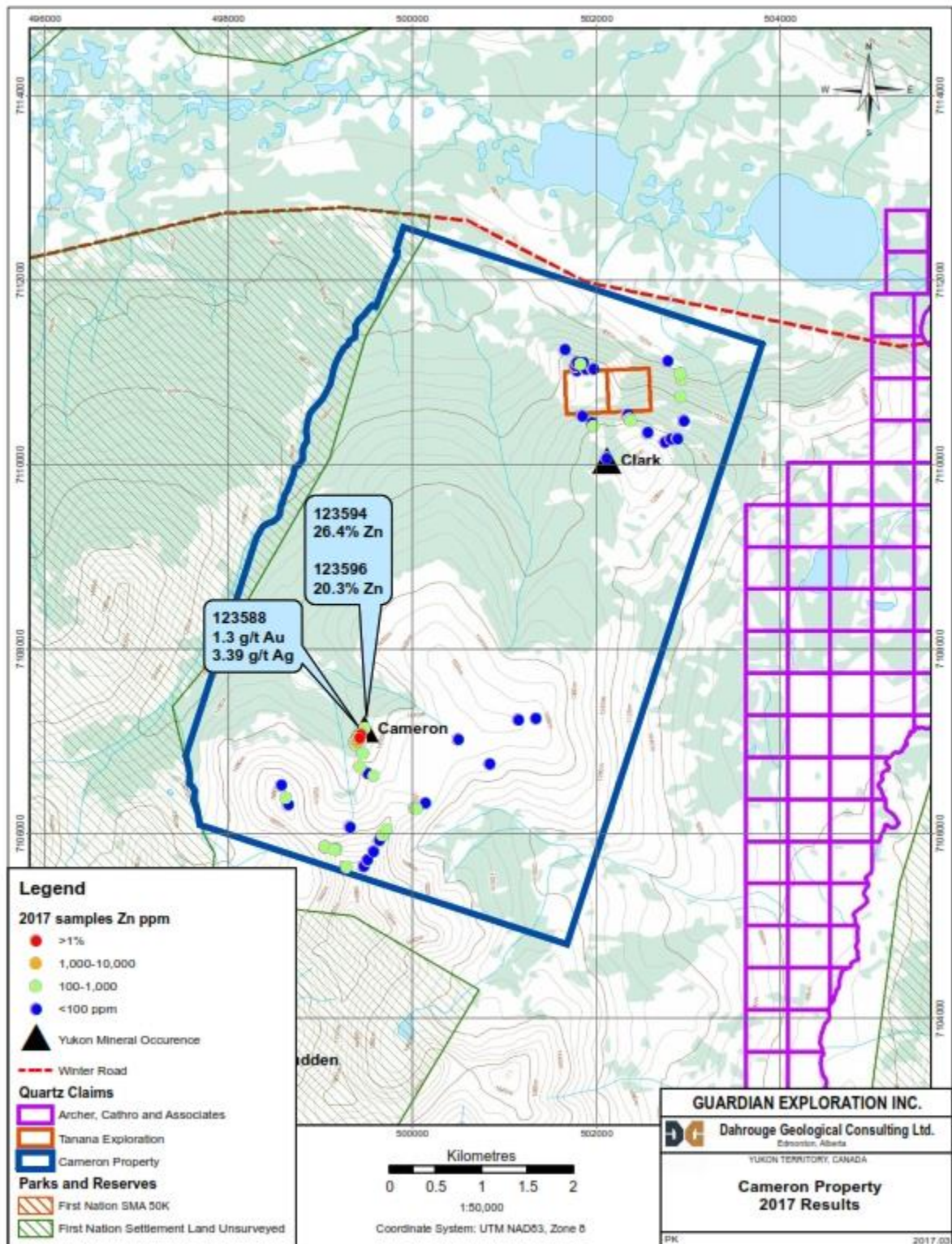


Figure 5

2017 Sample Results

5. DISCUSSION AND CONCLUSIONS

The Mount Cameron Property has been extensively prospected and sampled since the early 1900's; however, it has been limited to the topographic highs surrounding the Clark and Cameron showings. The main target has been the upper Proterozoic to lower Cambrian Hyland Group, more specifically the discontinuous brecciated limestone lenses, which have proved to be the host for Zn-Pb-Ag mineralization. During the 2017 field program, a total of 68 samples were collected from the Property, and have confirmed the presence of sulphide mineralization, with geochemical results of up to 26.4% Zn, 1.3 g/t Au and 3.39 g/t Ag from greenstones and tuffs near the Cameron showing. No economic results were obtained from the area near the existing Clark Property, suggesting that historic surface mineralization is limited to Tanana's Property.

The next phase of exploration on the Property should consist of additional mapping and sampling, focusing on the unexplored sections of the Property. The focus should be to further identify the mineralization at Cameron and to map out it's extent. Identifying and mapping the Hyland Group and adjacent stratigraphic units in the other portions of the Property should be a priority, especially Triassic greenstone units and their contacts. An EM survey is recommended in order to assist with the delineation of mineralized zones, where they may be underneath cover.

6.

STATEMENT OF QUALIFICATIONS

I, Patrick Kluczny, residing at 14815 39 Ave NW, 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 2006 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology.
- I have practiced my profession as a geologist continuously since 2006.
- I am a registered Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta, member M81985.
- I supervised the 2017 work described in this report.
- I am author of the report entitled "2017 Geological and Geochemical Exploration on the Mount Cameron 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 December 2017.



Patrick Kluczny, B.Sc., P. Geol.

APEGA M81985

7. REFERENCES

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**ITEMIZED COST STATEMENT FOR THE 2017 EXPLORATION
MOUNT CAMERON PROPERTY**

a) Personnel

J. Dahrouge				
<u>0.07</u>	days	Project management		
0.07	days	@ \$ 1,075.00	\$	71.66

P. Kluczny, geologist				
<u>4.80</u>	days	Project management, planning & preparation, reporting		
4.80	days	@ \$ 885.00	\$	4,248.00

H. Lole, geologist				
<u>2.47</u>	days	Project management, planning & preparation, reporting		
2.47	days	@ \$ 605.00	\$	1,492.33

R. Simpson, geologist				
6.00	days	Field work and travel June 29 to July 4, 2017		
<u>3.53</u>	days	Project planning & preparations, data entry & reporting		
9.53	days	@ \$ 505.00	\$	4,814.33

S. Berke, student geologist				
6.00	days	Field work and travel June 29 to July 4, 2017		
<u>7.07</u>	days	Project planning & preparations, data entry & reporting		
13.07	days	@ \$ 375.00	\$	4,900.00

D. Gorham, technician				
6.00	days	Field work and travel June 29 to July 4, 2017		
<u>0.33</u>	days	Project planning & preparations, data entry & reporting		
6.33	days	@ \$ 475.00	\$	3,008.33

D. Dicks, technician				
6.00	days	Field work and travel June 29 to July 4, 2017		
<u>0.63</u>	days	Project planning & preparations, data entry & reporting		
6.63	days	@ \$ 555.00	\$	3,681.50

S. Dahrouge, student geologist				
<u>0.27</u>	days	Project planning & preparations, data entry & reporting		
0.27	days	@ \$ 375.00	\$	100.00

J. Holman, receptionist				
<u>5.50</u>	hours	Data entry, research, reporting		
5.50	hours	@ \$ 42.00	\$	231.00

\$ 22,547.15

b) Food and Accommodation

24	man-days @	\$ 102.49	Accommodations	\$ 2,459.81	
24	man-days @	\$ 70.00	Meals	\$ 1,680.00	
				<u>\$ 4,139.81</u>	

c) Transportation

Vehicles:	SUV Rental (Whitehorse)	\$ 1,204.73	
	Fuel	\$ 216.32	
Helicopter:	Trans North Helicopters - Astar B2	<u>\$ 25,358.31</u>	\$ 26,779.36

d) Instrument Rental

GPS Rental (2)	\$	40.00	
Radios (2)	\$	30.00	
Sat Phone	\$	72.03	
InReach Locator (1)	\$	20.00	
			\$ 162.03

e) Analyses

Actlabs				
(68 rock samples)				
			<u>\$ 3,141.60</u>	
				\$ 3,141.60

f) Other

Software Rental - ArcGIS	\$	40.00	
Field & Geological Supplies	\$	529.71	
Administrative support and office supplies	\$	657.50	
			<u>\$</u> 1,227.20

Total\$ 57,997.15

Edmonton, Alberta
December 4, 2017


Patrick Kluczny, B.Sc., P.Geol.

APPENDIX 2: DESCRIPTION OF ANALYTICAL METHODS

Sample preparation and analyses were conducted by Actlabs (9899 Dallas Drive Kamloops, British Columbia, V2C 6T4). Samples were analyzed for major and trace elements by inductively coupled plasma (ICP) and ICP-mass spectrography (MS). Samples also underwent fire assays for Au, and targeted ore-grade analyses for Zn.

Ultratrace 4: Near Total Digestion ICP/MS

A 0.25 g sample is digested with four acids beginning with hydrofluoric, followed by a mixture of nitric and perchloric acids, heated using precise programmer-controlled heating in several ramping and holding cycles, which takes the samples to dryness. After dryness is attained, samples are brought back into solution using hydrochloric and nitric acids. This digestion may not be completely total if resistate minerals are present. As, Sb, and Cr may be partially volatilized. An in-lab standard (traceable to certified reference materials) or certified reference materials are used for quality control.

Digested samples are diluted and analyzed by Perkin Elmer Sciex ELAN 6000, 6100, or 9000 ICP/MS. One blank is run for every 40 samples. In-house control is run every 20 samples. Digested standards are run every 80 samples. After every 15 samples, a digestion duplicate is analyzed. The instrument is recalibrated every 80 samples.

1A2-ICP: Au-Fire Assay

A 0.25 g sample is digested with four acids beginning with hydrofluoric, followed by a mixture of nitric and perchloric acids, heated using precise programmer-controlled heating in several ramping and holding cycles, which takes the samples to dryness. After dryness is attained, samples are brought back into solution using hydrochloric and nitric acids. This digestion may not be completely total if resistate minerals are present. As, Sb, and Cr may be partially volatilized. A sample size of 5 to 50 g can be used but the routine size is 30 g for rock pulps, soils or sediments (exploration samples). The sample is mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with Ag added as a collector and the mixture is placed in a fire clay crucible, the mixture is preheated at 850°C, intermediate 950°C and finish 1060°C, the entire fusion process should last 60 minutes. The crucibles are then removed from the assay furnace and the molten slag (lighter material) is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel, which absorbs the lead when cupelled at 950°C to recover the Ag (doré bead) + Au.

On each tray of 42 samples there is two blanks, three sample duplicates, and 2 certified reference materials, one high and one low (QC 7 out of 42 samples).

