NATIONAL INSTRUMENT 43-101
TECHNICAL REPORT

On the

EMPIRICAL PROPERTY

SOUTHERN INTERIOR, BRITISH COLUMBIA, CANADA

Located Within:
NTS Sheet: 092I/12W

Centered at Approximately:
50"53'N Latitude North by Longitude 121"8'West

Report Prepared for:

Clarity Gold Corp.

223-1231 Pacific Boulevard
Vancouver, BC, V6Z 0E2

Report Prepared by:

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EFFECTIVE DATE: March 24th, 2020

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1 Executive Summary

1.1 Ownership

Clarity Gold Corp. (formerly 1222991 B.C. Ltd.) (**"Clarity Gold"** or the **"Issuer"**) as purchaser, and Longford Capital Corp. ("**Longford Capital**" or the **"Vendor"**) are party to a purchase agreement dated October 1, 2019 pursuant to which Clarity Gold agreed to purchase and the Vendor agreed to sell a 100% interest in BC Mineral Tenures 1067784, 1067785, and 1067786 (the **"Empirical Property Claims"**) in consideration for 2,000,000 common shares in the capital of Clarity Gold Corp. (each, a "**Share**") upon closing, performing $80,000 of expenditures on the project in the first year, performing $200,000 of expenditure in the second year and paying $50,000 in cash to the Vendor upon the Shares being approved for listing on a stock exchange. In addition, the Vendor shall be granted a 2% Net Smelter Royalty (**"NSR"**) on the Empirical Property Claims, and Clarity Gold retains the right to purchase 1% of the NSR for $1,500,000 cash. Included in the option agreement is a 1 km area-of-influence provision pursuant to which any claims staked by Clarity Gold within 1 km of the Optioned Property boundary (as defined by the Empirical Property Claims) will automatically be included in the agreement and subject to the Net Smelter Royalty.

For the purposes of this report, the "**Empirical Property**" consists of 3 unpatented mineral claims, Empirical 1, Empirical 2 and Empirical 3. The claims are located in the Lillooet Mining Division totalling 5,401.36 hectares. The claims which comprise the Empirical Property are currently shown in the online registry as being 100% owned by James Rogers, with Longford Capital being the beneficial owner. All mineral tenures are in good standing as of the date of this report.

1.2 Property Description

The Empirical Property is located 12 km south of Lillooet, British Columbia in the vicinity of Mount Brew. The property lies within NTS map sheet 92I/12 and centred at approximately 50"53'N Latitude North by Longitude 121"8'West.

Surface rights and permitting have yet to be completed to allow further in-depth investigations.

The Empirical Property can be accessed west of Lillooet on Route 99 via an old logging road that partially follows Enterprise Creek from Duffy Lake Road and onto Empirical 1 claim block. Texas Creek road is also accessible via Route 99 and runs between 1 and 2 km from the property's edge along its eastern border. Currently the Empirical Property does not have road access within the property boundaries and the topography is steep and rugged, therefore helicopter access for exploration is currently the most practical means of access. Helicopter service is available from Lillooet, BC.

Topography on the Empirical Property consists of steep mountain ranges, inter-webbing valleys and alpine meadows. Elevations over the property ranges from 1,250 m in the valley of Enterprise Creek to over 2,591 m on Mount Bew. The tree line on the Empirical Property is at 2,000 m, with variably thick jack pine forests; spruce trees cover the less rugged slopes and valley floors. Lining the creeks are thick growths of alder, willow and devils club.

This region is characterized by a warm-summer humid continental climate although it may experience a mixture of hot-summer continental climate and semi-arid climate types. This type of

climate generally produces hot and dry summers and cold dry winters with very little snowfall providing adequate conditions for year-round exploration operations.

1.3 Status of Exploration

Mineral exploration in the Lillooet district began in the 1860s with the discovery of placer gold on gravel bars along the Fraser River below Lillooet. Placer gold was subsequently mined from the Bridge River and Cayoosh Creek. In the 1960s, auriferous quartz veins hosted in quartz-diorite and hornfelsed sediments were discovered within the Spray Creek area. Increased interest in the area ensued following the discovery of anomalous base and precious metals concentrations in sediments through regional silt surveys carried out by a number of companies. This prompted staking in the vicinity of Enterprise Creek, Riley Creek, and Spray Creek.

A number of exploration programs were carried out in the area between 1967 and 1991 which consisted of prospecting, geochemical sampling, diamond drilling and geophysical surveys. In 2008, Glen Hawke Minerals Ltd. utilized low level aerial photography completed in 2002 to create high orthophoto mosaic and 2 m detailed contour map complete with a digital elevation model to provide a base for geo-referencing historic sample and drill hole locations. The Empirical Property is an early stage exploration project and there are no mineral resource or mineral reserve estimates for the Property.

1.4 Geology and Mineralization

Sulphide mineralization on the Empirical Property consists of widely scattered but rare disseminations of sphalerite in fractures within both intrusive and intruded rocks, and very rare coarse-grained molybdenite in quartz filled fractures. Molybdenite and minor chalcopyrite mineralization associated with the quartz stockwork veining on the property is characteristic of porphyry type mineral deposits.

Alteration associated with mineralization includes chloritization, sericitization, biotitization, and intense silicification without any evident pattern of alteration zoning. However, an extensive biotite hornfels aureole postdating the porphyry-type mineralization was reported to envelop the intrusion and the sediments.

Five short DBD diamond drill holes were drilled in 1986 all holes intersected a fine to medium grained biotitic porphyritic quartz diorite with irregular intervals of chlorite and silica alteration. Porphyry type molybdenum and copper mineralization was reported in every hole and 3 possible modes of gold mineralization were identified: porphyry-type grey quartz stockwork veining; pervasively silicified zones; and late, white, branching quartz vein.

1.5 Conclusions and Recommendations

During the 2019 Empirical Property exploration program the Longford Exploration Services Ltd. ("**Longford Exploration**") crew located historic workings, visible sulphide mineralization, and verified historically reported assay results. Evidence suggests the Empirical Property could potentially host a larger mineralizing system.

A two-phase exploration program is recommended to further define zones of anomalous mineralization corresponding to the 2019 exploration program. A cost estimate is provided in Table 26.1. The exploration should consist of geological and structural mapping, prospecting, and

soil sampling to test the highest-ranking target areas for further mineralization. Geophysics may also be implemented to further define zones of high priority after additional groundwork is undertaken. Once more defined areas of mineralization are established, diamond drilling should commence if warranted.

	Description	**Estimated Cost (CAD)**
Phase 1	**Geological and Structural Mapping, Prospecting, Soil Sampling**	
	10 days, 4-person crew (1 Project Manager, 2 Geologists, 1 helper)	$50,000
	VTEM geophysical survey	$90,000
	Interpretation of results-10 days	$10,000
Phase 2	**Anomaly Follow Up (contingent on results from Phase 1)**	
	500 m of trenching	$100,000
	1,500 m of diamond drilling to test geophysical, geochemical, and mapping targets	$500,000
	TOTAL	**$750,000**

2 Introduction and Terms of Reference

2.1 Purpose of Report

The purpose of the report is to allow for an Initial Public Offering ("**IPO**") prospectus to be prepared for listing Clarity Gold on the Canadian Securities Exchange ("**CSE**").

2.2 Sources of Information

The sources of information accessed in preparation of this report are listed in the References section. The author also relied upon information and discussions with "Longford Exploration" field personnel prior to and during the site visit.

2.3 Terms of Reference

The Issuer engaged the services of the author through Longford Exploration on October 1, 2019 to write an independent National Instrument 43-101 ("**NI 43-101**") Technical Report on the Empirical Property near Lillooet, BC, as part of its qualifying documentation for the CSE in connection with the Issuer's proposed listing. The author is independent of Longford Exploration and Longford Capital. This report is based upon personal examination, by the author, of all available reports and data on the Empirical Property in addition to a site visit to the Empirical Property on October 10, 2019 to assess and appraise the geological environment. The QP is not relying on other experts in the preparation of this report. The sources of information and data contained in the technical report or used in its preparation are provided under item 27 "*References*" and APPENDIX B, C, and D.

2.4 Abbreviations and Units of Measurement

Metric units are used throughout this report and all dollar amounts are reported in Canadian Dollars (CAD$) unless otherwise stated. Coordinates within this report use EPSG 26910 NAD83 UTM Zone 10N unless otherwise stated. The following is a list of abbreviations which may be used in this report:

Table 2.1 Abbreviations and Units of Measurement

Abbreviation	Description
%	percent
AA	atomic absorption
Ag	silver
AMSL	above mean sea level
as	arsenic
Au	gold
AuEq	gold equivalent grade
Az	azimuth
b.y.	billion years
CAD$	Canadian dollar
cl	chlorite
cm	centimetre

Abbreviation	Description
li	limonite
m	metre
m^2	square metre
m^3	cubic metre
Ma	million years ago
mg	magnetite
mm	millimetre
mm^2	square millimetre
mm^3	cubic millimetre
mn	pyrolusite
Mo	Molybdenum
Moz	million troy ounces

Abbreviation	Description
cm^2	square centimetre
cm^3	cubic centimetre
cc	chalcocite
cp	chalcopyrite
Cu	copper
cy	clay
°C	degree Celsius
°F	degree Fahrenheit
DDH	diamond drill hole
ep	epidote
ft	feet
ft^2	square feet
ft^3	cubic feet
g	gram
gl	galena
go	goethite
GPS	Global Positioning System
gpt	grams per tonne
ha	hectare
hg	mercury
hm	hematite
ICP	induced coupled plasma
kf	potassic feldspar
kg	kilogram
km	kilometre
km^2	square kilometre
l	litre

Abbreviation	Description
ms	sericite
Mt	million tonnes
mu	muscovite
m.y.	million years
NAD	North American Datum
NI 43-101	National Instrument 43-101
opt	ounces per short ton
oz	troy ounce (31.1035 grams)
Pb	lead
pf	plagioclase
ppb	parts per billion
ppm	parts per million
py	pyrite
QA	Quality Assurance
QC	Quality Control
qz	quartz
RC	reverse circulation drilling
RQD	rock quality description
sb	antimony
Sedar	System for Electronic Document Analysis and Retrieval
SG	specific gravity
sp	sphalerite
st	short ton (2,000 pounds)
t	tonne (1,000 kg or 2,204.6 lbs)
to	tourmaline
um	micron
US$	United States dollar
Zn	zinc

3 Reliance on Other Experts

This report has been prepared by Rory Kutluoglu, a qualified professional ("**QP**"). The author has relied on ownership information and information developed by both the Company and past owners of the Empirical Property. The author has not researched property title or mineral rights to the Empirical Property and expresses no opinion as to the ownership status of the property.

This report is based upon personal examination, by the author, of all available reports and data on the Empirical Property. The author visited the Property on October 10, 2019 to appraise the geological environment and assess the Empirical Property. The information, opinions and conclusions contained herein are based on:

- Information available to the author at the time of preparation of this report;
- Assumptions, conditions, and qualifications as set forth in this report;
- Data, reports, and other information supplied by the Company and other third-party sources;
- The author's visit of the Empirical Property on October 10, 2019; and
- The authors' review of all available reports, retained samples and legal documents

As of the date of this report, the author is not aware of any material fact or material change with respect to the subject matter of this technical report that is not presented herein, or which the omission to disclose could make this report misleading.

4 Property Description and Location

4.1 Location

The Empirical Property (Figure 4.1) is located 12 km south of Lillooet, British Columbia in the vicinity of Mount Brew. The Empirical Property is in the Lillooet Mining Division, on NTS map sheet 92I/12 and centred at approximately 50"53'N latitude North by longitude 121"8'West.

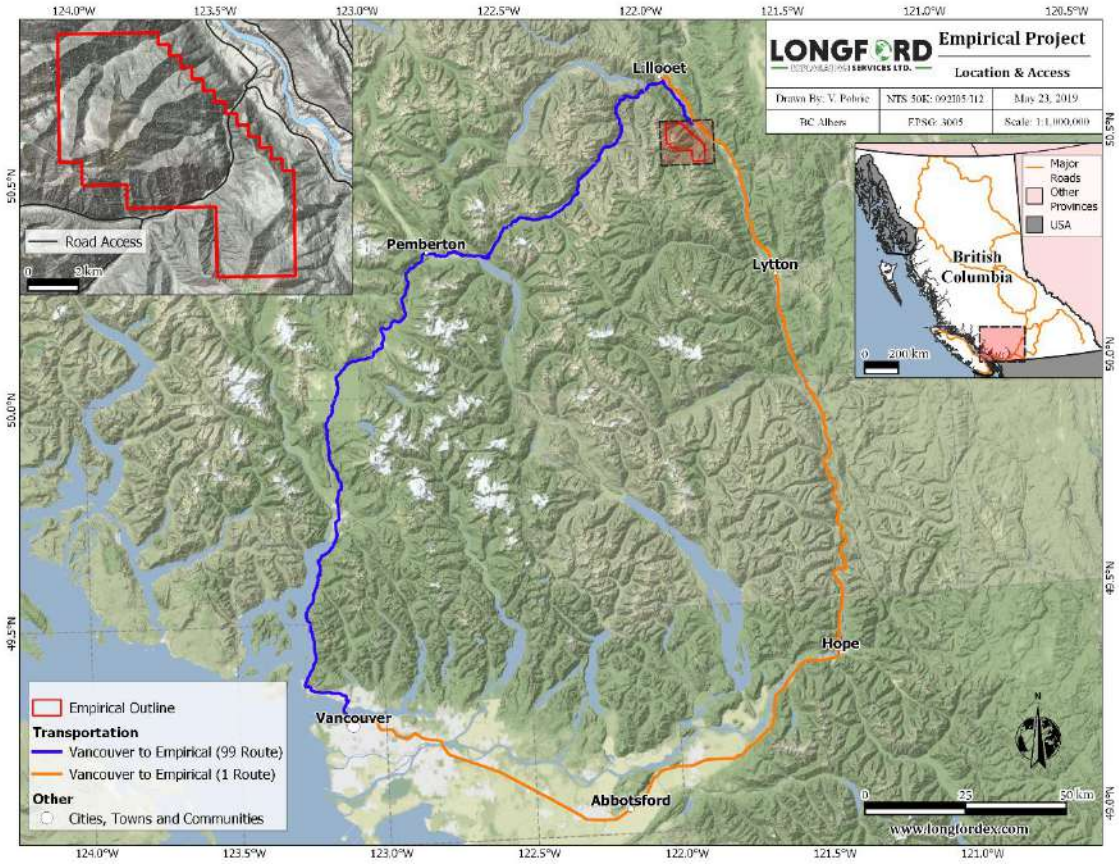

Figure 4.1: Empirical Property location and access map.

4.2 Mineral Titles

The Empirical Property consists of 3 unpatented mineral claims (Figure 4.2) located in the Lillooet Mining Division totalling 5,401.36 hectares. The Empirical Claims are currently shown in the online registry as being owned 100% by James Rogers who holds the claims in Bare Trust for Longford Capital Corp., the beneficial owner. The Empirical Claims are in good standing as of the date of this report (Table 4.1).

Table 4.1: Empirical Property mineral tenures.

Title Number	Claim Name	Issue Date	Good to Date	Status	Area (ha)
1067784	Empirical 1	2019-04-08	2020-04-08	GOOD	2,032.36
1067785	Empirical 2	2019-04-08	2020-04-08	GOOD	1,643.09
1067786	Empirical 3	2019-04-08	2020-04-08	GOOD	1,725.91
				TOTAL	**5,401.36**

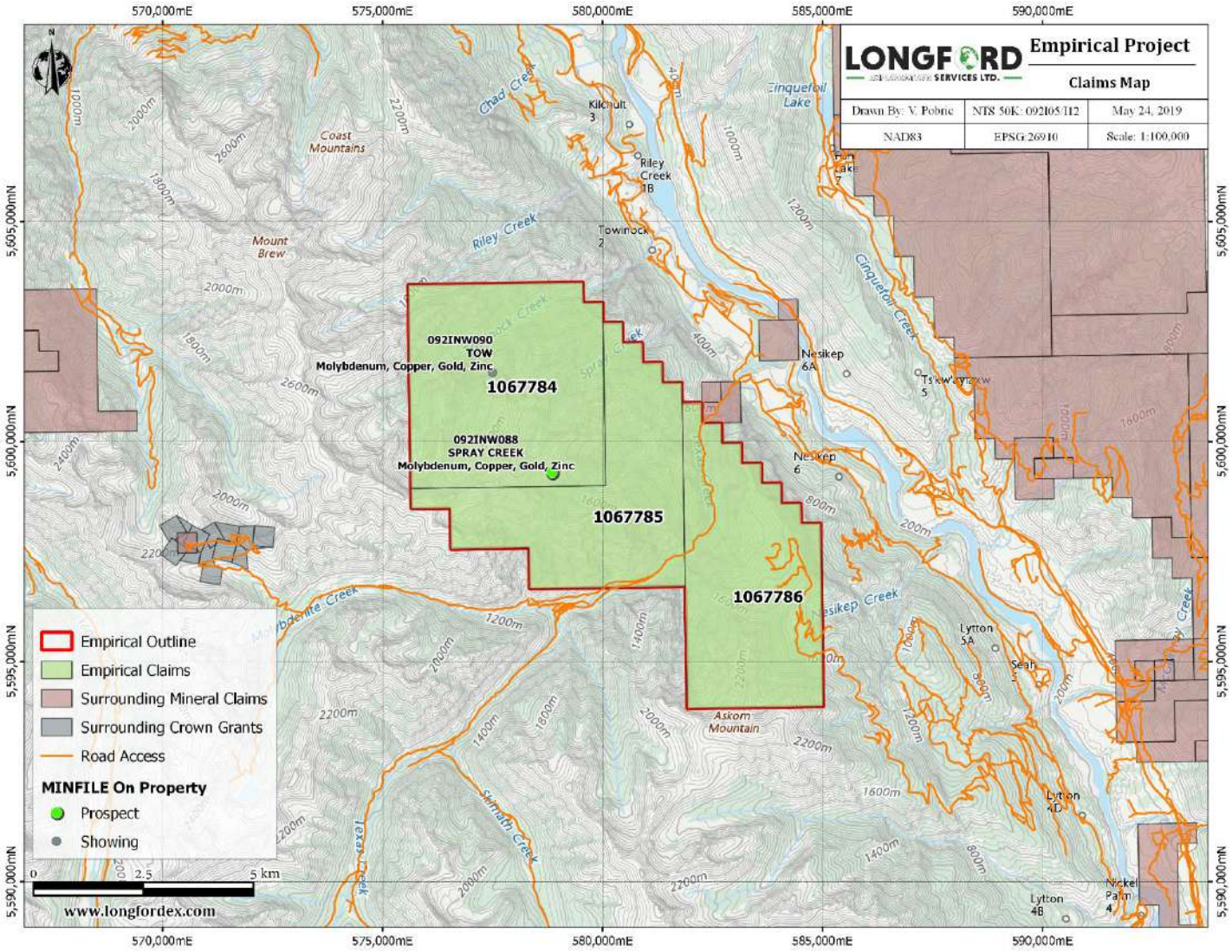

Figure 4.2: Empirical Property Claims.

4.3 Mineral Rights in British Columbia

Mineral Claims in British Columbia are subdivided into two major categories: Placer and Mineral. Both are acquired using the Mineral Titles Online ("**MTO**") system. The online MTO system allows clients to acquire and maintain (register work, payments, etc.) mineral and placer claims. Mineral Titles can be acquired anywhere in the province where there are no other impeding interests (other mineral titles, reserves, parks, etc.).

The electronic Internet map allows you to select single or multiple adjoining grid cells. Cell sizes vary from approximately 21 hectares (457m x 463m) in the south to approximately 16 hectares at the north of the province. Cell size variance is due to the longitude lines that gradually converge toward the North Pole.

MTO will calculate the exact area in hectares according to the cells you select and calculate the required fee. The fee is charged for the entire cell, even though a portion may be unavailable due to a prior legacy title or alienated land. The fee for Mineral Claim registration is $1.75 per hectare.

Upon immediate confirmation of payment, the mineral rights title is issued and assigned a tenure number for the registered claim. Email confirmation of your transaction and title is sent immediately.

Rights to any ground encumbered by existing legacy claims will not be granted with the cell claim except through the Conversion process. However, the rights held by a legacy claim or lease will accrue to the cell claim if the legacy claim or lease should terminate through forfeiture, abandonment, or cancellation, but not if the legacy claim is taken to lease. Similarly, if a cell partially covers land that is alienated (park, reserve etc.) or a reserve, no rights to the alienated or reserved land are acquired. But, if that alienation or reserve is subsequently rescinded, the rights held by the cell expand over the former alienated or reserve land within the border of the cell.

Upon registration, a cell claim is deemed to commence as of that date ("**Date of Issue**") and is good until the "Expiry Date" the ("**Good to Date**") that is one year from the date of registration. To maintain the claim beyond the expiry date, exploration and development work must be performed and registered, or a payment instead of exploration and development may be registered. If the claim is not maintained, it will forfeit at the end of the "expiry date" and it is the responsibility of every recorded holder to maintain their claims; no notice of pending forfeiture is sent to the recorded holder.

A mineral or placer claim has a set ***Good to Date***, and in order to maintain the claim beyond that expiry date, the recorded holder (or an agent) must, on or before the expiry date, register either exploration and development work that was performed on the claim, or a payment instead of exploration and development. Failure to maintain a claim results in automatic forfeiture at the end (midnight) of the expiry date; there is no notice to the claim holder prior to forfeiture.

When exploration and development work or a payment instead of work is registered, you may advance the claim forward to any new date. With a payment, instead of work the minimum requirement is 6 months, and the new date cannot exceed one year from the current expiry date; with work, it may be any date up to a maximum of ten years beyond the current anniversary

year. "Anniversary year" means the period of time that you are now in from the last expiry date to the next immediate expiry date.

All recorded holders of a claim must hold a valid Free Miners Certificate ("**FMC**") when either work or a payment is registered on the claim.

Clients need to register a certain value of work or a "cash-in-lieu of work" payment to their claims in MTO. The following tables outline the costs required to maintain a claim for one year:

Table 4.2 BC work requirements for mineral tenures.

Anniversary Years	Work Requirements
1 and 2	$5 / hectare
3 and 4	$10 / hectare
5 and 6	$15 / hectare
7 and subsequent	$20 / hectare

Table 4.3: BC cash-in-lieu for mineral tenures.

Anniversary Years	Cash Payment-in-Lieu of Work
1 and 2	$10 / hectare
3 and 4	$20 / hectare
5 and 6	$30 / hectare
7 and subsequent	$40 / hectare

4.4 Property Legal Status

The Mineral Titles Online website (https://www.mtonline.gov.bc.ca/mtov/home.do) confirms that all claims of the Empirical Property as described in Table 4.1 were in good standing at the date of this report and that no legal encumbrances were registered with the Mineral Titles Branch against the titles at that date. The author makes no further assertion with regard to the legal status of the Empirical Property. The Empirical Property has not been legally surveyed to date and no requirement to do so has existed.

There are no other royalties, back-in rights, environmental liabilities, or other known risks to undertake exploration.

4.5 Nature of Title to Property

The Empirical Claims cover 5,401.36 ha and is currently shown in the online registry as being 100% owned by James Rogers who is the bare trustee for Longford Capital Corp., the beneficial owner. There is a Bare Trust agreement in place between Longford Capital Corp. and James Rogers dated April 8, 2019 which illustrates James Rogers holding the claims in Bare Trust for Longford Capital Corp. The QP is independent of Longford Exploration and Longford Capital.

As stated above, Clarity Gold, as purchaser, and the Vendor are party to a purchase agreement dated October 1, 2019 pursuant to which Clarity Gold agreed to purchase and the Vendor agreed to sell, a 100% interest in the Empirical Claims for the following considerations:

Upon Closing

- Issuing 2,000,000 Shares to Longford Capital Corp.

On the first anniversary of closing

- Have performed an additional $80,000 of expenditure on the project in the first year

On the second anniversary of closing

- I Have performed an additional $200,000 of expenditure on the project in the second year

Upon Shares being approved for listing on a stock exchange

- Paying $50,000 cash

In addition, the Vendor shall be granted a 2% NSR on the Empirical Property Claims. 1% of the NSR may be purchased from the Vendor by making an aggregate payment of $1,500,000. Payment may be made by way of certified cheque or bank draft payable to the Vendor (or other method of payment acceptable to the Vendor) along with written notice of Purchaser's intent to exercise Buy-Back-In-Right.

In addition to the terms outlined above, the option agreement contains a 1 km area-of-influence provision pursuant to which any claims staked by Clarity Gold within 1 km of the Empirical Property boundary (as defined by the Empirical Property claims) will automatically be included in the agreement and subject to the NSR.

There are no other royalties, back-in rights, payments or other agreements to which the Empirical Property is subject.

4.6 Surface Rights in British Columbia

Surface rights are not included with mineral claims in British Columbia. However, the *Mineral Tenure Act* (British Columbia) allows persons holding a valid free miner certificate (free miner) to enter mineral lands to explore for minerals whether surface is owned privately or by the Crown. Right of entry onto these lands does not include land occupied by a building, the area around a dwelling house, orchard land or land under cultivation, protected heritage property or land in a park.

Miners entering on private lands must serve notice in the prescribed manner and compensate the landowner for any loss or damages resulting from the mining activities including prospecting, mapping, sampling, geophysical surveys, as well as any activities that disturb the surface. Landowners must be notified prior to persons entering onto private land for any mining activity and may not begin until eight days after giving notice to the owners of the surface area where the activity will take place. Notice must include the dates when the activities will take place, where the activity will occur, the names and addresses of the free miner or recorded holder and of the on-site person responsible for the operations. Details describing the activities that will be carried out, the number of people that will be on-site including a map or written description of where the activities will take place. Notices may be e-mailed, faxed, or hand delivered to the landowner. Any

substantial changes to the activity described in the notice must be given to the landowner in an amended notice and work may not begin until eight days after the amended notice has been given.

4.7 Permitting

Any work which disturbs the surface by mechanical means on a mineral claim in British Columbia requires a Notice of Work ("**NOW**") permit under the British Columbia Mines Act ("**Mines Act**"). The owner must receive written approval from a Provincial Mines Inspector prior to undertaking such work. This includes but is not limited to the following types of work: drilling, trenching, excavating, blasting, construction of a camp, demolition of a camp, induced polarization surveys using exposed electrodes, and reclamation.

Exploration activities which do not require a NOW permit include prospecting with hand tools, geological/geochemical surveys, airborne geophysical surveys, ground geophysics without exposed electrodes, hand trenching, and the establishment of grids. These activities and those that require Permits are outlined and governed by the Mines Act.

The Chief Inspector of Mines makes the decision if land access will be permitted. Other agencies, principally the Ministry of Forests, Lands and Natural Resources ("**FLNRO**"), determine where and how the access may be constructed and used. With the Chief Inspector's authorization, a mineral tenure holder must be issued the appropriate "Special Use Permit" by FLNRO, subject to specified terms and conditions. The Ministry of Energy and Mines makes the decision whether land access is appropriate and FLNRO issue a Special Use Permit. However, a collaborative effort and authorization between ministries, jointly determine the location, design and maintenance provisions of the approved road.

Notification must be provided before entering private land for any mining or exploration activity, including non-intrusive forms of mineral exploration such as mapping surface features and collecting rock, water or soil samples. Notification may be hand delivered, mailed, emailed or faxed to the owner shown on the British Columbia Assessment Authority records or the Land Title Office records. Mining activities cannot start sooner than eight days after notice has been served. Notice must include a description or map of where the work will be conducted and a description of what type of work will be done, when it will take place and approximately how many people will be on the site.

The issuer does not currently have any permits pertaining to exploration on the property.

4.8 Environmental

There are no known environmental liabilities to which the Empirical Property is subject and no other known significant factors and risks that may affect access, title, or the right or ability to perform work on the Empirical Property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Empirical Property can be accessed west of Lillooet on Route 99 via an old logging road that partially follows Enterprise Creek from Duffy Lake Road and onto Empirical 1 claim block (Figure 5.1). Texas Creek road is also accessible via Route 99 and runs between 1 and 2 km from the property's edge along its eastern border. Currently the Empirical Property does not have road access within the Empirical Property boundaries and the topography is steep and rugged, therefore helicopter access for exploration would be the most practical means of access. Helicopter service is available from Lillooet, BC.

Road distances from the Empirical Property to select cities and ports are summarized in the following table:

Table 5.1: Driving distances to the Property (in km).

Location	Description	Distance
Lillooet (pop. 2,321)	Nearest town with services	12 km
Lytton (pop. 249)	Nearest town with services	75 km
Richmond (pop. 216,288)	Vancouver International airport	263 km
Vancouver (pop. 675,218)	Port, mining services centre	251 km
2016 Census Canada, Sourced: https://www12.statcan.gc.ca/census-recensement/index-eng.cfm		

Figure 5.1: Logging access road on the Empirical 1 claim block.

5.2 Climate

This region is characterized by a warm-summer humid continental climate although it may experience a mixture of hot-summer continental climate and semi-arid climate types. This type of climate generally produces hot and dry summers and cold dry winters with very little snowfall. In the spring, the area experiences little to moderate precipitation.

Average daily temperatures in the summer range from 18 to 21 °C, and -2.4 to 5.2 °C in the winter (Table 5.1). The total average annual rainfall for Lillooet area is 322.5 mm with the most significant amount of precipitation occurring between October and January. Spring and summer months (April to September) are considerably drier, therefore provide ideal conditions for the entire exploration season. The recommended geophysical survey and diamond drilling can be carried out in any season, but the summer months would be preferable.

The nearest active weather station to the Empirical Property is Lillooet Seton BCHPA weather station, 130 km northeast of Whistler, BC.

Table 5.1 Climate Data for Lillooet weather station (Environment Canada).

Temperature	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
Daily Average (°C)	-2.4	0.4	5.2	9.9	14.8	18.6	21.6	21.3	15.9	8.8	2.1	-2.4	**9.5**
Record High (°C)	18.5	16.0	22.0	29.5	38.5	39.0	41.5	40.5	35.5	28.0	20.0	17.0	**N/A**
Record Low (°C)	-26.1	-22.5	-18.3	-5.0	0.0	4.0	7.5	5.5	-2.8	-17.0	-28.0	-28.3	**N/A**
Avg Precip. (mm)	38.3	20.3	16.8	19.0	26.1	23.7	35.5	25.7	23.7	33.8	44.4	41.7	**349.0**
Avg Rainfall (mm)	30.9	17.1	15.2	19.0	26.1	23.7	35.5	25.7	23.7	33.2	40.6	31.9	**322.5**
Avg Snowfall (cm)	7.5	3.3	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.7	3.8	9.7	**26.5**
1981 to 2010 Canadian Climate Norms Lillooet Seton BCHPA weather station data;													

5.3 Local Resources

General and skilled labour is readily available in the Lillooet-Lytton area (Lillooet pop. 2,321, Lytton pop. 249). Lillooet is 12 km by road from the project area and offers year-round charter and schedule fixed wing service, rail, RCMP, BC Provincial Police detachment, fire and rescue services, hospital, ambulance, fuel, lodging, restaurants, and equipment. Lyton also offers some of these amenities (on a smaller scale).

