

## Prospecting, Geological and Geochemical Survey Report

On the

### ULTRA PROPERTY

SOUTHWESTERN YUKON, CANADA

**Located Within:** NTS SHEET: 115B16

**Centered at Approximately:**

Latitude 60.54' North by Longitude 138.15' West

#### Claims:

GRANT NUMBERS	CLAIM NAME
YC18433 - YC18436	ELI 11 - ELI 14
YC19001 - YC19030	ULTRA 1 - ULTRA 30
YC19079, 81, 83	GAB 35, 37, 39
YC19098 - YC19133	ULTRA 37 - ULTRA 72
YC19376	ULT 1
YC25938 - 943	ULT 2 - ULT 7
YC19398 - YC19405	ULTRA 73 - ULTRA 80
YC19406 - YC19409	TELL 1 - TELL 4
YC25938 - YC25943	ULT 2 - ULT 7
YC26106 - YC26115	ULTRA 81 - ULTRA 90
YC26239 - YC26285	ULT 21 - ULT 67
YC26288, 289, 292, 293, 295, 297, 302, 304, 306, 308	ULT 70, 71, 74, 75, 77, 79, 84, 86, 88, 90
YC26323 - YC26341	ULT 105 - ULT 123
YC26359 - YC26372	ULT 8 - ULT 21
YC26373 - YC26383	ULT 142 - ULT 152
YC26408 - YC26447	JEN 1 - JEN 40
YC26448 - YC26449	JEN 120, 251
YC40233 - YC40248	ULT 177 - ULT 192
YC53937 - YC53948	VMS 1 - VMS 12
YE69101 - YE69163	UM 1 - UM 63
YE69701 - YE69789	UZ 1 - UZ 89
YE69899 - YE69902	UZ 199 - UZ 202
YE69919 - YE69959	UZ 219 - UZ 259
YE69974 - YE69976	UM 39 - UM 41
YE69977 - YE69980	UM 62 - UM 65
YF45969 - YE45986	UZE 1 - UZE18
YE33717 - YE33787	OUTPOST 1 - 71

**Yukon Mineral Exploration Program: Target Evaluation #19-082**

**Field Work Conducted:** September 7-20, 2019

**Report Prepared for:**

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January 31, 2019



## Table of Contents

List of Tables.....	iii
List of Figures.....	iv
1 Summary.....	5
1.1 Property Location and Geological Setting.....	5
1.2 Property History.....	6
1.3 2019 Exploration Program.....	8
1.4 Exploration Case.....	9
2 Introduction.....	10
2.1 YMEP Report.....	10
2.2 Abbreviations and Units of Measurement.....	10
3 Project Description and Location.....	12
3.1 2019 Program.....	12
3.2 Location & Physiography.....	12
3.3 Climate.....	12
3.4 Mineral Titles.....	13
4 History.....	16
4.1 General Timeline.....	16
4.2 Geochemistry.....	18
4.3 Geophysics.....	21
4.4 Trenching.....	27
4.5 Drilling.....	27
5 Geological Setting and Mineralization.....	29
5.1 Regional Geology.....	29
5.2 Regional Mineralization.....	31
5.3 Property Geology.....	33
5.4 Property Mineralization (after Pautler, 2015).....	39
6 Deposit Types (after Pautler, J., 2012, 2015).....	46
6.1 Volcanic Hosted Cu-Zn-Ag-Au Massive Sulphide Style Deposit (VMS).....	46
6.2 Flood Basalt/Ultramafic sill Associated Ni-Cu-PGE Style Deposits.....	47
7 Recent Exploration.....	49
7.1.1 Frohberg and Main Sill Area.....	49
7.1.2 Bryson Glacier and Ridges Area.....	59
7.1.3 Lower Telluride-Bryson Area.....	60
7.1.4 Boutellier Drainage Area.....	61
7.2 UZE Area Geochemistry.....	65
8 Sample Preparation, Analysis, and Security.....	67
8.1 2019 Program.....	67
9 Interpretation and Conclusions.....	68
10 Recommendations.....	70

10.1 Proposed Exploration Budget.....	70
11 References.....	71
APPENDIX A: Frohberg and Main Sill Geological Map .....	76
APPENDIX B: Date, Signature and Certificate of Author .....	78
APPENDIX C: Statement of Expenditures.....	79
APPENDIX D: 2019 Rock Sample Analytical Certificates .....	80
APPENDIX E: 2019 Soil Sample Analytical Certificates .....	95

## List of Tables

Table 2.1: Abbreviations and units of measurement .....	10
Table 3.1: Ultra Project mineral tenures. ....	14
Table 4.1: Exploration history of the Ultra Property (after Pautler, 2015). ....	16
Table 4.2: Previous geochemistry (after Pautler, 2015).....	18
Table 4.3: Previous geophysics (after Pautler J., 2015).....	21
Table 4.4: Previous trenching and rock sampling (after Pautler, 2015).....	27
Table 4.5: Historic Drilling (after Pautler J., 2015).....	28
Table 4.6: Historical drill hole locations. ....	28
Table 5.1: Table of formations (after Open File 2014-18, YGS).....	35
Table 5.2: Ultra Project showings.....	39
Table 7.1: Select rock sample locations and descriptions from the Frohberg area.....	50
Table 7.2: Select regional rock sample locations and descriptions from the Main Sill trend. ....	58
Table 7.3: Select rock sample locations from ridges in the Bryson Drainage area. ....	59
Table 7.4: Select rock sample locations from the lower Telluride Creek area.....	60
Table 7.5: Select rock sample locations and descriptions from the Boutellier area.....	62

## List of Figures

Figure 3.1: Ultra Property location map.....	13
Figure 3.2: Ultra Property mineral claims. ....	15
Figure 4.1: Ultra Property regional geophysics reduced to pole tilt derivative (Open File 2017-33). .....	24
Figure 4.2: Historical geophysical surveys and anomalies. ....	25
Figure 4.3: 2004 HEM survey calculated apparent resistivity. ....	26
Figure 5.1: Ultra project regional geological setting. ....	31
Figure 5.2: Cross section of mineral occurrences in the Kluane Ranges (from Campbell W., 1981). .....	33
Figure 5.3: Deposit model for the Kluane Belt ultramafic sill (modified from Hulbert, 1997).....	33
Figure 5.4: Ultra Property geology. ....	38
Figure 5.5: Mineral showings on the Ultra Property. ....	42
Figure 5.6: The Telluride showing after Pautler, 2015. ....	43
Figure 5.7: The Redball showing after Pautler, 2015. ....	44
Figure 5.8: The Frohberg showing after Pautler, 2015.....	45
Figure 7.1: Evidence of folding in the Frohberg area. ....	51
Figure 7.2: Three generations of veining at the Frohberg area. ....	52
Figure 7.3: Interpreted geological map of the Frohberg area showing structural measurements and related inferred structures. For rock unit description and key see Figure 7.4.....	53
Figure 7.4: Legend for Frohberg area mapping.....	54
Figure 7.5: Frohberg and Main Sill area Ni in rock results (ppm).....	55
Figure 7.6: Frohberg and Main Sill area Cu in rock results (ppm). ....	56
Figure 7.7: Frohberg and Main Sill area Pt+Pd+Au in rock results (ppb). ....	57
Figure 7.8: Aerial view of the Frohberg and Mail Sill area. ....	58
Figure 7.9: Massive sulphide boulder, lower Telluride Creek area. ....	61
Figure 7.10: Property wide Cu in rock results (ppm).....	63
Figure 7.11: Property wide Ni in rock results (ppm). ....	64
Figure 7.12: 2017-2019 Cu in soil results in the Uze area. ....	65
Figure 7.13: 2017-2019 Ni in soil results in the Uze area.....	66

# 1 Summary

## 1.1 Property Location and Geological Setting

The 10,077 ha Ultra Property comprises 536 mineral claims on NTS map sheet 115 B/16, located in the Whitehorse Mining District, approximately 42 km northwest of Haines Junction, and 201 km from Whitehorse, Yukon Territory, centered at a latitude of 48°53'N by Longitude 124°1'W. The Ultra Property comprises the Eli, Ultra, Gab, Tell, Ult, Jen, Vms, Um, Uz, Uze and Outpost claims, owned by Group Ten Metals Inc. of Vancouver, B.C. This report was prepared to satisfy requirements for the Yukon Mineral Exploration Program (YMEP) reporting. The work program from September 7-20, 2019 consisted of 43 mandays of geological mapping, rock sampling, soil sampling and prospecting based on recommendations from a YMEP proposal by Longford Exploration Services Ltd. The work was carried out by Longford Exploration Services personnel with project management by James Rogers of Vancouver, B.C. Total expenditures before GST amounted to \$87,236.49.

The Ultra Property is underlain by rocks of the Alexander Terrane in the southwest and Wrangell Terrane in the northeast, both part of the accreted Insular Super Terrane. The Alexander Terrane is comprised of Upper Proterozoic to Triassic volcanic and sedimentary rocks and co-magmatic intrusions. Wrangell Terrane consists of Mississippian to Permian arc volcanic, clastic and platform carbonate rocks overlain by Triassic oceanic rift basalt and carbonate rocks and co-magmatic intrusions. The eastern portion of the Ultra Property, east of the Denali Fault is underlain by an overlap assemblage of Late Triassic volcanic and sedimentary rocks of the Bear Creek Assemblage. Intrusive rocks of the Kluane Ranges Suite, primarily biotite-hornblende granodiorite, quartz diorite, quartz monzonite and hornblende diorite locally intrude the Wrangell Terrane and Bear Creek Assemblage. Older sills of the Late Triassic Kluane mafic/ultramafic Suite occur throughout the Kluane Ranges and are thought to be the subvolcanic feeder of the basic to mafic volcanic rocks within the Wrangell Terrane. Paleocene to Oligocene Amphitheatre Group sediments and Miocene to Pliocene Wrangell Lavas overlie and intrude the older lithologies.