The Ag doré bead is digested in hot (95°C) HNO₃ + HCl. After cooling for 2 hours, the sample solution is analyzed for Au by ICP-OES using a Varian 735 ICP.

Code 8 4-Acid ICP-OES: Ore-grade Zn over 1%

This analysis was only performed on samples that returned over 1% Zn in the Ultratrace 4 analysis. This is an assay package for Zn (and other base metals) using 4 acid digestion and ICP-OES. A 0.5 g sample is digested using 4 acid digestion and diluted volumetrically to 100 mL. CANMET reference materials for the appropriate elements are digested the same way and are used as a verification standard(s). Samples are analyzed on a Varian Vista 735 ICP-OES.

Appendix 3: Activation Laboratories Inc.
2017 Analytical Certificate

Quality Analysis ...



Innovative Technologies

Date Submitted: 14-Jul-17
Invoice No.: A17-07225
Invoice Date: 10-Aug-17
Your Reference:

Dahrouge Geological Consulting Ltd.
10509-81 Ave.
Suite 18
Edmonton AB T6E 1X7
Canada

ATTN: Jody Dahrouge (Inv)

CERTIFICATE OF ANALYSIS

68 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-ICP Kamloops Au-Fire Assay ICPOES 30g
 Code Sieve Report-Kamloops Internal Sieve Report Internal
 Code UT-4-Kamloops Total Digestion ICP/MS

REPORT **A17-07225**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Esemé , Ph.D.
 Quality Control

ACTIVATION LABORATORIES LTD.
 9989 Dallas Drive, Kamloops, British Columbia, Canada, V2C 6T4
 TELEPHONE +250 573-4484 or +1.888.228.5227 FAX +1.905.648.9613
 E-MAIL Kamloops@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Results

Activation Laboratories Ltd.

Report: A17-07225

Analyte Symbol	Zn	Au	B	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Ni	Er	Be	Ho	Hg	Ag	Cs	Co
Unit Symbol	%	ppb	ppm	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm
Lower Limit	0.001	2	1	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	0.5	0.1	0.1	0.1	10	0.05	0.05	0.1
Method Code	4Acid ICPOE S	FA-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123576		< 2	< 1	6.6	0.38	8.63	2.16	0.86	17.6	0.5	52	23.1	2230	2.73	1.5	19.9	1.0	1.3	0.4	70	0.28	0.93	7.0
123577		4	< 1	67.5	0.69	1.25	> 10.0	4.33	0.23	0.1	83	74.8	986	7.57	2.2	51.3	1.2	4.1	0.4	80	0.17	10.9	23.4
123578		< 2	< 1	38.7	0.35	0.97	7.55	2.80	0.29	< 0.1	36	44.6	1910	4.05	1.2	35.5	1.2	2.8	0.4	90	< 0.05	7.24	16.2
123579		2	< 1	4.3	0.92	0.07	2.08	0.50	0.27	0.1	13	40.1	1750	0.80	0.3	8.0	0.4	0.8	0.2	110	0.07	0.76	5.2
123580		< 2	< 1	14.9	1.15	0.17	4.84	1.49	0.05	< 0.1	11	25.7	92	1.43	1.3	7.1	0.8	1.4	0.2	110	< 0.05	1.96	3.1
123581		< 2	1	7.4	0.71	0.04	1.77	0.41	0.06	0.1	8	41.9	262	0.60	0.8	3.7	0.6	0.4	0.2	130	< 0.05	0.62	1.7
123582		< 2	5	3.3	1.07	0.05	1.86	0.15	0.08	< 0.1	7	44.6	572	1.28	0.1	5.5	0.5	0.5	0.2	10	< 0.05	0.74	2.3
123583		< 2	17	6.5	0.86	0.09	2.76	0.57	0.16	< 0.1	12	28.1	1210	0.89	0.7	5.8	0.9	0.7	0.3	80	0.06	0.90	1.9
123584		< 2	89	51.7	0.66	0.96	9.62	3.62	0.10	< 0.1	60	63.1	601	7.61	2.0	31.6	1.1	3.0	0.3	100	0.19	5.09	12.5
123585		< 2	9	15.5	1.01	0.22	2.40	0.38	0.06	< 0.1	11	29.8	221	1.25	0.2	6.7	0.4	0.6	0.1	110	0.28	0.69	2.8
123586		< 2	< 1	7.2	0.37	0.11	1.76	0.53	0.08	< 0.1	16	55.9	607	1.96	0.4	10.5	0.3	0.8	0.1	80	0.08	1.10	4.5
123587		20	< 1	52.2	0.54	0.92	> 10.0	3.59	0.08	< 0.1	83	57.4	1400	4.39	2.5	5.8	1.0	3.1	0.3	20	0.15	4.05	3.0
123588		1310	< 1	4.2	0.02	< 0.01	0.42	0.04	0.01	< 0.1	9	10.9	48	21.0	0.2	4.5	0.2	0.3	< 0.1	110	3.39	0.10	21.8
123589		5	< 1	24.3	0.07	0.37	3.99	1.65	20.9	0.3	85	36.4	1200	1.62	1.5	18.0	2.1	1.2	0.6	70	0.44	3.39	5.3
123590		6	< 1	4.8	0.01	0.19	0.55	0.27	0.33	3.1	10	10.3	> 10000	38.0	0.2	13.0	1.6	0.3	0.4	60	0.34	0.71	6.7
123591		< 2	< 1	7.2	0.02	1.20	0.54	0.26	0.63	17.3	13	20.8	> 10000	27.2	0.2	3.2	2.0	0.4	0.5	70	0.07	0.88	3.6
123592		< 2	7	0.9	0.03	0.38	0.45	0.17	38.9	0.9	9	17.5	1450	1.81	0.2	11.8	1.3	0.8	0.5	230	< 0.05	0.29	1.7
123593		< 2	7	5.5	0.10	0.82	1.34	0.59	> 50.0	4.0	19	21.4	2110	2.95	0.4	19.4	2.4	0.8	0.8	100	0.08	1.07	3.3
123594	26.4	239	< 1	1.0	0.01	0.11	0.14	0.05	0.32	> 1000	5	4.5	> 10000	24.8	< 0.1	52.9	1.8	0.5	0.5	530	8.47	0.23	118
123595		3	< 1	44.7	0.21	1.29	7.01	2.97	6.85	6.7	159	52.9	2270	4.99	3.1	52.3	2.1	2.3	0.7	80	0.88	5.73	20.3
123596	20.3	20	< 1	1.0	0.01	0.38	0.17	0.07	0.34	> 1000	5	1.0	> 10000	26.0	< 0.1	25.6	2.7	0.5	0.8	40	5.77	0.26	99.7
123597		8	< 1	9.4	0.05	0.46	1.49	0.34	27.5	3.5	22	16.3	1530	1.83	0.7	16.1	3.7	0.9	1.1	20	0.34	0.74	4.7
123598		< 2	< 1	1.5	0.02	0.32	0.22	0.09	28.4	5.3	8	6.8	1860	1.08	0.1	8.9	2.0	0.3	0.6	140	0.14	0.13	1.4
123599		5	< 1	13.8	0.06	1.15	5.04	2.17	13.7	8.5	88	42.6	> 10000	7.82	1.9	35.9	2.0	1.1	0.6	100	0.61	5.60	18.7
123600		< 2	< 1	22.6	0.04	0.49	0.94	0.35	32.6	0.5	19	18.7	1090	1.64	0.4	11.3	2.7	0.3	0.9	110	0.16	0.78	1.4
123601		< 2	< 1	8.0	0.10	0.39	0.43	0.05	38.6	0.5	10	7.4	693	1.31	< 0.1	11.4	0.8	0.6	0.2	50	0.15	0.06	1.5
123602		< 2	< 1	8.5	0.05	0.52	2.04	0.77	26.6	2.0	37	22.9	3750	2.37	0.6	26.2	4.0	0.7	1.3	70	0.08	1.59	5.4
123603		4	11	58.3	1.81	3.85	7.03	0.07	5.95	0.9	241	39.0	1660	10.3	0.3	70.7	2.8	0.9	1.0	100	0.17	0.08	48.6
123604		< 2	< 1	27.4	0.13	0.65	4.78	1.02	0.25	0.1	12	38.9	227	2.92	0.1	19.4	1.0	1.3	0.3	70	0.12	1.36	9.3
123605		< 2	< 1	23.0	0.14	0.41	4.03	1.29	0.11	0.9	20	33.6	112	2.03	1.3	13.9	0.7	1.3	0.2	80	0.08	1.70	4.5
123606		< 2	< 1	46.0	0.01	7.88	2.87	0.01	6.09	0.5	76	254	1610	8.65	0.3	590	0.9	0.6	0.3	90	0.06	0.10	70.0
123607		< 2	< 1	45.8	0.30	0.65	6.23	1.85	0.07	0.2	102	78.0	103	2.47	1.7	14.5	1.0	2.1	0.3	100	0.11	4.90	3.4
123608		< 2	< 1	53.6	0.24	0.87	5.63	1.63	0.06	0.3	82	102	121	3.15	1.3	20.2	1.0	1.5	0.3	130	0.10	4.80	2.7
123609		< 2	< 1	34.0	0.17	0.60	3.59	0.84	0.07	0.1	73	45.5	118	2.71	0.2	12.1	1.0	1.2	0.3	60	0.09	2.09	2.5
123610		4	< 1	52.5	0.30	0.65	6.35	1.86	0.04	0.1	114	63.8	111	3.21	0.5	15.6	1.4	1.8	0.4	200	0.07	6.04	2.6
123611		6	39	50.2	0.44	0.87	7.58	2.35	0.14	< 0.1	106	75.1	154	2.72	2.4	50.3	2.1	1.9	0.6	80	0.22	4.02	12.2
123612		< 2	52	30.1	0.49	0.64	4.87	1.48	0.07	0.9	64	53.9	102	2.41	1.6	53.6	1.2	1.5	0.4	90	0.11	2.12	14.4
123613		6	6	39.3	1.26	2.87	6.08	0.31	6.06	0.4	121	33.5	1720	12.3	0.2	63.2	4.5	1.3	1.6	130	0.20	2.69	50.5
123614		< 2	99	42.5	0.43	0.65	8.06	2.49	0.07	0.1	137	84.6	79	2.48	1.8	12.6	1.0	2.3	0.3	130	0.05	6.56	3.4
123615		< 2	< 1	43.0	0.47	0.78	8.07	3.33	0.27	< 0.1	32	52.2	356	5.32	0.9	35.4	1.1	2.8	0.3	70	0.12	6.13	13.1
123616		< 2	< 1	53.6	0.70	1.40	9.26	3.16	0.23	< 0.1	45	79.8	828	6.15	1.3	45.3	1.2	2.9	0.4	140	0.11	6.09	22.4

A7

Results

Activation Laboratories Ltd.