5.4 Infrastructure

There are 3 hydroelectric generating stations located in the vicinity of the Empirical Property, the Bridge River 1 & 2 stations and the Seton generating station with a combined total capacity of 526 MW. The BC power station closest to the Empirical Property is the Seton generating station (48 MW), located 9.6 km to the north.

5.5 Physiography

The Empirical Property lies just to the east of Mount Brew within the Pacific Ranges which are the southernmost subdivision of the Coast Mountains (Figure 5.2). They run northwest from the lower stretches of the Fraser River to Bella Coola and Burke Channel and include 4 of the 5 major coastal icecaps in the Southern Coast Mountains. The icecaps are the largest temperate-latitude icecaps in the world and feed a number of major rivers (by volume). The highest peak in the Pacific Ranges is Mount Waddington at an elevation of 4,019 m.

The area encompasses a series of barren ridges rising to an elevation of 2,200 m and inter-webbing valleys and alpine meadows. Elevations over the Empirical Property ranges from 1,250 m in the valley of Enterprise Creek to over 2,591 m on Mount Bew.

The tree line on the Empirical Property is at 2,000 m elevation, timber in the area is comprised of a variably thick forest of jack pine; spruce trees cover the less rugged slopes and valleys. Thick growths of alder, willow and devils club Line the creeks.

The fauna in the area include black bears, grizzly bears, cougars, coyotes, wolves, bobcats, birds of prey as well as rattle snakes in the arid interior.

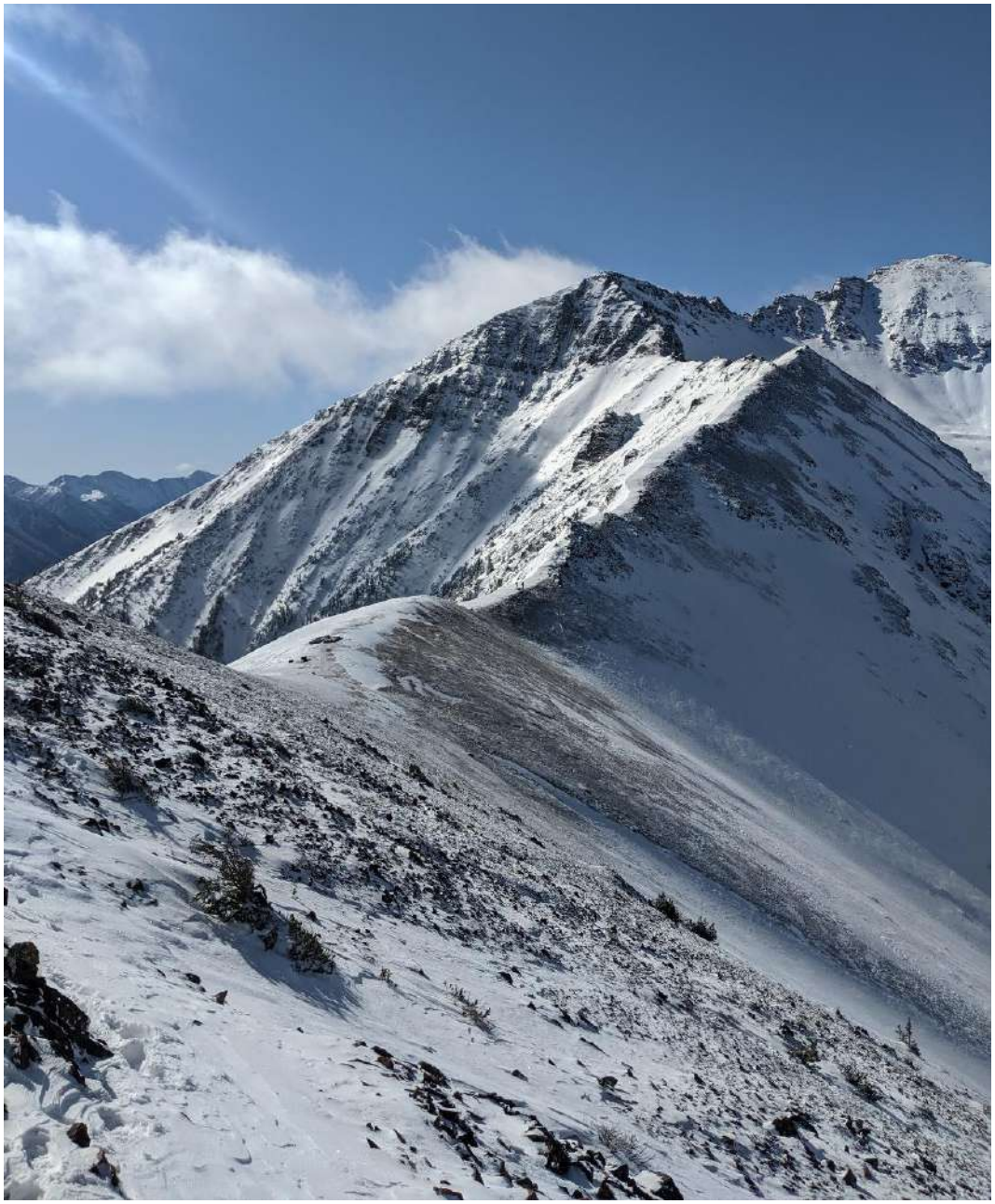

Figure 5.2: Empirical Property physiography.

6 History

Mineral exploration in the Lillooet district began in the 1860s with the discovery of placer gold on gravel bars along the Fraser River below Lillooet. Placer gold was subsequently mined from the Bridge River and Cayoosh Creek. In the 1960s, auriferous quartz veins hosted in quartz-diorite and hornfelsed sediments were discovered within the Spray Creek area. Increased interest in the area ensued following the discovery of anomalous base and precious metal concentrations in sediments through regional silt surveys carried out by a number of companies. This prompted staking in the vicinity of Enterprise Creek, Riley Creek, and Spray Creek.

In 1967, Dalex Mines carried out an induced polarization ("**IP**") survey over the Nancy Group of claims and discovered a large, split anomaly (or two parallel anomalies) northwest of Nesikep Creek. The anomalies had a length in excess of 2000 ft and opened to the southeast. Another IP survey was carried out the following year which consisted of 118 stations over 6600 ft of surveyed line. This survey identified an anomalous zone coincident with a Cu-rich sulphide showing in the surface rocks. The anomaly had a magnitude of approximately six times that of background values over a length of approximately 600 ft (opening to the south). In 1970, a geochemical soil survey was carried over the claims, 538 soil samples were collected along 400 ft lines spaced at 200 ft intervals. Results indicated that nickel in the rocks was associated with silicates rather than sulphides and any mineralization in the area would not be significant enough to be considered economic.

In 1979, Duval Mining Ltd. ("**Duval**") carried out a geological and geochemical survey over the Tow 1 and 2 claims. Mapping activities were carried out over a 2.5 M m^2 area; 62 rock chip samples and 33 soil samples were collected. The program explored two areas of pervasive disseminated pyrite, the northern area encloses a potassic-phyllic zonal complex, however the alteration zones in the south was not identified. Zn anomalies were also found to be present in northern and southern areas of the claim block with highest values returned from the south. Strongest Tungsten values occur in the southern zone of pyritization, and strongest Mo values are found in the northern area of pyritization. Rock chip sampling disclosed an area in the northern area that has more than 100 ppm (> 0.1%) Mo, but none were > than 100 ppm in the south. Duval continued exploration on the property up until 1981; work included prospecting, mapping, sampling, and a 900 m diamond drill program in 1981. The Tow claims were abandoned by Duval in 1984.

In 1985, the Brew claims were staked by Greg McKillop, based on unreported results from Duval indicating the presence of free gold in the sediments of Enterprise Creek and anomalous gold and arsenic concentrations in the talus fines along the east side of the upper valley of the south fork of the creek (ARIS 21181). The claims were optioned by Geostar Mining Corp. and later the option was assumed by Miramar Energy Corp. ("**Miramar**") in 1986. Work carried out over the claims consisted of prospecting, some sampling and a 4 diamond drill holes over the Spray claims at the southern end of the claim block. Miramar allowed the option to drop and the claims were subsequently optioned by Kerr Addison Mines Ltd in 1987.

From 1987 to 1988 Kerr Addison Mines Ltd. ("**Kerr Addison**") focused mainly on the Spray Claims, however, they did carry out more detailed mapping and geochemistry in the Brew area. This work confirmed and expanded the area of anomalous gold and arsenic values in talus fines. This work

defined the area to be approximately 1 km long and 0.5 km wide with fairly consistent gold values in excess of 100 ppb Au in talus fines. A 746.95 m drilling program was carried out in 1988 which was mainly focused on the southern part of the Spray Intrusion. A fan of four holes (537.15 m total depth) were centered around the collar of historic hole 81-4. All 4 holes were collared in a felsic intrusive described as a porphyritic, fine-med grained tonalite. Mineralization consists of pyrrhotite, pyrite, molybdenite, with locally minor chalcopyrite, sphalerite and arsenopyrite. The fifth hole (209.8 m depth) tested Au mineralization in historic hole 81-3 in the northern part of the Spray Intrusion which intersected two tonalite intrusions of similar character to the holes drilled in the south. However, no significant gold intersections were located during this program. Kerr Addison allowed the option to drop in late 1988 due to poor results from the Spray diamond drill program and the merging of Kerr Addison's exploration activities with those of Minnova Inc. (McKillop, 1991).

In 1991, prospecting and sampling was carried out over the Brew claims by owner Greg McKillop. Thirteen rock samples and 3 bulk sediment samples were collected over two traverses (upper and lower). Au values returned from Lower traverse were consistently <5 ppb and arsenic did not exceed 25 ppm. The upper traverse returned Au values consistently <5 ppb and arsenic values were <10 ppm. Sediment samples returned values of 15 ppb, 255 ppb, and 147 ppb Au respectively.

In 2008, Glen Hawke Minerals Ltd. utilized low level aerial photography completed in 2002 to create high ortho-photo mosaic and 2 m detailed contour map complete with a digital elevation model to provide a base for geo-referencing historic sample and drill hole locations (Einsiedel, 2008).

The Empirical Property does not have any mineral resources or mineral reserve estimates and there has been no production.

Historical works over the Empirical Property has been summarized in Table 6.1 and Figure 6.1 below.

6.1 Empirical Property

Table 6.1 Work history of mineral occurrences on the Empirical Property.

Year	Title Holder	Report ID	Claims	Author	Summary	Comments	Reference
1967	Dalex Mines Ltd.	1098	Nancy Group	Mouritsen, S.A.	IP Survey	A large split anomaly with a length in excess of 2000 ft and are open to the southeast.	ARIS_01098, 1967, Geophysical Report on the Induced Polarization Survey for Dalex Mines Ltd., on the Nancy Group of Claims, Geofax Surveys, Mouritsen, S.A.
1968	Dalex Mines Ltd.	1918	Nancy Group	Mouritsen, S.A.	IP Survey: 118 stations occupied, representing 6600 ft of surveyed line	An anomalous zone coincident with Cu sulphide showings in surface rocks has a magnitude approx. 6 times that of background (4 milliseconds).	ARIS_01918, 1968, Geophysical Report on the Induced Polarization Survey for Dalex Mines Ltd., on the Nancy Group of Claims, Geofax Surveys, Mouritsen, S.A.
1970	Dalex Mines Ltd.	2530	Nancy Group	Tri-Con Exploration Surveys Ltd.	538 soil samples (400 ft spaced lines at 200 ft intervals)	Nickel in rock associated with silicates rather than sulphides but not be significant enough to be economic.	ARIS_02530, 1970, Nancy Property Geochemical Report, Tri-Con Exploration Surveys Ltd.
1979	Duval Mining Ltd.	7211	Tow 1 and 2	Hollister, Victor F.	Map scale: 1:10,000 over 2.5 M m^2; 62 rock chip samples, 33 soil samples.	Rock chip sampling disclosed an area in the northern area that has more than 100 ppm (> 0.1%) Mo.	ARIS_07211, 1979, Preliminary Report on the Geology and Geochemistry of the Tow 1 and 2 Claims, Duval Mining Ltd.
1979	Duval Mining Ltd.	7569	Tow 1, 2, 3 and 4	McKillop, Gregory R.	Map Scale: 1:10,000 over ~1,300 ha; 91 rock chip samples, 10 soils samples, 19 silt samples.	Mo occurs as disseminations and fracture coatings in quartz veins with variable amounts of PO and CPY.	ARIS_07569, 1979, Report on the Geology and Geochemistry of the Tow 1, 2, 3, and 4 Claims, Duval Mining Ltd.
1980	Duval Mining Ltd.	8347	Tow 1, 2, 3 and 4	McKillop, Gregory R.	Map scale: 1:5,000 over 40 ha; 1 silt sample, 4 soil samples, and 49 rock samples; 2 drill sites, 1	Northeastern area has >50 ppm Mo over area 500 m X 350 m, three consecutive 30 m surface chip samples returned 450 ppm Mo. 300 m X 300 m area of the south zone contain >50 ppm	ARIS_08347, 1980, Report on Geological and Geochemical Surveys and Physical Work Conducted

Year	Title Holder	Report ID	Claims	Author	Summary	Comments	Reference
					tent site, 1 heliport, improvement of 1 heliport, and excavation of 6 trenches.	Mo and 10 m chip samples returned up to 1,260 ppm Mo.	on the Tow 1, 2, 3and 4 Claims, Duval Mining Ltd.
1981	Duval Mining Ltd.	9405	Tow 1	McKillop, Gregory R.	220 m drill hole, half the core sent for sampling	Hole CH81-2 intersected 220.3 m of mineralized qtz diorite and siltstone that averaged 299 ppm Mo.	ARIS_09405, 1981, Report on Diamond Drilling on the Tow #1 Claim, Duval Mining Ltd.
1981	Duval Mining Ltd.	9427	Tow 2	McKillop, Gregory R.	230 m drill hole, half the core sent for sampling	Hole CH81-3 penetrated 230.7 m of mineralized qtz diorite and hornfelsed siltstone which averaged 222 ppm Mo.	ARIS_09427, 1981, Report on Diamond Drilling on the Tow #2 Claim, Duval Mining Ltd.
1986	Geostar Mining Corp. and Miramar Energy Corp. & G. McKillop	14971	Spray 1, 2; Foam 1, 2, 3; Brew 1, 2; Home 1, 2; Free 1, 2	Price, Barry J.	83 rock chip samples, 165 soil samples	High values returned are up to 545 ppb Au, 935 ppm As, 739 ppm Zn, 403 ppm Cu, and 87 ppm Mo.	ARIS_14971, 1986, Geochemical Report on the Spray and Brew Claim Groups, McKillip, G.R.
1986	Geostar Mining Corp. and Miramar Energy Corp. & G. McKillop	14973	Brew 1 and 2	Price, Barry J.	Data compilation	Au values up to 685 ppb returned from Enterprise Creek and 26 soil samples indicate a Au-As anomaly.	ARIS_14973, 1986, Geological Report on the Brew 1 and Brew 2 Claims, Geostar Mining and McKillop, G.R.
1986	Miramar Energy Corp.	15073	Foam 1	Price, Barry J. and Ditson, Carol	Prospecting; Air-photo interpretation	Variation in attitude reveals moderate folding which is terminated by a strong northwesterly trending lineation in northern portion of claim. Structures are abundant. Syncline in the northwest portion is truncated by faulting.	ARIS_15073, 1986, Geological Report: Prospecting and Air-Photo Interpretation of Foam 1 Mineral Claim, Miramar Energy Corporation
1986	G. McKillop & Southern Gold Resources Ltd.	15835	Spray 1, 2; Foam 1, 2, 3; Home 1, 2	Rebagliati, C.M.	18 veins sampled (rock chips); 5 short DBD DDH totalling 264.62 m	Au values in the sampled late-qtz veins ranged from 1 to 990 ppb, when geochemically enhanced, the veins generally ranged from 150-350 ppb Au. Au concentrations overall (rock chips and core) ranged from 1 to 3,300 ppb.	ARIS_15835, 1986, Drilling and Geological Report on the Spray Claim Group: Summary Report on Spray Creek Gold Project, McKillop, G

Year	Title Holder	Report ID	Claims	Author	Summary	Comments	Reference
1988	Kerr Addison Mines Ltd.	18160	Free 1, 2; Brew 1, 2; Home 1, 2; Foam 1-3; Spray 1, 2	Grexton, L., and Bruland, T.	Prospecting, mapping, 225 samples (rock, soil, and stream seds), 5 DDH, Total 746.95 m	Heavy mineral samples from along Enterprise Creek returned up to 1,900 ppb Au, and up to 420 ppm As, silt samples from the same area returned up to 680 ppb Au and up to 180 ppm As.4 holes were collared in a felsic intrusive described as a porphyritic, fine-med grained tonalite. Mineralization consists of po, py, mo, with locally minor cpy, sp & aspy. The 5th hole (209.8 m) intersected 2 tonalite intrusions similar to the holes drilled in the south. No significant gold intersections were located.	ARIS_18160, 1988, Prospecting, Mapping, Sampling and Drilling Assessment & In-House Report, Kerr Addison Mines Ltd.
1991	G. McKillop	21181	Brew 1&2	McKillop, Gregory R.	13 rock samples, 3 bulk sediment samples	Au values returned from Lower traverse were consistently <5 ppb and As did not exceed 25 ppm. Upper traverse returned Au values consistently <5 ppb and As were <10 ppm. Sediment samples returned values of 15 ppb, 255 ppb, and 147 ppb Au.	ARIS_21181, 1991, Geochemical Report on Brew 1 and 2 Claims, McKillop, Gregory, R.
2008	Glen Hawke Minerals Ltd.	29554	Spray	Einsiedel, C.A.	Digital Elevation Model & GIS Drill Hole Location Data Compilation	Maps	ARIS_29554, 2008, Technical Assessment Report: Digital Elevation Model and GIS Drill Hole Location Data Compilation, by Einsiedel, C.A. for Glen Hawke Minerals Ltd.

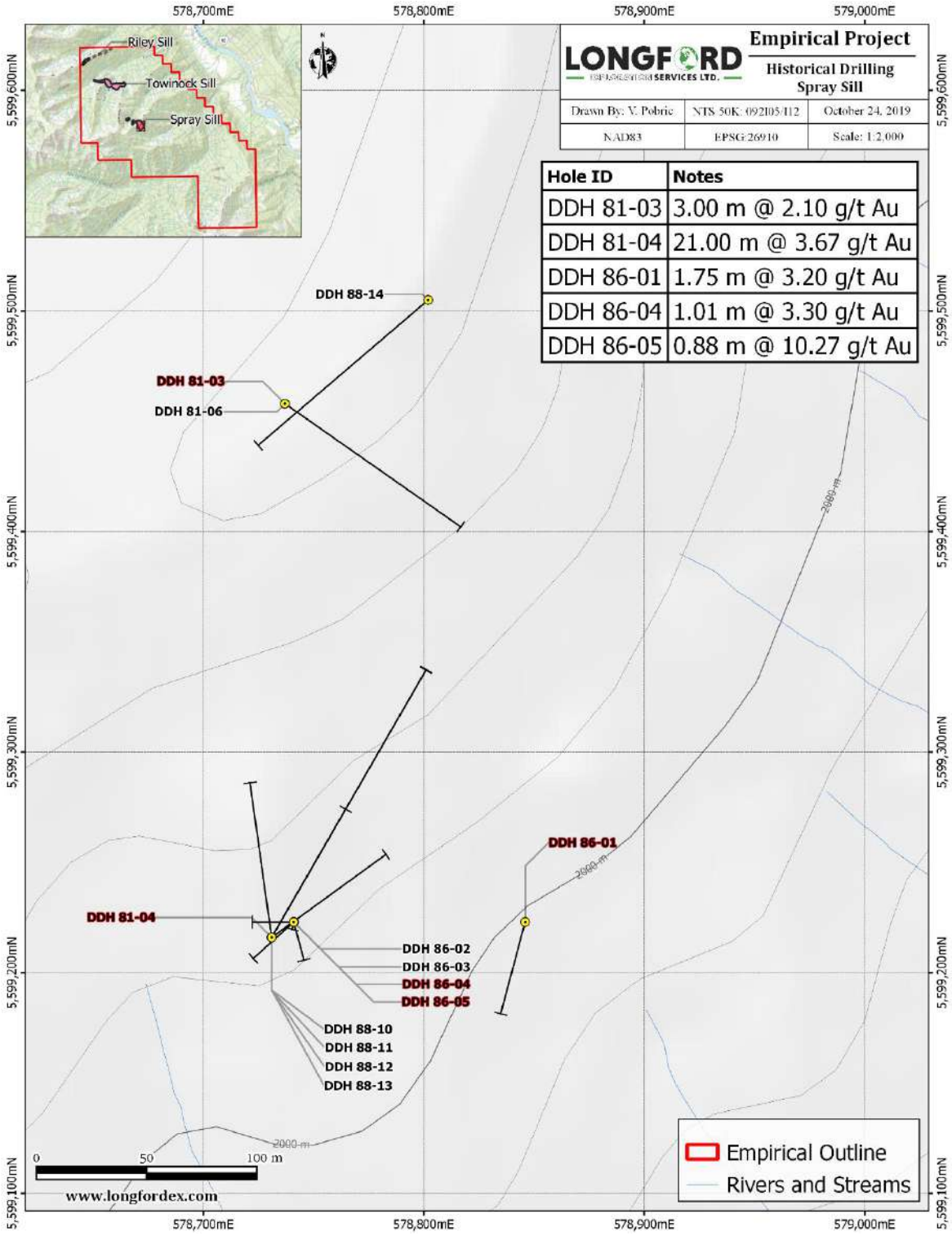

Figure 6.1: Empirical Property historical work

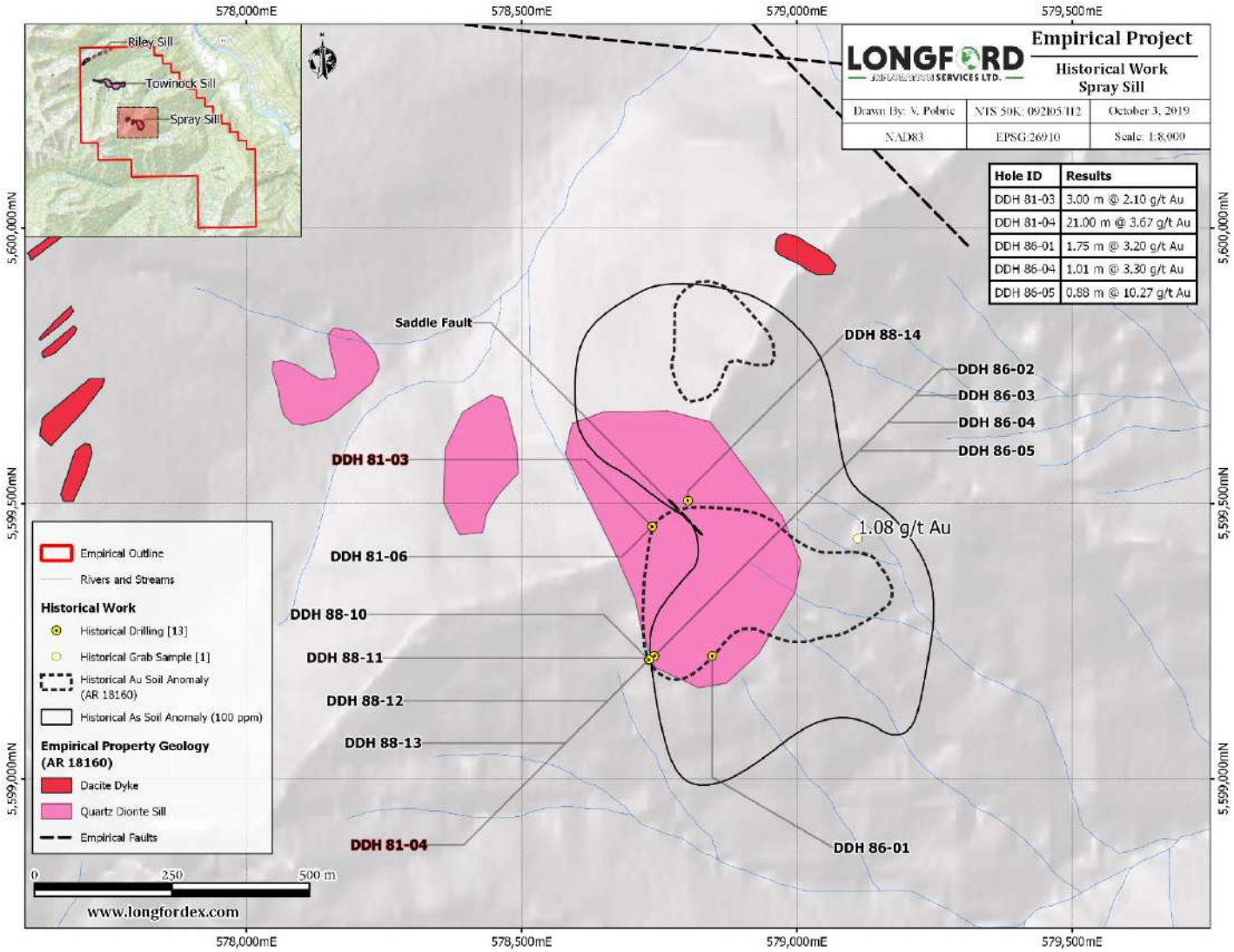

Figure 6.2: Historical work at Spray sill on the Empirical Property.

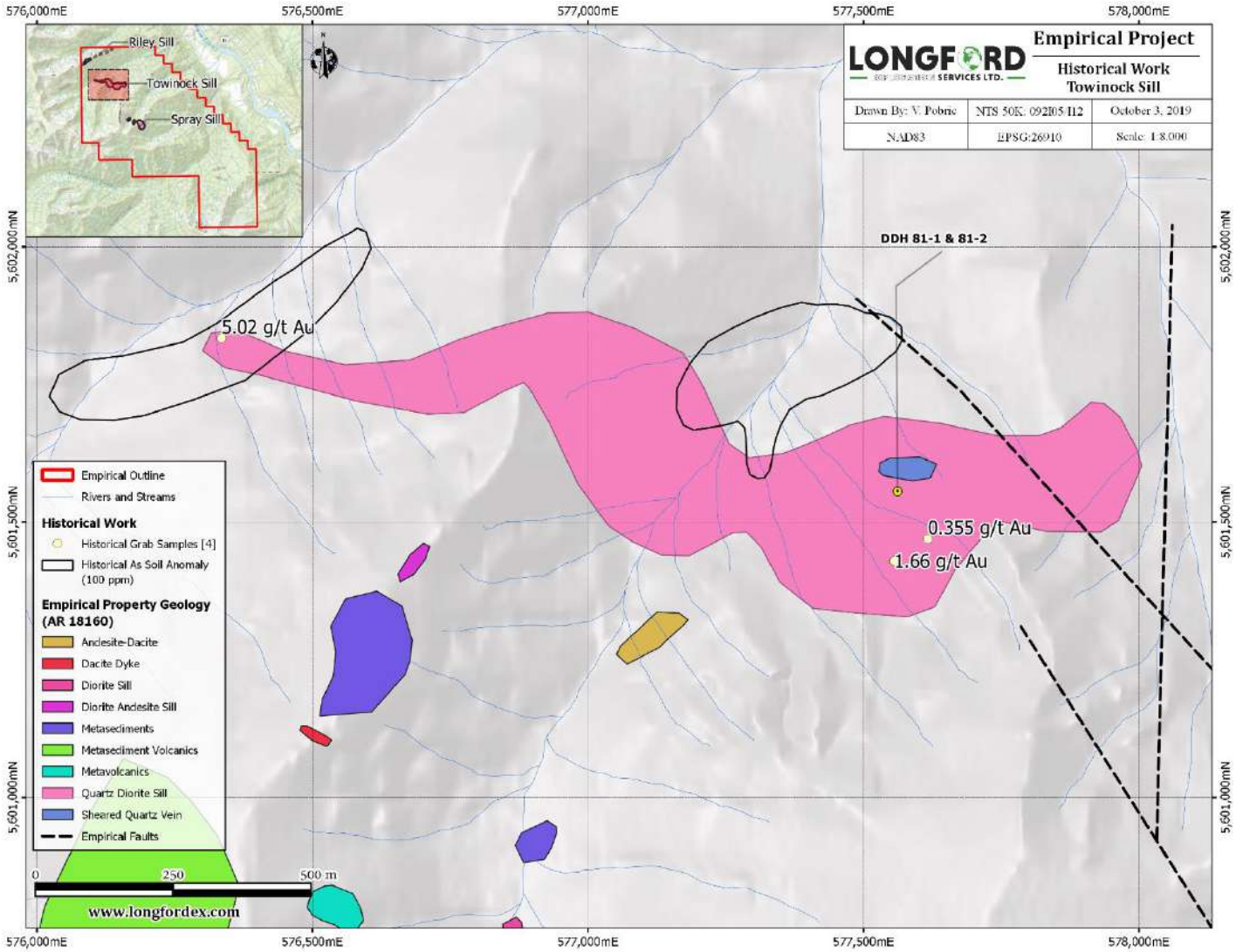

Figure 6.3: Historical work at the Towinock sill on the Empirical Property.