Economically, the Ultra Property is situated within the 600 km long Kluane Ultramafic Belt, which is characterized by Ni-Cu-PGE mineralization associated with the Late Triassic aged mafic to ultramafic sills. The Kluane mafic/ultramafic Suite hosts more than 25 magmatic nickel-copper-PGE mineral occurrences primarily within the Wrangell Terrane from Northern British Columbia, through Yukon and into Alaska. One of these occurrences located northwest of the Ultra Property, the Wellgreen deposit, processed approximately 200,000 tonnes of nickel-copper-PGE ore in 1972 and 1973. The Wellgreen deposit of Nickel Creek Platinum Ltd. has measured and indicated Mineral Resources of 330 million tonnes at 1.67 g/t platinum equivalent (Pt Eq) or 0.44% nickel equivalent (Ni Eq) and an Inferred Mineral Resource of 846 million tonnes at 1.57 g/t Pt Eq. or 0.41% Ni Eq, both at a 0.57 g/t Pt Eq or 0.15% Ni Eq cutoff, including a higher grade Mineral Resource of 72 million tonnes at 2.49 g/t Pt Eq or 0.65% Ni Eq Measured and Indicated and 174 million tonnes at 2.41 g/t Pt Eq or 0.63% Ni Eq, both at a 1.9 g/t Pt Eq or 0.50% Ni Eq cutoff

(Simpson, 2014). The Kluane Belt Ni-Cu-PGE occurrences are particularly enriched in the rarer platinum group elements osmium, iridium, ruthenium and rhodium.

In addition, the Alexander Terrane and the Bear Creek Assemblage are known to host PGE enriched VMS style mineralization similar to the Kloo minifile occurrence on the Ellen Property, 6 km southeast of the Ultra Property. The Bear Creek Assemblage is equivalent in age and composition to the upper Hyde Group, which hosts the Windy Craggy copper-cobalt-gold volcanogenic massive sulphide deposit. Windy Craggy is now situated within a park but had a Measured Reserve, prior to the implementation of NI 43-101 of 297,440,000 million tonnes grading 1.38 per cent copper (applying a 0.5 per cent copper cut-off), 0.2 gram per tonne gold, 3.83 grams per tonne silver and 0.069 per cent cobalt (Geddes Resources Ltd. Annual Report 1991).

## 1.2 Property History

The project area has been intermittently explored since 1892 when Jack Dalton and E.J. Glaven made an overland trip with four packhorses from the Chilkat River to the shores of Kluane Lake over a foot path which the Chilkat First Nations had used for the preceding two centuries as a trading route to the interior of the Yukon. Placer mining was the initial activity on Telluride and Kimberly Creeks downstream of the present-day Ultra Property. Placer miners first noticed massive sulphide boulders in glacial till at the mouth of Telluride Creek in 1904. The Ultra Property covers the Telluride, Nunatak and Boulder volcanogenic massive sulphide showings, the nickel-copper-PGE Frohberg showing, the Jesse anomaly and the Jennifer copper-silver vein/stockwork showing.

Initial exploration located the Telluride and Frohberg showings in 1955 & 1958 at the headwaters of Telluride Creek high in the cirque face and below on a glacial moraine. Early work on the Telluride banded massive sulphide showing by Gaymont Prospecting Syndicate included claim staking, prospecting & mapping and geophysical surveys. Various syndicates continued ground exploration and preliminary drilling work primarily in the lower valley in 1964 (Coranex Syndicate), in 1965-67 (Coranex + partners), in 1969 (Dynasty Exploration + partners). Exploration continued on the showings in the 1970's during a regional exploration program by Archer Cathro & Associates who subsequently staked the Ultra 1-22 claims at the head of Telluride Creek in 1975. Limited diamond drilling, geochemistry and ground geophysical surveys were undertaken. The prospect was re staked in 2004 by the Kluane Joint Venture, and later by prospectors Tom Morgan and Vern Matkovich who initiated several exploration campaigns consisting of airborne and ground geophysical surveys, blast trenching and geochemical sampling that targeted massive sulphides, Ni-Cu-PGE and Au mineralization within the Ultra Property. A database of geochemical samples, airborne and ground geophysics, and geological mapping was compiled in 2013-2014 by Ashburton Ventures Inc. and documented by J. M. Pautler, P. Geo. in a Technical Report on the Ultra Project in 2014 and in a Geochemical and Geophysical Assessment Report in 2015.

The most significant showing on the Ultra Property is the Telluride volcanogenic massive sulphide showing (Pautler J., 2015), "which appears to be consistent with the Cypress type deposit model.

The Telluride massive sulphide horizon trends 130-140°/ 45-70°S, ranges from 0.5 to 4m wide, has been traced for 200m and remains open along strike. The central portion overlies a 35m stockwork zone. The showing itself contains values of 3.23% Cu, 6.75% Zn, 17.8 ppm Ag, 0.15 ppm Au over 4m with selected values of 13.4% Cu, 6.75% Zn, 56 ppm Ag, 0.25 ppm Au. The system has been traced 6 km to the southeast and appears to continue beneath glacier cover to the northwest. The Nunatak Zone, a bedded massive sulphide lense and associated stockwork zone, was discovered 3 km southeast of the Telluride showing with rock sample results of 11.54% Cu, 1514 ppm Zn and 7.2 g/t Ag over 3m. One kilometer south of the Nunatak Zone, an occurrence of semi massive pyrite with sulphide bearing quartz veins and pyrite chalcopyrite stockwork type mineralization is exposed along a rugged north facing slope with highly anomalous values including 2.34% Cu, 50.9 g/t Ag over 2m. A glacier obscures the northwestern strike extent of the Telluride showing.”

The Telluride showing has been dated as Ordovician, the same age as the Niblack deposit in Alaska which occurs in the Alexander Terrane and contains a NI 43-101 compliant Indicated Resource of 5.6 million tonnes with grades of 0.95% copper, 1.75 g/t gold, 1.73% zinc, 29.52 g/t silver and an Inferred Resource of 3.4 million tonnes of 0.81% copper, 1.32 g/t gold, 1.29% zinc, 20.10 g/t silver at US\$50 net smelter return cut-off (Van der Heever et al., 2011).

Below the Telluride showing is the Frohberg showing consisting of mineralization in stockwork quartz-carbonate veins associated with gabbroic dykes and sills proximal to an elongate ultramafic body. Historic sample values include 5.54 g/t Pt, 13.46 g/t Pd, 4.07% Cu and 1.73% Ni over 0.5m obtained from the southeast end of the exposure in the 2002 trenching program and sampling in 2008 returned 2.56% Cu, 2.30% Ni, 1.85 g/t Pd, and 220 ppb Pt, 0.315 ppm Rh over 0.25m along the gabbro footwall contact 200m to the northwest, towards the main peridotite body (Pautler, J, 2015). Rhodium (Rh) is one of the rarest elements in the Earth's crust. Exploration potential exists for a buried deposit beneath boulder talus cover immediately north of the Frohberg showing where the dykes and sills coalesce into a larger gabbro to ultramafic body known as the Main Sill.

The Boulder occurrence, massive sulphide boulders in a tributary of Telluride Creek saw periodic exploration programs from 1955-2014 including approximately 440m of drilling in 8 holes (4 of which were lost), hand/blast trenching, rock, soil and silt geochemistry, mapping, prospecting, minor petrography, a 1977 airborne electromagnetic survey, a 2004 airborne total magnetic field and electromagnetic survey, rock geophysical properties analysis, and assorted small ground electromagnetic and magnetic geophysical surveys. The boulders at the Boulder showing appear to have originated from the Telluride showing, although dating suggests a younger age (Pautler, J., 2015). A strong EM conductor identified at lower elevation by ground EM surveys (Redball Grid) was originally thought to have been the source of the massive sulphide boulders and was tested by the early drilling programs. The drill holes did not reach bedrock and the EM conductor coincidental with an MMI soil geochemical anomaly on the Redball Grid is a possible source of the massive sulphide boulders and provides a potential drill target.

### 1.3 2019 Exploration Program

The 2019 exploration work on the Ultra Property focussed on aeromagnetic anomalies and occurrences of ultramafic/mafic rocks of the Kluane Suite and mapping and sampling of the Frohberg showing which proved the most promising occurrence of the program. Detailed examination at the Frohberg outlined mineralization within a greenish siliceous volcanoclastic unit of the Icefield Formation. The extent of this showing is not known due to talus cover but exposed mineralization consists of pyrite, pyrrhotite and chalcopyrite along quartz-carbonate vein stockwork and is disseminated throughout the siliceous volcanoclastic rock in some places. There are zones of intense malachite, azurite and limonite staining accompanied by open boxworks. Highly anomalous PGE & Cu values were obtained in rock samples grading up to 48.1 g/t Pt from outcrop southeast of the Frohberg showing, interpreted to be stratigraphically above the original occurrence.

Rock sample results from the Main Sill mafic/ultramafic rock and elsewhere on the property targeting the margins of the sills produced weakly elevated nickel values (generally 1000-2000 ppm). Potential low-grade copper-nickel-PGE mineralization within or at the base of the Kluane Suite sills was not found by this sampling program. The Kluane Suite is extensive and as has been concluded by previous writers requires ongoing investigation to evaluate the potential Cu-Ni-PGE mineralization with emphasis on a basal cumulate and feeder zone of the mafic/ultramafic rocks.

Along the Nunatak-Telluride trend, outcrops and cliffs of meta-basite and mafic volcanics were examined above the Bryson glacier and on steep ridges near Bryson Creek. Fault bounded intervals of recessive meta-sediments occur within the massive volcanics which are intruded by light grey-green boudinaged diabase sills often with abundant quartz-carbonate veining, spotty pyrrhotite and trace chalcopyrite similar to the Frohberg occurrence. One grab sample of meta-basalt with 10% pyrite assayed >10000ppm Cu with background PGE+Au values.

Traverses across the upland area of Boutellier Creek located a mafic/ultramafic sill in outcrop along the creek bank which has a strong NW-SE linear aeromagnetic expression extending to the head of the Telluride Creek canyon. Hanging wall meta-volcanic rocks exhibit a pyritic breccia with spotty chalcopyrite, malachite and azurite seen at the base of several unnamed creek canyons and in outcrop at the top of the Telluride Creek canyon. No anomalous results were obtained from initial samples but the long sinuous aeromagnetic anomaly requires a more thorough examination and can be accessed on existing trails by ATV.

The 2019 soil sample grid on the UZE block at the southeast end of the Property was an extension to an area sampled in 2017-2018 targeting an aeromagnetic anomaly. Soil results show an association with skarn lenses at the periphery of a quartz monzonite (EKK) intrusion into Bear Creek metavolcanic - metasedimentary rocks and faults mapped through the area. The nickel response is linear in the northwest portion of the grid while copper results show an anomalous zone in the centre of the grid on the margin of the magnetic anomaly.