Report: A17-07225

Analyte Symbol	Zn	Au	B	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Ni	Er	Be	Ho	Hg	Ag	Cs	Co
Unit Symbol	%	ppb	ppm	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm
Lower Limit	0.001	2	1	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	0.5	0.1	0.1	0.1	10	0.05	0.05	0.1
Method Code	4Acid ICPOE S	FA-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123617		11	< 1	53.1	1.19	1.40	8.67	3.12	0.10	< 0.1	48	53.6	342	3.81	1.3	55.7	0.9	2.9	0.3	80	0.11	5.70	20.1
123618		< 2	< 1	41.0	0.69	0.65	6.65	2.23	0.20	< 0.1	16	42.6	641	3.21	0.8	22.4	0.9	2.4	0.3	80	< 0.05	3.20	7.7
123619		< 2	< 1	45.6	1.14	0.96	7.66	3.00	0.35	< 0.1	29	45.0	519	6.10	0.5	40.4	0.9	2.9	0.3	70	< 0.05	5.53	13.5
123620		< 2	24	4.2	0.64	0.01	0.94	0.04	0.04	< 0.1	4	13.8	86	0.36	< 0.1	2.3	0.4	0.2	0.1	140	0.10	0.13	1.8
123621		< 2	31	37.5	0.93	0.91	6.38	1.33	0.88	< 0.1	19	57.3	1150	3.97	0.5	26.8	1.0	2.1	0.3	70	0.09	1.88	13.7
123622		< 2	34	11.1	1.10	0.38	4.33	1.11	0.20	< 0.1	15	39.2	277	1.86	0.2	13.8	0.9	1.1	0.3	70	0.21	1.60	5.5
123623		< 2	53	115	> 3.00	1.82	9.15	3.10	0.14	< 0.1	69	174	818	7.33	2.0	50.2	1.1	2.1	0.4	110	0.08	17.2	29.0
123624		< 2	< 1	37.8	0.50	1.01	> 10.0	4.56	0.21	< 0.1	52	85.7	905	7.73	1.1	47.7	1.3	3.7	0.5	80	0.08	4.08	19.2
123625		< 2	< 1	48.8	0.83	1.35	8.81	2.33	0.29	< 0.1	49	61.4	1190	6.20	0.9	46.3	0.7	3.2	0.3	40	< 0.05	1.97	24.0
123626		< 2	< 1	33.8	1.16	0.80	7.14	2.11	0.29	< 0.1	34	52.9	1870	3.64	1.1	28.1	1.2	2.1	0.4	20	< 0.05	3.29	10.9
123627		< 2	< 1	9.3	0.10	0.22	3.73	1.45	0.01	< 0.1	6	28.1	208	1.42	0.3	8.2	0.7	1.1	0.2	90	< 0.05	1.82	3.5
123628		< 2	< 1	31.0	0.28	0.38	5.14	1.56	0.03	< 0.1	9	41.3	169	2.05	0.5	15.1	0.8	1.1	0.2	160	< 0.05	1.35	5.5
123629		< 2	< 1	22.8	0.17	0.36	3.60	1.04	0.02	< 0.1	16	37.3	295	2.49	0.3	14.8	1.0	0.9	0.3	70	< 0.05	1.09	5.7
123630		< 2	20	41.7	0.16	0.50	4.45	1.31	0.11	< 0.1	16	37.9	382	2.53	0.3	9.0	0.8	0.9	0.3	110	0.07	1.47	4.2
123631		< 2	3	6.8	0.10	0.50	1.20	0.34	36.0	0.2	25	21.0	377	1.02	0.2	15.3	0.8	0.7	0.3	120	< 0.05	0.53	3.3
123632		4	2	87.9	0.39	3.02	6.99	0.03	6.12	0.6	151	27.2	1560	10.3	0.1	60.6	3.3	0.7	1.0	90	0.41	0.40	44.4
123633		4	< 1	71.5	1.30	3.22	7.27	0.03	5.20	0.8	145	41.8	1610	11.0	< 0.1	64.4	3.2	0.9	1.0	100	0.28	0.22	46.0
123634		4	< 1	55.9	0.51	0.87	> 10.0	2.88	0.07	0.1	173	76.1	135	2.91	2.1	10.3	1.2	2.6	0.4	110	0.17	8.57	2.4
123635		5	< 1	81.0	1.15	2.96	6.33	0.02	6.74	0.3	149	42.2	1840	11.9	0.1	64.7	3.6	0.7	1.2	80	0.11	0.19	44.9
123636		< 2	< 1	36.5	0.27	0.96	8.94	2.81	0.09	0.1	164	85.9	176	3.33	1.9	42.9	1.9	2.0	0.6	30	0.07	6.62	5.7
123637		< 2	< 1	59.4	0.36	0.85	7.94	2.29	0.11	0.1	153	86.2	144	2.75	1.6	24.5	1.4	1.9	0.4	90	0.06	6.27	3.2
123638		< 2	< 1	23.5	0.07	0.40	3.31	0.82	0.07	0.1	168	62.1	123	2.49	0.2	34.1	1.6	1.0	0.5	70	< 0.05	1.99	2.6
123639		7	< 1	49.2	0.25	0.79	5.97	1.60	0.09	< 0.1	71	59.8	177	3.08	0.3	19.8	1.3	1.7	0.4	< 10	0.07	4.06	4.8
123640		72	10	54.4	0.49	0.77	8.83	2.73	0.06	< 0.1	66	58.0	139	2.39	0.7	13.2	1.6	2.1	0.5	70	0.12	7.29	3.6
123641		< 2	9	23.6	0.03	0.41	2.10	0.40	0.02	0.1	143	48.4	81	4.03	0.2	14.1	1.1	0.6	0.4	70	0.23	1.64	2.1
123642		< 2	73	81.0	0.31	1.15	9.52	2.60	0.14	0.2	91	99.9	272	5.06	1.8	62.5	1.5	2.3	0.5	100	0.37	6.05	7.0
123643		< 2	78	61.1	0.50	0.88	> 10.0	2.63	0.10	0.2	119	69.8	171	3.36	0.3	16.7	1.2	2.7	0.4	70	0.29	6.84	5.2

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Results

Activation Laboratories Ltd.