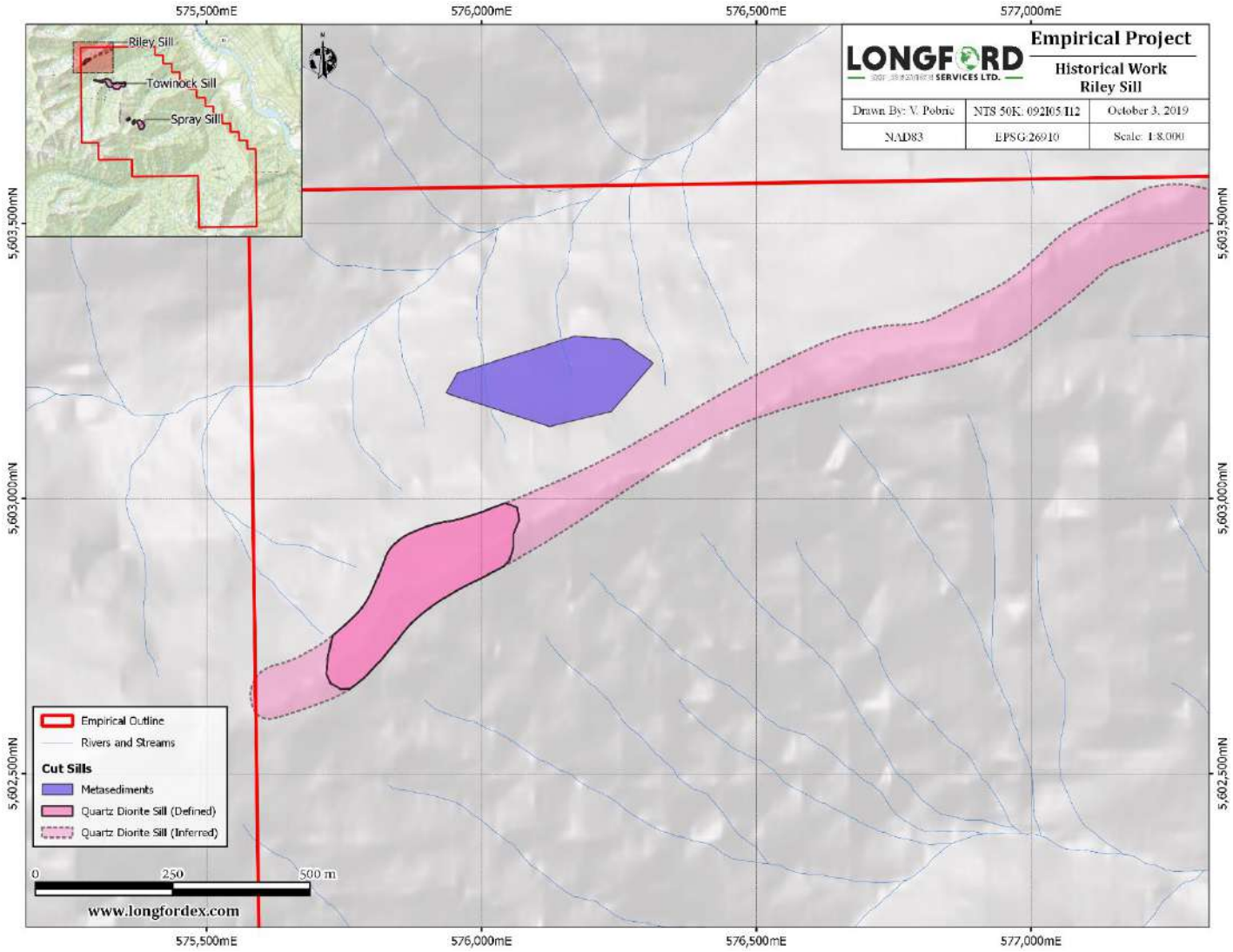

Figure 6.4: Historical work at the Riley sill on the Empirical Property.

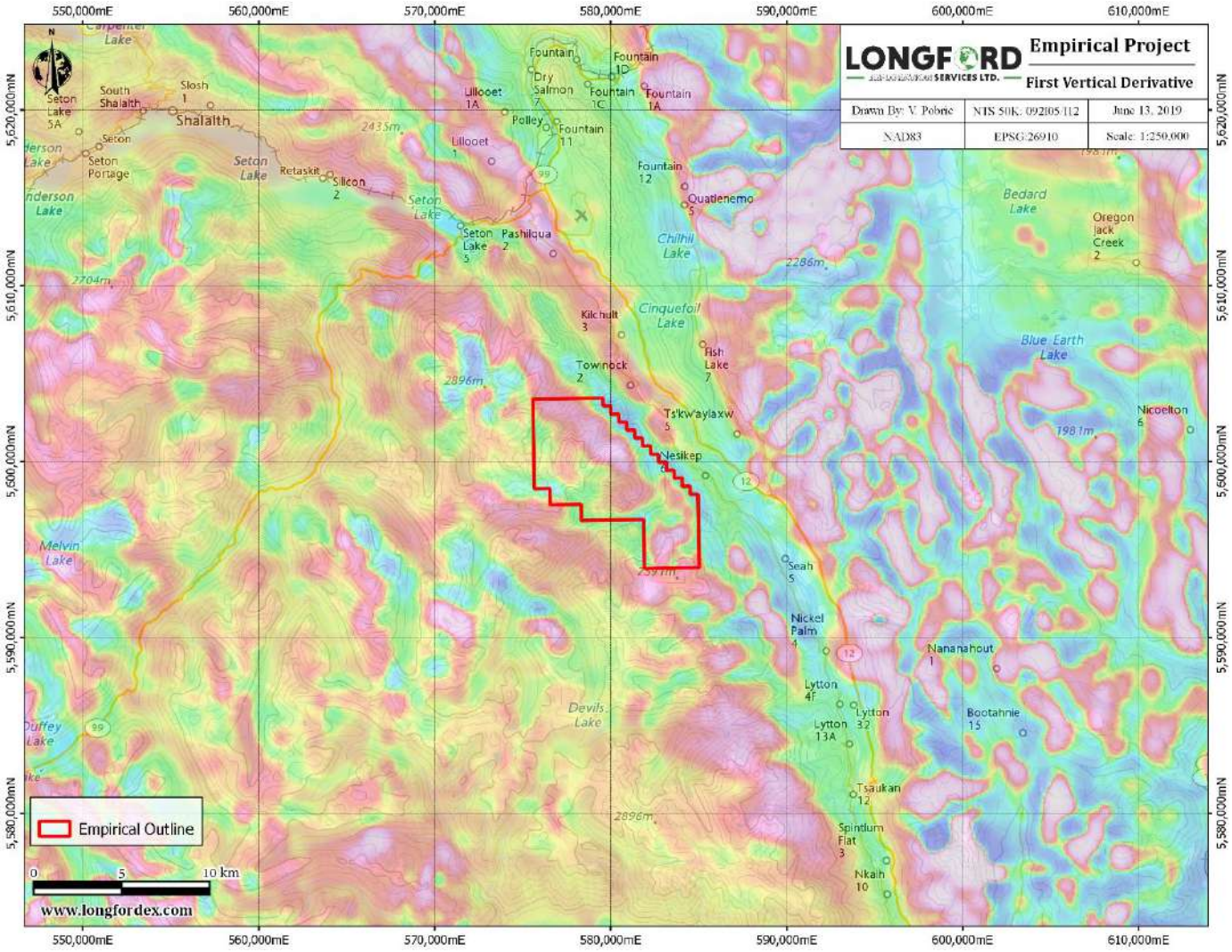

Figure 6.5: Empirical Property regional geophysics-First Vertical Derivative.

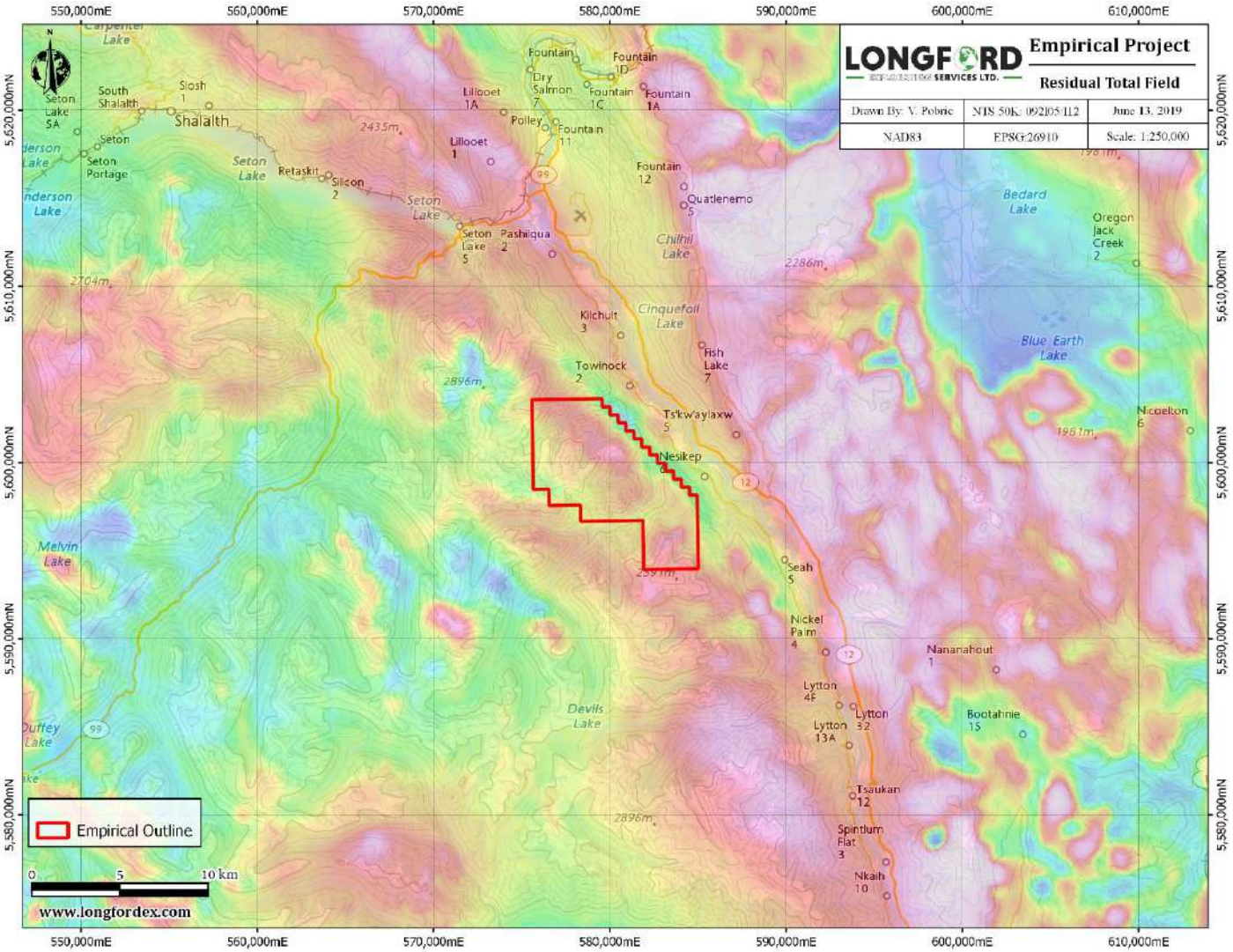

Figure 6.6: Empirical Property regional geophysics-Residual Total Field.

7 Geological Setting and Mineralization

7.1 Regional geology

Southwestern British Columbia is located within the Coast Mountain Belt of western British Columbia, which formed as a result of the collision of the Insular Super Terrane (Wrangellia and Alexander Terranes), the Intermontane Super Terrane (Stikinia, Cache Creek, Quesnellia, slide Mountain and Kootenay Terranes) which accreted to North America between the early Jurassic and Cretaceous. The convergence of these terranes led to the formation of two broad suture belts, both of which are characterized by widespread granitic magmatism, crustal thickening and uplift. The Omineca Belt is situated in the suture zone between the Intermontane Super Terrane and the North American Cordilleran miogeocline and the Coast Mountain Belt lies in the suture zone between the Insular Super Terrane and the Intermontane Super Terrane (Figure 7.1).

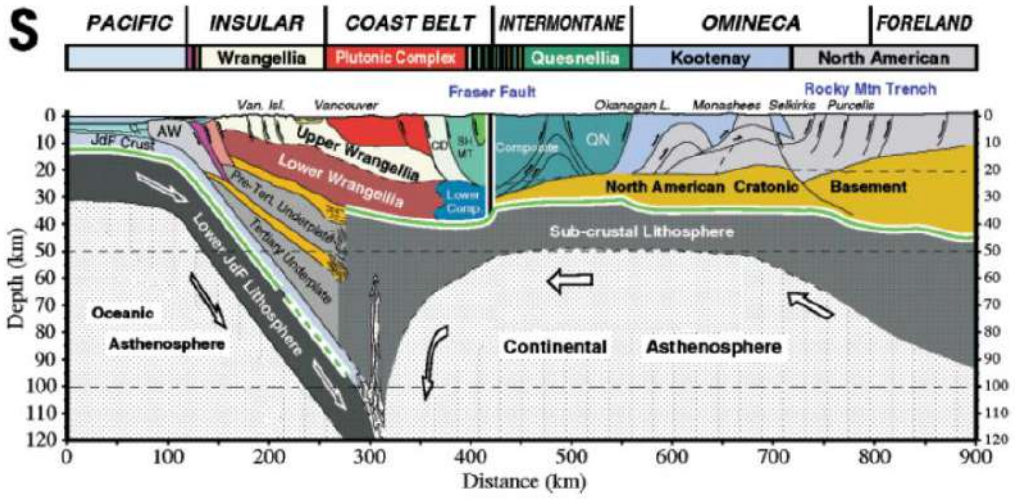

Figure 7.1: Simplified cross section of the accreted terranes of North America. The green line depicts the crust-mantle boundary (Moho). Vertical Exaggeration is 2.7:1 (Monger, 2002).

7.1.1 The Coast Belt

The Coast Belt is one of the largest calc-alkaline batholitic complexes in the world, extending approximately 1,600 km from southern British Columbia, through the Alaskan Panhandle to southern Yukon. Terranes within the Coast Belt include the Bridge River, Cadwallader, Chilliwack, Harrison, Methow, Shuksan, and Taku terranes.

This magmatic arc formed during transpressive accretion of the outboard Alexander and Wrangellia Terranes (Insular Super Terrane) with the Intermontane Super Terrane and North America during the mid-Cretaceous and Eocene (Hammer & Clowes, 2004). Ongoing subduction of the Juan de Fuca ("**JDF**") plate beneath the newly accreted continental margin (Insular Super Terrane) resulted in the formation of a continental volcanic arc, known as the Coast Range Arc. Magma rising from the subducted JDF plate ascended through the newly accreted Insular belt, depositing large quantities of granite within older igneous rocks of the Insular Belt and producing volcanoes along the continental margins. Crustal thickening and uplift exposed areas of extensive regional metamorphism and plutonism as well as outward verging thrust and fold belts on both flanks (Price, n.d.). Higher-grade metamorphic rocks of amphibolite and greenschist facies and

associated granitic rocks are common in both the Coast and Omineca Belts, while only sub greenschist facies rocks are found within the other three belts (Monger, 2002).

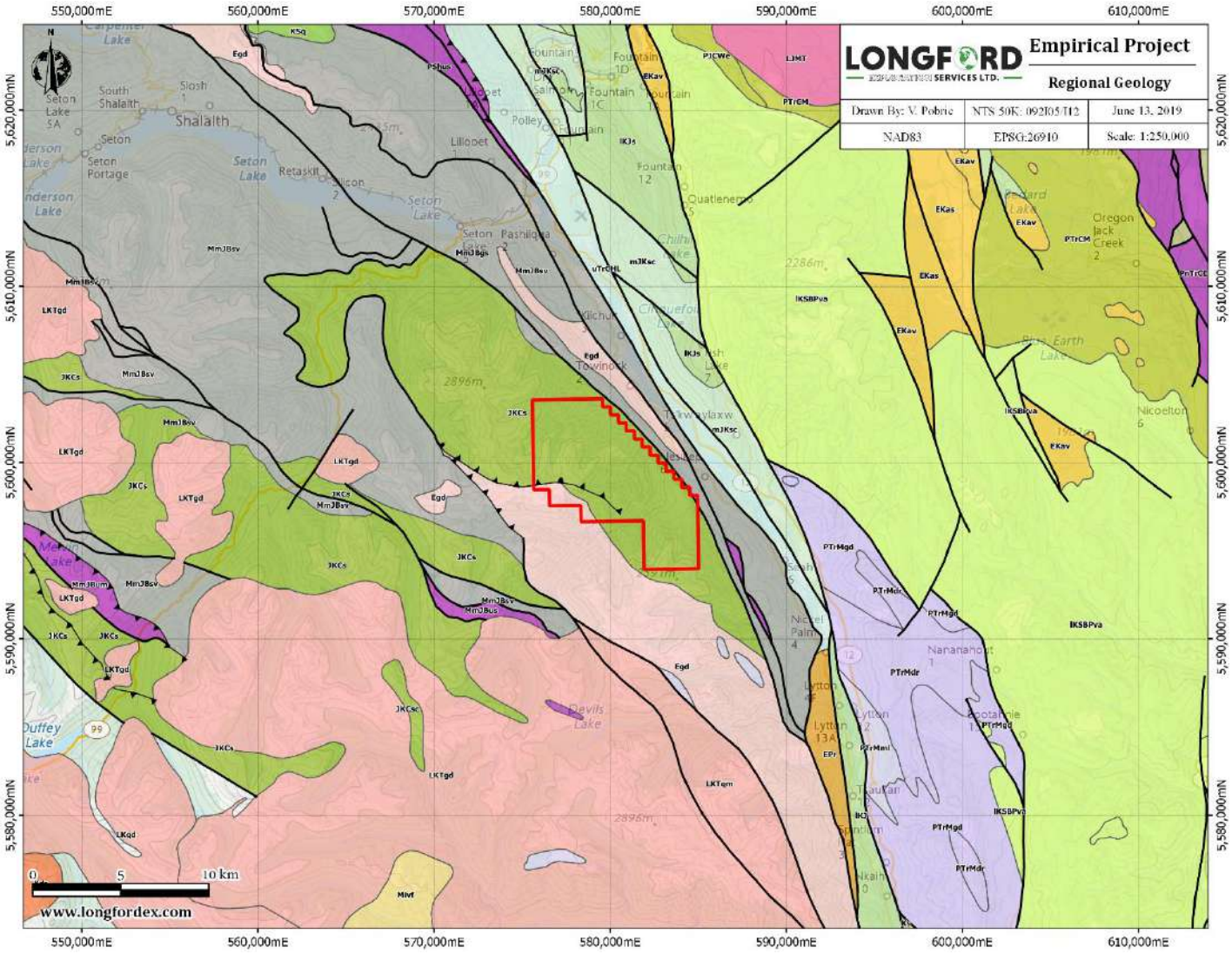

Figure 7.2: Empirical Property regional geology(BC Digital Geology, 2019).

Figure 7.3: Empirical Property regional geology legend.

7.2 Property Geology

The Empirical Property is predominantly underlain by the Cayoosh assemblage, a sequence of interbedded turbiditic sandstone which is partially derived from a plutonic-volcanic arc which includes local quartzite, shale and local conglomerate with plutonic clasts and rare volcanic horizons (Price & Monger, 2003). This assemblage is mainly metamorphosed to greenschist facies and shows penetrative deformation; however, it does contain some rare fossils which date the assemblage to somewhere between the Jurassic and Cretaceous period (Price & Monger, 2003). A tertiary granodiorite batholith intrudes the Cayoosh assemblage along its southwestern contact and several quart-diorite sills are located within the northwestern portion of the Empirical Property boundary. The Cayoosh assemblage can be correlated to other metamorphosed clastic units in the southeastern Coastal Belt, namely the Brew Group, Relay Mountain Group, Gun Lake and Downton lake units, and the fossiliferous Truax Creek conglomerate (Price & Monger, 2003).

Marshall Creek Fault trends northwest along the eastern boundary of the Empirical Property and divides the Cayoosh Assemblage of rocks from the Permian-Jurassic Bridge River Group of metasedimentary rocks. Along the Marshall Creek fault is a large area of carbonate alteration within the greenstones on the southwest side of the fault, and pervasive shear zones approximately 5-30 cm wide (Grexton & Bruland, 1988). Intruding into the Bridge River Complex, south of Reilly Creek and lying between the Marshall Fault and the Lillooet Fault, is a narrow band of Tertiary granodiorite.

Faulting is prevalent in the region with both Marshall Creek fault and Lillooet fault (splays from the Fraser River Fault System) found just to the east of the property. The area between Towinock Creek and Spray Creek is extensively faulted and gently folded. The locally major, northwesterly trending fault crossing the Empirical Property was referred to as the Tow Fault by Hollister (1979). The faults follow a predominant northwesterly trend, however north-easterly, northerly, and easterly trends have also been observed on the Empirical Property. Movement along the faults appear to be predominantly dextral and the age of the faulting is uncertain. However, movement appears to have occurred post-dacite emplacement as dyke swarms have been shattered along the Tow fault line (McKillop, 1979).

A large 200 +m thick quartz-diorite boss intrudes the metasediments on the south fork of Towinock Creek which includes both porphyritic and granitic textures (McKillop, 1986). Results from Duval's 1979 work program reported that the boss was largely devoid of magmatic orthoclase, but contained variable amounts of quartz, biotite, hornblende and plagioclase (Hollister, 1979).

The boundaries of two small Cretaceous/Tertiary quartz diorite sills south of Spray Creek were refined by Hollister in 1979, however the bosses were so altered by ground water the precise mineralogy could not be determined. Numerous north-easterly trending, fine-grained dacite dykes were found between these sills and described as fresh mixtures of quartz and plagioclase with lesser orthoclase and mica-believed to be differentiates of the quart-diorite sills (Hollister, 1979; McKillop, 1979). Dyke swarms are vertical to steep, west-dipping and reportedly occur parallel to the major faults on the property suggesting that the emplacement was structurally controlled (McKillop, 1979; McKillop, 1986). Metamorphic grade of rocks also increased at higher elevations suggesting that reverse faulting may be present in the claims area (McKillop, 1979).

The northern most quartz diorite boss (south of Towinock Creek) was reported by Hollister (1979) to show zones of potassic and phyllic alteration with areas of erratic pyritization occurring throughout. However, this was not confirmed by McKillop during the follow-up program of the same year. The follow-up program did suggest that the sericite and biotite alteration observed within the quartz-diorite boss may be related to a northwesterly trending set of quartz veins, as alteration appeared to decrease with increasing distance from the veins (McKillop, 1979). Quartz veins vary from 0.3 cm to approximately 1 m in width and are predominantly sub-parallel to faulting, however many other directions were also reported (McKillop, 1979). Composition of quartz veins in order of decreasing abundance: pyrrhotite, pyrite, molybdenite, and chalcopyrite (McKillop, 1979).

The southern quartz diorite bosses (south of Spray Creek) were reportedly strongly pyritized, however due to extensive weathering it was no longer possible to categorize hypogene alteration stages at the surface (Hollister, 1979).

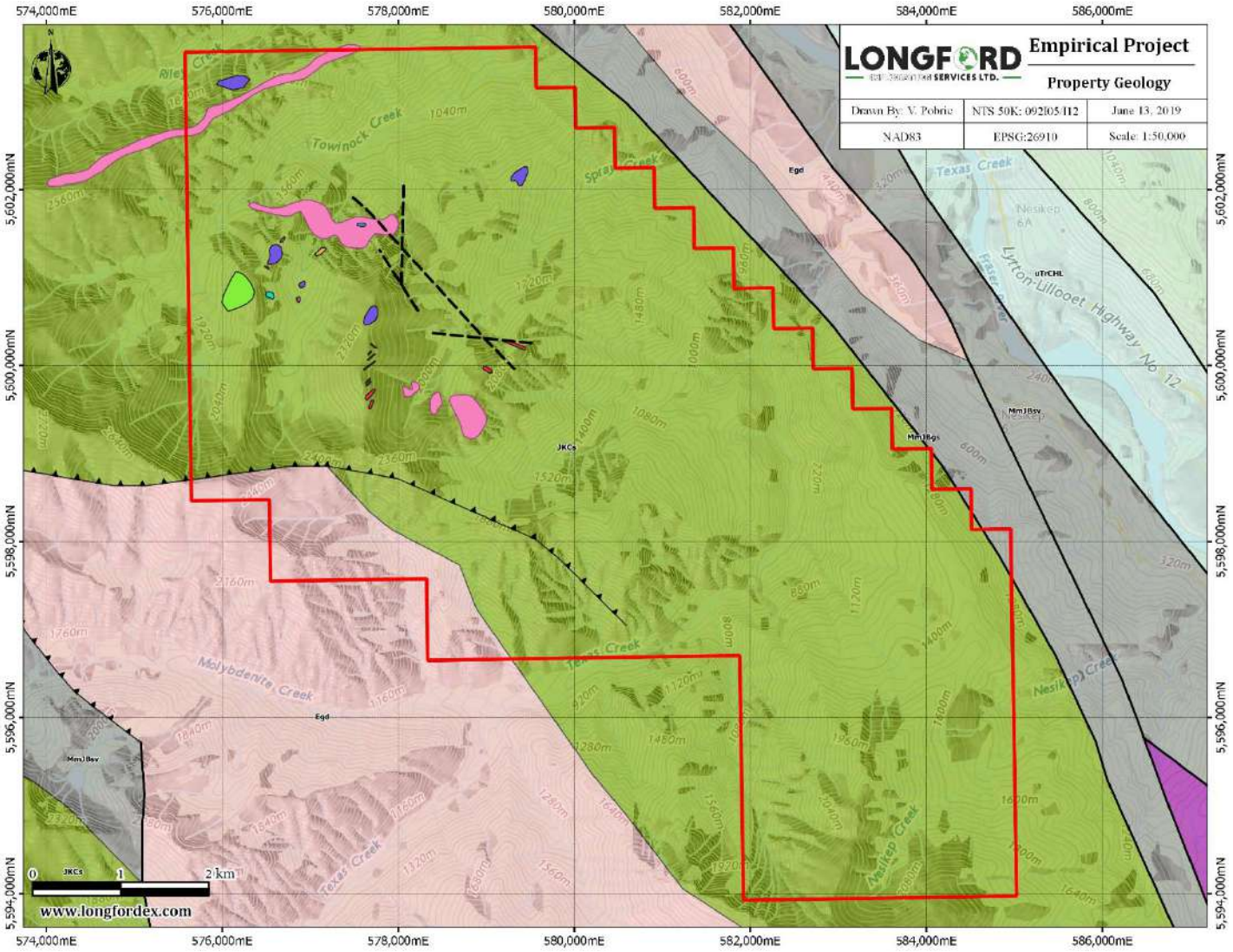

Figure 7.4: Empirical Property geology.

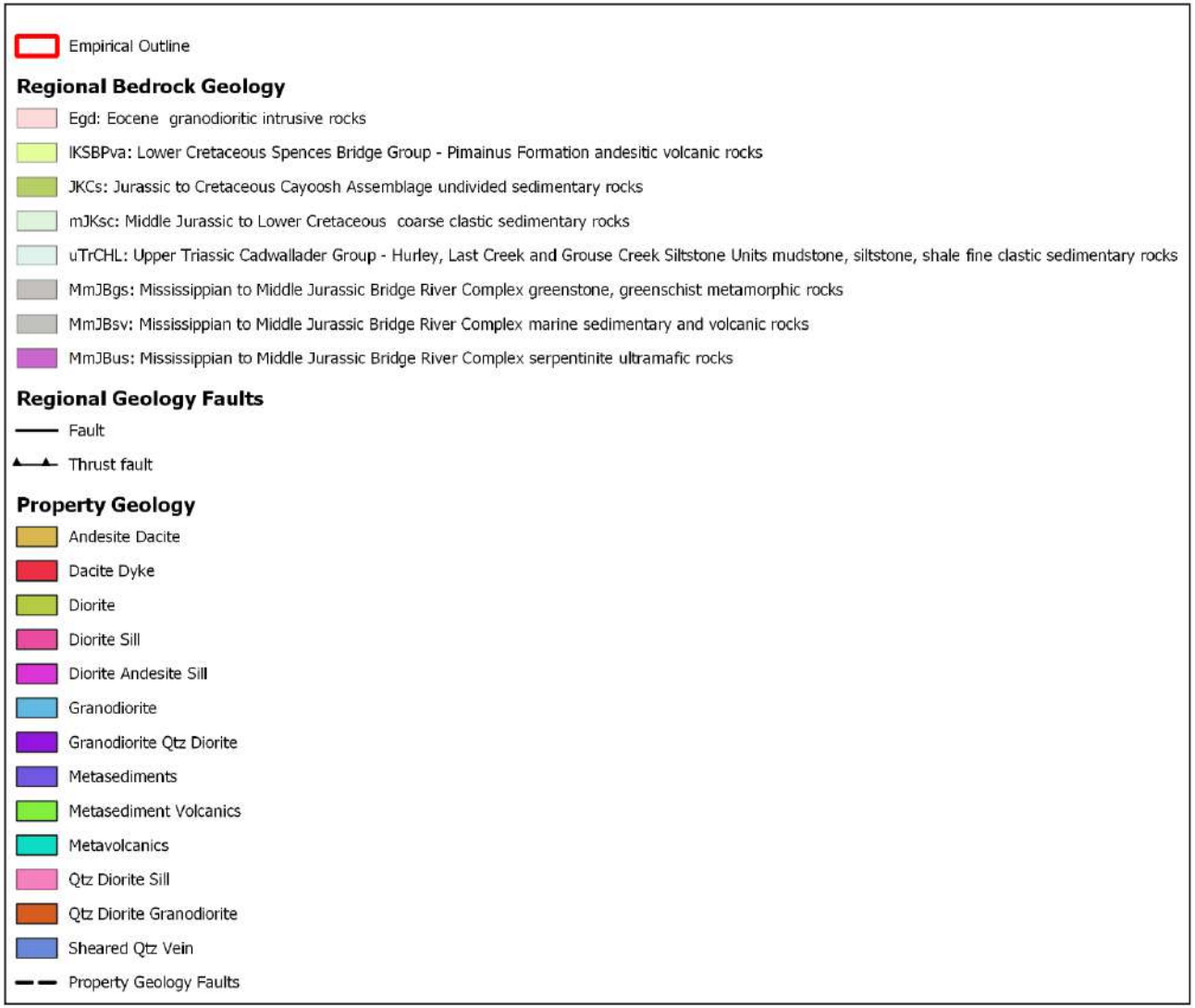

Figure 7.5: Empirical Property geology legend.

7.2.1 Lithological Units

The lithological units underlying the Empirical Property are described after (Grexton & Bruland, 1988):

TERTIARY:

Tgd Granodiorite, felsite, in part Eocene age.

CRETACEUOUS AND/OR TERTIARY:

KTgd Granodiorite with locally abundant septae of Relay Mtn or Bridge River Group rocks.

CRETACEOUS:

Kgd, qm Granodiorite, quartz monzonite. Few or no included metamorphics.

UKk Kingsvale Group: Basalt, local volcaniclastics.

IKsb Spences Bridge Group: Andesite, dacite, rhyolite, intercalated volcaniclastics, sandstone, shale, local conglomerate.

lKjm Jackass Mountain Group: Sandstone, conglomerate, shale.

JURASSIC AND CRETACEOUS:

JKrm Relay Mountain Group: Argillite, siltstone, sandstone, and metamorphosed equivalents.

JKqd Granodiorite, quartz monzonite.

PERMIAN TO JURASSIC:

PJbr Bridge River Group: Radiolarian chert, argillite, basalt, local carbonate, serpentine, ultramafics, phyllite, greenstone, schists.

7.2.2 Mineralization

Sulphide mineralization on the Empirical Property consists of widely scattered but rare disseminations of sphalerite in fractures within both intrusive and intruded rocks, and very rare coarse-grained molybdenite in quartz filled fractures (Hollister, 1979, McKillop, 1986). Molybdenite and minor chalcopyrite mineralization associated with the quartz stockwork veining on the Empirical Property is characteristic of porphyry type mineral deposits. Molybdenite mineralization is mainly located in the quartz-diorite stock south of Towinock Creek (north zone), known as the Tow Showing (Minfile 092INW090) and the stock located south of Spray Creek (south zone) is known as the Spray Occurrence (Minfile 092INW088). Pyrrhotite and lesser pyrite are also common as disseminations and as fracture plane coatings. Pyrrhotite and chalcopyrite are commonly associated with the molybdenite in quartz veins but are less common in higher grade zones (McKillop, 1979). A later set of larger veins (5-160 cm) are also reported to contain arsenopyrite, sphalerite, and rare scheelite within quart-diorite stocks (Hollister, 1979, Minfile 092INW090). These veins trend between 090° and 130° and cut the quartz-diorite stock and the enclosing sediments (Minfile 092INW090). These larger veins tend to occur where rock and soil

geochemistry indicated higher concentrations of gold and arsenic within the larger area of anomalous molybdenum values (McKillop, 1981).