#### 1.4 Exploration Case

The Ultra Property constitutes a property of merit based on the presence of mineralization at the Telluride, Frohberg, and Nunatak showings proximal to mafic/ultramafic sills of the highly prospective Kluane nickel-copper-PGE Ultramafic Belt, and the potential for VMS mineralization in associated Mississippian to Triassic volcanic and sedimentary units. The 2019 work extended the area of the Frohberg showing with new PGE values obtained from rock samples along slope from the original occurrence. The Telluride occurrence on the northeast face of Mt. Cairnes was not examined in recent programs due to ice and snow cover and unsuitable weather conditions for helicopter access. Fairly close to the Frohberg showing, the Telluride occurrence appears to be the source of the massive sulphide boulders sampled from the creek bed. These new samples and previous significant Cu-Zn-Au values obtained by J. Pautler (2006, 2012, 2015) from the Telluride occurrence along with the good results from the 2019 sampling at the Frohberg provide a promising target for further geological mapping and sampling programs recommended to include an EM or IP survey.

## 2 Introduction

### 2.1 YMEP Report

The Ultra Project comprises 536 mineral claims (10,077 ha) located 42 km northwest of Haines Junction and 201 km west of Whitehorse, Yukon Territory. The property is centered at a latitude of 60 54'N and a longitude of 138 15'W. The Ultra project comprises the Eli, Ultra, Gab, Ult, Tell, Jen, Um, Uz, Uze, and VMS claims, owned by Group Ten Metals Inc. The Outpost property consists of the 71 claims, owned by Longford Exploration Services Ltd. and are under option to Group Ten Metals as of September 20, 2019.

The 2019 work program was undertaken from September 7-20, 2019 on behalf of Group Ten Metals Inc. by Longford Exploration Services Ltd. under the supervision of James Rogers. The program utilizing helicopter access comprised geological mapping, rock sampling, XRF survey and soil geochemical surveys with a focus on the Main Sill and the Frohberg showing where the best previous results have come from. A total of 250 soil samples and 79 rock samples were collected by a four-person crew (43 mandays) based out of Haines Junction. The lower lying areas along the Denali Fault were also prospected and a soil grid in the UZE area was extended.

The present assessment and YMEP report describe the 2019 geological and geochemical survey conducted over the project area and includes a review of historic data on the Ultra property.

### 2.2 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 26907 NAD83 UTM Zone 7N 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	Abbreviation	Description
%	percent	li	limonite
AA	atomic absorption	m	metre
Ag	silver	m <sup>2</sup>	square metre
AMSL	above mean sea level	m <sup>3</sup>	cubic metre
As	arsenic	Ma	million years ago
Au	gold	Mg	magnetite
AuEq	gold equivalent grade	mm	millimetre
Az	azimuth	mm <sup>2</sup>	square millimetre
b.y.	billion years	mm <sup>3</sup>	cubic millimetre
CAD\$	Canadian dollar	mn	pyrolusite
cl	chlorite	Mo	Molybdenum

Abbreviation	Description
cm	centimetre
cm <sup>2</sup>	square centimetre
cm <sup>3</sup>	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 <sup>2</sup>	square feet
ft <sup>3</sup>	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 <sup>2</sup>	square kilometre
l	litre

Abbreviation	Description
Moz	million troy ounces
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 feldspar
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 Project Description and Location

### 3.1 2019 Program

The purpose of the 2019 YMEP program was to evaluate and map the ultramafic sills and the area of the Frohberg showing as well as its strike extents. Previous investigations have shown consistently elevated Ni values across a saddle to the NW of the Frohberg at the Main Sill. Other values encountered at lower elevations, including the Frohberg showing itself, show elevated values of Cu and PGE's as well as Ni which is hypothesized as a cumulate at the base of a sill.

An IP survey proposed for the YMEP was not done due to the high cost and availability of contractors but is recommended to take place in a future season.

### 3.2 Location & Physiography

The Ultra Property is located in southwest Yukon and is centered approximately 40 km northwest of Haines Junction, Yukon within NTS map sheet 115B 16 at approximately 124°1'W longitude, 48°53'N latitude (Figure 3.1).

The project lies along the west margin of the Shakwak Valley in the Kluane Ranges of the St. Elias Mountains north of the Jarvis River. The Shakwak Valley is a deep northwest-southeast oriented depression stretching for several hundred kilometers from northwestern British Columbia to Alaska. In the Jarvis River area, the valley is 8 to 10 km wide, bounded on the west side by the rugged Kluane Ranges which rise to 2588m. The property is located along a prominent ridge of mountain peaks including Mt. Cairnes, a high alpine area with valley glaciers on its northeast face and covering an upland plateau north of the peaks extending to lower lying areas of the Shakwak Valley. Elevations on the property range from 880m to 2500m on the flank of Mt. Cairnes.

The Alaska Highway is located in the Shakwak Valley northeast of the project area, and the Haines Highway extends south from Haines Junction ~300 km to the deep-water port of Haines, Alaska. An 11.5 km 4x4 trail extends from the Alaska Highway at the Christmas Creek crossing to Telluride Creek on the southeast margin of the project area and an ATV trail extends up Boutellier Creek at the northeast end of the claims, both trails have been used for previous exploration programs.

Airstrips are located at Haines Junction and Silver City with charter helicopter and fixed wing services available at Haines Junction and seasonally from Silver City. Commercial accommodation is available in Haines Junction and Silver City, and the former remains the best venue for staging exploration in the project area with most of the support that early stage exploration requires.

### 3.3 Climate

The area is affected by coastal weather systems, with a combination of moisture and temperature conditions influenced by the mountainous terrain and close proximity to the Pacific Coast (approx. 150 km). The Property lies at the border of the Kluane Mountain Ranges which is characterized by a dry and cold continental climate, as it lies in the rain-shadow of the St. Elias Mountains. The southern limits of the Kluane Ranges have a pronounced maritime influence and experiences higher temperatures and more precipitation.

The Ultra Property itself experiences high amounts of precipitation year-round, especially high in the mountains where local weather systems prevail. Snow begins to accumulate in the high alpine areas in late August or early September and begins to melt in late May to early June. Fieldwork can often be started at lower elevations by June, but at higher elevations a narrow window exists in August with minimum snow conditions. Summer temperatures range up to 30° Celsius and winter temperatures down to -50° Celsius.

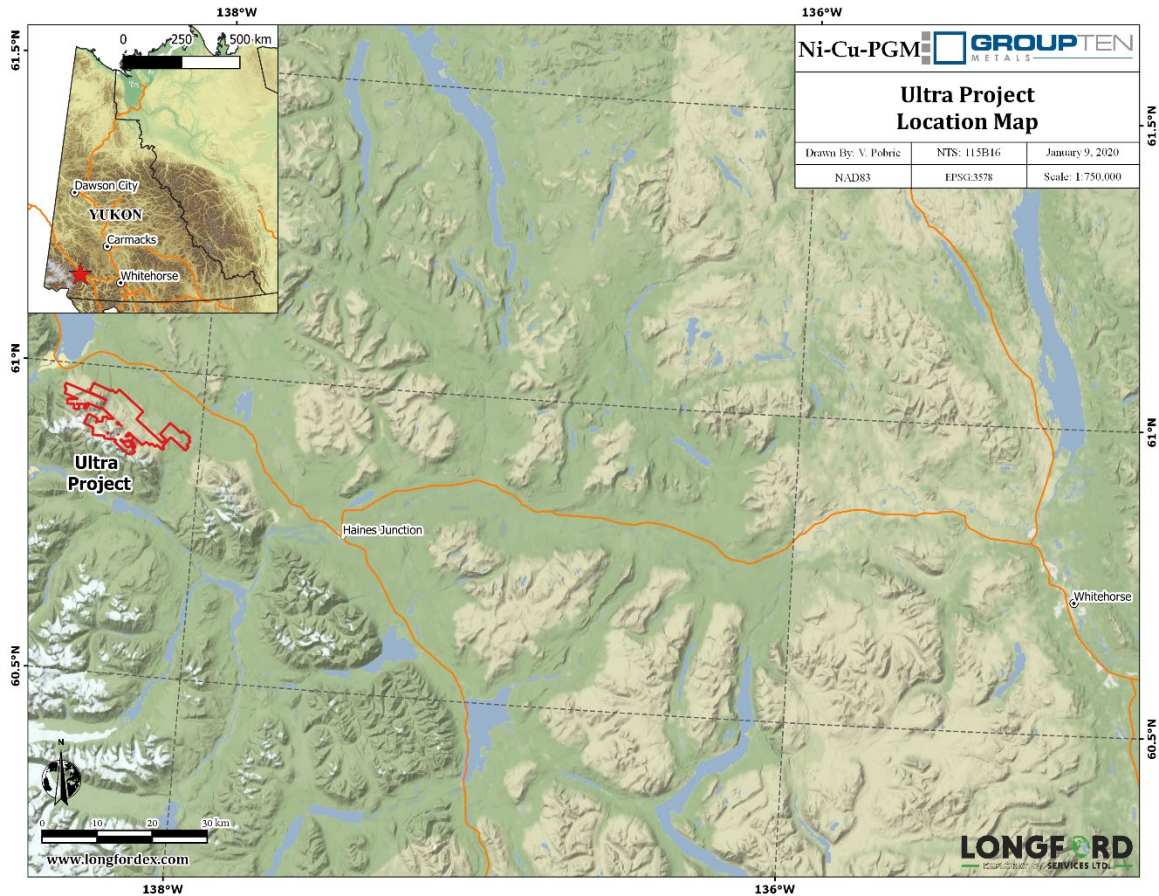


Figure 3.1: Ultra Property location map.

### 3.4 Mineral Titles

The Property consists of 536 contiguous mining claims covering 10,077 ha (Table 3.1 and Figure 3.2) owned or optioned 100% by Group Ten. These claims are subject to a July 25, 2019, option agreement with Group Ten pursuant to which Mount Cairnes Resources Corp. can earn a 51% right, title and undivided interest in and to the Property by paying to Group Ten a total of \$750,000 in cash payments, issue Group Ten a total of 3,000,000 common shares, and perform \$3,750,000 of exploration expenditures on the Property over a four year period.

The Property is subject to an underlying royalty interest whereupon the original vendor of the Property, Tom Morgan, is entitled to receive a royalty equal to 2% of the net smelter return of which half can be purchased at any time for \$1,000,000. It is intended that the royalty shall run with and form part of the Property and not be merely contractual in nature.

Table 3.1: Ultra Project mineral tenures.