Report: A17-07225

Analyte Symbol	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.02	0.1	0.2	0.1	0.1	0.2	0.1	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123576	0.68	0.11	0.1	63.0	5.0	9.1	38.4	8.6	49	4.1	0.34	< 0.1	1	0.2	< 0.1	194	22.0	43.1	4.8	19.0	2.9	3.3	0.4
123577	0.91	0.25	0.3	130	25.7	1.0	233	8.2	75	2.5	0.56	< 0.1	2	0.2	< 0.1	811	40.0	97.2	8.3	31.1	4.3	4.4	0.5
123578	0.87	0.09	0.5	81.1	17.2	1.1	162	8.9	42	0.3	0.12	< 0.1	< 1	< 0.1	< 0.1	585	32.1	65.6	6.8	26.9	4.1	4.1	0.4
123579	0.26	0.27	< 0.1	17.0	3.4	10.7	21.9	3.7	13	1.7	2.54	< 0.1	< 1	0.2	0.2	114	8.8	17.2	1.9	7.6	1.4	1.5	0.2
123580	0.41	0.12	0.6	30.0	12.0	0.5	65.2	5.7	42	< 0.1	0.07	< 0.1	< 1	< 0.1	< 0.1	485	16.0	33.9	3.3	12.1	1.7	1.9	0.2
123581	0.25	0.07	0.2	19.8	3.9	2.5	20.0	4.8	29	1.1	1.88	< 0.1	< 1	0.1	< 0.1	157	12.3	27.7	2.6	10.2	1.5	1.7	0.2
123582	0.26	0.12	< 0.1	11.6	1.7	2.4	9.3	4.1	6	0.8	5.12	< 0.1	< 1	0.1	< 0.1	39	10.2	22.8	2.2	8.8	1.5	1.6	0.2
123583	0.31	0.05	< 0.1	18.9	5.1	0.5	29.4	7.9	31	0.4	0.46	< 0.1	1	< 0.1	< 0.1	164	10.8	27.4	2.3	8.7	1.4	1.7	0.2
123584	1.07	0.05	< 0.1	106	23.4	0.3	199	8.1	68	7.7	1.92	< 0.1	2	0.1	0.1	796	33.6	81.5	7.3	28.1	4.3	4.6	0.5
123585	0.17	0.05	0.3	21.2	3.7	1.5	17.9	3.4	9	1.5	2.90	< 0.1	< 1	0.1	< 0.1	120	4.6	10.9	1.0	4.2	0.8	0.9	0.1
123586	0.20	< 0.02	0.4	20.9	4.2	6.5	31.1	2.6	14	1.9	3.57	< 0.1	< 1	0.2	< 0.1	144	8.2	15.5	1.7	6.5	1.0	1.1	0.1
123587	0.49	8.05	0.8	62.6	19.8	5.3	170	6.9	88	4.9	0.40	< 0.1	2	0.2	0.3	473	19.3	41.9	4.0	14.8	2.2	2.1	0.2
123588	0.15	72.5	2.8	17.8	1.2	> 10000	1.5	1.7	356	0.7	0.94	0.4	132	212	0.9	14	3.6	7.0	0.7	3.0	0.5	0.5	< 0.1
123589	0.88	0.38	1.0	175	9.9	360	99.6	17.7	53	4.6	2.14	< 0.1	3	10.1	0.1	340	23.5	50.2	5.6	23.5	4.0	4.6	0.6
123590	0.28	0.53	1.2	360	1.5	522	20.5	12.8	10	0.5	1.81	5.6	2	6.2	< 0.1	56	11.4	19.8	1.9	6.8	1.0	1.5	0.2
123591	0.14	0.03	0.1	1650	1.4	9.7	18.9	14.4	8	0.6	2.23	10.5	2	3.8	0.1	45	0.9	2.1	0.3	1.3	0.4	0.7	0.2
123592	1.09	0.08	1.3	136	0.9	79.0	11.5	15.8	6	0.6	0.40	< 0.1	< 1	0.9	0.1	31	5.3	11.4	1.4	6.7	1.6	2.7	0.4
123593	1.34	0.05	1.6	773	2.3	24.2	45.0	25.8	15	1.6	1.56	< 0.1	< 1	0.6	0.2	83	5.7	15.0	1.9	9.3	2.5	4.2	0.6
123594	0.65	3.54	16.3	> 10000	1.5	90.9	3.1	15.9	8	0.1	2.36	34.4	10	34.9	0.1	15	5.3	12.1	1.5	6.7	1.5	2.3	0.4
123595	0.94	0.57	2.1	1230	15.1	360	166	15.0	107	8.1	7.52	0.3	3	6.1	0.3	523	26.9	58.6	6.1	24.3	4.0	5.0	0.6
123596	0.90	3.79	12.6	> 10000	1.7	19.0	4.8	24.1	3	0.2	1.14	29.5	9	21.5	< 0.1	16	9.5	19.7	2.3	10.2	2.1	3.3	0.6
123597	0.53	0.17	0.6	598	2.3	5.8	20.0	26.0	21	2.2	0.96	0.1	< 1	1.9	0.1	77	11.4	23.3	2.7	12.2	2.6	4.4	0.7
123598	0.70	0.09	0.5	812	0.5	34.0	4.5	19.1	3	0.3	0.70	0.2	< 1	0.6	< 0.1	20	3.9	9.2	1.2	6.1	1.6	2.8	0.4
123599	1.05	0.39	0.9	3090	11.1	27.3	170	16.7	62	6.7	1.58	0.2	2	14.1	0.1	363	22.5	43.9	4.9	19.7	3.1	4.0	0.5
123600	0.84	0.11	1.3	80.8	2.0	2.2	24.0	26.4	16	1.5	0.58	< 0.1	< 1	0.3	< 0.1	73	5.3	11.1	1.5	8.1	2.3	4.0	0.7
123601	0.98	0.02	0.9	107	0.6	8.4	2.0	8.9	1	0.5	0.16	< 0.1	< 1	< 0.1	< 0.1	14	4.3	8.1	1.1	5.1	1.1	1.5	0.2
123602	1.87	0.10	1.1	354	4.0	5.4	56.7	36.6	23	1.9	1.30	0.2	8	2.1	< 0.1	121	13.9	28.9	3.5	16.2	4.0	6.3	1.0
123603	1.19	0.02	0.5	216	8.9	2.0	1.6	24.0	8	< 0.1	0.10	< 0.1	< 1	< 0.1	< 0.1	84	6.5	16.0	2.2	12.2	3.1	4.7	0.7
123604	0.83	0.04	0.7	78.2	25.6	4.6	43.9	7.8	5	< 0.1	0.08	< 0.1	< 1	< 0.1	< 0.1	1310	24.3	55.9	5.5	22.4	3.4	3.5	0.3
123605	0.58	0.04	0.2	105	21.7	17.0	55.9	4.9	44	0.3	0.21	< 0.1	20	< 0.1	< 0.1	1150	18.8	39.3	4.1	15.5	2.2	2.2	0.2
123606	1.20	0.04	0.7	142	5.4	145	0.4	8.9	10	1.6	0.25	< 0.1	< 1	0.2	< 0.1	24	16.1	32.1	3.8	17.3	3.3	4.0	0.5
123607	0.60	0.32	1.5	70.4	26.5	6.1	105	7.2	66	0.7	0.25	< 0.1	< 1	0.2	< 0.1	1280	20.8	35.4	3.8	14.3	2.3	2.4	0.3
123608	0.72	0.16	1.5	130	20.3	7.9	95.4	6.5	49	< 0.1	0.25	< 0.1	< 1	< 0.1	< 0.1	971	26.1	48.8	5.6	22.4	3.5	3.2	0.3
123609	0.62	0.20	0.2	88.1	11.3	3.6	43.5	8.1	10	0.2	0.24	< 0.1	< 1	< 0.1	< 0.1	518	16.4	31.7	3.6	14.8	2.5	3.0	0.3
123610	0.99	0.30	0.9	134	27.1	7.2	112	9.3	25	< 0.1	0.17	< 0.1	< 1	< 0.1	< 0.1	1380	25.9	49.4	5.7	23.2	4.0	4.0	0.4
123611	0.92	0.10	0.7	161	29.9	3.3	136	14.5	64	0.9	0.46	< 0.1	3	0.2	< 0.1	1580	24.6	49.0	5.7	22.4	3.7	4.1	0.5
123612	0.47	0.14	1.0	194	20.7	1.6	76.9	8.9	50	0.7	1.01	< 0.1	2	< 0.1	< 0.1	1090	11.0	20.4	2.3	9.6	1.6	2.1	0.3
123613	2.49	0.04	0.4	190	14.7	0.9	13.7	39.3	2	< 0.1	0.09	0.1	< 1	< 0.1	< 0.1	210	17.6	42.1	5.9	30.1	6.8	9.4	1.3
123614	1.00	0.15	0.5	70.9	33.9	1.2	141	8.1	73	1.1	0.41	< 0.1	< 1	< 0.1	< 0.1	1640	26.4	51.5	5.9	23.1	3.7	3.6	0.4
123615	0.93	0.06	0.9	74.9	23.2	0.5	172	8.6	32	1.4	0.22	< 0.1	< 1	< 0.1	< 0.1	870	36.6	80.8	7.6	29.6	4.4	4.3	0.4
123616	1.34	0.06	1.0	125	23.9	2.5	153	10.8	50	2.8	0.11	< 0.1	1	0.1	< 0.1	816	53.2	104	10.9	42.4	6.2	6.4	0.6
123617	0.96	0.14	0.4	109	23.3	0.9	152	7.1	46	0.8	0.10	< 0.1	< 1	< 0.1	< 0.1	837	35.0	76.9	7.5	29.0	4.4	4.4	0.4

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Analyte Symbol	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.02	0.1	0.2	0.1	0.1	0.2	0.1	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123618	0.79	0.12	0.5	66.1	14.8	0.7	109	7.9	30	< 0.1	0.06	< 0.1	< 1	< 0.1	< 0.1	449	31.3	68.7	6.5	24.5	3.6	3.8	0.4
123619	0.89	0.04	0.5	83.2	23.2	0.5	154	7.7	21	< 0.1	0.07	< 0.1	< 1	< 0.1	< 0.1	829	34.8	79.7	7.2	27.2	3.8	3.9	0.4
123620	0.21	0.31	0.2	6.4	0.6	8.0	2.0	3.3	4	1.1	1.11	< 0.1	< 1	0.1	< 0.1	9	6.9	16.8	1.5	5.8	1.0	1.2	0.1
123621	0.79	1.96	0.5	85.9	13.9	1.4	71.5	9.0	24	< 0.1	0.12	< 0.1	< 1	< 0.1	< 0.1	386	29.5	49.4	5.5	21.1	3.3	3.6	0.4
123622	0.57	0.09	0.1	39.8	10.7	< 0.1	52.4	7.7	18	0.2	0.10	< 0.1	< 1	< 0.1	< 0.1	349	23.5	50.5	4.9	18.4	2.9	3.1	0.3
123623	0.71	0.04	1.1	179	22.4	0.8	136	8.2	80	2.2	0.38	< 0.1	< 1	< 0.1	< 0.1	607	15.3	44.4	4.1	17.3	3.1	3.2	0.4
123624	1.50	0.08	1.1	103	26.4	1.0	208	12.0	46	0.8	0.16	< 0.1	< 1	< 0.1	< 0.1	703	58.8	121	12.0	46.5	6.9	6.8	0.7
123625	0.71	0.07	0.8	119	18.1	0.7	117	6.7	39	3.1	0.17	< 0.1	1	< 0.1	< 0.1	438	29.9	63.4	6.1	23.6	3.4	3.3	0.3
123626	0.75	0.09	0.2	75.8	17.4	1.2	99.8	10.5	40	0.7	0.25	< 0.1	< 1	< 0.1	< 0.1	554	29.6	61.7	6.0	22.9	3.4	3.6	0.4
123627	0.50	0.08	0.3	25.2	11.9	0.2	64.6	6.6	19	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	447	26.7	56.2	5.2	19.3	2.7	2.9	0.3
123628	0.58	0.13	< 0.1	38.7	13.4	< 0.1	72.6	6.8	24	< 0.1	0.08	< 0.1	< 1	< 0.1	< 0.1	446	22.9	48.0	4.7	17.9	2.6	2.7	0.3
123629	0.47	0.06	0.1	35.4	8.2	< 0.1	47.8	9.2	26	< 0.1	0.09	< 0.1	< 1	< 0.1	< 0.1	241	21.9	45.5	4.4	16.5	2.4	2.7	0.3
123630	0.53	0.14	1.3	40.5	9.7	0.5	76.9	8.1	15	0.2	0.14	< 0.1	1	< 0.1	< 0.1	274	25.7	52.6	5.1	18.9	2.7	2.8	0.3
123631	0.42	0.06	0.5	30.7	2.8	0.8	14.8	8.5	8	1.3	0.44	< 0.1	< 1	0.1	< 0.1	93	6.7	13.2	1.6	6.6	1.1	1.5	0.2
123632	1.44	0.03	1.2	143	11.1	1.4	1.3	29.5	3	1.2	0.33	< 0.1	3	0.3	< 0.1	71	8.1	19.8	2.8	14.9	3.7	5.4	0.8
123633	1.38	< 0.02	1.0	159	12.1	1.3	0.6	29.0	1	< 0.1	0.13	< 0.1	< 1	< 0.1	< 0.1	111	8.4	20.4	2.9	14.7	3.7	5.6	0.8
123634	1.08	0.14	1.6	71.9	44.6	4.3	170	9.7	87	0.4	0.18	< 0.1	< 1	< 0.1	< 0.1	1980	31.6	60.6	6.8	26.8	4.2	4.1	0.4
123635	1.97	0.04	1.4	169	12.0	0.8	0.8	33.6	4	0.1	0.13	< 0.1	< 1	< 0.1	< 0.1	24	15.2	37.2	5.1	25.7	6.2	8.0	1.1
123636	1.24	0.08	0.7	108	37.0	9.9	165	15.9	76	0.3	0.24	< 0.1	< 1	< 0.1	< 0.1	1600	36.8	70.5	7.9	31.4	4.9	5.2	0.6
123637	0.94	0.07	0.9	74.7	32.2	16.9	136	11.7	65	0.4	0.32	< 0.1	< 1	< 0.1	< 0.1	1420	26.9	53.1	6.0	22.9	3.5	3.5	0.4
123638	0.69	0.05	0.7	67.8	17.3	13.0	45.0	13.6	12	0.2	0.66	< 0.1	< 1	< 0.1	< 0.1	825	13.5	28.0	3.4	14.1	2.4	3.0	0.4
123639	0.70	0.17	0.3	82.2	21.6	4.1	93.8	9.1	13	< 0.1	0.09	< 0.1	< 1	< 0.1	< 0.1	952	20.1	37.3	4.2	16.4	2.6	2.9	0.3
123640	1.05	0.09	0.4	76.7	35.5	1.5	160	12.8	25	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	1610	33.7	65.1	7.3	28.8	4.3	4.4	0.5
123641	0.51	0.10	0.8	78.4	7.7	5.1	26.5	10.4	11	1.5	1.91	< 0.1	< 1	< 0.1	< 0.1	302	11.1	21.8	2.6	10.8	2.0	2.5	0.3
123642	0.74	0.19	0.9	144	39.5	6.3	144	13.5	72	0.4	0.14	< 0.1	< 1	< 0.1	< 0.1	1750	16.9	34.5	3.6	13.9	2.5	2.8	0.4
123643	0.79	0.19	0.4	154	39.1	4.5	160	10.0	12	< 0.1	0.06	< 0.1	< 1	< 0.1	< 0.1	1720	25.1	42.1	4.6	18.0	2.8	2.9	0.3