Strong stockwork zones are often identified on the surface by a light-yellow stain caused from the weathering of pyrite or pyrrhotite within veins, fractures and as disseminations (Minfile 092INW090). It was also noted that ferrimolybdite was observed.

Trace amounts of scheelite was reportedly recovered by panning stream gravel in Towinock Creek just below the north zone sill, but not above it (McKillop, 1979).

Alteration associated with mineralization includes chloritization, sericitization, biotitization, and intense silicification without any evident pattern of alteration zoning (Price & Ditson, 1986). However, an extensive biotite hornfels aureole postdating the porphyry-type mineralization was reported to envelop the intrusion and the sediments (Minfile 092INW090).

An investigative drill program carried out by Duval in 1981 yielded significant Au values in two drill holes, with 3 m of 2,100 ppb Au (0.06 ounces/ton) in DDH-CH81-3, and 21 m of 3,670 ppb Au (0.107 ounces/ton) and 3 m interval grading 7,860 ppb Au in DDH-CH81-4 (Price & Ditson, 1986). A series of easterly trending, 70°N-dipping, branching network of quartz veins between 5-130 cm in thickness outcrop in the vicinity of DDH-CH81-4 which commonly extend to 30 m from the main vein before pinching out (Rebagliati, 1986). Drill core also revealed zones of intense silicification and sericitization which completely obscure porphyritic textures and most quartz veinlets (Minfile 092INW088).

Five short DBD diamond drill holes were drilled in 1986 to follow up on the 1981 program and targeted the auriferous zone in hole CH81-4. All holes intersected a fine to medium grained biotitic porphyritic quartz diorite with irregular intervals of chlorite and silica alteration (Rebagliati, 1986). Porphyry type molybdenum and copper mineralization was reported in every hole and 3 possible modes of gold mineralization were identified: porphyry-type grey quartz stockwork veining; pervasively silicified zones; and late, white, branching quartz vein (Rebagliati, 1986). Hole 86-5 contained an 0.88 m interval of disseminated pyrrhotite and pyrite, porphyry-type molybdenum-bearing stringers, and a 13 cm thick brecciated grey quartz vein within which graded 10,270 ppb Au (0.289 oz/ton Au) (Rebagliati, 1986). Eighteen late quartz veins were sampled and compared to 9 similar vein intersections in split core which returned gold concentrations between 1 and 3,300 ppb Au (Rebagliati, 1986). Results indicate that gold is not uniformly distributed in the late veins, and no evidence of zoning was identified in the cluster of late veins distributed across the broad geochemical anomaly.

Gold values returned from the stockwork quartz-sulphide vein zone drill core suggests either surface depletion or zoning to higher gold concentration at depth (Price & Ditson, 1986).

Figure 7.6: Example of mineralization found on the Empirical Property.

8 Deposit Type

8.1 Cu-Au-Mo Porphyry Style Deposit

The Empirical Property is likely associated with a widespread hydrothermal Cu-Au-Mo porphyry style deposit (Figure 8.1). The mineralized zones are believed to be located within quartz diorite stockworks located just south of Towinock Creek near the Tow Showing and just south of Spray Creek near the Spray Occurrence. This area is underlain by a thick sequence of schistose argillites of the Jurassic-Cretaceous Relay Mountain Group which have been intruded by porphyritic quartz diorite stocks (Minfile 092INW090). The porphyritic quartz-diorite stocks, and to a lesser degree, the enclosing sediments have undergone multiple episodes of fracturing and related quartz veining providing the pathways for sulphide mineralization.

The formation of this style of deposit is related to orogenic belts at convergent plate boundaries (subduction-related magmatism), or extension settings related to strike-slip faulting or back arc spreading during continent margin accretion (Panteleyev, 1995). It is generally recognised that Cu-Au-Mo porphyry deposits are associated with granodiorite, quartz monzonite, quartz diorite granitoid rock types. Cu-Au-Mo porphyries tend to occur as large zones of hydrothermally altered host rock and are closely related to island-arc volcano-plutonic suites. Composition of intrusions range from basalt-andesite volcanic and gabbro-diorite-quartz-diorite associations. These deposits are characterized by quartz stockworks, veins, sulphide bearing veins (pyrite, chalcopyrite, bornite, with lesser molybdenum), closely spaced fractures and fracture selvages. These subvolcanic Intrusions are commonly emplaced by multiple successive intrusive phases and a wide variety of breccias. Grain size may range from coarse-grained phaneritic to porphyritic stocks, batholiths and dike swarms.

The timing of gold mineralization within these systems can be early or late and is related to magmatic or circulating meteoric waters. Early gold mineralization is closely associated with the potassic alteration zone and bornite and late mineralization is associated with pyrite and either sericitic, advanced argillic or skarn-destructive argillic alteration (Gendall, 1994). These deposits may be present in stockwork veins, skarns, or as carbonate and non-carbonate replacement (Gendall, 1994). Copper-gold style porphyries tend to be smaller in size compared to copper-molybdenum style porphyries (Gendall, 1994). Regional structures and structural lineaments act as mineralization controls in these systems and therefore the degree of fracturing and veining tends to favour the concentration of Cu and Au in these areas (Gendall, 1994; Panteleyev, 1995).

Mineralized zones occur at depths of 1 km or less and are mainly associated with the development of brecciated zones or preferential replacement in host rocks with a high degree of primary permeability (Panteleyev, 1995). Ore-grade stockworks are linked to zones of intensely developed fractures that are coincident or intersect multiple fracture sets. Propylitic alteration halo is widespread and generally surrounds an early potassic alteration core (which is commonly well-mineralized). Overprinting of early mineralization by younger mineralized phyllic alteration is also common. Pyrite is typically the predominant sulphide mineral, and the predominant ore minerals are chalcopyrite, molybdenite, lesser bornite and rare (primary) chalcocite. Subordinate minerals include tetrahedrite/tennantite, enargite and minor gold, electrum and arsenopyrite.

These deposits can be of the silica-oversaturated, silica-saturated and silica-oversaturated subtypes based on the modal composition of the associated alkalic intrusions and to a lesser extent on alteration (Lang & McClaren, 2003). The Empirical Property shows characteristics consistent with that of a silica-oversaturated alkalic copper-gold porphyry deposit on the basis of abundant quartz-sulphide veins, siliceous alteration, widespread, but weak sericitic alteration, and the presence of strong molybdenum mineralization, however the quartz-normative composition has not been reported in historical reports (Lang & McLaren, 2003). This particular style of deposit is favourable because, on average, they contain a greater tonnage of mineralization compared to other alkalic copper-gold porphyry types. Significant examples of silica-oversaturated alkalic copper-gold-molybdenum deposits include Goonombla/North Parks and Cadia-Ridgeway in Australia and Skouries in Greece (Lang & McLaren, 2003).

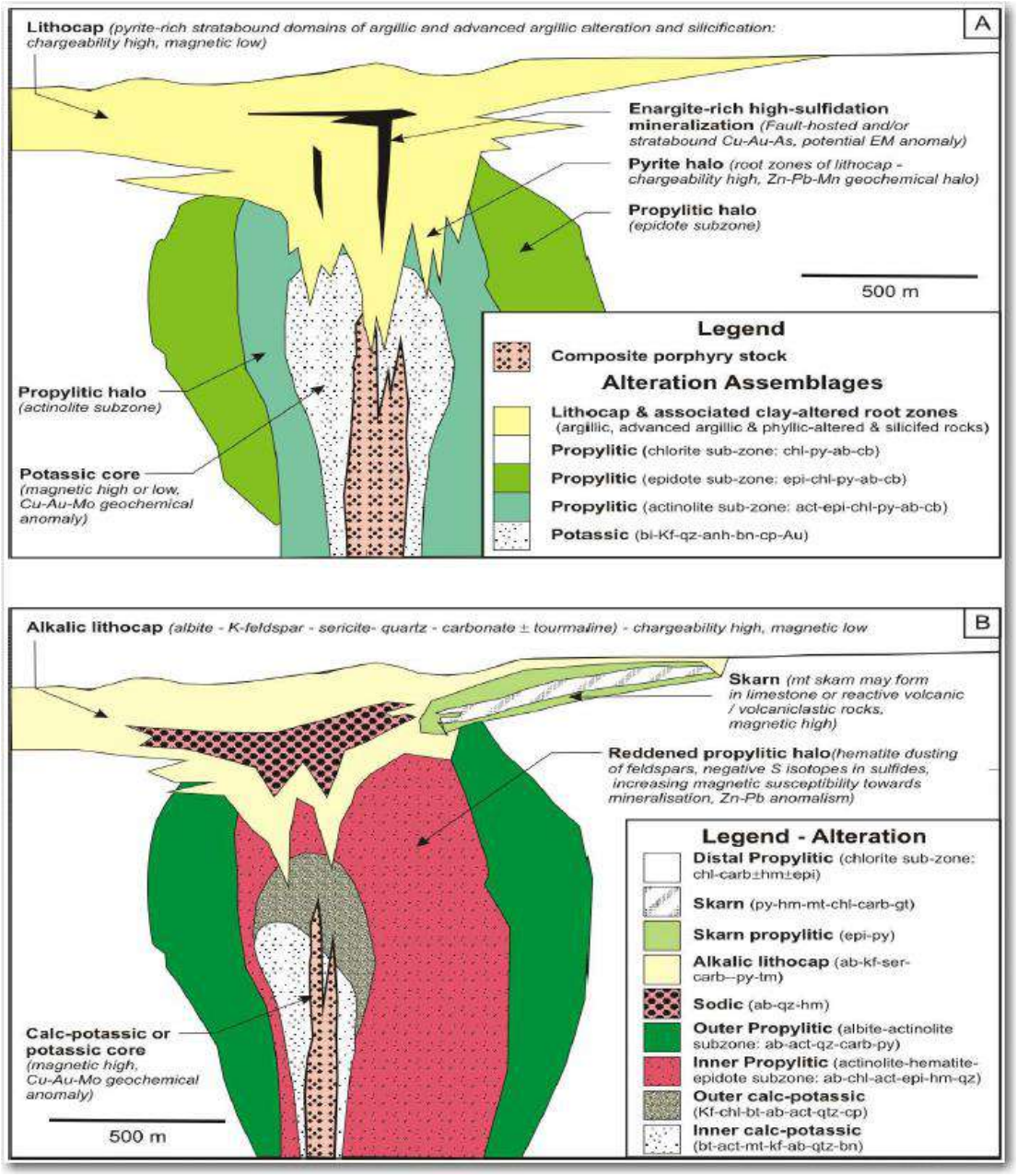

Figure 8.1: Zoned porphyry system model after Holliday and Cooke, 2007.

9 Exploration

9.1 2019 Field Program Sampling Procedures

Rock samples collected were located by GPS in NAD83 UTM Zone 10N, the sample location was recorded in field notebooks, an assay sample tag book and as a waypoint on a Garmin 60CSX GPS unit. Each sample was collected into its own 18" x 12" poly bag labeled with the locale (i.e. "Empirical") and a unique 7-character sample ID (i.e. E6690306) assigned from a barcoded Tyvek sample book. A tear-out tag with the barcode and unique sample ID was inserted in the bag with the sample and the bag sealed with a cable tie in the field. The sample locations are marked in the field with orange flagging type and the unique sample ID number written on the flagging tape.

Soils/talus fine samples were collected at 10 m intervals along lines spaced 10 m apart. All talus sample locations were recorded using hand-held GPS units. Sample sites are marked by flagging tape with the sample number written to it and tied/wrapped around a rock placed at the site. The talus samples were collected from 10 to 20 cm deep holes using hand-held geo-tools with larger rocks and pebbles removed by hand. The samples were placed into individually pre-numbered Kraft paper bags with corresponding sample tags inserted. The talus fine samples were sent to Bureau Veritas in Vancouver, BC where they were dried and screened to -80 mesh, dissolved using an aqua regia digestion and analyzed for 35 elements using the inductively coupled plasma-mass spectrometry technique (ICP-MS).

9.2 2019 Field Program

Longford Exploration was commissioned by Clarity Gold to carry out an exploration program on the Empirical Property. Longford Exploration mobilized a crew of four from Vancouver, BC on Oct 4, 2019 to carry out a 7-day geological mapping, prospecting and sampling program. The field program ran from Oct 5, 2019 to Oct 12, 2019 with the crew being dispatched from the Lillooet Blackcomb Helicopter base or utilizing the Texas Creek forest service road for access.

The program was a first pass exploration plan designed to assess the Empirical Property's potential for gold and copper mineralization and verify historical results and previous workings. A total of 102 rocks and 50 soil samples were collected during the program which are further described in Appendix B and C.

9.3 2019 Rock Sampling

Prospecting activities focused on locating structures, contacts, mineralization and observed lithologies, particularly in the area surrounding the Towinock and Spray showings of quartz-diorite sills where previous work (Minfile 092INW090 and 092INW088) reported samples returning values of 2,100 ppb Au over 3 m in DDH-CH81-3, 3,670 ppb Au over 21 m, and a 3 m interval grading 7,860 ppb Au in DDH-CH81-4 (Price & Ditson, 1986).

Given the steep terrain and snow, crews sampled along the outcropping quartz diorite found on the ridges of the Towinock and Spray sills. To the north of Towinock Creek, a third, poorly explored, quartz diorite Riley sill was explored and prospected briefly but due to deep snow and cliffs the area was left for future exploration in better conditions. Focus was given to drill collar locations of DDH-81-03 and DDH-81-04 which intercepted 3.00 m and 21.00 m at 2.10 g/t and 3.67 g/t Au during a 1981 program. Historical drill hole collars were identified, and core box

stashes were found and prospected for mineralization. Pictures of the core boxes and mineralized core can be seen in Figures 9.1 and 9.2 below. The condition of the historic core and boxes is well preserved with some sample tags still legible; future programs might spend time to relog and resample this core.

Figure 9.1: Example of mineralized historical core found on the Empirical Property.

Figure 9.2: Empirical Property historical Core (Including DDH-CH81-3).

9.3.1 2019 Rock Results Overview

Table 9.1 below highlights the average, maximum and minimum values returned by the talus fine samples and results are illustrated in Figures 9.3 to 9.6. A detailed description of rock samples and full assay results are available in APPENDIX B and D, respectively.

Table 9.1: Statistical analysis of 2019 Empirical Property exploration program rock results (n=102).

Element	Au (ppb)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
Mean	42.82	0.51	39.45	40.87	5.85	125.76
Median	0.80	0.10	34.85	3.70	2.70	57.50
Mode	0.25	0.05	30.80	0.20	1.50	49.00
Max	3,175.40	31.90	117.50	513.00	2.00	5,093.00
Min	0.25	0.05	3.20	0.05	0.40	2.00

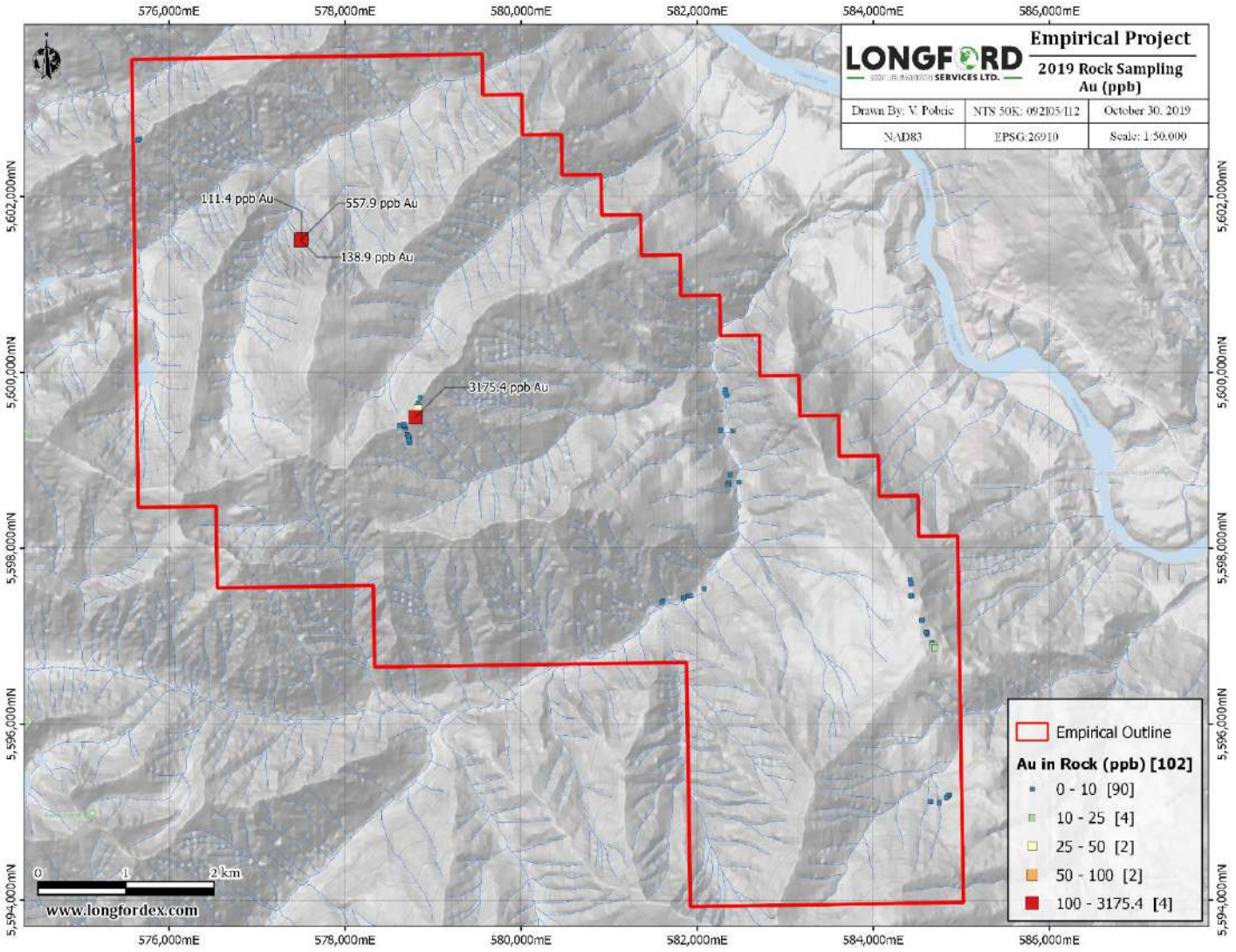

Figure 9.3: 2019 Empirical Property Au in rock results (ppb).

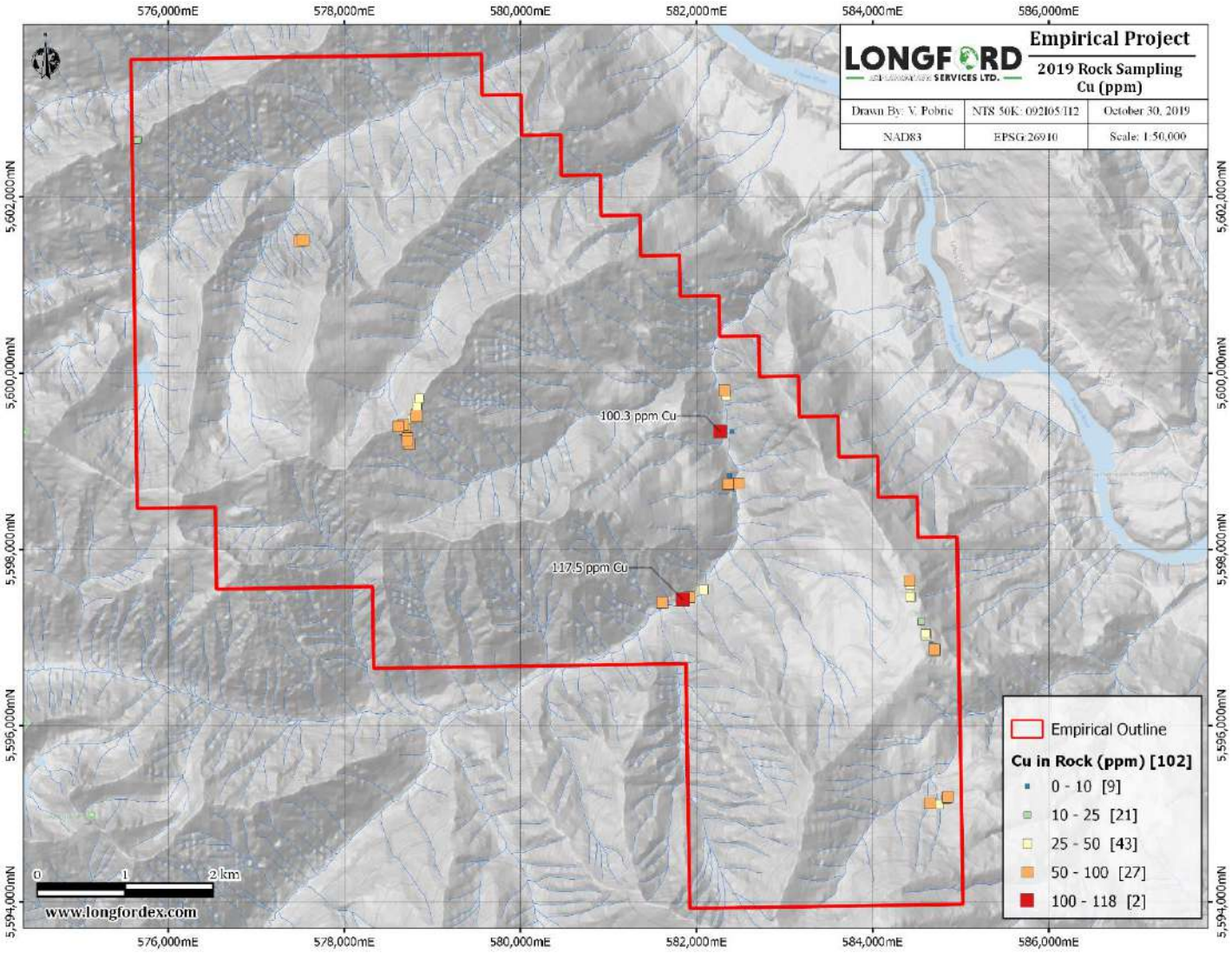

Figure 9.4: 2019 Empirical Property Cu in rock results (ppm).

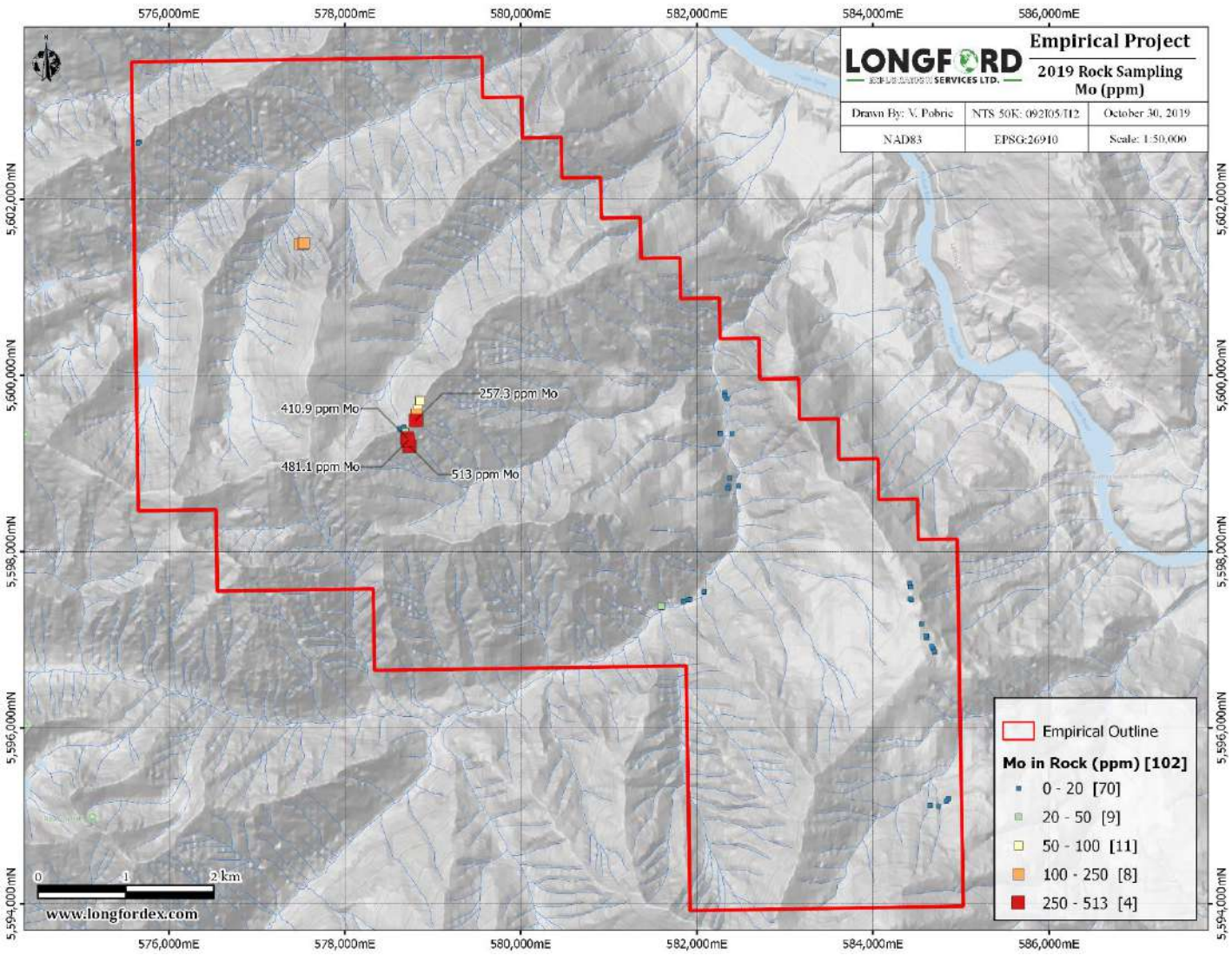

Figure 9.5: 2019 Empirical Property Mo in rock results (ppm).

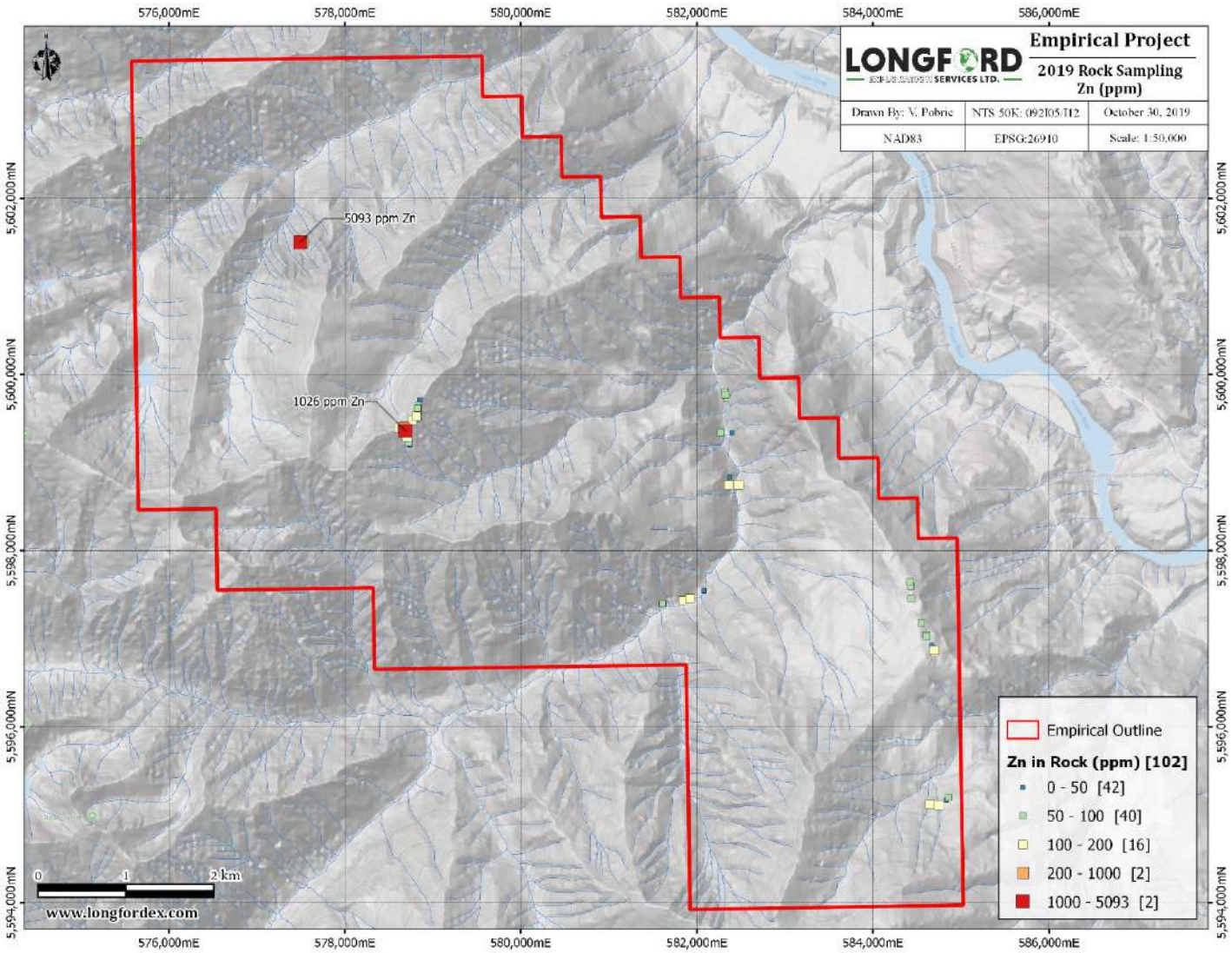

Figure 9.6: 2019 Empirical Property Zn in rock results (ppm).

9.4 2019 Talus Fine Sampling

50 talus fine samples were collected across the Spray sill saddle in the vicinity of the historic in-soil copper/gold anomalies. Select samples were taken in proximity to areas of historic sampling to verify historically reported analytical results, as well as to the North West and South East of historic samples to test for an extension of highly anomalous results.

9.4.1 2019 Talus Fine Results Overview

Table 9.2 below highlights the average, maximum and minimum values returned by the talus fine samples and results are illustrated in Figures 9.7 to 9.10. A detailed description of talus fines and full assay results are available in APPENDIX C and E, respectively.

Table 9.2: Statistical analysis of 2019 Empirical Property exploration program talus fines/soil results (n=50).