GRANT NUMBERS	CLAIM NAME	OWNER	STAKE DATE	EXPIRY DATE
YC18433 - YC18436	ELI 11 - ELI 14	Group Ten Metals Inc. - 100%	2000-02-22	2024-02-11
YC19001 - YC19030	ULTRA 1 - ULTRA 30	Group Ten Metals Inc. - 100%	2000-12-06	2023/24-02-11
YC19079, 81, 83	GAB 35, 37, 39	Group Ten Metals Inc. - 100%	2001-02-09	2024-02-11
YC19098 - YC19119	ULTRA 37 - ULTRA 72	Group Ten Metals Inc. - 100%	2001-02-07/08	2024-02-11
YC19376	ULT 1	Group Ten Metals Inc. - 100%	2001-09-05	2024-02-11
YC25938 - YC25943	ULT 2 - ULT 7	Group Ten Metals Inc. - 100%	2003-05-06	2024-02-11
YC19398 - YC19405	ULTRA 73 - ULTRA 80	Group Ten Metals Inc. - 100%	2001-10-10	2024-02-11
YC19406 - YC19409	TELL 1 - TELL 4	Group Ten Metals Inc. - 100%	2001-10-03	2024-02-11
YC26106 - YC26115	ULTRA 81 - ULTRA 90	Group Ten Metals Inc. - 100%	2003-11-24	2024-02-11
YC26239 - YC26285	ULT 21 - ULT 67	Group Ten Metals Inc. - 100%	2004-02-09	2024-02-11
YC26288, 289, 292, 293, 295, 297, 302, 304, 306, 308	ULT 70, 71, 74, 75, 77, 79, 84, 86, 88, 90	Group Ten Metals Inc. - 100%	2004-02-09	2024-02-11
YC26323 - YC26341	ULT 105 - ULT 123	Group Ten Metals Inc. - 100%	2004-02-09	2024-02-11
YC26359 - YC26372	ULT 8 - ULT 21	Group Ten Metals Inc. - 100%	2004-02-09	2024-02-11
YC26373 - YC26383	ULT 142 - ULT 152	Group Ten Metals Inc. - 100%	2004-02-12	2024-02-11
YC26408 - YC26447	JEN 1 - JEN 40	Group Ten Metals Inc. - 100%	2004-02-12	2023-02-11
YC26448, 449	JEN 120, 251	Group Ten Metals Inc. - 100%	2004-02-12	2023-02-11
YC40233 - YC40248	ULT 177 - ULT 192	Group Ten Metals Inc. - 100%	2005-09-11	2024-02-11
YC53937 - YC53948	VMS 1 - VMS 12	Group Ten Metals Inc. - 100%	2006-09-01	2024-02-11
YE69101 - YE69135	UM 1 - UM 35	Group Ten Metals Inc. - 100%	2011-08-01	2023/24-02-11
YE69701 - YE69789	UZ 1 - UZ 89	Group Ten Metals Inc. - 100%	2011-08-16	2023/24-02-11
YE69899 - YE69902	UZ 199 - UZ 202	Group Ten Metals Inc. - 100%	2011-08-16	2024-02-11
YE69919 - YE69959	UZ 219 - UZ 259	Group Ten Metals Inc. - 100%	2011-08-17	2023/24-02-11
YE69974 - YE69976	UM 39 - UM 41	Group Ten Metals Inc. - 100%	2011-08-16	2023-02-11
YE69977 - YE69980	UM 62 - UM 65	Group Ten Metals Inc. - 100%	2011-08-16	2023-02-11
YF45969 - YF45986	UZE 1 - UZE 18	Group Ten Metals Inc. - 100%	2017-08-08	2023-02-11
YE33717 - YE33787	OUTPOST 1 – OUTPOST 71	Longford Exploration Services Ltd. – 100%	2011-05-05	2023-02-11

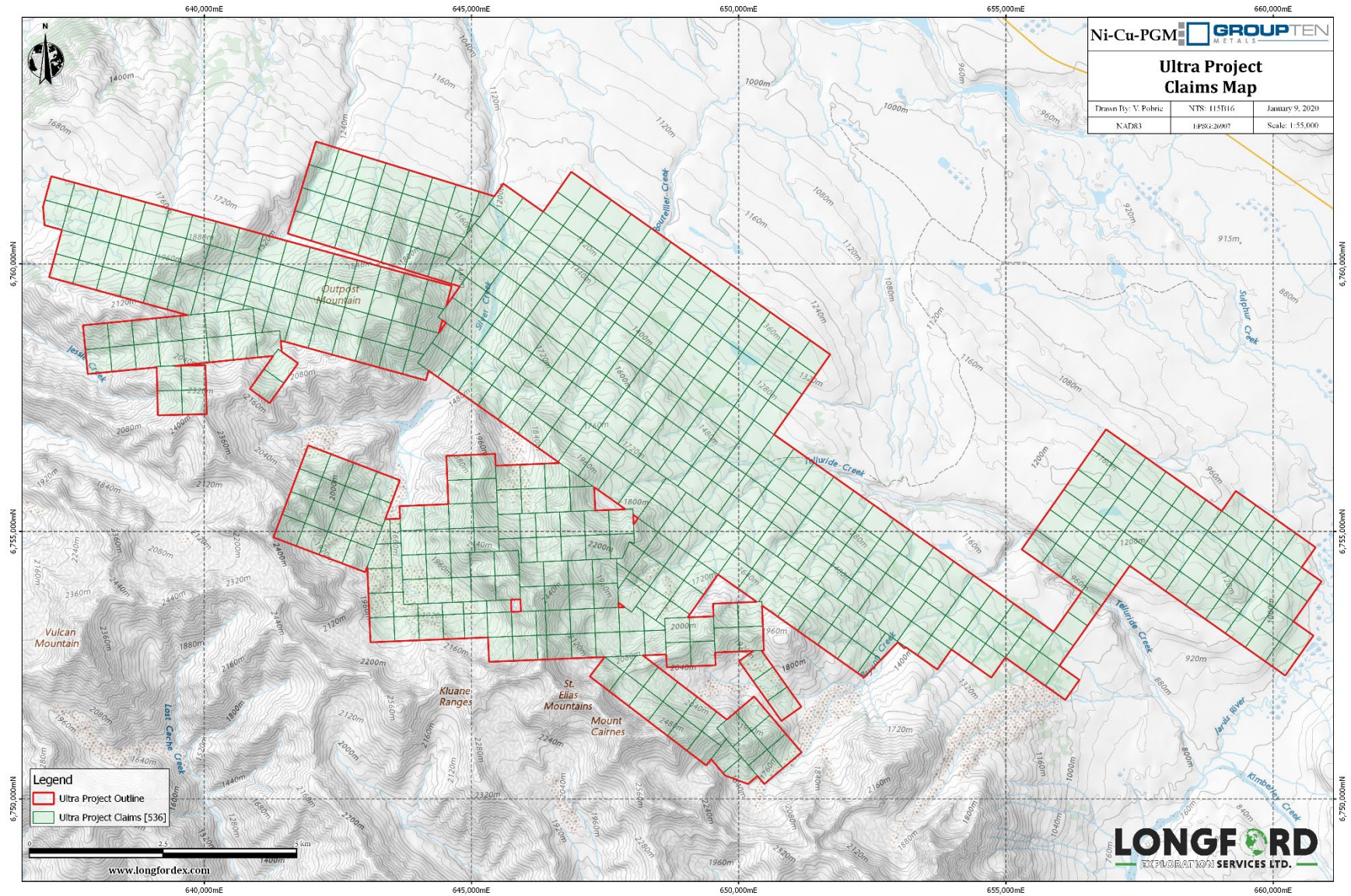


Figure 3.2: Ultra Property mineral claims.

## 4 History

### 4.1 General Timeline

Previous exploration on the Ultra Project, undertaken from 1955 to 2018, has involved approximately 440 m of drilling in 8 holes (4 of which were lost), all on the Boulder showing, hand/blast trenching, rock, soil and silt geochemistry, mapping, prospecting, minor petrography, a 1977 airborne electromagnetic survey, a 2004 airborne total magnetic field and electromagnetic survey, rock geophysical properties analysis, ground electromagnetic (Turam, horizontal loop, VLF) and magnetic geophysical surveys (Pautler J., 2015).

A summary of the work completed by various operators, as documented in Yukon Minfile (Deklerk, 2009), various government publications of the Yukon Geological Survey or its predecessor (Yukon Exploration and Geology) and the Geological Survey of Canada and company publications (primarily available as assessment reports filed with the government) is tabulated below in Table 4.1.

*Table 4.1: Exploration history of the Ultra Property (after Pautler, 2015).*

Period	Summary
1903-04	Placer gold first mined at Silver Creek and Telluride Creek and discovery of “crushed copper-pyrite zones” near junction of Cub Creek with Telluride Creek by placer miners (GSC, 1905).
1955-1958	Resistivity, magnetic and gravity surveys, diamond drilling of 108m in 3 holes in 1956 (failed to reach bedrock) on Boulder showing (Clark, 1956) and discovery of Frohberg Ni-Cu-PGE showing in 1958 by Gaymont Prospectors Syndicate, which included Teck Exploration Company Limited and Iso Uranium.
1961-1962	Turam electromagnetic survey outlined several conductors (Watson, 1961) which were tested by 116m of rotary drilling in two holes in 1962 on Boulder showing by Canadian Exploration Limited, which were reported to contain some disseminated native copper (Woodcock, 1967).
1964	Staked by Meridian Syndicate but no work conducted.
1965-67	Turam electromagnetic survey, outlining several conductors in Boulder showing area (Bosschart, 1966), soil sampling and geological mapping conducted by Coranex Limited (Woodcock, 1967).
1970	Program of electromagnetic surveying, soil sampling, geological mapping and diamond drilling of 216m in 3 holes on Boulder showing by Atlas Exploration Limited under option. Conductor explained by coal seams and marcasite in porous sedimentary unit (Coates, 1970).
1977	Scintrex airborne electromagnetic survey, Maxmin orientation survey, mapping, prospecting on Boulder and Frohberg showings with discovery of the Telluride massive sulphide showing by Aquitaine Oil Co. (Abbott and Cathro, 1977).
1983-84	Prospecting, silt geochemistry and geological mapping by Noranda returned anomalous copper, silver, zinc, and lead in silts and rocks southeast of Outpost Mountain (Kul showing) and discovery of Jennifer copper-silver-(gold) showing (Reid, 1985).