Analyte Symbol	Dy	Cu	Ge	Tm	Yb	Lu	Ta	Sr	W	Re	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.001	0.05	0.5	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123576	2.1	23.9	0.2	0.2	1.2	0.2	0.2	529	0.6	0.015	0.23	23.6	6.9	1.7
123577	2.4	44.3	1.2	0.2	1.6	0.2	< 0.1	161	0.2	0.012	1.34	29.5	19.9	2.4
123578	2.4	3.6	0.5	0.2	1.4	0.2	< 0.1	87.9	< 0.1	0.018	1.29	18.5	12.8	2.7
123579	1.0	2.9	0.2	< 0.1	0.4	< 0.1	< 0.1	35.0	0.1	0.013	0.24	12.8	3.0	0.8
123580	1.3	11.2	0.2	0.1	0.8	0.1	< 0.1	50.1	< 0.1	0.015	0.42	22.4	12.7	1.6
123581	1.1	11.0	0.4	< 0.1	0.6	< 0.1	0.1	18.9	< 0.1	0.012	0.17	14.2	6.3	0.9
123582	1.0	6.4	0.3	< 0.1	0.4	< 0.1	< 0.1	30.2	0.2	0.002	0.09	5.0	4.4	0.5
123583	1.6	10.8	0.1	0.1	0.8	0.1	< 0.1	52.8	< 0.1	0.008	0.19	10.8	8.4	1.2
123584	2.4	64.8	1.3	0.2	1.4	0.2	0.5	88.3	1.0	0.019	1.07	22.7	18.2	1.9
123585	0.8	8.0	0.1	< 0.1	0.3	< 0.1	< 0.1	20.9	0.3	0.009	0.17	9.7	3.4	0.6
123586	0.7	8.3	0.8	< 0.1	0.3	< 0.1	< 0.1	31.7	0.3	0.007	0.20	4.2	3.0	1.5
123587	1.6	10.7	0.9	0.2	1.3	0.2	0.3	166	0.6	0.007	0.89	33.2	12.8	2.2
123588	0.5	192	0.3	< 0.1	0.2	< 0.1	< 0.1	4.6	2.8	0.008	0.18	43.4	1.0	0.7
123589	3.8	22.1	0.4	0.3	1.9	0.2	0.3	754	0.8	0.018	1.11	30.9	7.6	1.4
123590	2.0	4.3	0.3	0.2	1.4	0.2	< 0.1	33.9	0.1	0.017	0.30	36.6	1.4	0.4
123591	2.1	19.4	0.2	0.4	2.7	0.3	< 0.1	8.4	0.2	0.006	0.18	4.1	0.7	0.2
123592	2.5	7.0	< 0.1	0.2	1.0	0.1	< 0.1	1010	0.2	0.024	0.13	24.8	0.6	0.7
123593	4.9	2.7	0.1	0.3	1.7	0.2	0.1	1970	0.5	0.023	0.43	57.2	1.3	0.8
123594	2.9	862	0.4	0.2	1.5	0.2	< 0.1	10.9	0.1	0.010	0.15	1340	0.4	0.7
123595	4.0	53.8	0.3	0.3	2.4	0.3	0.4	224	1.8	0.016	1.93	28.7	10.7	4.1
123596	4.4	899	0.2	0.4	2.2	0.3	< 0.1	4.5	< 0.1	0.010	0.34	669	0.7	0.2
123597	5.9	21.0	< 0.1	0.5	3.5	0.5	0.2	884	0.6	0.017	0.28	36.0	2.2	1.2
123598	3.5	7.6	< 0.1	0.3	1.5	0.2	< 0.1	522	0.2	0.016	0.10	28.1	0.3	0.2
123599	3.5	37.3	0.2	0.3	2.0	0.3	0.5	226	1.5	0.021	2.49	40.1	8.6	1.9
123600	4.9	5.0	0.1	0.4	2.2	0.3	0.2	738	0.4	0.013	0.39	22.5	1.5	0.6
123601	1.5	1.3	< 0.1	0.1	0.6	< 0.1	< 0.1	1260	0.2	0.010	0.08	22.7	0.5	0.5
123602	7.5	10.1	< 0.1	0.5	3.2	0.4	0.1	551	0.5	0.012	0.56	10.8	3.2	1.0
123603	5.4	164	0.2	0.4	2.5	0.3	< 0.1	155	< 0.1	0.006	0.12	4.4	0.9	0.2
123604	2.0	22.6	0.2	0.1	1.0	0.1	< 0.1	49.5	< 0.1	0.008	0.48	3.2	9.0	0.9
123605	1.2	12.6	0.4	< 0.1	0.7	< 0.1	< 0.1	47.1	< 0.1	0.014	0.50	4.9	10.2	1.9
123606	2.7	13.9	0.4	0.1	0.5	< 0.1	< 0.1	840	< 0.1	0.001	0.05	5.5	2.4	0.7
123607	1.7	12.8	0.4	0.2	1.3	0.2	< 0.1	75.9	< 0.1	0.013	1.01	21.5	8.0	3.6
123608	1.8	37.2	0.2	0.2	1.1	0.1	< 0.1	55.9	< 0.1	0.016	1.08	17.3	7.9	2.9
123609	2.1	13.5	0.5	0.2	1.0	0.1	< 0.1	28.7	< 0.1	0.017	0.46	9.7	5.4	2.1
123610	2.5	30.7	0.3	0.2	1.5	0.2	< 0.1	69.3	< 0.1	0.010	1.16	28.1	7.4	3.2
123611	3.2	36.6	0.7	0.3	2.3	0.3	< 0.1	99.9	0.1	0.014	1.51	25.0	8.2	6.0
123612	2.0	34.2	0.3	0.2	1.3	0.2	< 0.1	24.0	< 0.1	0.015	0.74	10.3	4.1	2.6
123613	9.2	341	0.3	0.6	3.3	0.4	< 0.1	215	< 0.1	0.009	0.20	22.4	1.8	0.3
123614	2.0	24.7	0.4	0.2	1.4	0.2	< 0.1	94.4	0.2	0.011	1.46	15.7	9.8	4.0
123615	2.3	41.7	0.5	0.2	1.0	0.1	< 0.1	111	0.2	0.005	0.90	15.4	12.1	1.1
123616	3.0	24.8	0.7	0.2	1.4	0.2	0.2	90.5	0.3	0.006	0.89	12.2	16.0	1.4
123617	1.9	209	0.4	0.1	1.1	0.1	< 0.1	96.7	0.1	0.019	0.93	15.8	13.5	3.5

Analyte Symbol	Dy	Cu	Ge	Tm	Yb	Lu	Ta	Sr	W	Re	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.001	0.05	0.5	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123618	2.0	11.5	0.2	0.1	1.0	0.1	< 0.1	107	< 0.1	0.014	0.61	23.1	13.4	1.9
123619	2.1	13.7	0.4	0.1	0.9	0.1	< 0.1	121	< 0.1	0.004	0.86	24.0	11.4	1.1
123620	0.7	7.6	< 0.1	< 0.1	0.3	< 0.1	< 0.1	9.0	0.4	0.013	0.08	4.3	2.5	0.7
123621	2.1	8.6	0.3	0.1	1.0	0.1	< 0.1	150	< 0.1	0.006	0.38	36.4	10.4	2.0
123622	1.8	15.9	0.2	0.1	0.9	0.1	< 0.1	49.5	< 0.1	0.006	0.32	14.2	12.2	1.8
123623	2.3	14.3	1.0	0.2	1.1	0.2	0.1	44.3	< 0.1	0.005	1.21	8.4	8.1	1.5
123624	3.1	23.9	0.5	0.2	1.3	0.2	< 0.1	227	0.2	0.011	1.02	29.6	17.2	1.9
123625	1.7	6.0	0.9	0.1	0.8	0.1	0.2	177	0.4	0.007	0.64	18.3	10.8	1.3
123626	2.4	32.8	0.3	0.2	1.1	0.1	< 0.1	81.4	< 0.1	0.009	0.57	18.9	13.6	1.5
123627	1.4	17.2	0.2	0.1	0.8	< 0.1	< 0.1	37.6	< 0.1	0.005	0.33	10.3	11.8	1.5
123628	1.5	17.2	0.2	0.1	1.0	0.1	< 0.1	49.1	< 0.1	0.005	0.43	13.7	11.3	2.2
123629	1.8	15.5	0.2	0.2	1.0	0.1	< 0.1	31.6	< 0.1	0.003	0.28	9.6	13.6	2.4
123630	1.8	14.5	0.2	0.1	0.9	0.1	< 0.1	39.6	< 0.1	0.004	0.44	9.2	10.4	1.8
123631	1.4	7.4	< 0.1	0.1	0.7	< 0.1	< 0.1	1190	0.3	0.015	0.11	26.9	2.1	1.4
123632	6.1	302	0.5	0.4	2.5	0.3	< 0.1	308	< 0.1	0.011	< 0.05	5.6	2.1	0.3
123633	5.8	259	0.3	0.4	2.5	0.3	< 0.1	184	< 0.1	0.008	< 0.05	5.0	0.8	0.2
123634	2.3	27.6	0.4	0.2	1.4	0.2	< 0.1	126	< 0.1	0.007	1.47	23.2	10.6	3.6
123635	7.6	219	0.4	0.4	2.6	0.3	< 0.1	259	< 0.1	0.010	0.10	5.5	1.5	0.2
123636	3.4	20.3	0.4	0.3	1.8	0.2	< 0.1	70.9	< 0.1	0.013	1.66	16.0	9.7	3.1
123637	2.7	10.5	0.4	0.2	1.5	0.2	< 0.1	106	< 0.1	0.004	1.37	22.9	8.8	3.0
123638	2.7	6.6	0.6	0.2	1.4	0.2	< 0.1	31.4	< 0.1	0.008	0.52	8.6	4.4	2.5
123639	2.2	11.2	0.2	0.2	1.3	0.2	< 0.1	57.1	< 0.1	0.009	0.79	15.3	7.3	2.8
123640	2.8	5.3	0.2	0.3	1.8	0.2	< 0.1	115	< 0.1	< 0.001	1.46	23.5	9.7	3.5
123641	2.1	15.3	0.4	0.2	1.1	0.1	< 0.1	8.4	< 0.1	0.006	0.28	7.8	3.8	1.8
123642	2.5	100	0.3	0.3	1.8	0.2	< 0.1	90.6	< 0.1	0.008	1.24	23.4	11.8	3.5
123643	2.0	22.6	0.2	0.2	1.6	0.2	< 0.1	99.1	< 0.1	0.004	1.47	21.6	8.6	3.5