Element	Au (ppb)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
Mean	13.19	0.65	191.20	131.79	21.78	976.86
Median	7.50	0.45	168.40	32.85	14.35	682.50
Mode	1.60	0.20	149.80	13.70	14.10	375.00
Max	88.80	4.50	426.10	748.00	117.90	6,845.00
Min	1.00	0.10	54.40	6.70	5.10	137.00

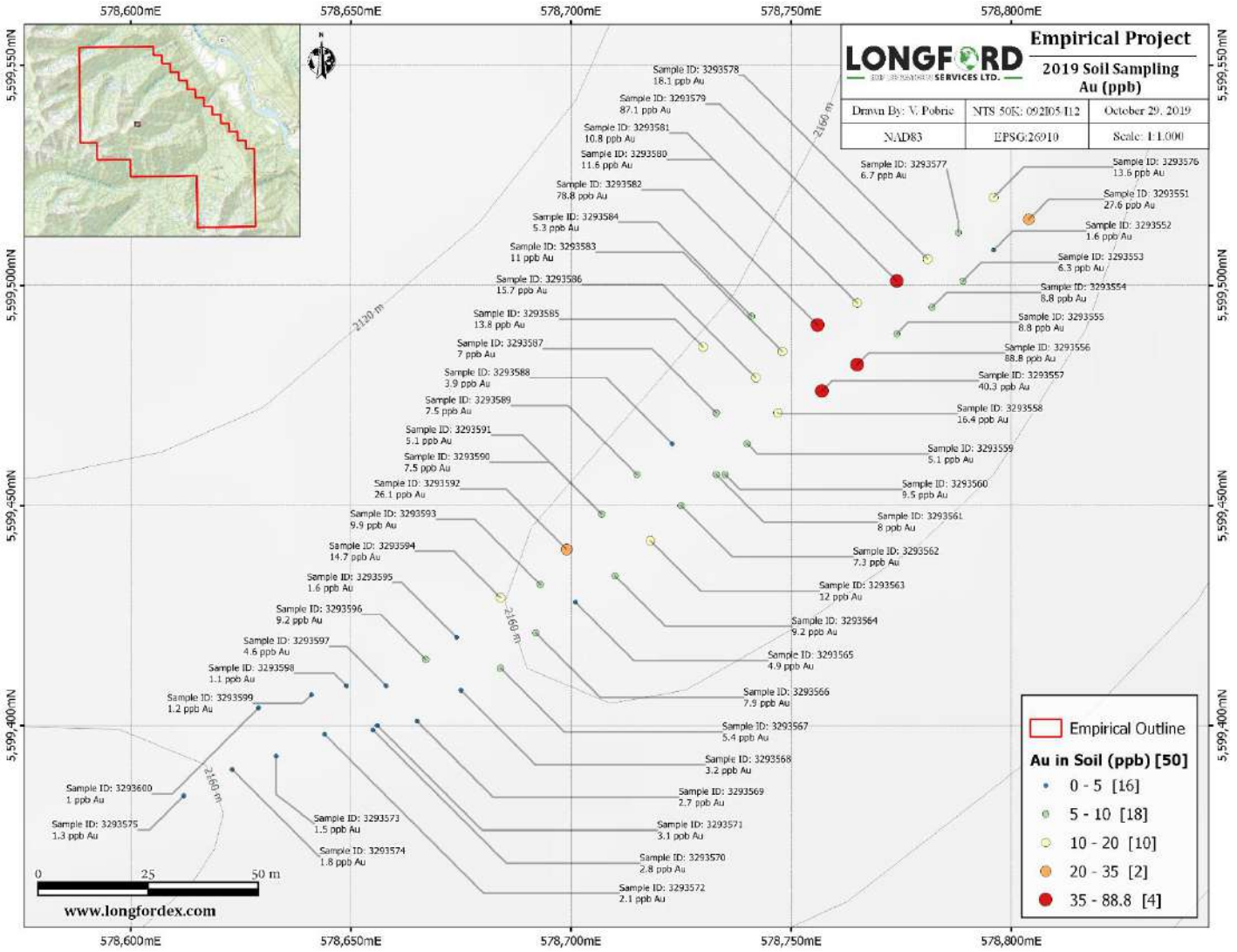

Figure 9.7: 2019 Empirical Property Au in soil results (ppb).

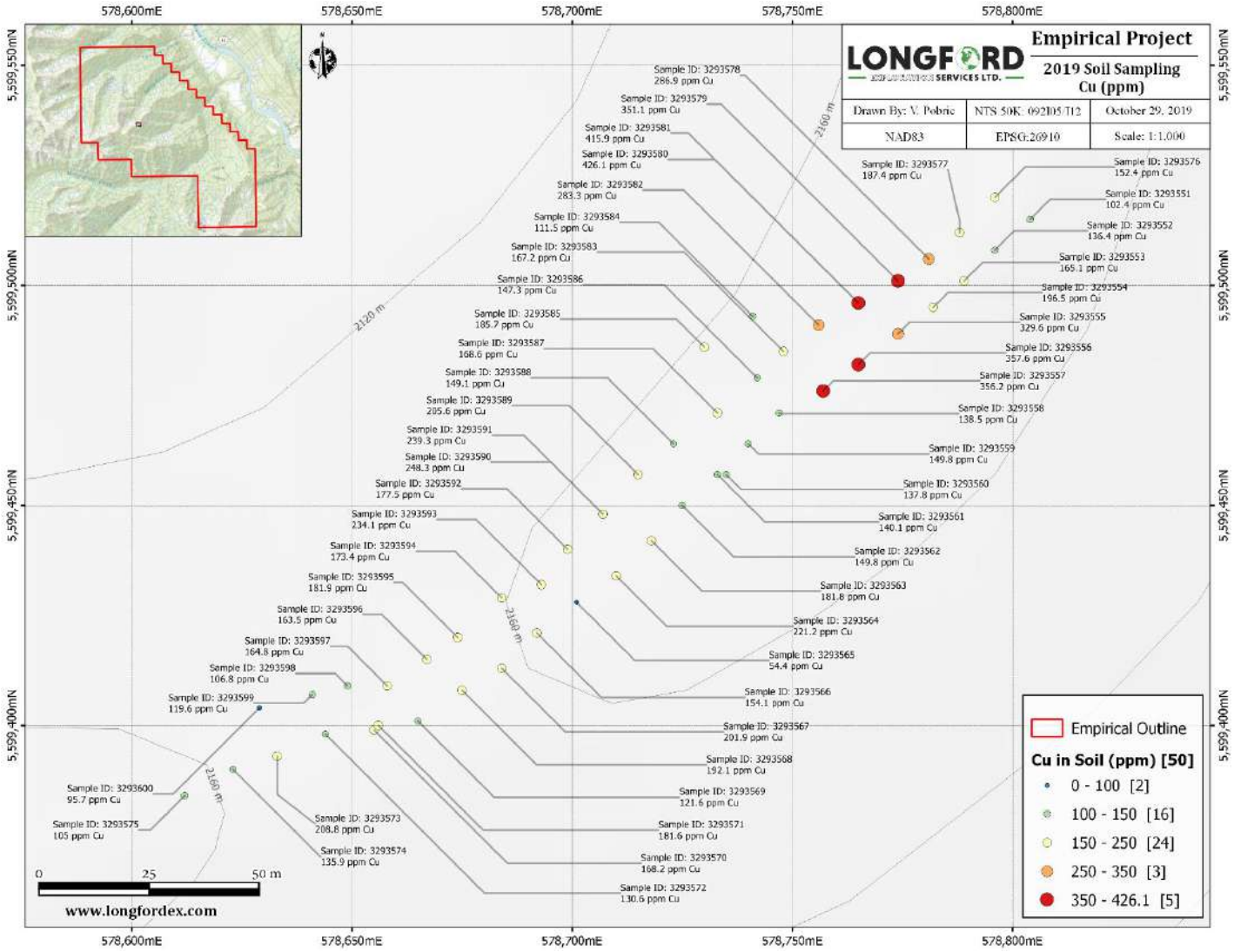

Figure 9.8: 2019 Empirical Property Cu in soil results (ppm).

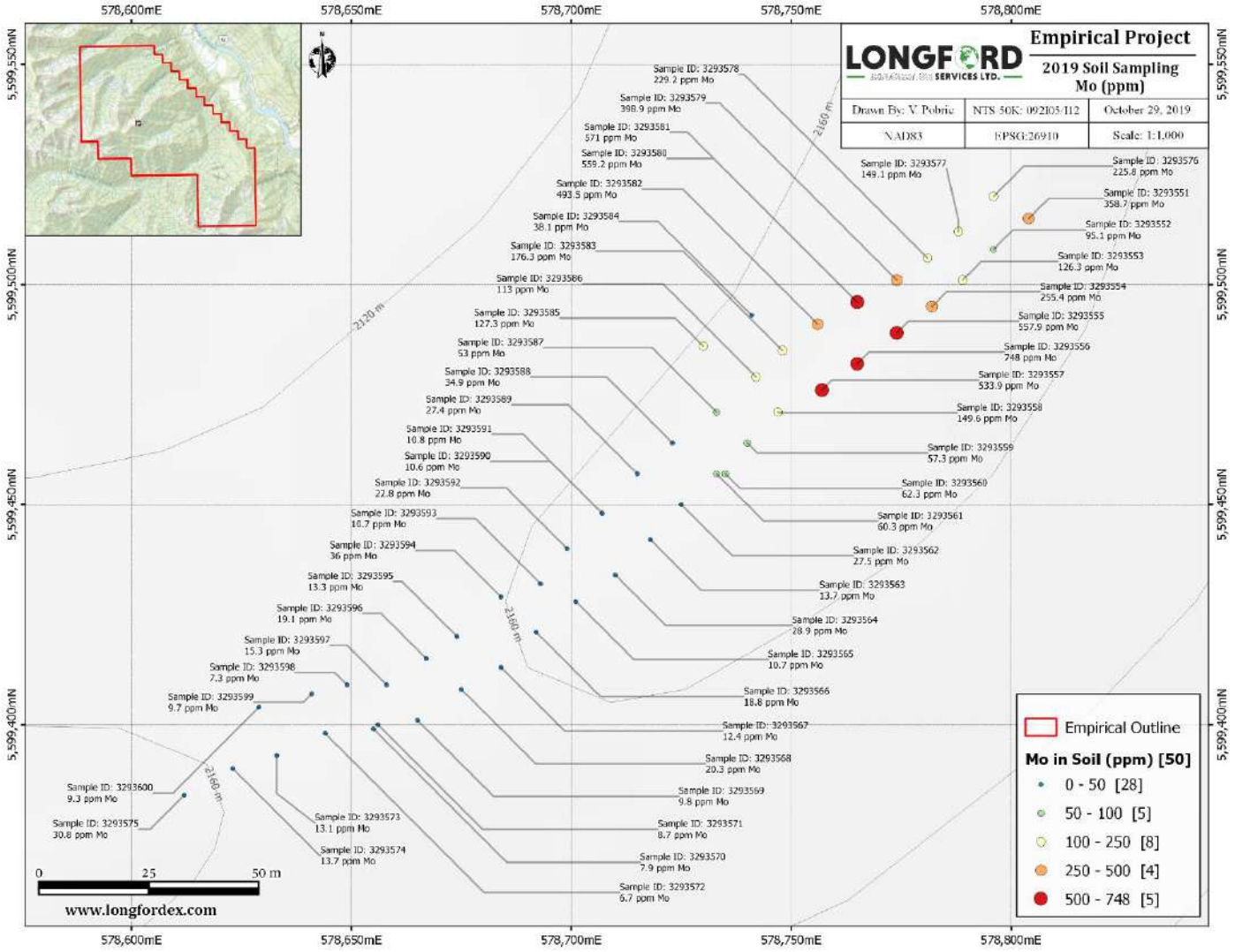

Figure 9.9: 2019 Empirical Property Mo in soil results (ppm).

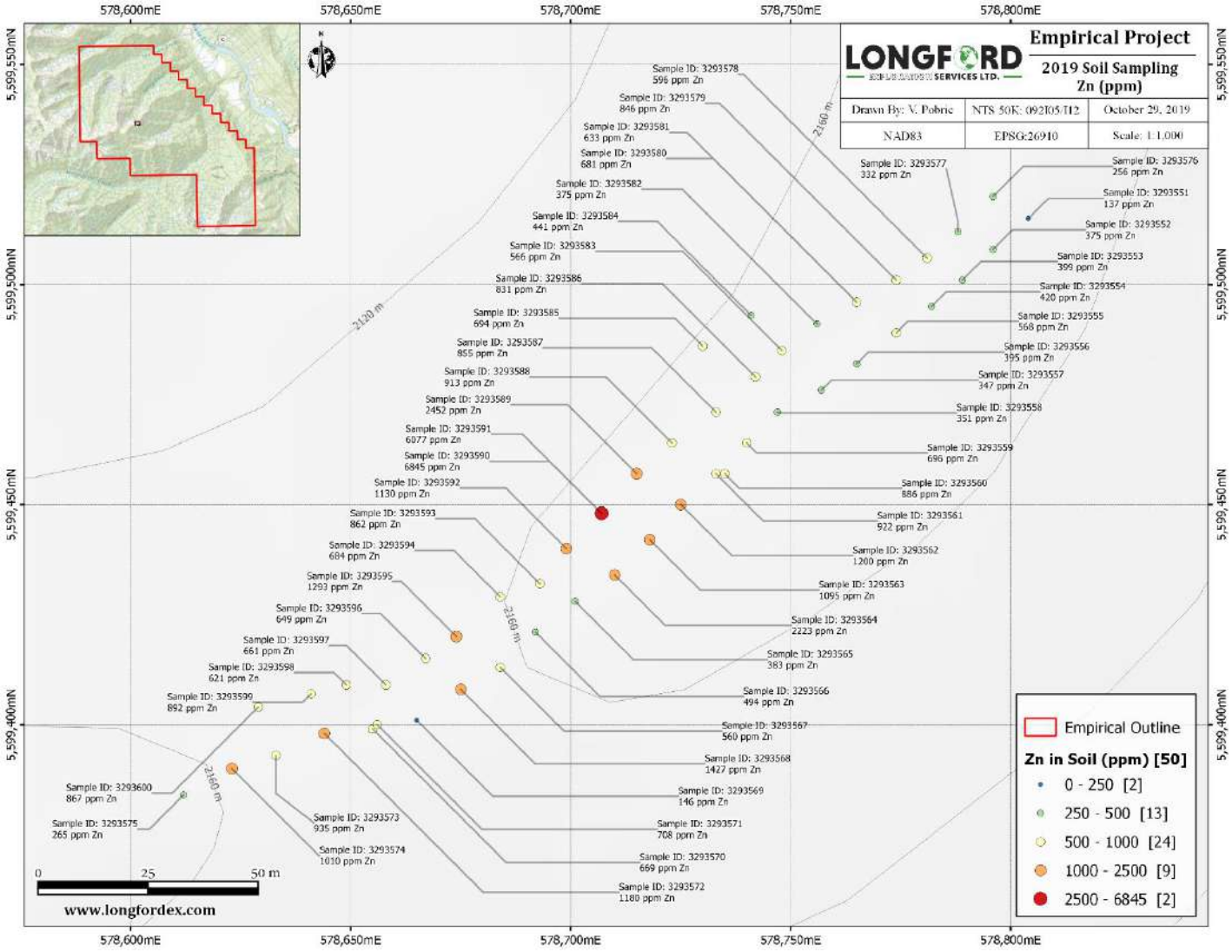

Figure 9.10: 2019 Empirical Property Zn in soil results (ppm).

9.5 2019 Program Summary

During the 2019 Empirical Property exploration program identified a strongly bedded sequence of meta-sedimentary rocks intruded by quartz diorite and dacite sills/dykes andsubsequently folded and faulted on the property. Later intrusions of andesite-dacite feldspar porphyry and basaltic dykes were also observed followed by a lessor folding and faulting event. Meta-sedimentary rocks observed consisted of locally dominant, argillite with siltstone, phyllite and calcite-chlorite sub schist and minor quartzite and chert. Most sedimentary/volcanic derived rocks were weakly calcareous, with or without calcite-ankerite lenses and laminae. More massive, dark grey-black (graphitic) argillite and intrusive rocks were observed to be non-calcareous. The pervasive, moderately to strongly hornfelsed character of the metasedimentary and volcanic rocks masked the local effects of sill and dyke emplacement. Mineralization was primarily observed in 2-10 cm wide quartz veins and fracture surfaces in the medium to coarse grained light grey quartz diorite found at the Towinock and Spray sills. Blebs of sulphides were found within quartz veins and disseminated throughout the vein selvedges with visible pyrite, chalcopyrite, trace sphalerite, black to red gossanous weathered material and minor molybdenum.

Table 9.1 below highlights the number of rock and soil/talus samples collected on the Empirical Property which fall within the typically anomalous range. A detailed map showing all rock sample IDs, locations and significant results is also available in APPENDIX F.

Table 9.3: 2019 Empirical Property exploration program samples which fall within the anomalous range (ppb/ppm), n=102 rocks n=50 soils.

Element	Crustal Abundance	Typical Anomalous Conc in Rock (ppm)	# of Rock Samples within anomalous range	Typical Anomalous Conc in Soil (ppm)	# of Soil/Talus Fine Samples within anomalous range
Au	4 ppb	50-100 ppb	2	40-100 ppb	4
Ag	70 ppb	0.5-1	8	0.2-0.5	48
Cu	55 ppm	100-200	3	50-200	50
Pb	13 ppm	40-100	0	40-100	4
Zn	70 ppm	100-500	20	200-300	48
Mo	1.5 ppm	5 to 20	50	2 to 5	50
W	1.5 ppm	10 to 50	1	2 to 10	0
Ni	75 ppm	100-200	2	100-200	1
As	1.8 ppm	5 to 10	41	5 to 20	50

10 Drilling

The owner of this property has not carried out any drilling on the Empirical Property.

11 Sample Preparation, Analysis, and Security

During the 2019 program a total of 102 rock samples and 50 soil samples were collected (Figure 11.1). The 2019 program samples were collected and secured in a manner to preserve sample integrity and provenance, enabling detailed sample descriptions and future analytical review.

Rock samples collected were located by GPS in NAD83 UTM Zone 10N, the sample location was recorded in field notebooks, an assay sample tag book and as a waypoint on a Garmin 60CSX GPS unit. Each sample was collected into its own 18" x 12" poly bag labeled with the locale (i.e. "Empirical") and a unique 7-character sample ID (i.e. E6690306) assigned from a barcoded Tyvek sample book. A tear-out tag with the barcode and unique sample ID was inserted in the bag with the sample and the bag sealed with a cable tie in the field. The sample locations are marked in the field with orange flagging type and the unique sample ID number written on the flagging tape.

Soils/talus fine samples were collected at 10 m intervals along lines spaced 10 m apart. All talus sample locations were recorded using hand-held GPS units. Sample sites are marked by flagging tape with the sample number written to it and tied/wrapped around a rock placed at the site. The talus samples were collected from 10 to 20 cm deep holes using hand-held geo-tools with larger rocks and pebbles removed by hand. The samples were placed into individually pre-numbered Kraft paper bags with corresponding sample tags inserted. The talus fine samples were sent to Bureau Veritas in Vancouver, BC where they were dried and screened to -80 mesh, dissolved using an aqua regia digestion and analyzed for 35 elements using the inductively coupled plasma-mass spectrometry technique (ICP-MS).

11.1 Chain of Custody

The Longford Exploration Crew maintained custody of all samples until they were delivered in person to Bureau Veritas Laboratories in Vancouver, BC.

11.2 QA/QC

Longford Exploration Services applies a high-level QA/QC program for early stage exploration programs. A duplicate rock sample is collected every twentieth sample, while stream sediment is duplicated every tenth sample to confirm consistency of the data stream. More comprehensive QA/QC procedures are applied to larger systematic sampling programs.

Two check samples (001 and 002, described in Appendix B and D) were also collected by the author during the site visit. The results are reasonably in line with the samples Longford Exploration collected in the area.

More comprehensive QA/QC procedures are applied to larger systematic sampling programs.

11.3 Sample Analysis

Sample analysis has been and will be carried out by Bureau Veritas at its Vancouver location, which is ISO/IEC 17025:2005 and ISO 9001:2015 certified and independent of the Issuer.

The author collected check samples were delivered by the author to ALS Chemex at its North Vancouver location, which is ISO/IEX 17025:2005 and ISO 9001:2015 certified and independent of the Issuer.

The analysis methods requested from the lab for the samples collected in the 2019 field exploration program are set out below:

Table 11.1: Analytical methods requested from Laboratories.

Sample Type	Analytical Methods
Analysis-Rock Bureau Veritas	PRP70-250 (Crush 1 kg to ≥70% passing 2mm - Pulverize 250 g ≥85% 75µm), AQ200 (Aqua Regia ICP-ES/MS, 36 elements, 0.5 g)
Analysis-Soil Bureau Veritas	SS80 (Sieve 100g soil to -80mesh), AQ200 (Aqua Regia ICP-ES/MS, 36 elements, 0.5 g)
Analysis-Rock ALS Chemex	Au-AA23 (Au 30g FA-AA finish), ME-MS61 (48 element four acid ICP-MS)

11.4 Adequacy of Procedures

All sample collection and analysis performed by the Longford Exploration field crew conform to industry best practices and are in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum Best Practice Guidelines.

12 Data Verification

The author visited the Empirical Property on October 10, 2019 to confirm the mineral showing identified and review the general geology of the prospect areas. The author also reviewed the crew methodology and concepts used in the 2019 exploration work.

The author was able to complete a traverse over the mineralized stratigraphy to review the potential of the entire host rock stratigraphy. The traverse focused on a section coincident with the principal showings along Towinock Creek and Spray Creek on the North west of the Empirical Property.

In the author's opinion, the data used for the purposes of this report are adequate and reliable.

13 Advanced Headings

The following headings are not relevant to the Empirical Property as the property is an early stage project:

- Mineral Processing and Metallurgical Testing
- Mineral Resource Estimates
- Mineral Reserve Estimates
- Mining Methods
- Recovery Methods
- Project Infrastructure
- Market Studies and Contracts
- Environmental Studies, Permitting and Social or Community Impact
- Capital and Operating Costs
- Economic Analysis

23 Adjacent Properties

There are currently no past or producing metal mines adjacent to the Empirical Property. However, past producers Fraser River Au Placer and Golden Cache are located 11 km north and 20 km west, respectively, of the centre of the Empirical Property.

The Golden Cache deposit is located on the cliffs above Cayoosh Creek in the metasedimentary rocks of the Bridge River Group. It was mined in the early 1900s for its small but high-grade gold-quartz veins. A 10-stamp mill was supported for a short period of time producing a total of 727 ounces of Au from 3,075 tons of ore (0.236 oz/ton) (Price, 1986).

The author has not been able to independently verify the above reserve information and it is not necessarily indicative of the mineralization on the Empirical Property which is the subject of this report.

24 Other Relevant Data and Information

The author is not aware of any other relevant information not included in this report.

25 Interpretation and Conclusions

The presence of visible copper and molybdenum sulphides in veins, associated alteration and multiple generations of intrusions and dykes found within the Empirical Property may support the notion that a Cu-Au-Mo porphyry deposit may underlie the property. The Empirical Property is situated in the Bridge River Terrane of the Coast Belt which is an area that has significant potential for the discovery of new porphyry deposits. The area where the Empirical Property resides is known to host 26 significant porphyry deposits, including Imperial Metal Corporation's historic Huckleberry Mine and Noranda Inc.'s historic Babine Porphyry camp. Potentially analogous Cordilleran Continental Arc porphyries from the South Eastern Coast Mountains within 150 km of Empirical Property includes:

- Fish Lake (Prosperity) 1,150 Mt @ 0.22% Cu and 0.41 g/t Au
- Poison mountain 808 Mt @ 0.24% Cu and 0.12 g/t Au
- Taseko 15 Mt @ 0.53% Cu and 0.53 g/t Au

The Empirical Property is found in an environment which has a demonstrated potential for hosting porphyry deposits. Confirmed visual mineralization and surface alteration found on the Empirical Property warrants further exploration.

26 Recommendations

During the 2019 Empirical Property exploration program the Longford Exploration crew located historic workings, visible sulphide mineralization, and verified historically reported assay results. Evidence suggests the Empirical Property could potentially host a larger mineralizing system.

A two-phase exploration program is recommended to further define zones of anomalous mineralization located during the 2019 exploration program. A cost estimate is provided in Table 26.1. The exploration should consist of geological and structural mapping, prospecting, and soil sampling to test the highest-ranking target areas for further mineralization. Geophysics may also be implemented to further define zones of high priority after additional groundwork is undertaken. Close attention should be put to alteration mapping and zonation, both from the geologic and geophysical work, as this will be a key vector to further delineate drill targets. Once more defined areas of mineralization are established, diamond drilling should commence if warranted. Phase 2 work is contingent on positive results from the previous phase of work.

26.1 Geophysics

A property wide VTEM survey is recommended to define magnetic and conductive anomalies at a higher resolution than currently available in regional data. A clear magnetic survey will help define the property's potential to host a large mineralizing system. VTEM™ Plus Time Domain EM system is excellent for locating discrete conductive anomalies as well as mapping lateral and vertical variations in resistivity. The resistivity mapping can be utilized to interpret alteration fronts and further post-processing can help further refinement of targets.

26.2 Prospecting

The magnetic and conductive anomalies identified in the geophysical phase will require prospecting to correlate these with known lithological mapped units, alteration and mineralization. This phase of prospecting will be aimed at defining future drill targets over anomalies and will therefore include rock and soil sampling.

26.3 Drilling

Data collected from the geophysical and prospecting programs will be used to identify drill targets. Ideally, the drill targets will show soil anomalies, alteration or mineralization at the surface and correlate with a geophysical anomaly to help define dimensions of any target body. Any targets identified from the budgeted program above are recommended to be followed up with drilling.

26.4 Proposed Exploration Budget

A budget for a VTEM geophysical survey, follow-up prospecting, and drilling has been proposed in the Table 26.1 below.

Table 26.1 Proposed exploration budget.

	Description	Estimated Cost (CAD)
Phase 1	**Geological and Structural Mapping, Prospecting, Soil Sampling**	
	10 days, 4-person crew (1 Project Manager, 2 Geologists, 1 helper)	$50,000
	VTEM geophysical survey	$90,000
	Interpretation of results-10 days	$10,000
Phase 2	**Anomaly Follow Up (contingent on results from Phase 1)**	
	500 m of trenching	$100,000
	1,500 m of diamond drilling to test geophysical, geochemical, and mapping targets	$500,000
	TOTAL	**$750,000**

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APPENDIX A: Date, Signature and Certificate of Author

I, Rory Kutluoglu of 902-1438 Richards Street Vancouver, British Columbia,

Canada. do hereby certify the following:

- I am a Professional Geoscientist in good standing with Engineers and Geoscientist B.C.
- For the purposes of the Technical Report entitled: "TECHNICAL REPORT on the EMPIRICAL PROPERTY, BRITISH COLUMBIA, CANADA", dated March 24th, 2020 of which I am the author and responsible person. I am a Qualified Person as defined in National Instrument 43-101, and responsible for each item in this report; and
- I visited the Empirical Property site on Oct 10, 2019, to conduct the site visit described herein and am responsible for the preparation of this report;
- I have had no prior involvement with Clarity Gold, the Vendor, nor Empirical Property and am an independent person as set out in National Instrument 43-101;
- I have read the National Instrument 43-101 and the technical report has been prepared in compliance with this Instrument; and
- That at the effective date of the technical report, to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- I graduated from Lakehead University with a degree in geology in 2004, and I have practiced my profession continuously since 2004.
- I am a member in good standing (#36147) of the Professional Engineers and Geoscientists of British Columbia and a Fellow of the Society of Economic Geologists.
- I am a Consulting Geologist and have been so since September 2015.
- I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Rory Kutluoglu

March 24th, 2020

Date

APPENDIX B: Rock Sample Descriptions

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270001	578770	5599482	2167	float/scree	Quartz diorite	Ridge top scree sample of medium to coarse grained light to dark grey quartz diorite with weathered oxidized sulphides creating an open boxwork texture. Visible trace sulphides ~5% highly weathered, 1-3% chalcopyrite.
3270002	578803	5599490	2178	outcrop	Quartz diorite	Coarse grained light grey quartz diorite with ~2cm quartz vein with weathered sulphides (3-5%) and trace molybdenum.
3270003	578800	5599492	2179	outcrop	Quartz vein	5cm quartz vein with open boxwork and weathered sulphides. Striking at 305/80.
3270004	578820	5599515	2161	outcrop	Quartz vein	3 cm quartz vein with sooty black disseminated weathered sulphides in open boxworks.
3270005	578824	5599516	2166	outcrop	Quartz vein	5cm quartz carbonate vein with open boxwork and weathered sulphides with chaotic black sulphides stringers. Striking at 300/70.
3270006	578832	5599607	2181	Sub-crop	Quartz diorite	Medium to coarse grained light to dark grey quartz diorite with weathered oxidized sulphides creating an open boxwork texture. ~2% Molybdenite.
3270007	578828	5599647	2166	outcrop	Quartz diorite	Fine grained oxidized quartz diorite with disseminated molybdenum and copper/iron sulphides throughout ~2-5%.
3270008	578670	5599407	2162	outcrop	Quartz diorite	Fine grained oxidized and silicified quartz diorite with disseminated limonite/iron sulphides throughout ~2-5%.
3270009	578667	5599393	2157	outcrop	Quartz diorite	Edge of contact between the diorite and quartzite. The chilled margin of the diorite was sampled containing a 3cm quartz vein with trace chalcopyrite, molybdenum and a black oxidized sooty material in the vein salvages.

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270010	578686	5599363	2133	outcrop	Quartz diorite	Edge of contact between the diorite and quartzite with shear development. The chilled margin of the diorite was sampled containing a chaotic quartz-veinlets with trace chalcopyrite, molybdenum and a black oxidized sooty material in the vein salvages.
3270011	578688	5599360	2133	outcrop	metasediments	Highly oxidized (possible scorodite) with limonite alteration and open boxworks in a very fine grained to microcrystalline meta-sediment.
3270012	578735	5599196	2041	outcrop	metasediments	Highly oxidized rusty sample with limonite alteration and open boxworks in a very fine grained to microcrystalline meta-sediment. Trace sulphides.
3270013	577503	5601514	1647	outcrop	Quartz diorite	1cm quartz vein with sooty black disseminated weathered sulphides in open boxworks within a very oxidized medium grey medium grained quartz diorite.
3270014	577494	5601502	1646	float	Quartz vein	Massive quartz boulder with highly weathered sulphides ~10% including pyrite, pyrrhotite and black disseminated sulphide.
3270015	577497	5601500	1648	outcrop	Quartz diorite	Medium to coarse grained dark grey quartz diorite with weathered oxidized sulphides creating an open boxwork texture. ~5% Molybdenite.
3270016	577488	5601492	1645	outcrop	Quartz diorite	Medium to coarse grained dark grey quartz diorite with quartz veinlets and silicification.
3270017	581610	5597396	625	outcrop	Phyllite/schist	Dark grey silicified biotite garnet phyllite/schist with chaotic quarts veinlets with 5% pyrite. Schistosity is at 135/80.
3270018	581851	5597433	608	outcrop	pyroxenite	Black to grey coarse grained pyroxenite with 1.5cm quartz vein and trace sulphides.
3270019	581844	5597432	607	outcrop	Phyllite/schist	Dark grey silicified biotite garnet phyllite/schist with chaotic quarts veinlets with trace pyrite and chalcopyrite. Schistosity is at 130/60.