Period	Summary
1984	Geological mapping and prospecting of Jennifer showing by S. J. Hill, with values of 1344 g/t Ag, 0.62 g/t Au and 22.5% Cu, with 7.8 g/t Au previously reported (Rogers, 1985).
1987	Geological mapping, prospecting and soil and rock geochemistry on the Frohberg showing by Nordac Mining Corp. (Eaton, 1988a) and exploration of the adjacent ultramafic targets, and geological mapping of the area from the Telluride showing to the massive sulphide boulders at the mouth of Cub Creek was undertaken by the Reed Creek Joint Venture (Eaton, 1988b).
1988-89	Small trenching and sampling program on the Jennifer showing by Ron Stack returned values of 685 g/t Ag and 16% Cu (Stack, 1989).
2000-03	Programs by Cabin Creek Resources Management Inc. and/or Tom Morgan of geological and geochemical surveys in 2001 on Boulder and Frohberg showings (Brickner, 2002), re-sampling of the massive sulphide boulders in 2002 with values of 2.1% Cu, 5.1% Zn and 24.5 g/t Ag (Mann and O'Shea, 2006), horizontal loop electromagnetic, VLF-EM and magnetometer surveys identifying three conductors and a magnetic low anomaly proximal to the boulder occurrences (Casselman, 2003), a blast trenching program on the Frohberg Showing, which returned sample values of 5.54 g/t Pt, 13.46 g/t Pd, 4.07 % Cu and 1.73% Ni in 2002, and extension of the HLEM survey (Jackson, 2003).
2004	Airborne total magnetic field and electromagnetic surveys (200 line km) using the McPhar Hummingbird system, outlining 54 conductors, and a geological mapping and prospecting program by Klondike Gold Corporation (Casselman, 2005).
2005-06	Programs by Klondike Star Mineral Corporation, under option, consisting of prospecting, line cutting, a VLF-EM and magnetic survey over the Frohberg Ni-Cu-PGM showing, delineating the continuation of the ultramafic body, and horizontal loop electromagnetic surveys on the Lake and Redball grids in the Boulder showing area, delineating conductors consistent with a volcanogenic massive sulphide model (Hildes, 2006 and Mann and O'Shea, 2006). Property wide geological mapping and geochemical sampling, detailed mapping of the Telluride, Frohberg, Redball and Silver Creek East areas, grid MMI soil surveys on the Lake, Redball and Silver Creek East grids, a beep mat geophysical survey over the Boulder showing, and trenching on the Telluride showing was conducted in 2006. The Telluride VMS horizon was traced for 6 km and returned a sample value of 3.23% Cu, 6.75% Zn, 17.8 Ag, 0.15 Au over 4m (Pautler, 2006).
2008	Detailed sampling of the Telluride volcanogenic massive sulphide horizon and Frohberg showing was conducted by Tom Morgan with rock sample results of 2.1% Ni, 2.06% Cu, 3.65 g/t Pd, and 630 ppb Pt and 2.56% Cu, 2.30% Ni, 1.85 g/t Pd, 220 ppb Pt and elevated rhodium (Rh) of 0.315 ppm from Frohberg. Also gold values of 480 and 410 ppb in the footwall portion of the two massive sulphide lenses at the Telluride showing (Morgan, 2008).
2011	Mapping, prospecting, rock geochemical sampling, evaluation of nickel-copper-PGE potential, detailed examination of Frohberg showing and evaluation of gabbro-ultramafic body northeast of Jesse showing for Tom Morgan (Pautler, 2012a).

Period	Summary
2012	Soil geochemical sampling and prospecting of a 2010 government aeromagnetic anomaly, with similar size and amplitude to that at the Wellgreen deposit, on the eastern UZ claims by Tom Morgan. Work was filed in 2013, following the option by Ashburton Ventures Inc., which partially funded the program. Results indicated copper, palladium, platinum enrichment along the inner edge of the magnetic high and zinc, copper, silver, nickel, ±molybdenum enrichment at the outer edges over almost 3 km, the latter centred approximately 1 km to the west (Morgan, 2013).
2013-14	Ashburton Ventures Inc. funded program of compilation and merging of historical geophysical data sets and petro-physical studies on property samples and lithological units, which indicated that the ultramafic units and one gabbro sample have a consistent and high magnetic susceptibility, with moderately high susceptibility in the massive sulphides, the Nikolai group and gabbroic samples, and the mineralized units all have a low resistivity signature coupled with high chargeability (Jackson, 2014).
2014	Aurora Geosciences completed a ground magnetometer and VLF survey (17km) on the UZ claims. J Pautler collected 1 soil and 16 rock samples on the Frohberg area, documented in a comprehensive report for Duncastle Gold Corp (Pautler, 2015).
2016	UAV mag survey (28.9km) by Longford Exploration Ltd. and Pioneer Exploration on the UZ claims for Group Ten Metals Inc. (Rogers, 2016).
2017	Longford Exploration Services Ltd. carried out programs of soil geochemistry, geological mapping and prospecting on the UZE claims for Group Ten Metals Inc. (Davidson, 2018).
2018	Longford Exploration Services Ltd. carried out programs of soil geochemistry on the UZE claims, as well as other geophysical targets, and conducted geological mapping and XRF surveys over the Main Sill, as well as other geophysical targets.

## 4.2 Geochemistry

Table 4.2: Previous geochemistry (after Pautler, 2015).

Period	Summary
1955	The first claims were staked by Gaymont Prospectors Syndicate over the Boulder showing, which probably corresponds to the original “crushed copper-pyrite zones” discovered by placer miners in 1904 (Geological Survey of Canada, 1905). No assays were reported from the boulders at this time.
1958	The Frohberg nickel-copper-PGE+gold showing was discovered by Gaymont Prospectors Syndicate in 1958, with rock sample values of 18.9% Cu, 2.75% Zn, 0.4% Ni, 7.54 g/t Ag and 3.43 g/t Au, while tracing the source of the massive sulphide boulders at the Boulder showing (Abbott and Cathro, 1977).
1965	Coranex Limited obtained an average of 1.6% Cu, 4.4% Zn and 6.86 g/t Ag from six channel samples across the layering in the massive sulphide boulders at the Boulder showing (Abbott and Cathro, 1977).
1967	A detailed 71 sample silt survey was conducted along the upper drainages of Telluride Creek by Coranex Limited to explore for the source of the massive sulphide boulders at the Boulder showing. Samples were analyzed for copper, zinc, total heavy metals and occasional lead but significant results were not obtained from Cub Creek

Period	Summary
	(Woodcock, 1967). A 77-sample soil geochemical survey was also completed by Coranex Limited in 1967, with analysis for copper, zinc and mercury. A mercury anomaly was found to coincide with the margins of the 1966 Turam conductor (Woodcock, 1967). The source of the boulders was thought to originate from the southeast from the area of the conductor due to glacial movement along the Shakwak valley (Woodcock, 1967).
1970	The Atlas program located massive sulphide float, 3 km upstream of the original Boulder showing along Cub Creek, with values of 0.25% Cu, 3.96% Zn and 19.2 g/t Ag (Abbott and Cathro, 1977).
1977	A geochemical sampling program by Aquitaine Oil Company on the Boulder, Telluride and Frohberg showings returned values of 1.40% Cu, 13.9% Zn and 46.6 g/t Ag from the Boulder showing and values of 1.15% Cu, 0.02% Zn, 0.86% Ni, 6.86 g/t Ag and 5.14 g/t Pd from the Frohberg showing. The Telluride massive sulphide showing was discovered and a brief examination returned 0.50% Cu, 5.22% Zn and 7.54 g/t Ag from a composite sample of the massive sulphides (Abbott and Cathro, 1977).
1984	A geochemical survey, involving the collection of 38 silt and 37 rock samples, in the area north of the Jennifer showing (Kul showing) was undertaken by Noranda Exploration Company Limited, following up silt anomalies obtained in 1983 (Reid, 1985). The survey outlined a 50-hectare drainage basin with anomalous copper, silver, zinc, and lead in an area north of the west branch of Silver Creek, southeast of Outpost Mountain. The drainage basin contains quartz stockwork and veins with malachite, chalcocite, galena hosted by black phyllitic argillite and limestone and limestone with pyrrhotite and chalcopyrite stringers returning rock sample values of 5200 ppm Cu, 4800 ppm Pb, 600 ppm Zn, 450 ppm Ag and 220 ppb Au. Results of > 4% Cu, 472 ppm Pb, 9200 ppm Zn, >500 ppm Ag and 440 ppb Au were obtained from the Jennifer showing. Grab samples were also collected from the Jennifer showing in 1984 with rock sample values of 1344 g/t Ag, 0.62 g/t Au and 22.5% Cu, with a previous sample reported to assay 7.8 g/t Au (Rogers, 1985).
1987	126 soil and 43 rock samples were collected from the Frohberg showing and surrounding areas underlain by mafic to ultramafic intrusions by Nordac Mining Corp. (Eaton, 1988a) and 52 soil and 38 rock samples by the Reed Creek Joint Venture from an area underlain by mafic to ultramafic intrusions 3 km southeast of the Frohberg showing (Eaton, 1988b) and analyzed for copper, nickel, gold, palladium and platinum. The Nordac program returned rock sample values of 1.6% Cu, 0.21% Ni, and 2.2 g/t Pd from the Frohberg showing but only 0.14% Ni and 0.07% Cu from surrounding areas and the Reed Creek JV returned values of 0.19% Ni and 0.06% Cu with no anomalous gold or PGE values.
2001	Fifty rock samples were collected in 2001 from the Frohberg showing and other exposures of mafic to ultramafic rocks on the property yielding rock sample values of 1.97 g/t Pd, 0.203 Pt g/t and 1.66% Cu from the Frohberg showing and rock sample values of 2.7% Cu, 0.83% Ni, 4.1% Zn and 23.5 g/t Ag from other exposures of mafic to ultramafic rocks (Brickner, 2002). In 2002 sampling of conglomerate float with malachite and sulphide stringers from the Boulder showing returned 0.86% Cu, 1.86% Zn and 85.1 g/t Ag (Table 3 and Morgan and Matkovich, 2003) and values of 5.54 g/t