Analyte Symbol	Zn	Au	B	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Ni	Er	Be	Ho	Hg	Ag	Cs	Co
Unit Symbol	%	ppb	ppm	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm
Lower Limit	0.001	2	1	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	0.5	0.1	0.1	0.1	10	0.05	0.05	0.1
Method Code	4Acid ICPOE S	FA-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SDC-1 Meas			11	33.8	1.58	1.06	9.17	2.69	1.07		32	42.1	870	4.89	0.6	34.4	3.4	3.1	1.1	70		3.59	17.6
SDC-1 Cert			13.00	34.0	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30	38.0	4.10	3.00	1.50	200.00		4.00	18.0
GXR-6 Meas			11	35.2	0.10	0.65	> 10.0	1.81	0.19	0.1	112	58.9	1050	5.55	1.9	23.4		1.1		50	0.38	3.77	12.9
GXR-6 Cert			9.80	32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30	27.0		1.40		68.0	1.30	4.20	13.8
MP-1b Meas	17.0																						
MP-1b Cert	16.7																						
DNC-1a Meas				4.5							158	182				265							56.3
DNC-1a Cert				5.2							148	270				247							57
PK2 Meas		4890																					
PK2 Cert		4790																					
PK2 Meas		4530																					
PK2 Cert		4790																					
PK2 Meas		4860																					
PK2 Cert		4790																					
CZN-4 Meas	55.2																						
CZN-4 Cert	55.07																						
SBC-1 Meas				160						0.4	232	79.9			2.9	85.7	3.6	3.5	1.2			7.65	22.7
SBC-1 Cert				163						0.40	220.0	109			3.7	82.8	3.80	3.20	1.40			8.2	22.7
CDN-PGMS-25 Meas		488																					
CDN-PGMS-25 Cert		483																					
CDN-PGMS-25 Meas		499																					
CDN-PGMS-25 Cert		483																					
CDN-PGMS-25 Meas		491																					
CDN-PGMS-25 Cert		483																					
PTC-1b Meas	0.209																						
PTC-1b Cert	0.2083																						
SdAR-M2 (U.S.G.S.) Meas				18.8						5.0	30	39.0			3.4	55.1	3.1	6.4	0.9	100		1.71	13.6
SdAR-M2 (U.S.G.S.) Cert				17.9						5.1	25.2	49.6			7.29	48.8	3.58	6.6	1.21	1440.00		1.82	12.4
CCU-1e Meas	3.05																						
CCU-1e Cert	3.02																						
123584 Orig		< 2																					
123584 Dup		3																					
123588 Orig			< 1	4.6	0.03	< 0.01	0.45	0.04	0.01	< 0.1	10	8.9	58	21.8	0.2	4.7	0.2	0.2	< 0.1	100	3.37	0.11	22.4
123588 Dup			< 1	3.8	0.02	< 0.01	0.40	0.03	0.01	< 0.1	8	13.0	38	20.1	0.2	4.4	0.2	0.4	< 0.1	120	3.42	0.10	21.2

Analyte Symbol	Zn	Au	B	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Ni	Er	Be	Ho	Hg	Ag	Cs	Co
Unit Symbol	%	ppb	ppm	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm
Lower Limit	0.001	2	1	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	0.5	0.1	0.1	0.1	10	0.05	0.05	0.1
Method Code	4Acid ICPOE S	FA-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123592 Orig		3																					
123592 Dup		< 2																					
123596 Orig	20.3																						
123596 Dup	20.3																						
123602 Orig			< 1	8.4	0.05	0.53	2.06	0.78	26.8	2.1	38	22.6	3740	2.38	0.5	26.2	4.0	0.8	1.3	70	0.10	1.60	5.2
123602 Dup			36	8.5	0.05	0.52	2.03	0.76	26.4	1.9	36	23.3	3750	2.35	0.6	26.3	4.0	0.7	1.3	60	0.07	1.58	5.5
123605 Orig		23																					
123605 Dup		< 2																					
123619 Orig		< 2																					
123619 Dup		< 2																					
123625 Orig		< 2	< 1	48.8	0.83	1.35	8.81	2.33	0.29	< 0.1	49	61.4	1190	6.20	0.9	46.3	0.7	3.2	0.3	40	< 0.05	1.97	24.0
123625 Split PREP DUP		< 2	< 1	47.9	0.81	1.30	8.04	2.24	0.29	< 0.1	50	58.2	1170	6.03	1.0	44.6	0.7	2.8	0.2	120	0.06	1.91	23.1
123626 Orig		< 2	< 1	33.6	1.15	0.80	7.00	2.12	0.29	0.1	34	49.0	1840	3.62	1.1	28.1	1.2	2.3	0.4	20	< 0.05	3.27	11.0
123626 Dup		< 2	< 1	34.0	1.17	0.81	7.28	2.10	0.29	< 0.1	33	56.8	1890	3.67	1.0	28.2	1.3	1.9	0.4	20	0.06	3.32	10.9
123639 Orig		11																					
123639 Dup		2																					
123640 Orig			7	52.8	0.48	0.74	8.85	2.63	0.06	< 0.1	58	55.7	126	2.31	0.5	12.4	1.6	2.1	0.5	40	0.07	7.06	3.5
123640 Dup			14	56.1	0.51	0.80	8.82	2.82	0.07	< 0.1	74	60.3	151	2.47	0.8	14.0	1.5	2.1	0.5	100	0.18	7.51	3.6
Method Blank			< 1	< 0.5	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.1	2	< 0.5	< 1	< 0.01	< 0.1	< 0.5	< 0.1	0.2	< 0.1	80	< 0.05	< 0.05	< 0.1
Method Blank		< 2																					
Method Blank		< 2																					
Method Blank		< 2																					
Method Blank	< 0.001																						

Analyte Symbol	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.02	0.1	0.2	0.1	0.1	0.2	0.1	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SDC-1 Meas	1.36			99.7	21.3	1.1	126		21	0.1			< 1	< 0.1		577	38.4	79.5		37.1	6.1	7.2	0.9
SDC-1 Cert	1.70			103.00	21.00	0.220	127.00		290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20
GXR-6 Meas	0.68	0.19	1.5	122	35.5	242	82.4	12.1	72	0.6	0.73	< 0.1	< 1	0.6	< 0.1	1300	12.4	32.5		11.7	2.1	2.6	0.3
GXR-6 Cert	0.760	0.290	0.940	118	35.0	330	90.0	14.0	110	7.50	2.40	0.260	1.70	3.60	0.0180	1300	13.9	36.0		13.0	2.67	2.97	0.415
MP-1b Meas																							
MP-1b Cert																							
DNC-1a Meas	0.50			68.2	8.4		3.6	16.0	37	1.0				0.3		93	3.4			4.3			
DNC-1a Cert	0.59			70	15		5	18.0	38.0	3				0.96		118	3.6			5.20			
PK2 Meas																							
PK2 Cert																							
PK2 Meas																							
PK2 Cert																							
PK2 Meas																							
PK2 Cert																							
CZN-4 Meas																							
CZN-4 Cert																							
SBC-1 Meas	1.66	0.64		195	25.3	25.5	153	31.6	122	11.3	2.38		3	0.9		738	48.9	99.5	11.0	45.2	7.5	8.8	1.1
SBC-1 Cert	1.98	0.70		186	27.0	25.7	147	36.5	134.0	15.3	2.40		3.3	1.01		788.0	52.5	108.0	12.6	49.2	9.6	8.5	1.20
CDN-PGMS-25 Meas																							
CDN-PGMS-25 Cert																							
CDN-PGMS-25 Meas																							
CDN-PGMS-25 Cert																							
CDN-PGMS-25 Meas																							
CDN-PGMS-25 Cert																							
PTC-1b Meas																							
PTC-1b Cert																							
SdAR-M2 (U.S.G.S.) Meas	1.34	0.99		789	25.7		162	26.5	121	14.3	13.0					967	47.0	97.8	10.0	38.8	5.9	6.8	0.8
SdAR-M2 (U.S.G.S.) Cert	1.44	1.05		760	17.6		149	32.7	259	26.2	13.3					990	46.6	98.8	11.0	39.4	7.18	6.28	0.97
CCU-1e Meas																							
CCU-1e Cert																							
123584 Orig																							
123584 Dup																							
123588 Orig	0.14	73.1	2.2	18.0	1.2 > 10000		1.6	1.8	370	0.7	1.00	0.4	135	216	0.9	14	3.4	6.6	0.7	2.9	0.5	0.5	< 0.1
123588 Dup	0.16	71.9	3.3	17.5	1.1 > 10000		1.4	1.7	343	0.7	0.88	0.5	129	207	0.9	14	3.9	7.4	0.8	3.1	0.5	0.6	< 0.1
123592 Orig																							
123592 Dup																							