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270020	581896	5597451	603	outcrop	Granodiorite	Fresh fine-grained granodiorite with oxidized cubic pyrite 1-3%.
3270021	582080	5597541	587	outcrop	Quartz vein	Massive quartz boulder below cliff face of dark grey silicified phyllite with chaotic quarts veinlets and weathered open boxworks
3270022	582476	5598747	462	outcrop	graphitic schist	Highly fissile graphitic schist fold hinge with on echelon quartz veining with moderate oxidation and weathered disseminated sulphides.
3270023	584861	5595196	1535	outcrop	graphitic schist	Meta-sediment of graphite schist and phyllite with open boxworks quartz veins and moderate oxidation on the edge of a fold hinge (trend 298 plunge 20). Potential fault zone 164/32 orientation.
3270024	584849	5595182	1526	outcrop	diorite	Medium to coarse grained dark grey diorite with quartz veinlets.
3270025	584832	5595159	1522	outcrop	diorite	Diorite dykes (3270024) in the metasedimentary unit (3270023) with 2% weathered pyrite.
3270026	584748	5595106	1515	outcrop	metasediments	Dark grey to black metasediments with chaotic quartz veinlets and trace sulphides.
3270027	584648	5595120	1509	outcrop	metasediments	Dark grey to black metasediments with chaotic quartz veinlets and trace sulphides in contact with dacite. 1% pyrite
3270028	575643	5602641	2172	outcrop	Phyllite	Dark grey silicified biotite garnet phyllite/schist with chaotic quarts veinlets.
3270029	575664	5602654	2173	outcrop	Phyllite	Dark grey silicified biotite garnet phyllite/schist with chaotic quarts veinlets with trace pyrite and chalcopyrite.
3270030	578812	5599535	2184	outcrop	Quartz diorite	Medium grained grey quartz diorite that is silicified and weathered with a high degree of oxidation on the altered mafics. Disseminated sulphides throughout >5% (mostly pyrite).
3270031	578814	5599544	2180	outcrop	Quartz diorite	Medium grained grey quartz diorite that is silicified and weathered with a high degree of oxidation on

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
						the altered mafics. Disseminated sulphides throughout >5% (mostly pyrite) weathering with open boxworks and limonite.
3270032	578816	5599556	2178	outcrop	Quartz diorite	Medium to coarse grained light to dark grey quartz diorite with weathered oxidized sulphides creating an open boxwork texture in a 1-2cm quartz vein.
3270033	578827	5599583	2183	outcrop	Quartz diorite	Medium to coarse grained light to dark grey quartz diorite with weathered oxidized sulphides creating an open boxwork texture.
3270034	584703	5596854	1458	outcrop	Phyllite	Rusty oxidized phyllite with folded quartz 1cm veins with trace oxidized sulphides. Strong foliation at 148/34.
3270035	584683	5596899	1458	outcrop	serpentinite	Waxy black green serpentinite with stringers of calcite and quartz.
3270036	584610	5597040	1445	outcrop	Granodiorite	Light grey aphanitic dyke with blebs of sulphides (pyrite/pyrrhotite) with moderate magnetism. Possible granodiorite.
3270037	582359	5598727	563	outcrop	metasediments	Silicified mudstone/metasediments with chaotic quartz veinlets with 3-5% sulphides disseminated throughout (mostly pyrite). Highly altered next to 1m granodiorite intrusion with sporadic quartz veinlets.
3270038	582351	5598726	568	outcrop	Granodiorite	Fine to medium grained granodiorite chilled margin of dyke next to fold hinge in the metasediments. Pyrite is disseminated throughout.
3270039	582351	5598726	568	outcrop	Meta-sediments	Silicified mudstone/metasediments with chaotic quartz veinlets with 3-5% sulphides disseminated throughout (mostly pyrite). Highly altered next to 1m granodiorite intrusion with sporadic quartz veinlets and open boxwork of weathered pyrite and sulphides.
3270040	582266	5599346	474	outcrop	Phyllite	Rusty oxidized phyllite with folded quartz 1cm veins with trace oxidized sulphides. 2-5% Pyrite.

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270041	582318	5599801	439	outcrop	Phyllite	Meta-sediment of graphite schist and phyllite with open boxworks quartz veins and moderate oxidation on the edge of a fold hinge (trend 298 plunge 20). Potential fault zone 164/32 orientation.
3270051	578811	5599523	2174	Rock	Diorite/quartz vein	5 cm quartz vein (305/80) hosted within oxidised and sheared diorite. Vein dextrally offset by 0.30 m 1 m above sample.
3270052	578820	5599568	2179	Rock	Quartz diorite	Ripped-up, highly oxidized quartz clasts within shear zone. Trace py and mo. 20% limonite alteration with high percentage of biotite present
3270053	578825	5599615	2173	Rock	Quartz diorite	Contact with coarse-grained (biotite-rich) quartz diorite & and a finer-grained quartzite. Disseminated sulphides (cpy, py, bn) throughout and within stringers at <1%.
3270054	578671	5599412	2164	Rock	Quartz diorite	Highly oxidised (60%) quartz diorite on ridge with 2% disseminated py.
3270055	578670	5599391	2154	Rock	Diorite	Fine-grained, highly oxidised (80%) diorite with 5% py hosted within 1 mm wide stringers
3270056	578724	5599250	2073	Rock	Granodiorite	Disseminated Mo (2%) within highly oxidised (60%) granodiorite within the Saddle Fault boundary.
3270057	577503	5601511	1642	Rock	Quartz vein	Quartz vein 10 m adjacent to drill-pad 81-01. 2% py, 1% mo, trace cpy.
3270058	577492	5601501	1643	Rock	Quartz vein	30 cm wide, discontinuously folded, and dextrally off-set (20 cm) quartz vein hosting 2% mo, 2% py. 318/65 N
3270059	577523	5601495	1670	Rock	Diorite	Disseminated py, 5%. Highly oxidised (70%) diorite taken 5 m below the Tow helipad
3270060	584856	5595189	1528	Rock	Diorite	Chilled margin of diorite with high chlorite alteration. Highly sheared quartz vein.
3270061	584836	5595167	1521	Rock	Phyllite/quartz vein	Sheared quartz (5 cm wide) within phyllite outcrop. Veining crosscuts foliation. No visible sulphides.

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270062	584653	5595118	1510	Rock	Diorite	Contact between chloritic diorite and hornblende dacite. No visible sulphides.
3270063	584705	5596855	1462	Rock	Phyllite/quartz vein	Highly sheared phyllite with 2 mm wide quartz veinlet crosscutting perpendicular to shear. No visible sulphides.
3270064	584685	5596893	1459	Rock	Serpentinite	Extensive package of conjugate quartz-carbonate veining (2 mm wide) within folded and sheared serpentinite
3270065	584610	5597024	1447	Rock	Mudstone	Highly oxidised (80%) and sheared mudstone/meta-sediment. Fresh and disseminated py, 5%.
3270066	584437	5597451	1430	Rock	Phyllite/quartz vein	3 cm quartz vein within phyllite. Oxidised (40%) with trace sulphides within quartz vein.
3270067	584431	5597595	1427	Rock	Granodiorite	1-2 m wide intrusive fine-grained granodiorite within metasediments. Trace disseminated pyrite within 1 mm quartz stringers.
3270068	582350	5598722	572	Rock	Granodiorite	Granodiorite with high chlorite alteration. 1% disseminated py and trace mo.
3270069	582349	5598726	572	Rock	Granodiorite	Granodiorite with high chlorite alteration. 2% disseminated py and trace mo.
3270070	582349	5598726	572	Rock	Mudstone	Highly sheared quartz vein 10 cm wide within meta-sediment. 20% oxidised with no visible sulphides.
3270071	582269	5599338	473	Rock	Granodiorite	Intrusive contact with mudstone. Highly oxidised (80%) and dense. Unable to identify presence of sulphides.
3270072	582338	5599735	435	Rock	Mudstone	Mudstone with high oxidation (60%). Dense sample with 1% sulphides hosted within quartz stringers 1 mm wide.
3270101	578800	5599489	2174	Sub-crop	Quartz Diorite	Medium grained, Diss Moly, some qtz veining.
3270102	578804	5599489	2175	Outcrop	Quartz	4cm thick qtz vein. Some vein salvage material too.
3270103	578811	5599516	2160	Outcrop	Quartz	Highly oxidized vein material
3270104	578826	5599490	2143	Outcrop	Quartz	6cm thick qtz vein, shearing.

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270105	578813	5599561	2179	Outcrop	Quartz Diorite	Porphyritic quartz in dark aphanitic groundmass. Quartz is blobby, Moly diss and in stringers
3270106	578852	5599711	2167	Outcrop	Quartzite	Meta-sed, qtz rich, oxidized.
3270107	578666	5599407	2163	Outcrop	Quartz Diorite	5% pyrite diss.
3270108	578617	5599394	2161	Outcrop	Quartz Diorite – meta-sed contact	Contact zone of qtz diorite – meta-sed. Highly oxidized with 1-4% diss pyrite
3270109	578708	5599291	2101	Outcrop	Granodiorite	Near small fault trending 207/58. Granodiorite - contact zone of qtz diorite intrusion. 1% Moly. Thin 1cm qtz veins oxidized.
3270110	578707	5599290	2097	Outcrop	Quartz	Qtz vein next to fault 207/58 (same as 3270109 along strike). Some voids. 15cm thick.
3270111	578717	5599261	2082	Sub-crop	Quartz	Qtz vein, highly oxidized, moly 1-3%. Peacock Cu staining (Bornite or cpy)
3270112	578720	5599229	2065	Outcrop	Quartz Diorite Gouge	Fault gouge, qtz + qtz diorite rich. 1m wide. Trace py, highly oxidized.
3270113	577504	5601513	1650	Outcrop	Quartz	Qtz vein, 10cm thick. Moly 5% (sooty). Py 4%, trace cpy
3270114	577494	5601504	1649	Float	Quartz	3cm wide areas of massive sulphide. Py + grey sulphide. (same location as 3270014)
3270115	577492	5601497	1645	Outcrop	Quartz + quartz diorite	Qtz + fault deformed qtz diorite + granodiorite. Py vein 1cm, discontinuous due to faulting. Py 1-4%
3270116	577534	5601504	1676	Outcrop	Granodiorite	Moly dissem + 2mm veinlet in granodiorite (1-3%). Adjacent to clean qtz vein.
3270117	581594	5597380	671	Outcrop	Quartz	Qtz vein trending 130/70S. Difficult location. Oxidized and folded.
3270118	581921	5597456	633	Outcrop	Quartz in biotite schist	Qtz vein 6cm thick parallel with foliation: 006/40W. 1-3% pyrite. Pre-foliation vein.
3270119	581845	5597432	632	Outcrop	Quartz	Qtz vein 10cm thick. Trace py, oxidized. Gneissic granite and meta-sed host rock. Brecciated zone. Vein trending 136/84SW cut by faults.
3270120	582373	5598836	523	Outcrop	Quartz in graphitic schist	Qtz vein in graphitic schist. Deformed and folded numerous times. Indistinguishable orientations.

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270121	582403	5599337	592	Float	Quartz	Qtz vein in granodiorite. Vein 20cm thick. Pyrite 2%
3270122	584854	5595191	1514	Outcrop	Quartz	Qtz vein, Swelling and pinching, pre-open fold, parallel with foliation on lower limb. Oxidized.
3270123	584834	5595167	1533	Outcrop	Quartz	Qtz vein 1-2m wide. Oxidized, possibly folded. Trending 160/60NE
3270124	584648	5595120	1516	Outcrop	Phyllite - granodiorite	Contact zone phyllite-granodiorite. Possible fault gouge/fine grained baked phyllitic material.
3270125	575644	5602639	2197	Outcrop	Quartz - phyllite	Qtz vein in phyllite. Oxidized with limonite in vugs. Foliation 111/33S. 10cm thick
3270126	575646	5602640	2194	Outcrop	Phyllite + quartzite	Phyllite + quartzite. 1-3% pyrite. Possible Moly.
3270127	584699	5596866	1462	Outcrop	Quartz in phyllite	Qtz vein, oxidized stringers. Parallel with foliation in phyllite: 148/34SW. Swells and pinches.
3270128	584666	5596928	1458	Outcrop	Serpentinite	Some calcite veins crosscutting. Foliation is similar to 3270127. Lots of fracturing.
3270129	584611	5597018	1449	Outcrop	Phyllite	Oxidized phyllite. Near serpentine contact. Py 2% along joint faces and veinlets
3270130	584604	5597044	1448	Outcrop	Phyllite/mudstone	No foliation. Highly oxidized. Py 5% along joint faces
3270131	584552	5597180	1440	Outcrop	Quartz	Qtz vein on contact between py rich plag pheno granite and phyllite. Limonite in vugs.
3270132	584423	5597464	1431	Float	Quartzite	Py 5%. Siliceous grey quartzite. Unknown protolith. Highly oxidized.
3270133	584430	5597597	1428	Sub-crop	Phyllite/mudstone	Oxidized with lots of limonite. Trace py
3270134	584420	5597643	1424	Outcrop	Meta-basalt?	Highly oxidized siliceous unit. Possible metabasalt.1% py
3270135	582359	5598726	573	Outcrop	Silicified mudstone?	Silicified grey, possibly mudstone. Stockworks of qtz + 4% py stringers.
3270136	582362	5598733	576	Outcrop	Quartz in mudstone	Stringers of oxidized qtz. Stockworks in phyllite. Below a fault
3270137	582359	5598742	577	Outcrop	Limonite + phyllite	Orange weathered rock / mud. Highly weathered with some blocks of phyllite.
3270138	582348	5598721	583	Outcrop	Quartz	Highly oxidized qtz vein. 30cm-2cm pinching and swelling. Near folded granodiorite in phyllite.

Sample ID	Easting	Northing	Elevation	Type	Lithology	Description
3270139	582323	5599767	448	Outcrop	Quartz	Qtz vein in highly oxidized phyllite. Gossanous zone, pre-foliation vein with limonite throughout.
001	577495	5601492	1567	Outcrop	Quartz	Due diligence sample of 3270114
002	577494	5601504	1588	Outcrop	Quartz + quartz diorite	Due diligence sample near 3270115, but not the same float sample taken

APPENDIX C: Soil Sample Descriptions

Sample ID	Easting	Northing	Elevation	Type	Description
3293551	578804	5599515	2180	soils	talus fines
3293552	578796	5599508	2177	soils	talus fines
3293553	578789	5599501	2174	soils	talus fines
3293554	578782	5599495	2170	soils	talus fines
3293555	578774	5599489	2167	soils	talus fines
3293556	578765	5599482	2165	soils	talus fines
3293557	578757	5599476	2162	soils	talus fines
3293558	578747	5599471	2160	soils	talus fines
3293559	578740	5599464	2161	soils	talus fines
3293560	578735	5599457	2161	soils	talus fines
3293561	578733	5599457	2162	soils	talus fines
3293562	578725	5599450	2163	soils	talus fines
3293563	578718	5599442	2162	soils	talus fines
3293564	578710	5599434	2159	soils	talus fines
3293565	578701	5599428	2159	soils	talus fines
3293566	578692	5599421	2159	soils	talus fines
3293567	578684	5599413	2156	soils	talus fines
3293568	578675	5599408	2156	soils	talus fines
3293569	578665	5599401	2153	soils	talus fines
3293570	578655	5599399	2153	soils	talus fines
3293571	578656	5599400	2154	soils	talus fines
3293572	578644	5599398	2154	soils	talus fines
3293573	578633	5599393	2155	soils	talus fines
3293574	578623	5599390	2159	soils	talus fines
3293575	578612	5599384	2159	soils	talus fines
3293576	578796	5599520	2183	soils	talus fines
3293577	578788	5599512	2182	soils	talus fines
3293578	578781	5599506	2179	soils	talus fines
3293579	578774	5599501	2174	soils	talus fines
3293580	578765	5599496	2171	soils	talus fines
3293581	578765	5599496	2171	soils	talus fines

Sample ID	Easting	Northing	Elevation	Type	Description
3293582	578756	5599491	2168	soils	talus fines
3293583	578748	5599485	2165	soils	talus fines
3293584	578741	5599493	2159	soils	talus fines
3293585	578730	5599486	2158	soils	talus fines
3293586	578742	5599479	2163	soils	talus fines
3293587	578733	5599471	2162	soils	talus fines
3293588	578723	5599464	2159	soils	talus fines
3293589	578715	5599457	2158	soils	talus fines
3293590	578707	5599448	2158	soils	talus fines
3293591	578707	5599448	2158	soils	talus fines
3293592	578699	5599440	2157	soils	talus fines
3293593	578693	5599432	2157	soils	talus fines
3293594	578684	5599429	2156	soils	talus fines
3293595	578674	5599420	2154	soils	talus fines
3293596	578667	5599415	2151	soils	talus fines
3293597	578658	5599409	2148	soils	talus fines
3293598	578649	5599409	2147	soils	talus fines
3293599	578641	5599407	2147	soils	talus fines
3293600	578629	5599404	2147	soils	talus fines

APPENDIX D: 2019 Rock Sample Analytical Certificates

BUREAU VERITAS MINERAL LABORATORIES Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1 Canada

Submitted By: James Rogers
Receiving Lab: Canada-Vancouver
Received: October 15, 2019
Report Date: October 28, 2019
Page: 1 of 5

CERTIFICATE OF ANALYSIS VAN19003068.1

CLIENT JOB INFORMATION

Project: Empirical
Shipment ID:
P.O. Number
Number of Samples: 102

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	102	Crush, split and pulverize 250 g rock to 200 mesh			VAN
AQ200	102	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
PICKUP-RJT Client to Pickup Rejects

ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Longford Exploration Services Ltd.
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1
Canada

CC: Vedran Pobric
Matt Krukowski

GEORGE ARCALA
Instrumentation Shift Supervisor

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval, preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Project: Empirical
Report Date: October 28, 2019

Page: 2 of 5 Part: 1 of 2

CERTIFICATE OF ANALYSIS VAN19003068.1

	Method	WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
3270001	Rock	1.64	8.2	36.2	2.5	137	<0.1	3.2	4.1	341	2.38	2.1	1.2	1.2	41	0.7	0.2	0.2	34	0.42	0.078
3270002	Rock	1.62	257.3	13.2	2.7	43	<0.1	0.8	0.7	191	1.49	0.6	1.0	0.9	39	0.2	0.1	0.3	25	0.31	0.052
3270003	Rock	1.87	94.2	12.1	13.3	37	2.7	0.8	0.6	112	0.94	0.8	3175.4	0.3	12	0.5	0.2	241.6	9	0.13	0.017
3270004	Rock	1.82	58.4	59.7	2.0	53	0.1	4.5	9.4	527	1.61	1.5	0.9	2.4	80	0.7	0.1	0.6	13	2.05	0.023
3270005	Rock	1.07	32.2	27.0	1.8	42	<0.1	2.5	3.6	1046	1.53	37.8	2.9	0.5	165	0.4	0.2	0.7	18	8.36	0.018
3270006	Rock	1.65	23.1	40.4	4.3	46	0.2	2.5	3.4	286	2.32	5.1	12.6	1.0	39	0.2	<0.1	0.6	34	0.37	0.061
3270007	Rock	1.39	7.9	30.8	6.8	63	0.1	6.5	4.7	423	2.32	4.1	2.3	1.1	41	0.4	0.3	0.7	44	0.56	0.078
3270008	Rock	1.38	5.6	57.5	4.2	58	0.4	1.9	2.1	699	5.91	1.0	1.5	0.7	24	<0.1	<0.1	0.7	153	0.22	0.079
3270009	Rock	2.52	4.1	41.0	4.6	272	0.1	14.5	16.9	1492	5.27	3.0	1.1	0.9	24	1.9	<0.1	0.5	134	0.94	0.072
3270010	Rock	1.75	23.0	45.5	6.5	291	0.2	16.0	5.5	910	5.47	3.0	0.8	1.2	24	3.3	<0.1	1.8	161	0.46	0.073
3270011	Rock	1.36	21.2	61.0	7.4	1026	0.3	10.4	6.2	843	6.99	1.7	<0.5	1.5	16	13.1	<0.1	2.1	144	0.30	0.054
3270012	Rock	1.20	513.0	50.2	1.9	40	0.3	2.5	2.3	323	2.86	1.2	2.0	1.5	29	0.4	0.1	0.4	127	0.46	0.038
3270013	Rock	1.29	54.4	70.2	3.4	72	0.3	2.2	8.2	479	3.12	411.0	59.7	0.9	43	0.9	0.2	1.5	43	0.33	0.077
3270014	Rock	2.29	4.8	59.9	6.0	41	0.6	1.3	4.8	54	1.54	5.2	557.9	0.1	2	5.7	<0.1	39.8	2	<0.01	0.002
3270015	Rock	1.23	71.4	54.1	2.2	49	0.2	1.1	14.7	337	3.38	5824.1	138.9	0.9	48	0.2	0.4	1.2	57	0.38	0.084
3270016	Rock	1.44	218.9	35.7	2.8	52	0.2	0.7	1.5	343	2.57	7.7	1.2	1.1	58	0.2	<0.1	0.7	42	0.37	0.082
3270017	Rock	2.20	2.3	54.8	2.8	97	0.3	32.1	9.6	265	3.97	3.8	<0.5	1.8	13	<0.1	<0.1	0.1	171	0.22	0.047
3270018	Rock	2.49	0.5	15.0	1.4	49	<0.1	56.9	15.0	534	2.73	4.8	2.5	0.5	38	0.1	<0.1	0.1	97	2.83	0.140
3270019	Rock	1.47	2.0	117.5	1.8	116	0.4	30.1	14.2	278	4.44	<0.5	0.9	1.2	11	0.2	<0.1	0.2	101	0.70	0.048
3270020	Rock	1.71	1.1	29.4	4.2	80	<0.1	21.3	9.6	335	2.12	<0.5	2.3	4.2	19	0.1	<0.1	<0.1	49	0.56	0.057
3270021	Rock	2.63	11.2	33.1	11.2	37	0.2	3.8	2.9	259	2.46	<0.5	<0.5	0.4	12	0.1	<0.1	0.2	36	0.20	0.015
3270022	Rock	3.66	3.3	80.6	2.3	139	0.1	27.0	10.9	529	3.71	52.8	0.6	0.8	71	1.6	0.1	<0.1	47	1.99	0.058
3270023	Rock	1.87	0.7	3.2	1.5	73	<0.1	17.8	7.5	714	3.27	3.3	<0.5	0.7	10	0.3	<0.1	<0.1	43	0.11	0.039
3270024	Rock	1.83	0.2	97.3	2.7	35	0.1	74.4	29.0	607	3.35	25.2	<0.5	0.4	82	<0.1	0.3	<0.1	84	1.47	0.049
3270025	Rock	2.21	0.4	43.7	0.8	44	<0.1	42.5	27.2	806	4.08	10.5	<0.5	0.5	127	<0.1	0.2	<0.1	137	3.43	0.053
3270026	Rock	2.47	1.4	40.0	5.2	120	0.3	16.0	7.9	293	4.43	3.4	<0.5	1.2	32	0.2	0.1	0.1	55	0.08	0.031
3270027	Rock	1.40	1.0	58.8	2.5	67	0.2	22.1	11.4	1173	3.70	4.8	<0.5	0.9	48	0.4	<0.1	<0.1	39	5.52	0.091
3270028	Rock	1.84	1.1	19.5	2.2	71	0.1	5.2	3.5	378	1.47	128.1	3.3	6.5	14	1.3	0.5	0.1	41	0.46	0.027
3270029	Rock	2.07	1.1	22.1	12.0	97	0.1	1.2	7.2	534	4.43	2.8	8.4	1.1	19	0.2	<0.1	<0.1	86	0.29	0.109
3270030	Rock	1.25	74.7	27.2	1.5	19	<0.1	0.8	0.9	294	1.48	2.1	0.5	1.3	81	0.3	0.2	0.2	29	0.60	0.051

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Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1 Canada

Project: Empirical
Report Date: October 28, 2019

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CERTIFICATE OF ANALYSIS VAN19003068.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
3270001	Rock	6	7	0.79	71	0.106	<20	1.33	0.107	0.27	0.4	0.01	2.5	<0.1	<0.05	6	<0.5	<0.2
3270002	Rock	3	7	0.50	60	0.093	<20	0.85	0.059	0.22	<0.1	<0.01	1.1	<0.1	0.06	4	<0.5	<0.2
3270003	Rock	<1	6	0.13	16	0.014	<20	0.33	0.028	0.04	0.2	<0.01	0.5	<0.1	<0.05	2	1.0	16.6
3270004	Rock	4	5	0.23	49	0.024	<20	0.60	0.059	0.13	0.2	<0.01	1.0	<0.1	0.17	2	0.6	<0.2
3270005	Rock	2	6	0.40	14	0.034	<20	0.65	0.018	0.04	14.5	<0.01	3.4	<0.1	<0.05	3	0.7	<0.2
3270006	Rock	4	7	0.63	60	0.042	<20	1.35	0.118	0.35	0.3	<0.01	2.5	0.2	0.18	5	0.6	<0.2
3270007	Rock	6	15	0.87	101	0.122	<20	1.37	0.089	0.27	0.6	<0.01	3.4	<0.1	0.12	6	0.6	<0.2
3270008	Rock	2	12	1.07	84	0.177	<20	1.59	0.070	0.08	0.1	<0.01	9.9	<0.1	0.16	8	4.4	0.5
3270009	Rock	4	9	1.52	84	0.172	<20	2.26	0.043	0.22	0.3	<0.01	8.5	0.1	0.29	8	1.7	0.3
3270010	Rock	4	16	0.80	130	0.191	<20	1.33	0.073	0.15	0.4	<0.01	9.8	<0.1	0.44	6	5.1	1.1
3270011	Rock	4	13	0.82	134	0.138	<20	1.46	0.048	0.23	0.3	<0.01	6.9	0.2	0.26	6	5.8	0.9
3270012	Rock	3	8	0.59	136	0.184	<20	1.04	0.079	0.21	0.4	<0.01	6.2	0.1	0.38	5	3.4	<0.2
3270013	Rock	5	6	0.69	76	0.072	<20	1.24	0.080	0.20	0.6	<0.01	2.9	<0.1	0.19	5	0.8	0.5
3270014	Rock	<1	6	<0.01	4	<0.001	<20	0.03	0.003	0.01	<0.1	<0.01	<0.1	<0.1	0.63	<1	1.6	9.8
3270015	Rock	4	6	0.83	112	0.074	<20	1.32	0.098	0.21	0.3	<0.01	3.7	<0.1	0.49	7	1.6	2.5
3270016	Rock	5	6	0.76	89	0.070	<20	1.31	0.080	0.19	0.3	<0.01	2.4	<0.1	0.06	6	0.6	<0.2
3270017	Rock	4	98	1.62	97	0.107	<20	2.23	0.072	0.36	<0.1	<0.01	11.6	0.1	0.48	9	2.7	<0.2
3270018	Rock	2	148	1.77	17	0.087	<20	2.32	0.228	0.06	0.3	<0.01	11.4	<0.1	<0.05	7	<0.5	<0.2
3270019	Rock	4	25	1.11	421	0.127	<20	2.18	0.064	0.94	<0.1	<0.01	7.8	0.3	0.73	8	3.2	<0.2
3270020	Rock	10	27	0.73	201	0.079	<20	1.15	0.087	0.39	<0.1	<0.01	4.1	0.1	0.09	5	<0.5	<0.2
3270021	Rock	<1	14	0.39	23	0.066	<20	0.96	0.030	0.07	0.1	<0.01	3.6	<0.1	0.05	4	1.1	<0.2
3270022	Rock	5	11	1.14	56	0.002	<20	1.70	0.049	0.16	<0.1	<0.01	4.3	<0.1	<0.05	5	1.5	<0.2
3270023	Rock	6	20	1.04	59	0.002	<20	1.86	0.028	0.11	<0.1	<0.01	3.7	<0.1	<0.05	6	<0.5	<0.2
3270024	Rock	4	466	2.63	5	0.170	<20	2.56	0.084	0.01	<0.1	<0.01	8.7	<0.1	<0.05	6	<0.5	<0.2
3270025	Rock	5	482	3.03	8	0.219	<20	3.10	0.079	0.01	<0.1	<0.01	16.7	<0.1	<0.05	8	<0.5	<0.2
3270026	Rock	7	29	1.07	77	0.001	<20	2.72	0.080	0.14	<0.1	<0.01	6.3	<0.1	<0.05	8	2.1	<0.2
3270027	Rock	4	25	1.13	68	0.021	<20	1.96	0.032	0.21	<0.1	<0.01	5.4	<0.1	<0.05	5	<0.5	<0.2
3270028	Rock	13	6	0.31	53	0.028	<20	0.67	0.104	0.16	0.2	<0.01	4.4	0.1	0.13	2	0.7	<0.2
3270029	Rock	3	4	1.09	375	0.131	<20	2.13	0.082	0.59	0.1	<0.01	5.7	0.6	0.09	11	0.7	<0.2
3270030	Rock	5	6	0.76	27	0.155	<20	1.31	0.081	0.07	0.1	<0.01	1.9	<0.1	<0.05	6	0.5	<0.2

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CERTIFICATE OF ANALYSIS VAN19003068.1