Period	Summary
	Pt, 13.46 g/t Pd, 4.07% Cu and 1.73% Ni over 0.5m from trenching on the Frohberg showing (Pautler, 2012).
2004	Numerous quartz-pyrite stockwork boulders were identified by Klondike Gold Corporation in the headwaters of Bryson Creek returning rock sample values of 1.14% copper with anomalous arsenic, mercury, antimony and zinc. Weak to moderate pyrite stockwork mineralization was also uncovered in mafic volcanic rocks in a number of creeks, including Boutellier Creek, along the eastern side of the claim boundary, which were thought to represent a feeder system to the VMS style mineralization at the Boulder showing (Casselman, 2005).
2006	<p>Klondike Star Mineral Corporation collected 157 rock and 16 soil samples across the property and completed MMI grid soil surveys (242 samples) on the Redball (100), Lake (62), and Silver Creek East (80) grids in 2006 to test for the presence of massive sulphide mineralization in areas of previously outlined geophysical conductors below thick deposits of glacial till where conventional soil sampling is ineffective (Pautler, 2006).</p> <p>On the Redball grid an airborne geophysical conductor occurs at L100N/9975E along with a geochemical anomaly in cobalt molybdenum-barium and to a lower degree, copper. Multi-element anomalies occur just to the south. One copper-cadmium-cobalt-lead-(barium)-(zinc) anomaly is centred at L100N/9850E (650298mE, 6755288mN) and lies within the 1961 Turam conductor. Another multi-element anomaly lies at the southern edge of the 1961 Turam conductor at 10150N/9750E (650187mE, 6755227mN) and includes copper-cadmium-cobalt-lead-barium-(molybdenum). Another high copper-cadmium cobalt-molybdenum-iron-zinc-barium-(lead) multi-element anomaly occurs in the northeastern grid area but is less distinct. A copper-molybdenum-iron-zinc (cadmium)-(cobalt) anomaly occurs centred at L10250N/100E at the northwest edge of the grid.</p> <p>The Lake grid covers a till covered area with geophysical anomalies consistent with the VMS model (Hildes, 2006) that could be the source of the boulders from the Boulder showing with late reverse movement of the Shakwak Ice Sheet. A high copper-iron-molybdenum-barium anomaly occurs in the northeastern grid area and in the central area of L91N and L92N. A broad cadmium anomaly with some coincident zinc occurs through the northern two-thirds of the grid. The lack of exposure in this area and limited number of samples makes interpretation difficult but is also consistent with the presence of the Denali Fault, thought to transect the area.</p>
2008	Rock geochemical sampling reported by Tom Morgan in 2008 (16 samples) returned 2.1% Ni, 2.06% Cu, 3.65 g/t Pd, and 660 ppb Pt over 0.5m from semi-massive pyrrhotite in the hanging wall chert 4m above a gabbro dike, and 2.56% Cu, 2.30% Ni, 1.85 g/t Pd, and 220 ppb Pt, 0.315 ppm Rh over 0.25m along the gabbro footwall, 200m to the northwest of the Frohberg showing. Rhodium (Rh) is one of the rarest elements in the Earth's crust. Rock sampling of the Telluride North showing returned 5.53% Cu and 42.0 g/t Ag over 2m, and 4.60% Cu and 33.9 Ag g/t over 1.5m, and 7.06 % Cu, 32.3 g/t Ag, and 2.21% Zn from two adjacent samples, as well as gold enrichment of 480 and 410 ppb in the footwall portion of the two largest lenses.

Period	Summary
2012	The 2012 program reported by Tom Morgan (2013) involved soil geochemical sampling and prospecting of a 2010 government aeromagnetic anomaly (Kiss, 2010a, b), with similar size and amplitude to that at the Wellgreen deposit, on the eastern UZ claims. A total of 157 soil and 3 rock samples were collected at a 25m sample spacing on 11 out of 18 lines (L0-L17), generally 200m apart, over the southern contact of the anomaly (gaps in sampling between lines 6 and 11, and 12 and 16). Soil sample results indicated elevated copper, palladium, platinum values correlating with the edge of the magnetic high (values of 2019 ppm Cu, 34 ppb Pd, 12 ppb Pt) and weakly elevated zinc, copper, silver, nickel, $\pm$ molybdenum, $\pm$ gold values centred approximately 1 km to the west of the magnetic high (soil sample values of 1429 ppm Zn, 371.5 ppm Cu, 458 ppb Ag, 259.5 ppm Ni, 13.6 ppm Mo and 596.3 ppb Au). Another weakly anomalous area appears to be emerging at L17/025N with soil sample values of 345.6 ppm Zn, 105.8 ppm Cu, 387 ppb Ag, 121.3 ppm Ni and 20.76 ppm Mo.
2014	J. Pautler collected samples from the 2002 trench on the Frohberg showing which returned 7.91 g/t Pd, 1.00 (repeated at 3.24 by a different analysis) g/t Pt, 0.37 g/t Au, 1.98% Cu and 0.94% Ni from the silicified tuffaceous rocks (sample number YCRR82048) and a grab sample also returned 3.44% Cu with 0.71% Ni, with 0.26 g/t Au, 1.9 g/t Pt, and 10.9 g/t Pd (14ULT01), (Pautler, 2015). Samples of gabbro from the showing returned 0.54% Cu with 0.227% Ni with 182 ppb Pd (YCRR82045) and 0.02% Cu, 0.18% Ni with 178 ppb Au (16851). The latter sample is part of the Main sill, which was traced over 3 km to the west.
2017	Longford Exploration field crews conducted prospecting traverses, geological surveys and soil geochemical sampling on the UZE claims, including 13 rock samples and 387 soil samples on soil lines targeting geochemical and geophysical anomalies. The 2017 exploration work on the UZE claims identified soil geochemical anomalies in an area underlain by a quartz monzonite (EKK) intruding Bear Creek Assemblage metamorphic rocks with local pods of magnetite-epidote-actinolite skarn (Davidson, 2018).
2018	Longford Exploration field crews conducted prospecting traverses, geological surveys and soil geochemical sampling over various magnetic anomalies across the property. A total of 518 soil samples were collected primarily on the Uze area and 60 rock samples were collected from across the property.

### 4.3 Geophysics

Table 4.3: Previous geophysics (after Pautler J., 2015).

Period	Summary
1955-56	A resistivity and magnetic survey and three uncorrected gravity profiles were completed in the Boulder showing area by Gaymont Prospectors Syndicate in 1955 to 1956 to locate the source of the massive sulphide boulders at the Boulder showing. A magnetic high and resistivity low was outlined approximately 300m southwest of the most upstream occurrence of boulders known at this time. Results of the gravity survey were inconclusive (Clark, 1956).
1961	A Turam electromagnetic survey over the Boulder showing by Canadian Exploration Limited in 1961 outlined a northwest trending broad conductive zone with several

Period	Summary
	conductive trends that appeared to correlate with the 1956 (Clark's) resistivity anomaly (Watson, 1961).
1966	Another Turam electromagnetic survey was completed over the Boulder showing by Coranex Limited in 1966 outlining a small conductor southeast of the massive sulphide boulder float, assumed to lie up ice of the Shakwak ice trend (Bosschart, 1966).
1977	An airborne electromagnetic survey, carried out by Scintrex, and a Maxmin orientation survey was completed in 1977 by Aquitaine Oil Co. to locate the source of the massive sulphide boulders at the Boulder showing, but results were not published (Abbott and Cathro, 1977).
2002	A horizontal loop electromagnetic (HLEM), VLF-EM and magnetic surveys, totaling 8.625-line km, were completed over the Ultra grid, on the Boulder showing, identifying two conductors and a magnetic low anomaly proximal to the boulder occurrences. A VLF-EM survey was also completed over the Frohberg showing but did not indicate any conductivity (Casselman, 2003). In 2003 the HLEM survey over the Ultra grid was extended (Jackson, 2003).
2004	A 200-line km airborne total magnetic field and electromagnetic survey using the McPhar Hummingbird system was completed in 2004 by Klondike Gold Corporation over the lower slopes in the northeastern property area, directed towards locating the source of the massive sulphide boulders of the Boulder showing. A total of 54 EM anomalies were outlined and several northwest trending narrow magnetic highs which may outline ultramafic sills of the Kluane Ultramafic Suite (Figure 6.3) (Casselman, 2005).
2005	A VLF-EM and magnetic survey was undertaken over the Frohberg Ni-Cu-PGE showing and horizontal loop electromagnetic (HLEM) surveys were completed on the Lake and Redball grids in the Boulder showing area (Hildes, 2006) by Klondike Star Mineral Corporation under option. The Redball grid covers the best anomaly identified by the 2004 airborne electromagnetic survey and confirms anomalies identified by the 2002-2003 ground HLEM survey on the Ultra grid but was better oriented with respect to the regional geological strike (Mann and O'Shea, 2006). A conductor was outlined adjacent to a magnetic high anomaly on the Redball grid coincident with the Redball airborne anomaly and within the 1961 Turam electromagnetic anomaly. On the Lake grid a conductor was delineated southwest of a central, intermediate magnetic high anomaly (Mann and O'Shea, 2006). Both the Lake and Redball anomalies are consistent with the VMS model (Hildes, 2006). However, the Denali fault is thought to transect the Lake grid area and would be consistent with the anomalies obtained. A fault was also mapped in Alteration Creek in 2006 that follows the trend of the 1961 Turam electromagnetic anomaly. The VLF survey at the Frohberg showing confirmed the continuation of the host ultramafic sill that is partially obscured by overburden. The magnetic survey suggests that the Frohberg showing represents an apparent offshoot of a larger body underlying the creek, in an area with little outcrop.
2014	The 2014 magnetic (TMF) and VLF-EM survey covered approximately 17-line km over the UZE aeromagnetic anomaly in the eastern property area (Hildes, 2014). The grid is referred to as Jarvis River East in the memo by Hildes (2014) but has been renamed the UZE grid. A strong well-defined conductor (1) follows a very weak magnetic high in

Period	Summary
	the southern grid area, corresponding to the open-ended copper-nickel-PGE soil anomaly from 2012. Strong magnetic highs were identified in the northern half of the grid and are consistent with responses over ultramafic bodies. A lower order magnetic high anomaly (B) is truncated by a VLF conductor, interpreted to be a fault (F). The main magnetic high anomaly (A) is coincident with a well-defined VLF response (2), which is slightly less distinct to the east of the interpreted fault (3) (Hildes, 2014).
2016	UAV mag survey (28.9km) by Longford Exploration Services Ltd. and Pioneer Exploration on the UZE claims for Group Ten Metals Inc. contiguous to the 2014 survey Identified a magnetic high through the center of the claim block (Rogers, 2016).
2017	Aurora Geosciences Ltd. released reprocessed geophysical imagery for map sheet 115B in Open File 2017-33 (Figure 4.1).