Analyte Symbol	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.02	0.1	0.2	0.1	0.1	0.2	0.1	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123596 Orig																							
123596 Dup																							
123602 Orig	1.86	0.10	0.8	358	4.0	4.0	56.9	36.7	22	1.9	1.42	0.2	10	2.0	< 0.1	121	13.8	28.8	3.5	16.1	4.1	6.3	1.0
123602 Dup	1.89	0.10	1.5	350	4.0	6.9	56.6	36.4	24	2.0	1.19	0.2	6	2.2	< 0.1	121	14.0	28.9	3.4	16.3	4.0	6.3	1.1
123605 Orig																							
123605 Dup																							
123619 Orig																							
123619 Dup																							
123625 Orig	0.71	0.07	0.8	119	18.1	0.7	117	6.7	39	3.1	0.17	< 0.1	1	< 0.1	< 0.1	438	29.9	63.4	6.1	23.6	3.4	3.3	0.3
123625 Split PREP DUP	0.76	0.05	1.0	117	17.7	0.8	109	6.1	41	1.6	0.28	< 0.1	1	< 0.1	< 0.1	428	29.0	62.2	6.1	23.5	3.1	3.2	0.3
123626 Orig	0.72	0.09	0.1	67.3	17.1	1.2	98.7	10.3	42	0.8	0.24	< 0.1	< 1	< 0.1	< 0.1	548	28.6	60.1	5.9	22.2	3.3	3.5	0.4
123626 Dup	0.79	0.09	0.2	84.3	17.6	1.2	101	10.7	37	0.5	0.26	< 0.1	< 1	< 0.1	< 0.1	560	30.6	63.3	6.2	23.7	3.4	3.7	0.4
123639 Orig																							
123639 Dup																							
123640 Orig	1.04	0.09	0.5	74.2	34.3	1.8	156	12.7	19	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	1560	32.6	63.4	7.1	28.4	4.2	4.2	0.5
123640 Dup	1.06	0.09	0.4	79.3	36.8	1.2	164	12.8	32	< 0.1	0.06	< 0.1	< 1	< 0.1	< 0.1	1650	34.7	66.9	7.4	29.1	4.3	4.6	0.5
Method Blank	< 0.05	< 0.02	< 0.1	0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	Dy	Cu	Ge	Tm	Yb	Lu	Ta	Sr	W	Re	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.001	0.05	0.5	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SDC-1 Meas	6.1	34.4		0.5	3.2		< 0.1	170	< 0.1		0.58	22.3	9.3	2.5
SDC-1 Cert	6.70	30.000		0.65	4.00		1.20	180.00	0.80		0.70	25.00	12.00	3.10
GXR-6 Meas	2.6	65.6			1.7	0.3	< 0.1	38.7	0.1		1.98	101	5.2	1.4
GXR-6 Cert	2.80	66.0			2.40	0.330	0.485	35.0	1.90		2.20	101	5.30	1.54
MP-1b Meas														
MP-1b Cert														
DNC-1a Meas		101			1.9			136				5.6		
DNC-1a Cert		100			2.0			144				6.3		
PK2 Meas														
PK2 Cert														
PK2 Meas														
PK2 Cert														
PK2 Meas														
PK2 Cert														
CZN-4 Meas														
CZN-4 Cert														
SBC-1 Meas	6.7	36.8		0.5	3.4	0.4	0.5	178	1.3		0.78	34.4	14.0	5.4
SBC-1 Cert	7.10	31.0000		0.56	3.64	0.54	1.10	178.0	1.60		0.89	35.0	15.8	5.76
CDN-PGMS-25 Meas														
CDN-PGMS-25 Cert														
CDN-PGMS-25 Meas														
CDN-PGMS-25 Cert														
CDN-PGMS-25 Meas														
CDN-PGMS-25 Cert														
PTC-1b Meas														
PTC-1b Cert														
SdAR-M2 (U.S.G.S.) Meas	5.3	263		0.5	3.0	0.4	0.5	147	1.1			832	13.2	2.5
SdAR-M2 (U.S.G.S.) Cert	5.88	236.0000		0.54	3.63	0.54	1.8	144	2.8			808	14.2	2.53
CCU-1e Meas														
CCU-1e Cert														
123584 Orig														
123584 Dup														
123588 Orig	0.5	200	0.3	< 0.1	0.2	< 0.1	< 0.1	4.7	2.8	0.013	0.19	43.5	1.1	0.8
123588 Dup	0.4	185	0.3	< 0.1	0.2	< 0.1	< 0.1	4.5	2.8	0.003	0.17	43.2	1.0	0.7
123592 Orig														

Analyte Symbol	Dy	Cu	Ge	Tm	Yb	Lu	Ta	Sr	W	Re	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.001	0.05	0.5	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
123592 Dup														
123596 Orig														
123596 Dup														
123602 Orig	7.4	10.1	< 0.1	0.5	3.3	0.4	0.1	553	0.5	0.015	0.54	11.5	3.1	0.9
123602 Dup	7.6	10.1	0.1	0.5	3.2	0.4	0.1	549	0.5	0.010	0.58	10.1	3.2	1.1
123605 Orig														
123605 Dup														
123619 Orig														
123619 Dup														
123625 Orig	1.7	6.0	0.9	0.1	0.8	0.1	0.2	177	0.4	0.007	0.64	18.3	10.8	1.3
123625 Split PREP DUP	1.6	7.1	0.6	0.1	0.8	0.1	< 0.1	173	0.1	0.005	0.59	19.3	10.5	1.3
123626 Orig	2.3	19.8	0.4	0.2	1.1	0.1	< 0.1	80.7	< 0.1	0.011	0.55	18.8	13.4	1.4
123626 Dup	2.5	45.9	0.3	0.2	1.2	0.1	< 0.1	82.1	< 0.1	0.006	0.59	19.0	13.7	1.5
123639 Orig														
123639 Dup														
123640 Orig	2.8	5.1	0.2	0.3	1.8	0.3	< 0.1	113	< 0.1	< 0.001	1.43	23.6	9.6	3.6
123640 Dup	2.8	5.5	0.2	0.3	1.8	0.2	< 0.1	118	< 0.1	0.009	1.49	23.4	9.9	3.5
Method Blank	< 0.1	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	0.002	< 0.05	< 0.5	< 0.1	< 0.1
Method Blank														
Method Blank														
Method Blank														
Method Blank														

APPENDIX 4: 2017 SAMPLE DESCRIPTIONS FROM THE MOUNT CAMERON PROPERTY

Sample ID	Easting	Northing	Sample Type	Rock Type	Description
123576	502109.31	7110076.24	Grab - boulder	Limestone	orange weathered, grey fresh, fine-grained, massive, alteration: oxide, localized (surface), moderate intensity, moderate HCL reaction, structure(s): quartz veins, outcrop scale, moderate
123577	501965	7110417	Grab - boulder	Phyllite	metallic grey weathered, orange to red fresh, recessive (hardness of 2), alteration: oxide, pervasive, moderate intensity, structure(s): quartz veins, white, outcrop-scale, moderate
123578	501943	7110460	Grab - outcrop	Limestone	grey to black weathered, light grey to white fresh, fine-grained, massive, alteration: oxide, localized, weak intensity, weak HCL reaction (powdered), magnetite, sulphides: sphalerite
123579	501843.78	7110529.83	Grab - outcrop	Phyllite	medium grey weathered, medium grey fresh, fine-grained, massive, structure(s): calcite veins, outcrop-scale, moderate, minerals: muscovite, sulphides: chalcopyrite (?), sphalerite (?), interbedded with lenses of limestone, grey weathered, light grey fresh, fine-grained, massive, moderate HCL reaction,
123580	501784.67	7111023.01	Grab - outcrop	Schist	
123581	501883.66	7111033.43	Grab - outcrop	Schist	grey to beige weathered, grey to beige fresh, fine-grained, massive with minor foliations, alteration: oxide, localized, moderate intensity, magnetite, structure(s): quartz vein, localized, sulphides: galena(?)
123582	501959.51	7111038.72	Grab - boulder	Quartz Vein	grey weathered, white to orange fresh, medium grained, alteration: oxide, localized, strong intensity, minerals: siderite, magnetite, sulphides: quartz vein float from top of ridge?, outer surface resembles grey schist
123583	501850.65	7111100.27	Grab - outcrop	Schist	light grey to dark grey weathered, light grey fresh, fine-grained to medium grained, minerals: muscovite, biotite, siderite (?)
123584	501825.19	7111090.12	Grab - outcrop	Schist	dark grey weathered, light grey fresh, fine-grained, massive, alteration: oxide, localized, weak, minerals: muscovite, magnetite
123585	501768.19	7111063.79	Grab - outcrop	Schist	grey weathered, white to grey fresh, fine-grained, vuggy (open), alteration: oxide, pervasive, moderate intensity, structure(s): fractured, outcrop-scale, strong, minerals: quartz, chlorite, magnetite, chalcopyrite
123586	501786.62	7111104.58	Grab - outcrop	Schist	light grey to dark grey weathered, light to dark grey fresh, fine-grained, alteration: oxide, localized, weak intensity, structure(s): fractured, outcrop-scale, strong, quartz vein, outcrop-scale, strong (10-40 cm width x 400 cm length), fine-grained to medium-grained smoky quartz, minerals: biotite, chlorite, muscovite, sulphides: hematite, pyrrhotite (?), minor magnetism
123587	501654.74	7111242.35	Grab - boulder	Chert	beige to orange weathered, beige fresh, fine-grained, alteration: oxide, localized, weak intensity (weathered surface), structure(s): fractured, outcrop-scale, strong, minerals: biotite
123588	499440.79	7107078.10	Grab - boulder	Greenstone	brown to green to beige weathered, dark grey to bright green fresh, fine-grained, vesicles (open), alteration: oxide, localized, weak intensity, serpentine (?), localized, weak, minerals: olivine, pyroxene, sulphides: pyrite
123589	499480.15	7107146.52	Grab - trench outcrop	Limestone	dark grey to black weathered, dark grey fresh, fine-grained, massive, alteration: oxide, localized, weak intensity, moderate HCL reaction, structure(s): quartz veins, outcrop-scale, weak, minerals: cream to orange calcite / aragonite (?), graphite,
123590	499421.48	7107045.68	Grab - waste pile boulder	Gabbro	dark grey weathered, dark grey fresh, fine-grained, vesicles (open), alteration: oxide, localized, moderate intensity, structure(s): quartz vein (?), localized, weak intensity, sulphides: hematite, chalcopyrite, galena (all in vein?)
123591	499429.91	7107060.16	Grab - waste pile boulder	Diorite	dark grey to maroon to white weathered, dark grey to maroon to white fresh, fine-grained to medium-grained, alteration: oxide, localized, weak intensity, serpentine(?), localized, weak intensity, minerals: pyroxene (tabular), calcite (white, HCL fizz), hornblende, quartz, sulphides: chalcopyrite
123592	499440.15	7107075.43	Grab - waste pile boulder	Limestone	dark grey weathered, dark grey to white fresh, fine-grained, structure(s): calcite veins (cream to orange), outcrop scale, moderate
123593	499435.48	7107081.22	Grab - waste pile boulder	Limestone	light grey to dark grey and brown weathered, dark grey fresh, fine-grained, structure(s): calcite veins (white to creamy-orange), outcrop-scale, moderate, sulphides: galena (within veins?)
123594	499433.52	7107068.85	Grab - waste pile boulder	Tuff	dark grey to brown weathered, dark brown to dark grey to rusty orange fresh, fine-grained (<1mm) to very coarse-grained (>20mm), greenstone clasts?, dolomite clasts, sulphides: pyrrhotite
123595	499408.41	7107066.96	Grab - waste pile boulder	Phyllite	dark grey to metallic weathered, dark grey to metallic fresh, fine-grained, crenulation, alteration: oxide, vein-related, moderate intensity, structure(s): calcite veins, outcrop-scale, weak, minerals: graphite