	Method	WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
3270031	Rock	2.00	110.7	33.6	2.7	28	<0.1	0.7	1.2	349	2.28	4.0	<0.5	1.3	73	0.2	0.2	0.6	36	0.62	0.077
3270032	Rock	1.72	85.0	22.5	1.5	26	<0.1	0.5	0.8	242	2.28	<0.5	<0.5	1.1	70	<0.1	0.2	0.2	34	0.50	0.069
3270033	Rock	2.26	5.6	39.2	2.1	53	0.2	2.4	3.9	335	2.53	26.8	47.8	1.2	36	0.2	0.3	0.3	24	0.49	0.074
3270034	Rock	0.72	4.3	62.2	8.8	144	0.5	25.2	11.7	357	5.79	39.8	5.0	0.7	35	0.4	0.7	0.1	56	0.12	0.068
3270035	Rock	1.32	0.2	20.1	0.4	6	<0.1	1290.4	63.9	3477	3.37	11.0	0.8	<0.1	190	<0.1	0.6	<0.1	19	6.01	<0.001
3270036	Rock	3.09	0.6	35.0	2.9	61	<0.1	47.2	17.1	747	3.98	1.5	<0.5	0.3	107	<0.1	<0.1	<0.1	72	2.99	0.201
3270037	Rock	1.43	2.6	36.6	7.3	55	<0.1	12.4	5.2	366	2.31	1.1	<0.5	0.7	25	0.3	<0.1	<0.1	36	0.68	0.047
3270038	Rock	1.35	0.2	28.5	4.5	75	0.1	27.5	13.8	612	3.01	1.1	<0.5	0.6	87	0.1	<0.1	<0.1	47	3.28	0.105
3270039	Rock	2.09	1.0	45.1	13.0	68	0.6	5.5	5.6	467	3.83	0.6	<0.5	0.6	53	0.2	0.1	<0.1	27	1.62	0.073
3270040	Rock	2.15	7.3	89.2	2.2	71	0.1	20.6	17.5	542	3.99	2.5	<0.5	1.0	34	0.1	<0.1	<0.1	70	2.35	0.096
3270041	Rock	1.34	2.0	73.1	6.3	99	0.3	21.8	6.8	739	5.15	0.5	0.5	1.3	73	0.2	<0.1	0.1	69	3.26	0.111
3270051	Rock	1.05	42.8	17.7	196.1	112	31.9	1.3	1.6	103	0.89	20.4	14.7	0.3	11	2.1	0.2	71.5	6	0.10	0.012
3270052	Rock	1.78	12.4	22.2	1.3	21	<0.1	1.2	0.8	195	1.74	4.3	0.7	0.5	26	<0.1	0.1	0.2	21	0.27	0.038
3270053	Rock	2.31	53.3	33.7	1.9	85	0.2	3.3	6.2	370	2.71	6.1	2.6	0.9	58	0.2	0.4	0.4	55	0.46	0.066
3270054	Rock	1.84	3.2	56.8	2.7	117	0.2	2.5	4.5	727	6.09	2.8	0.9	0.4	37	0.5	<0.1	0.4	184	0.28	0.069
3270055	Rock	1.80	4.4	21.2	2.3	89	0.2	3.3	7.1	709	4.79	5.3	1.6	0.6	19	0.2	<0.1	0.2	142	0.38	0.066
3270056	Rock	1.95	93.4	36.7	2.1	49	0.2	1.0	1.9	245	2.67	1.5	1.9	1.0	59	0.1	<0.1	0.3	47	0.37	0.070
3270057	Rock	0.95	31.9	26.1	1.4	17	<0.1	1.1	2.1	197	1.42	52.7	3.2	0.3	22	<0.1	<0.1	0.3	13	0.09	0.023
3270058	Rock	1.65	6.4	9.4	0.6	25	<0.1	1.3	1.7	175	0.64	1.6	0.9	<0.1	4	0.5	<0.1	0.5	3	0.07	0.004
3270059	Rock	2.62	107.3	46.7	1.9	36	0.2	1.3	3.3	297	2.86	49.1	1.1	0.9	44	<0.1	0.2	0.4	56	0.37	0.083
3270060	Rock	1.47	0.4	8.1	1.5	39	<0.1	17.0	15.7	1507	3.33	9.9	<0.5	0.2	296	0.1	0.2	<0.1	63	13.06	0.030
3270061	Rock	1.43	1.0	27.5	4.4	49	0.2	8.5	6.0	313	2.93	<0.5	1.1	0.6	13	0.2	0.2	0.1	49	0.09	0.021
3270062	Rock	2.01	0.6	22.9	7.2	84	<0.1	26.7	9.5	573	2.68	5.6	<0.5	1.0	45	0.1	0.1	<0.1	47	1.65	0.123
3270063	Rock	1.77	3.7	41.8	8.9	130	0.5	23.2	10.7	392	4.63	33.7	0.8	0.6	25	0.5	0.5	<0.1	48	0.11	0.050
3270064	Rock	0.80	<0.1	7.0	0.7	13	<0.1	1939.3	102.8	568	4.71	155.7	17.2	0.1	66	<0.1	1.0	<0.1	29	1.55	0.002
3270065	Rock	2.23	0.8	30.8	5.6	98	0.2	11.0	11.4	735	4.39	16.4	2.3	0.6	13	0.2	0.1	<0.1	31	0.08	0.024
3270066	Rock	1.25	0.8	46.7	13.1	99	0.2	11.5	9.1	1366	3.67	6.3	3.2	0.4	295	0.8	<0.1	<0.1	57	4.95	0.051
3270067	Rock	1.38	0.2	47.9	1.6	57	0.1	33.1	28.0	1187	5.30	25.7	1.3	0.6	114	<0.1	0.2	<0.1	161	7.25	0.051
3270068	Rock	0.91	0.1	24.5	3.8	65	<0.1	27.7	13.5	519	2.97	1.4	0.7	0.7	82	0.2	<0.1	<0.1	42	2.59	0.098
3270069	Rock	2.30	0.2	26.5	2.7	84	0.1	33.1	13.9	612	3.08	1.8	0.7	0.6	83	0.2	<0.1	<0.1	48	3.00	0.120

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CERTIFICATE OF ANALYSIS VAN19003068.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
3270031	Rock	5	7	0.82	29	0.143	<20	1.41	0.060	0.08	0.6	<0.01	1.9	<0.1	<0.05	7	0.9	<0.2
3270032	Rock	5	8	0.73	58	0.149	<20	1.21	0.091	0.21	0.3	<0.01	2.0	<0.1	0.08	6	1.5	<0.2
3270033	Rock	5	5	0.71	80	0.072	<20	1.15	0.066	0.29	0.2	<0.01	1.8	<0.1	0.18	5	0.5	<0.2
3270034	Rock	9	19	0.92	76	0.002	<20	2.25	0.078	0.15	<0.1	<0.01	6.9	0.2	0.07	7	6.7	<0.2
3270035	Rock	<1	959	17.84	10	0.001	22	0.24	<0.001	<0.01	0.3	<0.01	4.9	<0.1	<0.05	<1	<0.5	<0.2
3270036	Rock	16	42	1.60	132	0.007	<20	2.34	0.075	0.30	<0.1	<0.01	4.8	<0.1	0.26	9	<0.5	<0.2
3270037	Rock	4	29	0.80	30	0.157	<20	1.45	0.037	0.09	0.1	<0.01	4.2	<0.1	0.14	5	0.6	<0.2
3270038	Rock	4	29	1.50	75	0.120	<20	2.04	0.057	0.13	0.1	<0.01	2.5	<0.1	0.19	9	<0.5	<0.2
3270039	Rock	4	10	1.22	73	0.188	<20	1.81	0.033	0.21	0.2	<0.01	3.2	<0.1	0.73	5	1.5	<0.2
3270040	Rock	5	16	1.58	39	0.078	<20	2.23	0.049	0.19	<0.1	<0.01	4.9	<0.1	0.18	9	<0.5	<0.2
3270041	Rock	4	32	1.42	81	0.034	<20	2.23	0.025	0.21	0.1	<0.01	5.2	<0.1	0.59	6	3.1	<0.2
3270051	Rock	<1	6	0.11	21	0.017	<20	0.30	0.028	0.08	0.3	<0.01	0.4	<0.1	<0.05	1	2.0	7.3
3270052	Rock	2	7	0.41	29	0.048	<20	0.75	0.076	0.16	0.5	<0.01	1.5	<0.1	0.09	3	0.9	<0.2
3270053	Rock	4	8	0.96	190	0.191	<20	1.56	0.066	0.91	0.2	<0.01	4.1	0.2	0.32	6	0.6	<0.2
3270054	Rock	1	10	1.65	64	0.203	<20	2.41	0.084	0.12	0.2	<0.01	9.8	<0.1	0.31	9	1.7	0.3
3270055	Rock	2	10	1.48	57	0.231	<20	2.05	0.065	0.07	0.4	<0.01	11.9	<0.1	0.46	9	1.6	0.2
3270056	Rock	4	6	0.64	146	0.103	<20	1.36	0.095	0.34	0.2	<0.01	2.6	0.2	0.07	7	0.6	<0.2
3270057	Rock	1	6	0.18	24	0.021	<20	0.37	0.032	0.05	0.3	<0.01	1.0	<0.1	<0.05	2	<0.5	<0.2
3270058	Rock	<1	5	0.11	7	0.002	<20	0.19	0.004	0.02	<0.1	<0.01	0.3	<0.1	<0.05	<1	<0.5	0.2
3270059	Rock	5	8	0.77	139	0.095	<20	1.27	0.085	0.22	0.2	<0.01	3.1	<0.1	0.31	7	1.2	<0.2
3270060	Rock	2	119	1.60	5	0.078	<20	2.27	0.009	0.03	<0.1	<0.01	3.6	<0.1	<0.05	5	<0.5	<0.2
3270061	Rock	2	16	0.72	64	0.113	<20	1.47	0.045	0.11	<0.1	<0.01	4.7	<0.1	<0.05	4	0.5	<0.2
3270062	Rock	22	22	1.01	88	0.005	<20	1.61	0.058	0.20	<0.1	<0.01	3.4	<0.1	<0.05	7	<0.5	<0.2
3270063	Rock	8	15	0.86	87	0.001	<20	2.49	0.072	0.19	<0.1	0.01	4.5	0.1	0.07	6	2.6	<0.2
3270064	Rock	<1	1495	18.95	4	0.002	29	0.39	<0.001	<0.01	0.4	<0.01	8.5	<0.1	<0.05	<1	<0.5	<0.2
3270065	Rock	5	10	0.72	64	0.002	<20	1.97	0.066	0.19	<0.1	<0.01	4.1	<0.1	0.72	5	1.6	<0.2
3270066	Rock	5	11	0.58	64	0.003	<20	1.36	0.041	0.11	<0.1	<0.01	8.0	<0.1	0.09	6	0.6	<0.2
3270067	Rock	4	138	3.40	18	0.012	<20	4.30	0.049	0.06	<0.1	<0.01	16.3	<0.1	0.06	11	<0.5	<0.2
3270068	Rock	4	20	1.46	73	0.101	<20	1.97	0.049	0.15	<0.1	<0.01	2.2	<0.1	0.25	8	<0.5	<0.2
3270069	Rock	4	35	1.58	76	0.111	<20	2.04	0.059	0.15	<0.1	<0.01	2.6	<0.1	0.36	8	<0.5	<0.2

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Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
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Project: Empirical
Report Date: October 28, 2019

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CERTIFICATE OF ANALYSIS VAN19003068.1

	Method	WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
3270070	Rock	1.35	0.2	25.6	4.8	56	<0.1	27.5	11.0	528	2.57	3.9	<0.5	0.8	148	0.2	0.1	<0.1	50	3.32	0.101
3270071	Rock	2.07	3.6	100.3	1.6	52	0.2	13.8	10.8	484	3.78	1.4	<0.5	0.3	38	<0.1	<0.1	<0.1	58	0.88	0.045
3270072	Rock	1.64	1.0	42.3	4.3	66	0.1	9.1	5.9	392	3.86	<0.5	<0.5	0.6	17	<0.1	0.1	1.0	42	0.38	0.030
3270101	Rock	1.63	49.4	32.4	1.5	31	<0.1	1.7	1.9	286	2.05	31.0	<0.5	1.0	47	0.1	0.1	0.3	40	0.56	0.080
3270102	Rock	1.41	72.0	17.7	2.5	21	0.6	1.0	1.1	143	1.04	1.3	5.4	0.5	13	<0.1	<0.1	10.8	13	0.14	0.024
3270103	Rock	1.70	118.5	31.0	3.0	9	0.2	0.5	0.4	75	1.73	2.3	<0.5	2.0	26	<0.1	0.2	0.4	11	0.19	0.012
3270104	Rock	0.96	168.6	36.7	1.9	15	0.1	1.4	4.1	103	1.49	6.4	3.1	1.0	12	0.2	<0.1	0.3	9	0.21	0.023
3270105	Rock	1.13	170.6	13.6	1.1	18	<0.1	0.5	0.6	157	1.52	9.6	0.5	0.9	46	<0.1	0.1	0.2	32	0.34	0.038
3270106	Rock	1.71	97.0	30.8	1.2	41	0.2	0.9	1.3	327	3.32	8.8	6.0	0.2	29	0.1	0.5	0.3	33	0.46	0.084
3270107	Rock	1.22	3.7	26.7	3.4	74	0.4	1.3	2.1	767	4.72	2.1	1.7	0.3	17	0.1	<0.1	0.6	146	0.24	0.085
3270108	Rock	1.36	4.8	76.8	3.8	126	0.2	2.2	2.1	343	6.38	<0.5	<0.5	0.7	41	0.4	<0.1	0.8	100	0.94	0.086
3270109	Rock	1.05	168.5	44.0	1.5	146	<0.1	5.3	5.1	568	1.78	1.9	<0.5	1.4	31	3.9	0.1	0.6	53	0.56	0.073
3270110	Rock	1.72	410.9	33.1	1.7	60	<0.1	4.3	2.9	434	1.84	1.0	<0.5	0.9	44	0.9	0.3	0.3	53	0.55	0.095
3270111	Rock	1.61	481.1	73.1	4.4	35	0.3	1.0	2.6	211	3.32	3.9	4.7	0.7	21	0.8	<0.1	1.3	40	0.14	0.066
3270112	Rock	1.20	50.0	52.6	2.4	57	<0.1	16.2	6.5	289	2.60	13.8	<0.5	1.4	41	0.3	0.1	0.6	43	0.44	0.076
3270113	Rock	2.12	10.5	26.4	1.5	15	0.2	1.6	3.8	78	1.87	219.4	111.4	<0.1	2	0.2	<0.1	4.0	3	0.04	0.003
3270114	Rock	3.05	6.6	11.1	1.4	5093	0.1	0.7	0.8	67	1.06	27.2	71.3	<0.1	2	150.5	<0.1	18.7	2	<0.01	0.003
3270115	Rock	1.58	72.3	78.0	5.2	108	0.2	2.5	7.7	600	3.27	9.0	1.8	1.0	75	1.3	<0.1	1.9	48	1.24	0.085
3270116	Rock	2.02	100.1	66.5	2.6	101	0.2	7.9	7.4	456	2.62	87.4	29.0	1.4	36	1.7	0.2	1.4	33	0.33	0.085
3270117	Rock	0.54	43.2	13.4	1.7	12	<0.1	3.2	1.4	64	0.83	<0.5	0.8	0.1	5	0.1	<0.1	<0.1	5	0.06	0.002
3270118	Rock	1.48	1.0	90.7	3.0	133	0.2	67.9	35.9	981	2.25	<0.5	0.5	0.5	101	0.4	<0.1	0.2	51	3.13	0.049
3270119	Rock	1.31	2.1	45.3	0.5	9	0.1	2.7	0.9	66	1.11	<0.5	0.6	<0.1	2	<0.1	<0.1	0.1	5	0.02	0.004
3270120	Rock	3.02	0.4	6.8	2.4	23	<0.1	191.7	13.4	1163	2.68	56.6	<0.5	0.1	637	0.2	0.2	<0.1	18	8.21	0.026
3270121	Rock	1.72	9.7	3.7	1.5	2	<0.1	2.1	0.9	103	0.59	<0.5	0.9	<0.1	10	<0.1	<0.1	0.1	2	0.21	0.002
3270122	Rock	1.87	0.6	88.0	0.7	31	0.4	6.9	5.6	274	1.36	4.2	4.7	<0.1	6	0.3	0.1	<0.1	11	0.07	0.014
3270123	Rock	1.39	0.3	7.0	1.2	11	<0.1	4.6	4.0	291	0.84	0.8	<0.5	0.1	20	0.2	<0.1	<0.1	13	0.12	0.014
3270124	Rock	1.88	1.0	59.7	20.3	101	0.2	92.7	13.6	950	4.55	19.1	<0.5	1.2	95	0.8	0.1	0.1	70	3.06	0.083
3270125	Rock	1.63	1.2	12.0	1.3	45	<0.1	2.8	1.7	180	1.10	2.0	<0.5	4.8	7	0.5	0.2	<0.1	23	0.09	0.022
3270126	Rock	1.45	1.2	12.7	2.9	96	<0.1	4.1	2.6	373	1.16	3.4	4.0	7.8	9	1.4	0.1	0.2	21	0.10	0.024
3270127	Rock	1.38	6.2	57.8	10.0	191	0.5	35.9	9.0	220	5.41	83.3	23.3	0.5	40	0.6	2.0	<0.1	31	0.07	0.061

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	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
3270070	Rock	4	32	1.24	59	0.095	<20	1.61	0.036	0.11	<0.1	<0.01	2.9	<0.1	0.23	7	<0.5	<0.2
3270071	Rock	1	24	1.17	44	0.175	<20	2.00	0.056	0.44	0.1	<0.01	3.7	0.1	0.41	5	0.7	<0.2
3270072	Rock	1	13	0.96	63	0.153	<20	2.05	0.052	0.25	0.2	<0.01	5.0	<0.1	0.66	7	0.8	0.4
3270101	Rock	4	9	0.89	38	0.061	<20	1.52	0.105	0.19	0.1	<0.01	2.3	<0.1	0.14	7	<0.5	<0.2
3270102	Rock	1	6	0.20	23	0.021	<20	0.47	0.038	0.10	0.1	<0.01	0.9	<0.1	<0.05	2	<0.5	1.8
3270103	Rock	2	5	0.10	31	0.028	<20	0.50	0.056	0.07	<0.1	<0.01	0.7	<0.1	0.06	3	1.1	<0.2
3270104	Rock	3	5	0.16	27	0.003	<20	0.35	0.033	0.06	0.1	<0.01	0.7	<0.1	0.14	2	<0.5	<0.2
3270105	Rock	3	6	0.46	99	0.111	<20	0.84	0.082	0.28	0.2	<0.01	1.7	0.1	0.20	4	1.0	<0.2
3270106	Rock	2	5	0.76	60	0.220	<20	1.31	0.060	0.23	0.3	<0.01	4.5	0.2	0.13	4	1.3	0.3
3270107	Rock	2	10	1.52	36	0.184	<20	1.72	0.066	0.05	0.7	<0.01	12.6	<0.1	0.40	8	2.9	0.5
3270108	Rock	2	7	0.52	24	0.173	<20	1.38	0.114	0.07	0.5	<0.01	7.5	<0.1	0.97	8	10.4	<0.2
3270109	Rock	5	6	0.65	49	0.044	<20	0.96	0.087	0.13	<0.1	<0.01	3.4	<0.1	0.09	5	<0.5	<0.2
3270110	Rock	6	7	0.70	22	0.107	<20	1.02	0.081	0.07	0.7	0.01	3.0	<0.1	0.08	5	<0.5	<0.2
3270111	Rock	4	4	0.45	55	0.015	<20	0.88	0.058	0.14	1.2	<0.01	2.3	<0.1	0.06	5	0.9	0.3
3270112	Rock	5	20	0.78	44	0.103	<20	1.21	0.090	0.13	0.4	0.02	3.4	<0.1	0.07	5	<0.5	<0.2
3270113	Rock	<1	5	0.05	5	0.002	<20	0.08	0.002	0.01	0.1	0.01	0.2	<0.1	0.71	<1	1.2	0.9
3270114	Rock	<1	6	0.01	5	<0.001	<20	0.04	0.004	0.02	<0.1	0.04	0.1	<0.1	0.34	<1	1.0	3.0
3270115	Rock	7	5	0.73	62	0.028	<20	1.32	0.066	0.16	0.1	<0.01	3.1	<0.1	0.44	7	1.3	<0.2
3270116	Rock	8	5	0.69	126	0.054	<20	1.33	0.089	0.46	0.8	<0.01	2.9	0.2	0.09	6	0.7	<0.2
3270117	Rock	<1	6	0.06	9	0.002	<20	0.16	0.040	0.03	<0.1	<0.01	0.4	<0.1	0.06	<1	<0.5	<0.2
3270118	Rock	5	8	0.60	79	0.033	<20	1.02	0.041	0.16	<0.1	<0.01	4.9	<0.1	0.06	4	<0.5	<0.2
3270119	Rock	<1	6	0.04	12	0.006	<20	0.08	0.009	0.02	<0.1	<0.01	0.6	<0.1	<0.05	<1	<0.5	<0.2
3270120	Rock	1	177	4.90	27	0.001	<20	0.77	0.006	0.06	<0.1	<0.01	4.8	<0.1	0.06	2	<0.5	<0.2
3270121	Rock	<1	7	0.03	19	<0.001	<20	0.03	0.004	<0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2
3270122	Rock	3	8	0.23	4	0.001	<20	0.40	0.007	<0.01	<0.1	<0.01	2.1	<0.1	<0.05	1	<0.5	<0.2
3270123	Rock	<1	7	0.10	20	0.001	<20	0.39	0.030	0.08	<0.1	<0.01	0.9	<0.1	<0.05	1	<0.5	<0.2
3270124	Rock	8	34	1.33	107	0.012	<20	2.65	0.056	0.26	<0.1	<0.01	7.4	<0.1	<0.05	7	<0.5	<0.2
3270125	Rock	7	6	0.20	30	0.027	<20	0.44	0.078	0.12	<0.1	<0.01	3.1	0.1	<0.05	2	<0.5	<0.2
3270126	Rock	13	4	0.24	43	0.014	<20	0.60	0.088	0.14	<0.1	<0.01	2.5	0.1	<0.05	2	<0.5	<0.2
3270127	Rock	9	10	0.57	79	0.001	<20	1.68	0.055	0.14	0.2	0.01	4.1	0.1	<0.05	5	1.9	<0.2

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	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
3270128	Rock	1.33	<0.1	9.4	0.7	18	0.1	2125.5	98.7	661	4.73	50.2	0.8	<0.1	90	<0.1	1.0	<0.1	28	1.20	0.001
3270129	Rock	1.50	1.8	39.9	5.1	70	0.3	8.3	7.6	235	3.19	9.3	<0.5	0.6	21	0.2	0.2	0.2	24	0.04	0.026
3270130	Rock	1.44	1.8	34.7	7.5	50	0.3	13.1	9.1	270	4.06	0.9	<0.5	0.4	22	0.3	0.2	<0.1	26	0.06	0.021
3270131	Rock	1.22	0.5	17.6	4.5	73	<0.1	4.9	4.6	257	1.21	1.3	<0.5	<0.1	26	0.5	<0.1	<0.1	5	0.28	0.006
3270132	Rock	1.09	2.0	32.3	6.0	28	0.2	3.0	3.5	457	3.18	1.8	<0.5	0.5	14	<0.1	<0.1	<0.1	31	0.66	0.061
3270133	Rock	1.42	2.9	11.9	2.5	72	<0.1	6.4	3.5	488	1.18	2.0	<0.5	0.7	7	0.6	<0.1	<0.1	6	0.11	0.015
3270134	Rock	1.49	3.3	99.5	7.8	58	0.4	17.4	13.6	607	4.71	<0.5	<0.5	0.5	107	<0.1	0.1	0.4	45	3.76	0.123
3270135	Rock	1.78	2.9	58.6	6.6	56	0.2	10.6	4.8	375	2.55	1.1	<0.5	0.8	27	0.4	<0.1	0.1	36	0.71	0.070
3270136	Rock	1.35	3.0	35.6	6.3	65	0.1	7.8	3.4	450	2.62	<0.5	<0.5	1.2	20	0.2	<0.1	<0.1	25	0.53	0.043
3270137	Rock	1.69	12.1	62.8	6.1	136	0.3	70.0	10.8	1574	4.42	19.0	<0.5	1.0	37	2.0	0.3	0.1	51	2.54	0.032
3270138	Rock	1.72	0.4	22.0	6.0	26	0.1	3.9	2.7	250	1.47	<0.5	<0.5	0.3	69	0.1	<0.1	<0.1	8	1.78	0.009
3270139	Rock	2.45	0.9	7.6	6.5	75	<0.1	5.8	3.0	208	1.90	22.4	<0.5	0.3	34	0.6	0.1	0.2	15	0.64	0.024

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Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1 Canada

Project: Empirical
Report Date: October 28, 2019

Page: 5 of 5 Part: 2 of 2

CERTIFICATE OF ANALYSIS VAN19003068.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
3270128	Rock	<1	1363	19.17	6	0.003	46	0.40	<0.001	<0.01	0.4	<0.01	9.5	<0.1	<0.05	<1	<0.5	<0.2
3270129	Rock	3	8	0.37	87	0.002	<20	1.38	0.061	0.27	<0.1	<0.01	3.3	<0.1	0.49	4	1.7	<0.2
3270130	Rock	2	11	0.48	87	0.004	<20	1.44	0.079	0.17	<0.1	<0.01	3.7	<0.1	0.57	4	0.8	<0.2
3270131	Rock	<1	6	0.11	16	0.005	<20	0.33	0.011	0.04	<0.1	<0.01	0.9	<0.1	<0.05	<1	<0.5	<0.2
3270132	Rock	5	7	0.58	28	0.003	<20	0.99	0.086	0.03	<0.1	<0.01	9.2	<0.1	0.69	4	1.9	<0.2
3270133	Rock	6	4	0.09	116	0.002	<20	0.48	0.029	0.19	<0.1	<0.01	1.7	<0.1	<0.05	1	<0.5	<0.2
3270134	Rock	3	13	1.13	67	0.163	<20	2.05	0.049	0.23	0.3	<0.01	4.8	<0.1	1.45	5	1.4	<0.2
3270135	Rock	5	23	0.84	35	0.186	<20	1.51	0.048	0.10	0.2	<0.01	5.5	<0.1	0.24	5	0.7	<0.2
3270136	Rock	4	15	0.97	39	0.156	<20	1.62	0.046	0.17	0.1	<0.01	3.5	<0.1	0.08	5	<0.5	<0.2
3270137	Rock	5	31	0.66	88	0.133	<20	1.02	0.033	0.17	0.3	<0.01	2.9	<0.1	0.09	3	2.2	<0.2
3270138	Rock	<1	6	0.29	27	0.019	<20	0.43	0.007	0.05	<0.1	<0.01	0.6	<0.1	0.34	2	<0.5	<0.2
3270139	Rock	1	10	0.30	39	0.042	<20	0.46	0.016	0.12	0.3	<0.01	1.3	<0.1	0.20	2	<0.5	<0.2

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Project: Empirical
Report Date: October 28, 2019

Page: 1 of 2 Part: 1 of 2

QUALITY CONTROL REPORT VAN19003068.1

	Method	WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
Pulp Duplicates																					
3270004	Rock	1.82	58.4	59.7	2.0	53	0.1	4.5	9.4	527	1.61	1.5	0.9	2.4	80	0.7	0.1	0.6	13	2.05	0.023
REP 3270004	QC		57.1	61.1	1.9	50	0.1	4.6	8.9	492	1.54	1.5	3.4	2.2	76	0.6	0.1	0.5	13	1.91	0.022
3270038	Rock	1.35	0.2	28.5	4.5	75	0.1	27.5	13.8	612	3.01	1.1	<0.5	0.6	87	0.1	<0.1	<0.1	47	3.28	0.105
REP 3270038	QC		0.2	26.9	4.3	69	<0.1	25.3	12.9	582	3.00	1.3	<0.5	0.6	88	0.2	<0.1	<0.1	47	3.23	0.100
3270110	Rock	1.72	410.9	33.1	1.7	60	<0.1	4.3	2.9	434	1.84	1.0	<0.5	0.9	44	0.9	0.3	0.3	53	0.55	0.095
REP 3270110	QC		410.9	32.2	1.8	60	<0.1	4.4	2.9	426	1.83	1.3	<0.5	0.9	44	0.8	0.2	0.3	53	0.54	0.093
Core Reject Duplicates																					
3270028	Rock	1.84	1.1	19.5	2.2	71	0.1	5.2	3.5	378	1.47	128.1	3.3	6.5	14	1.3	0.5	0.1	41	0.46	0.027
DUP 3270028	QC		1.1	19.3	2.2	73	0.1	5.0	3.5	377	1.50	143.3	3.7	6.6	15	1.2	0.6	0.1	41	0.47	0.028
3270071	Rock	2.07	3.6	100.3	1.6	52	0.2	13.8	10.8	484	3.78	1.4	<0.5	0.3	38	<0.1	<0.1	<0.1	58	0.88	0.045
DUP 3270071	QC		3.6	101.8	1.6	52	0.2	14.4	11.3	494	3.84	1.5	<0.5	0.2	38	<0.1	<0.1	<0.1	58	0.91	0.041
3270133	Rock	1.42	2.9	11.9	2.5	72	<0.1	6.4	3.5	488	1.18	2.0	<0.5	0.7	7	0.6	<0.1	<0.1	6	0.11	0.015
DUP 3270133	QC		2.9	12.0	2.5	73	<0.1	6.5	3.4	478	1.19	1.9	<0.5	0.7	8	0.6	<0.1	<0.1	6	0.11	0.015
Reference Materials																					
STD BVGEO01	Standard		11.2	4545.9	202.5	1820	2.6	164.5	27.0	732	3.80	119.1	208.0	16.5	53	6.8	2.3	24.9	74	1.39	0.070
STD DS11	Standard		13.7	142.5	134.2	340	1.7	79.5	13.6	992	3.07	44.4	72.4	7.6	61	2.2	6.8	11.3	49	0.94	0.068
STD DS11	Standard		13.6	149.1	132.0	343	1.9	75.5	13.5	1020	3.11	42.7	57.1	7.8	75	2.3	8.3	13.7	49	1.06	0.073
STD OREAS262	Standard		0.7	124.0	61.7	162	0.5	69.7	30.6	570	3.47	37.9	61.3	10.2	37	0.7	3.0	1.1	23	3.22	0.040
STD OREAS262	Standard		0.7	113.3	56.2	141	0.5	62.8	26.7	539	3.22	35.9	59.1	9.4	34	0.7	2.7	1.0	21	3.05	0.038
STD OREAS262	Standard		0.8	119.1	57.9	156	0.5	65.0	27.6	569	3.28	36.7	69.0	10.1	40	0.6	3.5	1.1	22	3.03	0.038
STD BVGEO01 Expected			10.8	4415	187	1741	2.53	163	25	733	3.7	121	219	14.4	55	6.5	2.2	25.6	73	1.3219	0.0727
STD DS11 Expected			13.9	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	79	7.65	67.3	2.37	7.2	12.2	50	1.063	0.0701
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	65	9.33	36	0.61	3.39	1.03	22.5	2.98	0.04
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.001
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.001
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.001
Prep Wash																					
ROCK-VAN	Prep Blank		0.7	12.0	2.8	107	<0.1	1.1	3.7	542	1.95	0.9	2.1	2.0	21	0.2	<0.1	<0.1	26	0.74	0.037

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Project: Empirical
Report Date: October 28, 2019

Page: 1 of 2 Part: 2 of 2

QUALITY CONTROL REPORT VAN19003068.1

Method		AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
MDL		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																		
3270004	Rock	4	5	0.23	49	0.024	<20	0.60	0.059	0.13	0.2	<0.01	1.0	<0.1	0.17	2	0.6	<0.2
REP 3270004	QC	4	5	0.22	45	0.022	<20	0.58	0.055	0.13	0.1	<0.01	1.1	<0.1	0.15	2	0.7	<0.2
3270038	Rock	4	29	1.50	75	0.120	<20	2.04	0.057	0.13	0.1	<0.01	2.5	<0.1	0.19	9	<0.5	<0.2
REP 3270038	QC	4	26	1.45	71	0.117	<20	2.01	0.057	0.14	0.1	<0.01	2.5	<0.1	0.19	8	<0.5	<0.2
3270110	Rock	6	7	0.70	22	0.107	<20	1.02	0.081	0.07	0.7	0.01	3.0	<0.1	0.08	5	<0.5	<0.2
REP 3270110	QC	5	7	0.70	21	0.103	<20	1.02	0.080	0.07	0.6	<0.01	2.9	<0.1	0.08	5	<0.5	<0.2
Core Reject Duplicates																		
3270028	Rock	13	6	0.31	53	0.028	<20	0.67	0.104	0.16	0.2	<0.01	4.4	0.1	0.13	2	0.7	<0.2
DUP 3270028	QC	13	7	0.31	53	0.028	<20	0.69	0.110	0.16	0.2	<0.01	4.5	0.1	0.14	3	0.7	<0.2
3270071	Rock	1	24	1.17	44	0.175	<20	2.00	0.056	0.44	0.1	<0.01	3.7	0.1	0.41	5	0.7	<0.2
DUP 3270071	QC	1	24	1.17	43	0.175	<20	2.01	0.053	0.44	0.1	<0.01	3.7	0.2	0.43	5	0.8	<0.2
3270133	Rock	6	4	0.09	116	0.002	<20	0.48	0.029	0.19	<0.1	<0.01	1.7	<0.1	<0.05	1	<0.5	<0.2
DUP 3270133	QC	6	5	0.10	131	0.002	<20	0.52	0.035	0.21	<0.1	<0.01	1.8	<0.1	<0.05	1	<0.5	<0.2
Reference Materials																		
STD BVGEO01	Standard	27	191	1.28	342	0.242	<20	2.31	0.198	0.91	3.5	0.09	5.8	0.6	0.69	8	4.8	1.0
STD DS11	Standard	17	61	0.83	416	0.085	<20	1.13	0.070	0.40	3.0	0.24	3.2	4.7	0.26	5	1.8	4.6
STD DS11	Standard	19	59	0.85	431	0.097	<20	1.17	0.075	0.40	3.0	0.26	3.4	4.8	0.28	5	2.0	4.5
STD OREAS262	Standard	19	48	1.24	268	0.004	<20	1.35	0.071	0.34	0.1	0.17	3.3	0.5	0.27	4	<0.5	0.2
STD OREAS262	Standard	15	42	1.13	245	0.003	<20	1.21	0.067	0.30	0.1	0.16	3.0	0.5	0.27	4	<0.5	0.3
STD OREAS262	Standard	18	43	1.22	254	0.003	<20	1.32	0.073	0.31	0.1	0.16	3.5	0.5	0.27	4	<0.5	0.3
STD BVGEO01 Expected		25.9	171	1.2963	340	0.233		2.347	0.1924	0.89	3.5	0.1	5.97	0.62	0.6655	7.37	4.84	1.02
STD DS11 Expected		18.6	61.5	0.85	417	0.0976		1.129	0.0694	0.4	2.9	0.26	3.1	4.9	0.2835	4.7	2.2	4.56
STD OREAS262 Expected		15.9	41.7	1.17	248	0.003		1.204	0.071	0.312	0.13	0.17	3.24	0.47	0.253	3.73	0.4	0.23
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																		
ROCK-VAN	Prep Blank	6	6	0.48	59	0.080	<20	0.93	0.106	0.12	<0.1	0.02	2.9	<0.1	<0.05	4	<0.5	<0.2

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Report Date: October 28, 2019

Page: 2 of 2 Part: 1 of 2

QUALITY CONTROL REPORT VAN19003068.1

		WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
ROCK-VAN	Prep Blank		0.6	12.2	3.6	112	<0.1	1.1	3.9	519	1.90	0.8	1.6	2.2	21	0.2	<0.1	<0.1	27	0.72	0.037

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QUALITY CONTROL REPORT VAN19003068.1

		AQ200 La ppm 1	AQ200 Cr ppm 1	AQ200 Mg % 0.01	AQ200 Ba ppm 1	AQ200 Ti % 0.001	AQ200 B ppm 20	AQ200 Al % 0.01	AQ200 Na % 0.001	AQ200 K % 0.01	AQ200 W ppm 0.1	AQ200 Hg ppm 0.01	AQ200 Sc ppm 0.1	AQ200 Tl ppm 0.1	AQ200 S % 0.05	AQ200 Ga ppm 1	AQ200 Se ppm 0.5	AQ200 Te ppm 0.2
ROCK-VAN	Prep Blank	6	5	0.47	58	0.080	<20	0.90	0.099	0.11	<0.1	0.01	2.8	<0.1	<0.05	4	<0.5	<0.2

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Page: 1
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 20-NOV-2019
Account: OCDCCY

CERTIFICATE VA19266039

Project: Empirical Property

This report is for 2 Rock samples submitted to our lab in Vancouver, BC, Canada on 21-OCT-2019.