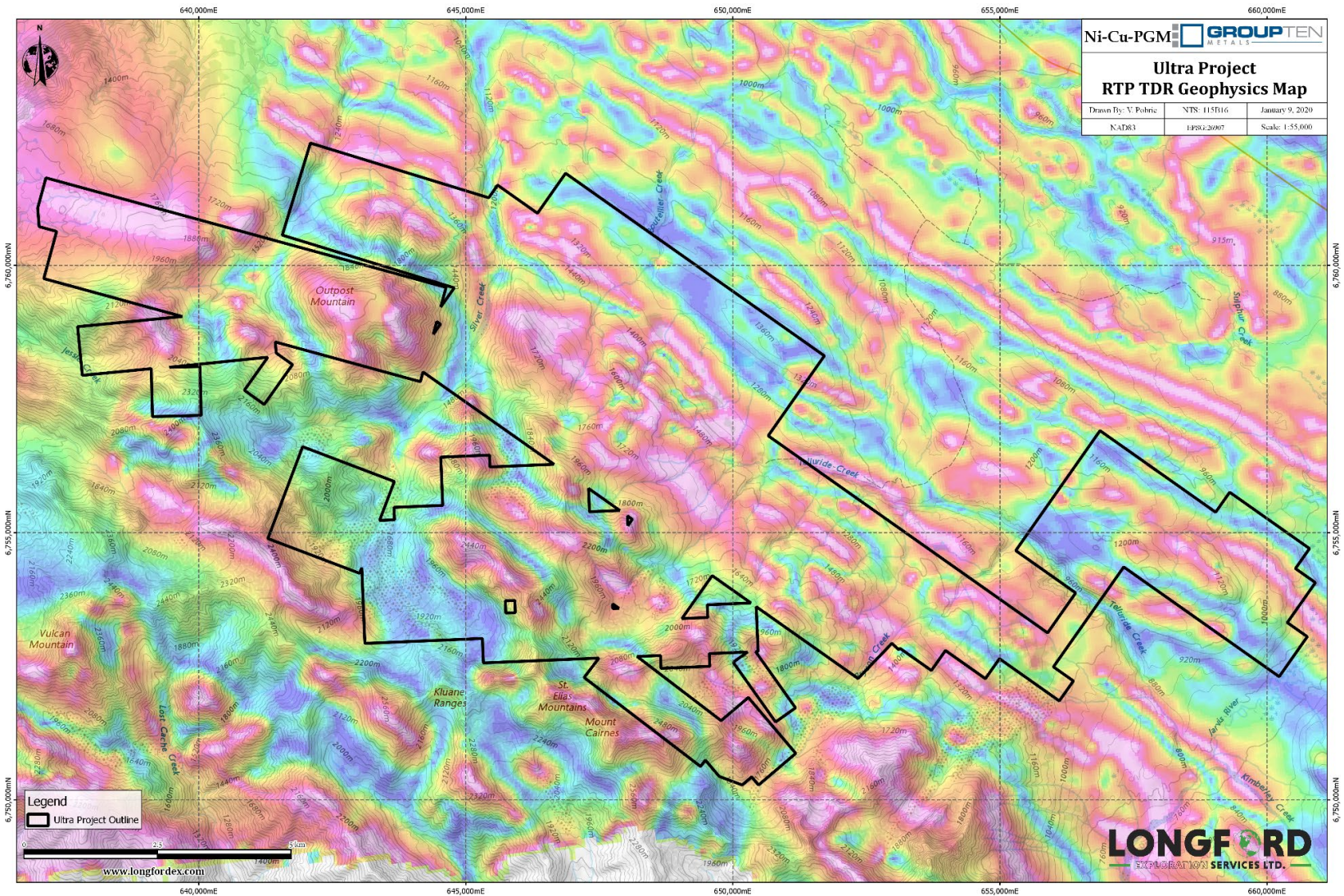


Figure 4.1: Ultra Property regional geophysics reduced to pole tilt derivative (Open File 2017-33).

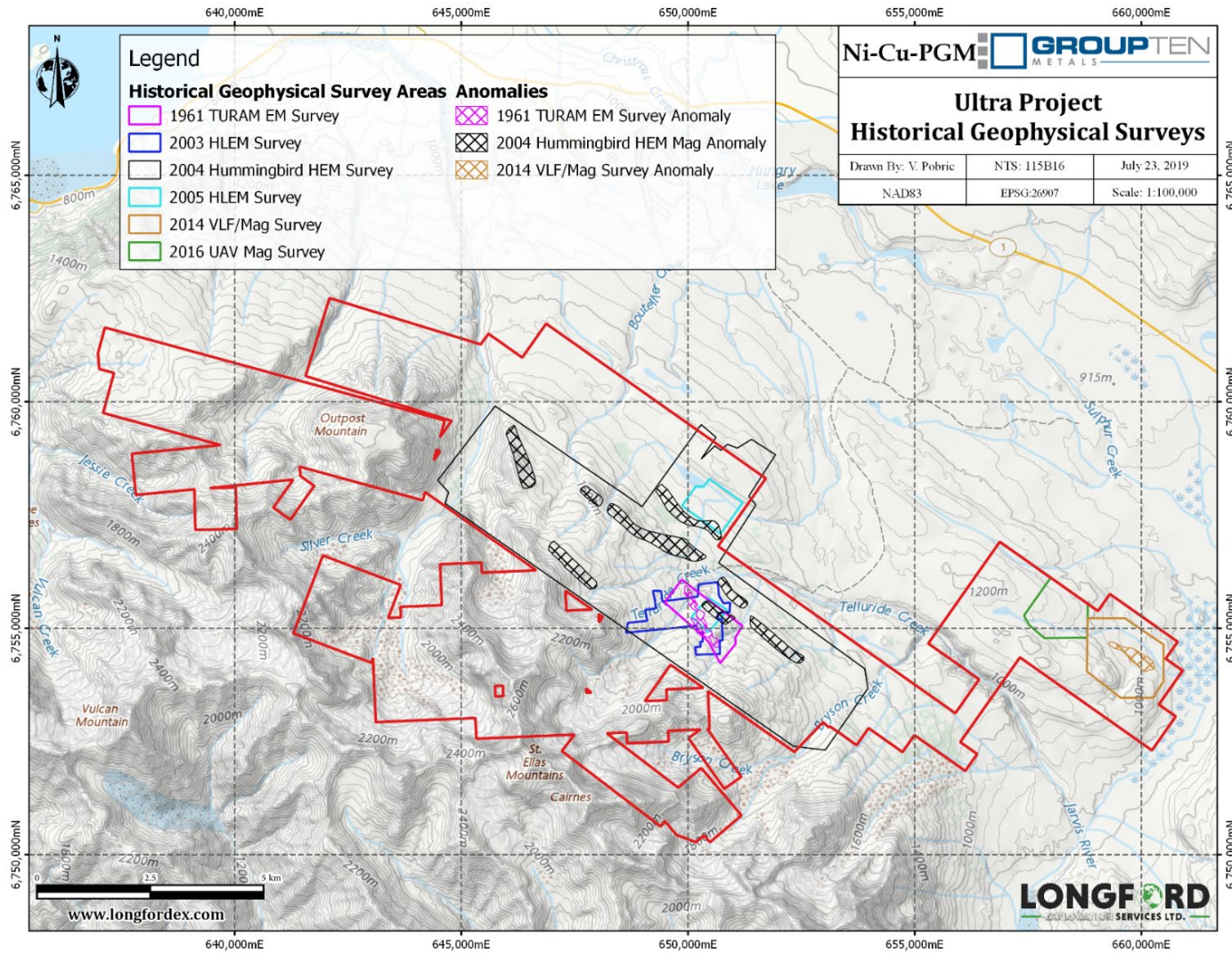


Figure 4.2: Historical geophysical surveys and anomalies.

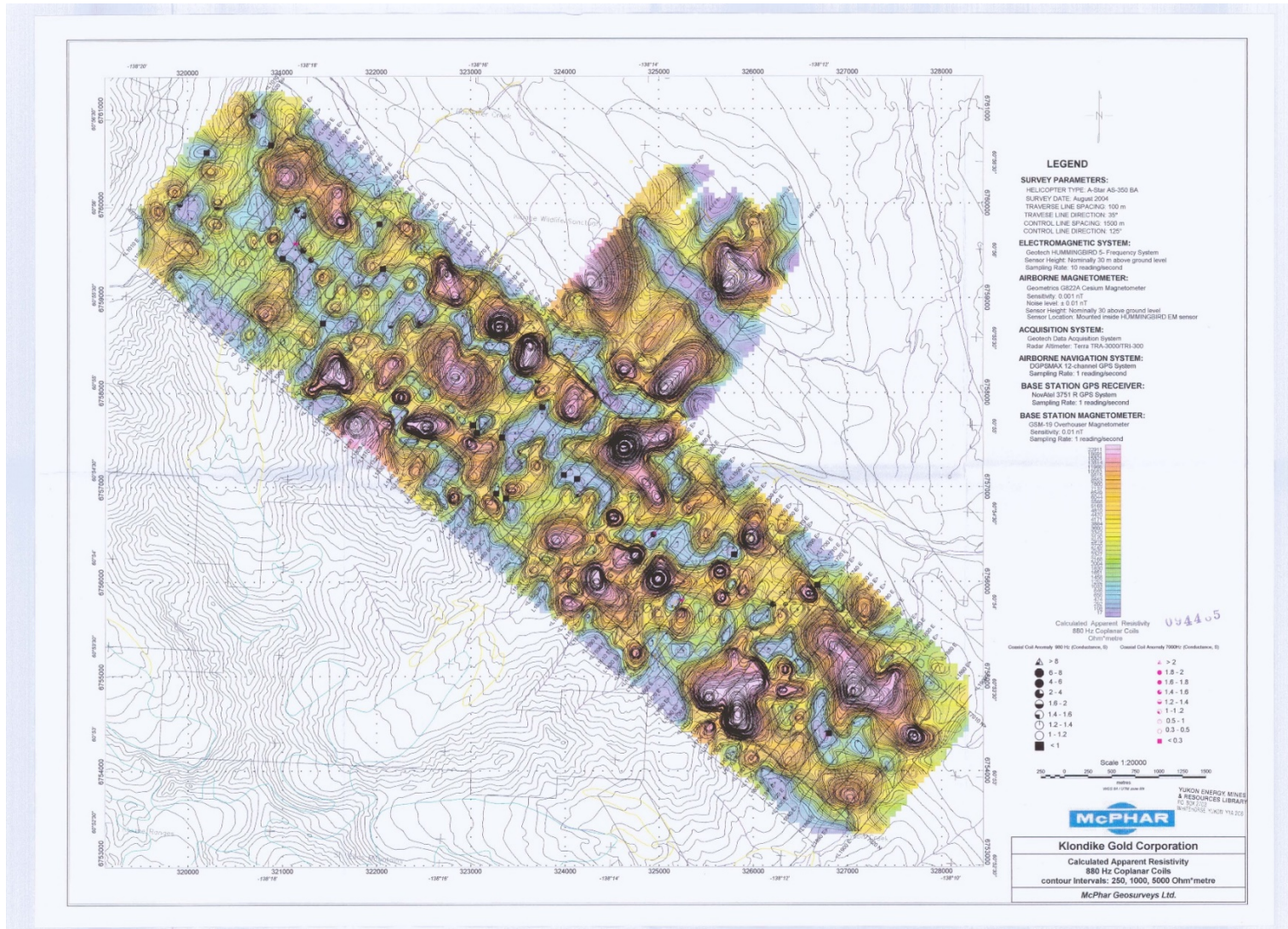


Figure 4.3: 2004 HEM survey calculated apparent resistivity.