Sample ID	Easting	Northing	Sample Type	Rock Type	Description
123596	499419.14	7107039.33	Grab - trench outcrop	Greenstone	light grey to dark grey and brown weathered, dark grey to rusty orange fresh, fine-grained (<1mm), alteration: oxide, localized, weak, structure(s): veins, outcrop-scale, weak, minerals: hornblende, sulphides: hematite
123597	499435.17	7107009.79	Grab - waste pile boulder	Limestone	dark grey weathered, bluish grey fresh, fine-grained, structure(s): calcite vein, outcrop-scale, weak (1.5 to 5 cm width), burrows (?), outcrop-scale, weak, minerals: graphite, sulphides: galena, pyrite
123598	499404.51	7107039.00	Grab - waste pile boulder	Limestone	dark grey weathered, bluish grey fresh, fine-grained to coarse grained (medium to coarse-grained calcite xls), alteration: dolomite, localized, weak
123599	499397.43	7107001.44	Grab - boulder	Phyllite	dark metallic grey to maroon weathered, dark metallic grey fresh, fine-grained, foliated, minerals: calcite, muscovite, graphite, interbedded with Limestone lense, dark grey weathered, dark bluish grey fresh,
123600	499379.64	7107005.79	Grab - boulder	Limestone	dark grey weathered, bluish grey fresh, fine-grained, structure(s): calcite veins, outcrop-scale, weak
123601	499368.08	7106991.87	Grab - waste pile boulder	Limestone	dark grey weathered, greyish blue fresh, fine-grained, structure(s): calcite veins, outcrop-scale, weak
123602	499379.53	7106969.35	Grab - waste pile boulder	Phyllite	dark metallic grey to maroon weathered, dark metallic grey fresh, fine-grained, foliated, minerals: calcite, muscovite, graphite, sulphides: pyrite, interbedded with Limestone lenses, dark grey weathered, dark grey fresh
123603	499427.56	7106730.10	Grab - outcrop	Greenstone	dark grey weathered, dark green to black fresh, medium-grained to coarse-grained, ophitic (diabase texture), alteration: oxide, localized, weak intensity, minerals: chlorite, calcite, serpentine, pyroxene
123604	499505.18	7106659.21	Grab - boulder	Phyllite	light grey to dark grey weathered, metallic grey to green fresh, fine-grained, foliated, alteration: oxide, localized, weak, minerals: chlorite, graphite, sulphides: pyrrhotite, angular boulders
123605	499580.65	7106628.22	Grab - outcrop	Schist	light grey to dark grey weathered, light metallic grey to dark metallic grey fresh, fine-grained, alteration: oxide, pervasive, strong intensity, sulphides: pyrite, chalcopyrite
123606	499462.45	7106870.72	Grab - outcrop	Gabbro	dark grey to black weathered, light grey to dark green and white fresh, medium-grained, alteration: oxide, localized, strong (rusty red colouring), minerals: hornblende, chlorite, plagioclase, quartz
123607	498569.74	7106526.11	Grab - outcrop	Schist	light grey to dark grey to brown to metallic grey weathered, metallic grey to brassy gold fresh, fine-grained, minerals: muscovite, pyrrhotite, quartz inclusions (trace)
123608	498626.29	7106390.25	Grab - outcrop	Schist	light grey to dark grey weathered, light grey to dark grey and black fresh, fine-grained, crenulation, alteration: oxide, localized, moderate intensity, structure(s): quartz veins, outcrop-scale, moderate, minerals: muscovite, magnetite, sulphides: pyrrhotite
123609	498642.59	7106313.91	Grab - outcrop	Argillite	dark grey to metallic grey weathered, light grey to greenish beige fresh, fine-grained, alteration: oxide, localized, weak intensity, structure(s): bedding (definite), outcrop-scale, 071/25 SE, minerals: muscovite, sulphides: pyrite, hematite
123610	499050.24	7105860.67	Grab - outcrop	Phyllite	dark metallic grey to brassy gold weathered, dark metallic grey to brassy gold fresh, fine-grained, crenulation, alteration: oxide, localized, weak intensity, structure(s): quartz veins, outcrop-scale, weak, minerals: muscovite, graphite (?), sulphides: chalcopyrite
123611	499172.51	7105837.23	Grab - outcrop	Phyllitic Quartzite	light grey to dark grey and maroon to beige weathered, bluish grey, fine-grained, phyllitic, alteration: oxide, localized, weak intensity, minerals: quartz, muscovite, sulphides: pyrite
123612	499167.67	7105825.09	Grab - outcrop	Phyllitic Quartzite	light grey to dark grey and rusty orange weathered, light grey to bluish grey and white fresh, fine-grained, phyllitic, alteration: oxide, localized, strong, structure(s): bedding (definite), outcrop-scale, 080/50 SE, minerals: quartz, muscovite
123613	499169.53	7105828.76	Grab - outcrop	Greenstone	dark green to dark grey and brownish beige weathered, dark green and white fresh, fine-grained to medium-grained, alteration: oxide, localized, moderate, minerals: chlorite, calcite, serpentine
123614	499312.44	7106077.23	Grab - outcrop	Phyllite	light to dark grey weathered, metallic grey fresh, fine-grained, structure(s): graphite vein, local, weak intensity, minerals: graphite, muscovite, sulphides: chalcopyrite, very soft
123615	502330.29	7110541.19	Grab - boulder	Schist	brown to grey metallic weathered, medium grey and black fresh, fine-grained, minerals: muscovite, magnetite
123616	502356.33	7110500.43	Grab - outcrop	Phyllite	grey to brown weathered, grey to green fresh, fine-grained, minerals: muscovite, quartz, minor chlorite, minor biotite
123617	502374.31	7110481.50	Grab - outcrop	Schist	grey to brown weathered, medium grey fresh, fine-grained, minerals: muscovite, magnetite, sulphides: trace chalcopyrite

Sample ID	Easting	Northing	Sample Type	Rock Type	Description
123618	502559.63	7110344.92	Grab - outcrop	Schist	grey to brown weathered, light grey to dark grey fresh, fine-grained, minerals: biotite, muscovite, magnetite, sulphides: galena (?)
123619	502741.92	7110245.89	Grab - outcrop	Schist	grey to brown weathered, light brown to medium brown fresh, fine-grained, minerals: muscovite, sulphides: abundant galena,
123620	502807.59	7110277.93	Grab - boulder	Quartzite	white to orange-red weathered, white to orange-red fresh, fine-grained to medium-grained, alteration: oxide, pervasive, moderate intensity, minerals: quartz
123621	502875.52	7110287.91	Grab - boulder	Schist	brown to grey weathered, light grey to medium grey fresh, fine-grained, minerals: muscovite, minor magnetite, sulphides: trace hematite
123622	502943.34	7110477.53	Grab - outcrop	Schist	fine-grained, minerals: muscovite, biotite, magnetite
123623	502916.06	7110735.03	Grab - boulder	Schist	grey to brown weathered, grey fresh, fine-grained, minerals: biotite, sulphides: galena
123624	502933.66	7110927.05	Grab - outcrop	Schist	grey to brown weathered, grey fresh, fine-grained, minerals: muscovite, chlorite, quartz, magnetite, sulphides: chalcopyrite
123625	502915.00	7110987.98	Grab - boulder	Schist	grey to brown weathered, light grey to medium grey fresh, fine-grained, minerals: muscovite, chlorite, quartz, magnetite, sulphides: pyrrhotite
123626	502767.39	7111120.79	Grab - outcrop	Schist	grey to brown weathered, light grey to medium grey fresh, fine-grained, minerals: muscovite, quartz, magnetite
123627	500491.21	7107023.49	Grab - outcrop	Schist	brown to grey weathered, light grey to medium grey fresh, fine-grained, crenulation, minerals: muscovite, biotite, quartz, minor chl
123628	501146.40	7107238.62	Grab - outcrop	Gabbro	brown to grey weathered, light grey to medium grey and brown fresh, medium grained, alteration: serpentine, mineral-related, weak intensity, minerals: muscovite, quartz, pyroxene, sulphides: chalcopyrite, minor interbedded phyllite
123629	501342.33	7107247.05	Grab - boulder	Gabbro	brown to grey weathered, light grey to medium grey and brown fresh, fine-grained to medium-grained, alteration: serpentine, mineral-related, weak intensity, minerals: quartz, pyroxene, chlorite
123630	500836.32	7106757.01	Grab - boulder	Schist	brown to grey weathered, light grey to medium grey fresh, fine-grained, structure(s): quartz vein, localized, moderate, minerals: biotite, muscovite, quartz
123631	500135.96	7106331.33	Grab - boulder	Limestone	light grey to medium grey weathered, medium grey fresh, fine-grained, structure(s): calcite vein, localized, moderate intensity, sulphides: pyrrhotite
123632	500020.73	7106282.97	Grab - outcrop	Greenstone	dark grey weathered, medium grey to dark grey fresh, fine-grained, minerals: chlorite, calcite, serpentine
123633	500044.67	7106272.50	Grab - outcrop	Diorite	medium grey to dark grey weathered, dark grey fresh, fine-grained, minerals: quartz, calcite, chlorite, pyroxene
123634	499045.99	7105855.99	Grab - outcrop	Phyllite	light grey to dark grey and brown weathered, dark grey fresh, fine-grained, minerals: muscovite, graphite, sericite, biotite (weathered out)
123635	499149.14	7105829.10	Grab - outcrop	Greenstone	fine-grained, minerals: calcite, chlorite, serpentine (?), sulphides: chalcopyrite
123636	499284.10	7105640.19	Grab - outcrop	Phyllitic Quartzite	fine-grained, phyllitic, minerals: quartz, muscovite, chlorite (?), graphite, sulphides: chalcopyrite
123637	499465.51	7105648.73	Grab - outcrop	Phyllite	fine-grained, minerals: quartz, muscovite, graphite, sulphides: chalcopyrite
123638	499510.44	7105711.35	Grab - outcrop	Phyllitic Quartzite	fine-grained, phyllitic, minerals: quartz, muscovite, graphite, sulphides: chalcopyrite
123639	499570.59	7105811.74	Grab - outcrop	Phyllite	fine-grained, alteration: sericite, localized, weak intensity, minerals: quartz, muscovite, graphite, sulphides: chalcopyrite
123640	499637.62	7105925.06	Grab - outcrop	Phyllite	fine-grained, alteration: sericite, localized, weak intensity, minerals: quartz, muscovite, graphite
123641	499673.38	7105987.02	Grab - outcrop	Gabbro	medium-grained, minerals: plagioclase, pyroxene, olivine, serpentine, quartz
123642	499672.84	7105989.02	Grab - outcrop	Phyllite	fine-grained, crenulation, minerals: quartz, muscovite, graphite
123643	499720.45	7106045.96	Grab - outcrop	Phyllite	fine-grained, crenulation, minerals: quartz, graphite, muscovite