The following have access to data associated with this certificate:

RORY KUTLUOGLU

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
DISP-01	Disposal of all sample fractions

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME-MS61	48 element four acid ICP-MS	
Au-AA23	Au 30g FA-AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
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www.alsglobal.com/geochemistry

To: OCD CONSULTANCY
902-1438 RICHARDS ST.
VANCOUVER BC V6Z 3B8

Page: 2 - A
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 20-NOV-2019
Account: OCDCCY

Project: Empirical Property

CERTIFICATE OF ANALYSIS VA19266039

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-AA23 Au ppm 0.005	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
001		1.46	0.047	0.10	1.27	111.0	130	0.22	4.17	0.28	4.07	3.63	3.3	48	0.13	42.3
002		0.92	<0.005	0.11	5.87	15.6	370	1.06	0.71	0.75	4.49	19.60	16.9	19	0.63	109.0

***** See Appendix Page for comments regarding this certificate *****

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Page: 2 - B
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 20-NOV-2019
Account: OCDCCY

Project: Empirical Property

CERTIFICATE OF ANALYSIS VA19266039

Sample Description	Method Analyte Units LOD	ME-MS61 Fe % 0.01	ME-MS61 Ca ppm 0.05	ME-MS61 Ce ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
001		1.46	3.67	<0.05	0.1	0.029	0.17	1.7	1.6	0.09	72	25.7	0.47	0.6	1.2	160
002		2.30	14.10	0.08	0.3	0.033	0.65	8.8	15.3	0.52	784	89.5	2.80	3.4	8.6	600

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6Z 3B8

Page: 2 - C
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 20-NOV-2019
Account: OCDCCY

Project: Empirical Property

CERTIFICATE OF ANALYSIS VA19266039

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
001		2.3	5.2	0.002	0.36	0.19	1.2	1	0.4	102.5	<0.05	0.96	0.32	0.035	0.06	0.3
002		3.4	22.9	0.007	0.12	0.18	5.6	1	1.6	469	0.18	0.08	0.99	0.183	0.26	1.2

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6Z 3B8

Page: 2 - D
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 20-NOV-2019
Account: OCDCCY

Project: Empirical Property

CERTIFICATE OF ANALYSIS VA19266039

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOD	1	0.1	0.1	2	0.5
001		20	3.4	1.5	111	1.6
002		54	2.0	13.9	181	5.9

***** See Appendix Page for comments regarding this certificate *****

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Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 20-NOV-2019
Account: OCDCCY

Project: Empirical Property

CERTIFICATE OF ANALYSIS VA19266039

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME-MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au-AA23	CRU-31	CRU-QC	DISP-01
LOG-22	ME-MS61	PUL-31	PUL-QC
SPL-21	WEI-21		

APPENDIX E: 2019 Soil Sample Analytical Certificates

BUREAU VERITAS MINERAL LABORATORIES Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1 Canada

Submitted By: James Rogers
Receiving Lab: Canada-Vancouver
Received: October 15, 2019
Report Date: October 28, 2019
Page: 1 of 3

CERTIFICATE OF ANALYSIS VAN19003069.1

CLIENT JOB INFORMATION

Project: Empirical
Shipment ID:
P.O. Number
Number of Samples: 50

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
PICKUP-RJT Client to Pickup Rejects

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
DY060	50	Dry at 60C			VAN
SS80	50	Dry at 60C sieve 100g to -80 mesh			VAN
SVRJT	50	Save all or part of Soil Reject			VAN
AQ200	50	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Longford Exploration Services Ltd.
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1
Canada

CC: Vedran Pobric
Matt Krukowski

KERRY JAY
Geochem Project Specialist

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

BUREAU VERITAS MINERAL LABORATORIES Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1 Canada

Project: Empirical
Report Date: October 28, 2019

Page: 2 of 3 Part: 1 of 2

CERTIFICATE OF ANALYSIS VAN19003069.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
3293551	Soil	358.7	102.4	6.1	137	0.2	14.2	8.5	401	7.22	449.6	27.6	1.6	204	1.2	0.8	1.1	51	0.58	0.173	8
3293552	Soil	95.1	136.4	10.5	375	0.2	16.9	18.4	754	4.56	13.7	1.6	2.4	64	5.3	0.2	2.4	27	0.35	0.089	8
3293553	Soil	126.3	165.1	14.5	399	0.3	21.6	23.1	864	6.03	39.5	6.3	2.1	57	6.6	0.4	3.9	39	0.30	0.120	9
3293554	Soil	255.4	196.5	117.9	420	4.5	15.7	21.1	832	8.35	81.7	8.8	2.1	80	5.8	0.4	22.2	55	0.27	0.133	9
3293555	Soil	557.9	329.6	28.4	568	0.9	19.3	49.5	1217	13.63	122.3	8.8	1.5	99	4.3	1.0	9.5	123	0.37	0.159	7
3293556	Soil	748.0	357.6	25.0	395	0.8	21.0	42.2	1019	11.08	718.3	88.8	1.9	153	4.7	1.6	8.9	76	0.55	0.141	10
3293557	Soil	533.9	356.2	35.4	347	0.9	21.3	57.5	1868	10.30	593.0	40.3	1.6	91	5.6	1.2	11.2	64	0.39	0.139	8
3293558	Soil	149.6	138.5	12.5	351	0.4	29.7	30.0	1833	7.08	227.1	16.4	1.6	84	2.3	0.8	2.4	99	0.38	0.118	10
3293559	Soil	57.3	149.8	13.7	696	0.3	31.3	23.5	1225	13.36	58.1	5.1	1.6	141	5.3	0.3	2.3	230	0.58	0.222	9
3293560	Soil	62.3	137.8	14.0	886	0.5	41.6	38.9	1768	11.52	74.6	9.5	1.7	115	8.8	0.3	3.3	180	0.62	0.192	8
3293561	Soil	60.3	140.1	14.1	922	0.5	39.9	40.0	1741	11.37	74.6	8.0	1.7	113	9.5	0.3	3.3	160	0.60	0.191	8
3293562	Soil	27.5	149.8	13.2	1200	0.4	38.1	34.8	1863	15.86	58.9	7.3	1.0	99	11.2	0.2	3.3	225	0.36	0.309	6
3293563	Soil	13.7	181.8	9.7	1095	0.6	23.4	21.7	1480	17.00	12.7	12.0	0.6	64	6.8	0.2	1.7	363	0.21	0.243	4
3293564	Soil	28.9	221.2	15.8	2223	0.8	50.3	40.8	4296	13.21	28.3	9.2	1.5	96	23.3	0.3	2.3	91	0.31	0.238	6
3293565	Soil	10.7	54.4	6.4	383	0.3	35.2	18.1	1609	5.26	5.2	4.9	0.9	31	1.3	<0.1	0.6	87	0.18	0.060	3
3293566	Soil	18.8	154.1	21.8	494	0.3	25.7	22.4	1085	13.79	13.8	7.9	1.8	101	2.3	0.2	1.8	152	0.50	0.255	14
3293567	Soil	12.4	201.9	16.9	560	0.8	15.0	14.9	924	18.72	8.4	5.4	0.7	117	1.8	0.1	2.1	176	0.23	0.255	4
3293568	Soil	20.3	192.1	23.0	1427	0.3	42.6	68.2	3178	15.15	18.9	3.2	1.1	98	9.2	0.2	9.5	167	0.38	0.223	6
3293569	Soil	9.8	121.6	5.1	146	0.2	13.2	5.7	885	14.21	10.3	2.7	0.4	12	0.2	0.1	1.0	167	0.11	0.126	<1
3293570	Soil	7.9	168.2	10.9	669	0.2	43.3	84.7	3322	10.51	8.4	2.8	0.6	114	3.0	0.1	1.0	247	1.14	0.120	3
3293571	Soil	8.7	181.6	11.1	708	0.2	46.3	89.3	3348	11.18	9.6	3.1	0.6	124	3.4	0.2	1.0	261	1.13	0.122	3
3293572	Soil	6.7	130.6	6.9	1180	0.2	47.9	61.8	2428	7.76	6.5	2.1	0.6	161	8.1	<0.1	0.9	123	1.42	0.101	2
3293573	Soil	13.1	208.8	11.5	935	0.2	73.0	133.2	6270	10.53	10.7	1.5	0.7	43	5.7	<0.1	1.0	133	0.45	0.134	3
3293574	Soil	13.7	135.9	9.5	1010	0.3	38.2	41.5	2641	9.60	20.6	1.8	1.1	79	21.0	0.6	1.2	134	0.70	0.109	5
3293575	Soil	30.8	105.0	6.7	265	0.1	12.2	8.0	519	13.80	11.1	1.3	1.2	51	0.9	0.1	0.7	133	0.48	0.184	4
3293576	Soil	225.8	152.4	14.1	256	0.1	11.3	11.1	422	7.03	279.3	13.6	2.1	137	2.1	0.6	4.0	37	0.31	0.152	9
3293577	Soil	149.1	187.4	14.7	332	0.3	17.1	16.5	624	7.71	73.1	6.7	2.1	123	2.8	0.4	3.0	53	0.46	0.180	11
3293578	Soil	229.2	286.9	94.0	596	1.3	33.6	62.3	1743	9.59	113.7	18.1	1.9	145	8.5	0.5	9.2	65	0.50	0.169	11
3293579	Soil	398.9	351.1	49.2	846	1.7	29.5	60.2	1581	10.33	467.6	87.1	1.8	117	17.7	1.8	8.5	78	0.44	0.150	10
3293580	Soil	559.2	426.1	27.0	681	1.1	31.4	67.6	1768	10.86	111.2	11.6	1.8	88	14.6	0.7	8.0	85	0.35	0.128	9

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PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1 Canada

Project: Empirical
Report Date: October 28, 2019

Page: 2 of 3 Part: 2 of 2

CERTIFICATE OF ANALYSIS VAN19003069.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
3293551	Soil	27	0.86	77	0.084	<20	2.55	0.070	0.31	1.0	0.02	3.1	0.2	0.36	9	3.1	0.2
3293552	Soil	19	0.66	30	0.036	<20	1.68	0.022	0.10	0.2	<0.01	1.7	<0.1	<0.05	6	1.7	<0.2
3293553	Soil	20	0.72	54	0.039	<20	1.89	0.021	0.11	0.1	0.02	3.0	0.1	<0.05	6	2.0	0.8
3293554	Soil	20	1.01	54	0.068	<20	1.98	0.036	0.13	0.2	0.04	4.8	0.1	0.11	8	4.0	2.5
3293555	Soil	19	0.85	60	0.178	<20	3.17	0.035	0.14	0.6	0.04	9.9	0.3	0.20	10	5.9	2.0
3293556	Soil	18	0.77	76	0.122	<20	3.27	0.045	0.18	1.4	0.02	8.1	0.5	0.22	9	4.3	1.1
3293557	Soil	13	0.85	57	0.101	<20	2.31	0.030	0.13	1.0	0.02	6.0	0.3	0.14	8	4.2	1.7
3293558	Soil	18	0.99	68	0.139	<20	2.38	0.020	0.15	0.4	0.01	7.6	0.7	0.12	9	2.0	0.3
3293559	Soil	28	0.92	100	0.197	<20	3.28	0.055	0.17	0.3	0.03	12.0	0.3	0.28	11	5.1	0.9
3293560	Soil	36	0.98	107	0.148	<20	3.53	0.049	0.23	0.4	0.03	13.0	0.3	0.30	11	5.9	1.0
3293561	Soil	31	1.04	107	0.149	<20	3.50	0.053	0.22	0.5	0.04	12.7	0.3	0.31	11	7.0	1.0
3293562	Soil	31	0.86	106	0.157	<20	3.25	0.073	0.21	0.6	0.04	15.8	0.3	0.44	10	8.1	1.7
3293563	Soil	28	1.00	208	0.264	<20	2.78	0.062	0.22	0.2	0.05	15.0	0.3	0.55	10	7.0	1.4
3293564	Soil	12	0.68	62	0.102	<20	4.37	0.033	0.15	0.5	0.07	12.2	0.3	0.33	7	9.0	1.5
3293565	Soil	34	0.93	87	0.105	<20	1.63	0.016	0.24	0.3	0.01	9.0	0.2	0.13	8	1.4	0.7
3293566	Soil	26	0.77	129	0.156	<20	3.12	0.056	0.22	0.2	0.03	12.8	0.3	0.35	10	11.1	1.0
3293567	Soil	19	0.77	150	0.131	<20	3.25	0.165	0.30	0.4	0.02	12.0	0.3	1.14	10	11.2	1.3
3293568	Soil	23	0.95	122	0.146	<20	3.22	0.048	0.21	0.3	0.02	12.0	0.4	0.30	9	6.3	3.5
3293569	Soil	24	1.43	71	0.130	<20	1.82	0.020	0.06	0.3	<0.01	8.3	<0.1	0.48	9	6.0	0.6
3293570	Soil	21	1.72	43	0.076	<20	4.12	0.013	0.15	0.1	0.02	24.4	0.3	<0.05	14	2.5	0.4
3293571	Soil	22	1.65	45	0.085	<20	4.13	0.015	0.17	0.1	0.02	23.1	0.3	<0.05	14	2.9	0.5
3293572	Soil	22	1.16	63	0.082	<20	3.78	0.031	0.24	0.1	0.02	11.1	0.4	0.07	12	2.4	0.6
3293573	Soil	28	0.99	64	0.071	<20	2.59	0.020	0.15	0.3	0.01	16.5	0.3	0.12	9	2.7	0.4
3293574	Soil	43	1.12	83	0.084	<20	3.23	0.023	0.21	0.1	0.02	11.3	0.4	0.12	10	3.5	0.5
3293575	Soil	23	0.78	60	0.104	<20	2.84	0.053	0.13	0.4	<0.01	6.9	0.1	0.38	9	8.8	0.2
3293576	Soil	9	0.64	53	0.093	<20	2.09	0.039	0.16	0.6	0.02	2.6	0.2	0.18	6	1.9	0.8
3293577	Soil	18	0.74	68	0.080	<20	2.49	0.049	0.17	0.5	0.03	3.5	0.2	0.20	8	2.2	0.5
3293578	Soil	26	0.76	74	0.069	<20	2.56	0.037	0.17	0.2	0.05	5.3	0.2	0.16	8	2.9	2.2
3293579	Soil	24	0.86	74	0.066	<20	2.77	0.038	0.19	1.0	0.06	6.9	0.3	0.16	8	3.5	1.2
3293580	Soil	21	0.76	63	0.125	<20	2.51	0.032	0.13	1.0	0.03	7.2	0.4	0.15	7	4.3	1.0

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BUREAU VERITAS MINERAL LABORATORIES Canada

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
460-688 West Hastings St.
Vancouver British Columbia V6B 1P1 Canada

Project: Empirical
Report Date: October 28, 2019

Page: 3 of 3 Part: 1 of 2

CERTIFICATE OF ANALYSIS VAN19003069.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
3293581	Soil	571.0	415.9	27.2	633	1.1	30.5	63.7	1650	11.09	116.9	10.8	1.7	97	13.3	0.7	8.3	85	0.33	0.123	9
3293582	Soil	493.5	283.3	23.0	375	1.1	23.4	35.3	1039	10.93	719.8	78.6	1.3	99	3.9	1.8	9.3	87	0.31	0.133	8
3293583	Soil	176.3	167.2	20.3	566	0.7	40.6	37.5	1634	8.74	151.1	11.0	2.1	174	5.3	1.1	4.3	102	0.37	0.130	13
3293584	Soil	38.1	111.5	20.2	441	0.2	26.9	19.8	997	4.76	86.9	5.3	4.3	110	2.9	0.5	1.6	64	0.34	0.091	12
3293585	Soil	127.3	185.7	21.9	694	0.5	46.2	54.4	1561	10.13	183.1	13.8	1.8	72	4.6	0.5	3.9	158	0.32	0.183	10
3293586	Soil	113.0	147.3	20.2	831	0.4	62.7	52.4	1716	8.16	116.1	15.7	2.2	104	7.2	0.4	2.9	116	0.61	0.150	9
3293587	Soil	53.0	168.6	14.1	856	0.5	42.5	33.6	1852	14.25	59.1	7.0	1.1	89	6.0	0.5	2.1	215	0.45	0.234	8
3293588	Soil	34.9	149.1	34.9	913	0.9	25.4	18.6	1171	14.20	224.5	3.9	1.4	101	9.7	0.3	6.5	220	0.61	0.239	10
3293589	Soil	27.4	205.6	12.5	2452	0.7	104.4	115.8	8818	14.01	271.9	7.5	0.8	95	38.0	0.2	2.3	205	0.57	0.246	5
3293590	Soil	10.6	248.3	10.9	6845	0.6	83.1	98.5	8224	14.36	12.6	7.5	0.6	86	63.0	0.3	2.0	256	0.41	0.215	4
3293591	Soil	10.8	239.3	10.4	6077	0.6	79.8	103.5	7657	13.33	12.1	5.1	0.5	81	59.0	0.2	2.0	249	0.38	0.214	4
3293592	Soil	22.8	177.5	88.3	1130	2.8	27.7	20.6	2089	14.12	55.0	26.1	1.1	97	8.3	0.4	14.6	161	0.23	0.210	5
3293593	Soil	10.7	234.1	26.3	862	0.5	41.9	86.0	2855	17.92	18.0	9.9	1.0	79	7.0	0.3	2.1	210	0.42	0.316	6
3293594	Soil	36.0	173.4	17.7	684	0.9	17.2	26.5	1124	13.38	6.9	14.7	1.1	68	8.1	0.2	1.9	208	0.21	0.160	6
3293595	Soil	13.3	181.9	22.1	1293	0.4	25.9	42.5	2344	15.97	17.2	1.6	0.8	66	14.7	0.2	3.0	156	0.20	0.238	5
3293596	Soil	19.1	163.5	20.5	649	0.6	15.4	14.5	928	17.40	24.9	9.2	0.9	78	2.4	0.4	6.3	231	0.25	0.291	7
3293597	Soil	15.3	164.8	14.2	661	0.4	38.7	41.7	1651	10.91	23.0	4.6	1.2	55	3.1	0.4	2.4	154	0.40	0.161	6
3293598	Soil	7.3	106.8	10.5	621	0.2	30.7	31.0	1932	7.43	8.7	1.1	0.9	74	5.8	0.1	0.7	108	0.78	0.107	4
3293599	Soil	9.7	119.6	7.4	892	0.2	39.8	35.8	1762	6.87	11.6	1.2	0.8	99	12.8	0.2	0.8	114	1.02	0.111	4
3293600	Soil	9.3	95.7	6.8	867	0.2	35.7	26.3	1719	6.35	11.9	1.0	0.7	89	16.7	0.1	0.7	127	0.98	0.091	3

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Project: Empirical
Report Date: October 28, 2019

Page: 3 of 3 Part: 2 of 2

CERTIFICATE OF ANALYSIS VAN19003069.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
3293581	Soil	22	0.77	61	0.123	<20	2.45	0.034	0.12	0.9	0.04	6.8	0.4	0.15	7	3.4	1.2
3293582	Soil	22	0.79	72	0.126	<20	2.34	0.034	0.14	1.5	0.03	7.6	0.3	0.18	8	4.5	1.1
3293583	Soil	25	0.92	122	0.163	<20	2.43	0.044	0.16	0.5	<0.01	7.7	0.5	0.25	8	3.1	0.6
3293584	Soil	19	0.77	58	0.090	<20	1.85	0.012	0.12	0.2	<0.01	4.9	0.2	<0.05	7	1.2	0.3
3293585	Soil	28	0.87	93	0.146	<20	3.08	0.035	0.13	0.8	0.02	9.3	0.2	0.19	9	4.6	1.0
3293586	Soil	24	0.88	77	0.113	<20	3.50	0.026	0.15	0.4	0.02	7.5	0.2	0.11	9	2.8	0.7
3293587	Soil	25	0.85	82	0.258	<20	3.36	0.031	0.13	0.4	0.03	12.4	0.2	0.25	9	7.6	1.0
3293588	Soil	24	0.75	111	0.182	<20	3.34	0.051	0.19	0.5	0.03	13.2	0.2	0.35	10	7.6	2.0
3293589	Soil	23	1.19	199	0.210	<20	4.46	0.053	0.34	1.0	0.03	15.2	0.5	0.48	11	6.8	1.5
3293590	Soil	21	1.33	344	0.230	<20	3.98	0.052	0.31	0.5	0.04	18.0	0.5	0.41	11	5.4	1.2
3293591	Soil	20	1.23	349	0.221	<20	3.63	0.047	0.29	0.4	0.03	16.7	0.5	0.41	10	5.9	1.2
3293592	Soil	13	1.06	149	0.177	<20	3.42	0.062	0.25	0.7	0.05	14.1	0.3	0.59	10	7.4	2.5
3293593	Soil	17	0.81	107	0.160	<20	2.93	0.041	0.19	0.3	0.04	11.7	0.6	0.36	9	9.0	1.2
3293594	Soil	15	0.95	340	0.233	<20	2.51	0.056	0.59	0.4	0.02	13.7	0.6	0.57	11	10.3	1.6
3293595	Soil	18	1.02	88	0.172	<20	2.50	0.053	0.14	0.3	0.02	10.0	0.2	0.34	8	8.5	1.4
3293596	Soil	24	0.83	185	0.201	<20	2.83	0.075	0.25	0.3	0.13	14.5	0.3	0.75	10	8.9	1.2
3293597	Soil	37	1.12	98	0.147	<20	3.13	0.024	0.17	0.4	0.03	14.4	0.3	0.18	9	4.4	0.8
3293598	Soil	16	1.06	53	0.061	<20	2.83	0.014	0.15	0.3	0.01	9.3	0.2	<0.05	9	2.2	0.2
3293599	Soil	23	0.82	65	0.077	<20	3.06	0.019	0.21	0.1	0.02	9.8	0.3	0.06	9	2.1	0.3
3293600	Soil	20	0.94	52	0.054	<20	2.89	0.015	0.18	0.1	0.03	10.5	0.3	<0.05	9	1.6	0.2

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Project: Empirical
Report Date: October 28, 2019

Page: 1 of 1 Part: 1 of 2

QUALITY CONTROL REPORT VAN19003069.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
Pulp Duplicates																					
3293580	Soil	559.2	426.1	27.0	681	1.1	31.4	67.6	1768	10.86	111.2	11.6	1.8	88	14.6	0.7	8.0	85	0.35	0.128	9
REP 3293580	QC	569.8	431.9	29.5	673	1.1	32.7	66.6	1943	11.15	111.4	11.1	1.7	94	15.8	0.7	8.2	85	0.33	0.134	9
3293598	Soil	7.3	106.8	10.5	621	0.2	30.7	31.0	1932	7.43	8.7	1.1	0.9	74	5.8	0.1	0.7	108	0.78	0.107	4
REP 3293598	QC	7.7	110.7	11.1	630	0.2	31.3	32.3	1912	7.25	8.8	1.2	0.9	77	6.1	0.1	0.8	113	0.79	0.111	4
Reference Materials																					
STD BVGEO01	Standard	11.3	4512.2	189.1	1653	2.7	170.3	25.5	731	3.68	123.1	222.9	14.6	59	6.0	3.6	26.2	76	1.38	0.076	28
STD DS11	Standard	14.8	140.8	134.9	316	1.7	81.0	13.5	1031	3.16	43.4	115.1	7.8	63	2.3	7.1	11.1	52	1.01	0.070	17
STD OREAS262	Standard	0.7	124.5	58.4	156	0.5	62.3	28.2	519	3.54	36.7	62.5	9.6	36	0.7	4.8	1.1	23	2.95	0.041	20
STD OREAS262	Standard	0.7	111.2	54.6	141	0.4	62.5	26.5	542	3.37	34.9	67.2	9.3	34	0.7	3.5	0.9	21	3.00	0.039	16
STD BVGEO01 Expected		10.8	4415	187	1741	2.53	163	25	733	3.7	121	219	14.4	55	6.5	2.2	25.6	73	1.3219	0.0727	25.9
STD DS11 Expected		13.9	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	79	7.55	67.3	2.37	7.2	12.2	50	1.063	0.0701	18.6
STD OREAS262 Expected		0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	65	9.33	36	0.61	3.39	1.03	22.5	2.98	0.04	15.9
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	0.6	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1

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Vancouver British Columbia V6B 1P1 Canada

Project: Empirical
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Page: 1 of 1 Part: 2 of 2

QUALITY CONTROL REPORT VAN19003069.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																	
3293580	Soil	21	0.76	63	0.125	<20	2.51	0.032	0.13	1.0	0.03	7.2	0.4	0.15	7	4.3	1.0
REP 3293580	QC	21	0.76	62	0.125	<20	2.48	0.031	0.13	1.0	0.04	7.3	0.4	0.15	7	3.8	1.0
3293598	Soil	16	1.06	53	0.061	<20	2.83	0.014	0.15	0.3	0.01	9.3	0.2	<0.05	9	2.2	0.2
REP 3293598	QC	17	1.12	57	0.064	<20	3.16	0.015	0.15	0.3	0.02	9.8	0.3	<0.05	9	2.4	0.3
Reference Materials																	
STD BVGEO01	Standard	175	1.29	346	0.247	<20	2.28	0.193	0.88	3.9	0.10	6.3	0.6	0.71	8	4.7	1.0
STD DS11	Standard	59	0.83	412	0.087	<20	1.13	0.066	0.37	2.9	0.25	2.9	5.0	0.25	5	2.0	4.5
STD OREAS262	Standard	42	1.18	254	0.004	<20	1.18	0.068	0.31	0.2	0.16	3.1	0.5	0.22	4	<0.5	0.2
STD OREAS262	Standard	42	1.16	246	0.003	<20	1.21	0.065	0.29	0.1	0.16	3.1	0.5	0.24	4	0.6	<0.2
STD BVGEO01 Expected		171	1.2963	340	0.233		2.347	0.1924	0.89	3.5	0.1	5.97	0.62	0.6655	7.37	4.84	1.02
STD DS11 Expected		61.5	0.85	417	0.0976		1.129	0.0694	0.4	2.9	0.26	3.1	4.9	0.2835	4.7	2.2	4.56
STD OREAS262 Expected		41.7	1.17	248	0.003		1.204	0.071	0.312	0.13	0.17	3.24	0.47	0.253	3.73	0.4	0.23
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2

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APPENDIX F: 2019 Rock Sample IDs, Locations and Significant Results Map

LONGFORD EXPLORATION SERVICES LTD.

Empirical Project

2019 Rock Sampling

Drawn By: V. Pobuta	NTS 50K: 092J05 J12	October 31, 2019
NAD83	EPSG:26910	Scale: 1:12,500

Empirical Outline

2019 Empirical Rocks [102]

0 0.5 1 km

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