## 4.4 Trenching

Table 4.4: Previous trenching and rock sampling (after Pautler, 2015).

Period	Summary
2002	In 2002 a hand trench was excavated at the southeastern end of the Frohberg showing, returning 5.54 g/t Pt, 13.46 g/t Pd, 4.07% Cu and 1.73% Ni over 0.5m from the silicified tuffaceous rocks at the margin of a gabbro sill (Morgan and Matkovich, 2003). An ultramafic body, 2 km southeast of the Frohberg returned 1526 ppm Ni, but with no associated gold. Previous sampling from this sill returned values up to 665 ppm Cu and 1500 ppm Ni but with no anomalous gold or PGE values (Eaton, 1988a).
2006	A helicopter pad was blasted at UTM coordinates 6753935mN, 646309mE, Nad 83, Zone 7 to facilitate access to the Telluride showing and hand/blast trenching was undertaken by Klondike Star Mineral Corporation in 2006 (Pautler, 2006).
2006	In 2006 the Telluride horizon was discontinuously traced, due to glacier cover, 6 km along strike to the southeast. The Telluride showing was systematically sampled and four hand-blast trenches (trenches TR 06-1 to TR 06-4, from south to north) were excavated in the lower, southern, offset portion of the massive sulphide horizon (Telluride South) over a strike length of 60m (Figure 7.6). Four additional trenches (trenches TR 06-5 to TR 06-8, from south to north) were excavated in the upper, northern portion of the massive sulphide horizon (Telluride North) over a strike length of 100m. The massive sulphide horizon trends 130-140°/ 45-70°S, ranges from 0.5 to 4m wide, has been traced for 200m and remains open along strike. The central portion overlies a 35m stockwork zone. The showing itself returned rock sample values of 3.23% Cu, 6.75% Zn, 17.8 Ag, 0.15 Au over 4m with grab sample values of 13.4% Cu, 6.75% Zn, 56 ppm Ag, 0.25 ppm Au. Sampling of the ridge 2 km southeast of the showing did not return anomalous values. However, another lense is partially exposed in a nunatak, 3 km southeast of the Telluride showing with rock sample results of 11.54% Cu, 1514 ppm Zn and 7.2 g/t Ag over 3m. The footwall returned 796 ppm Cu with 358 ppm Zn. One km further along strike to the southeast of the Nunatak showing (4 km southeast of the Telluride showing), semi massive pyritic horizons, sulphide bearing quartz veins and pyrite-chalcopyrite stockwork type mineralization is exposed along a rugged north facing slope with values of 2.34% Cu and 50.9 g/t Ag over 2m; and 5.34% Cu and 9.7 g/t Ag over 0.5m. This appears to be the source of the copper bearing boulders in Bryson Creek that returned 1.14% Cu in 2004. Anomalous values up to 295 ppm Cu, 2214 ppm Zn and 607 ppm Pb were obtained from a cliff face 6 km along strike to the southeast of the Telluride showing, on the east side of upper Bryson Creek (Pautler, 2006).

## 4.5 Drilling

Three drill programs, totaling 440 metres in 8 holes (4 holes lost prior to reaching target depth), were completed on the Ultra Project, all on the grassy uplands of the Boulder showing area, between 1956 and 1970, testing for the source of the massive sulphide boulders. Table 6.5 below summarizes the drill programs and most of the drill sites were located in the field in recent years.

Table 4.5: Historic Drilling (after Pautler J., 2015).

Period	Summary
1956	Gaymont Prospecting Syndicate: 3 diamond for 108 m. The 1956 drill program tested the magnetic high and resistivity low anomaly approximately 300m upstream of the most upstream occurrence of boulders but failed to reach bedrock as the casing twisted off due to extensive boulder till (Clark, 1956).
1962	Canadian Exploration Limited: 2-rotary for 116 m. The 1962 churn drill program tested conductors in the eastern portion of the geophysical anomaly but did not intersect massive sulphides. The cuttings were reported to contain some disseminated native copper (Woodcock, 1967).
1970	Atlas Exploration Limited 3 diamond drill holes totalling 216 m. The 1970 drill program tested a conductor along the Shakwak ice trend. One hole was lost in overburden and another hole intersected coal seams and marcasite in porous sedimentary rocks thought to be responsible for the conductor (Coates, 1970). The 1970 core storage is located on the property and was examined by the author in 2006 at UTM coordinates 6756057mN, 650981mE, Nad 83, Zone 7 but is in a state of total disrepair (Pautler, 2015).

Table 4.6: Historical drill hole locations.

DDH	UTME_NAD83_Z7	UTMN_NAD83_Z7	Azi	Dip	Depth (ft)
56-1	650155	6755560	SW	-45	124
56-2	650283	6755393	SW	-50	110
56-3	650021	6755622	-	-90	120
62-A	650675	6754733	-	-90	190
62-B	650653	6754716	-	-90	190
70-1	650830	6755657	225	-55	62
70-2	650830	6755657	-	-90	362
70-3	650936	6755511	225	-60	285

## 5 Geological Setting and Mineralization

### 5.1 Regional Geology

The Ultra Property is underlain by the Alexander Terrane to the southwest and Wrangell Terrane to the northeast, together comprising the accreted Insular Super Terrane. The Alexander Terrane, west of the Duke River Fault is primarily composed of clastic and calcareous sedimentary rocks with meta-basalt to greenschist of the Silurian to Devonian Bullion Formation and the Devonian to Upper Triassic Icefield Formation, mainly clastic and carbonate sedimentary units with some greenschist volcanics.

The Wrangell Terrane bounded on the west by the Duke River Fault and on the east by the Denali Fault consists of Permian to Late Triassic calcareous to clastic sedimentary strata and meta-basalt including the Late Triassic McCarthy Formation of calcareous to carbonaceous mudstone and siltstone; the Late Triassic Nikolai Group of amygdaloidal basaltic, andesitic flows with local tuff, volcanic breccia, thin bedded shale and minor bioclastic limestone; in fault contact with the Mississippian to Permian Skolai Group consisting of volcanic and sedimentary strata of the Station Creek Formation and the overlying Hasen Creek Formation, primarily sedimentary rocks. The Station Creek Formation is a sequence of volcanic and volcano-clastic rocks with increasing sedimentary content in the upper half. In the upper 400m of the Station Creek Formation, shale siltstone, limestone and argillite are interbedded with fine grained tuff layers that decrease in abundance upwards. The contact with the overlying Hasen Creek Formation is gradual and is placed at the top of the tuff layers. The Hasen Creek Formation is a subaqueous sequence consisting of shale, cherty argillite, chert and siltstone grading up into limestone, conglomerate, greywacke and sandstone.

Northeast of the Denali Fault, Triassic meta-volcanic and meta-sediments are mapped as an overlap assemblage known as the Late Triassic Bear Creek Assemblage. Towards the northwestern portion of the project area near Silver Creek and Boutellier Creek intrusive rocks of the Kluane Ranges Suite consist of grey medium to coarse grained biotite-hornblende granodiorite, quartz diorite, quartz monzonite and hornblende diorite in the Wrangell strata. Locally dykes and small plugs of Kluane Ranges Suite intrude the Bear Creek Assemblage units east of the Denali Fault. Sills of the Late Triassic Kluane Mafic/Ultramafic Suite occur throughout the Kluane Ranges and are thought to be the subvolcanic feeder of the basic to mafic volcanics of the Nikolai Formation (Figure 5.1).

The Kluane Ultramafic Belt extends through the front ranges of the St. Elias Mountains that cross the Yukon-Alaska border and hosts sills of the Late Triassic Kluane Mafic/Ultramafic Suite that are distinctively coloured (glossy black to dark brown or light green to pale grey when altered) and can be seen as linear topographical features. The Kluane mafic/ultramafic sills are elongated cumulate bodies that locally host Ni-Cu-PGE mineralization. They are layered intrusions with a thin rim of gabbro around the margins grading into an ultramafic core of peridotite and dunite (Hulbert, 1997). The width of the sills ranges from less than 10 to 600m and they can cover up to 20 km in strike length. The sills intrude the older Skolai Group near the contact between the

underlying Station Creek Formation and the overlying Hasen Creek Formation. Most of the sills are poorly exposed and some are deformed and altered by faults. Nickel and Copper values increase from east to west along the belt. Compared to other Ni-Cu-PGE deposits worldwide, the belt is known for having high concentrations of PGEs such as Osmium, Iridium, Ruthenium and Rhodium and high Platinum to Palladium ratio (James, 2017).

Sill-like gabbroic bodies of Maple Creek Gabbro, included in the Kluane ultramafic/mafic Suite are generally found higher in the sequence than the ultramafic sills and may be feeders to the Nikolai volcanics. Maple Creek gabbros can be distinguished from Kluane gabbros because they do not grade into peridotite or dunite, can be finer grained and may display columnar jointing. They also are not associated with Ni-Cu-PGE mineralization (James, 2017).

The dominant structural direction, controlled by the major Duke River and Denali Faults, ranges in orientation from 290° to 310°. Movement of the Wrangell Terrane northwards along the Denali Fault began in the Tertiary and continues today. The fault is steeply dipping and the order of displacement may be 100s of kilometres. The Duke River Fault is also near vertical and joins the Denali Fault southwest of Haines Junction. Between the major faults small scale faulting is common and faults increase in number to the southeast. Major fold axes are oriented in the same dominant northwest direction. The folds are tight and inclined to the southwest. A later folding episode has refolded the strata at right angles to the dominant direction along northeast axes (Carne, 2003).

A recent description of the Duke River Fault by Cobbet et al (2017) follows: “In southwest Yukon, the boundary between the Alexander terrane and Wrangellia corresponds with the Duke River fault. Within these areas, the Duke River fault juxtaposes imbricated, pervasively foliated and folded greenschist-facies rocks of the Alexander terrane southwest of the fault against sub-greenschist-facies, less deformed rocks of Wrangellia. Multiple lines of evidence from this region indicate the Alexander terrane has been juxtaposed against Wrangellia along a southwest-dipping thrust fault.  $^{40}\text{Ar}/^{39}\text{Ar}$  dates from muscovite, which grew during faulting or have been reset by motion along the Duke River fault, range from 79 to 105 Ma, suggesting that ductile movement along the fault is at least as old as Cretaceous (Albian to Cenomanian). This phase of faulting is interpreted as the local expression of Cretaceous shortening, which has been documented along the length and width of the Cordillera. Cretaceous structures along the Duke River fault are overprinted by brittle deformation that affects rocks as young as Miocene (or Pliocene?). The Duke River fault appears to be accommodating present-day transgression through uplift and reactivation of the thrust fault.”

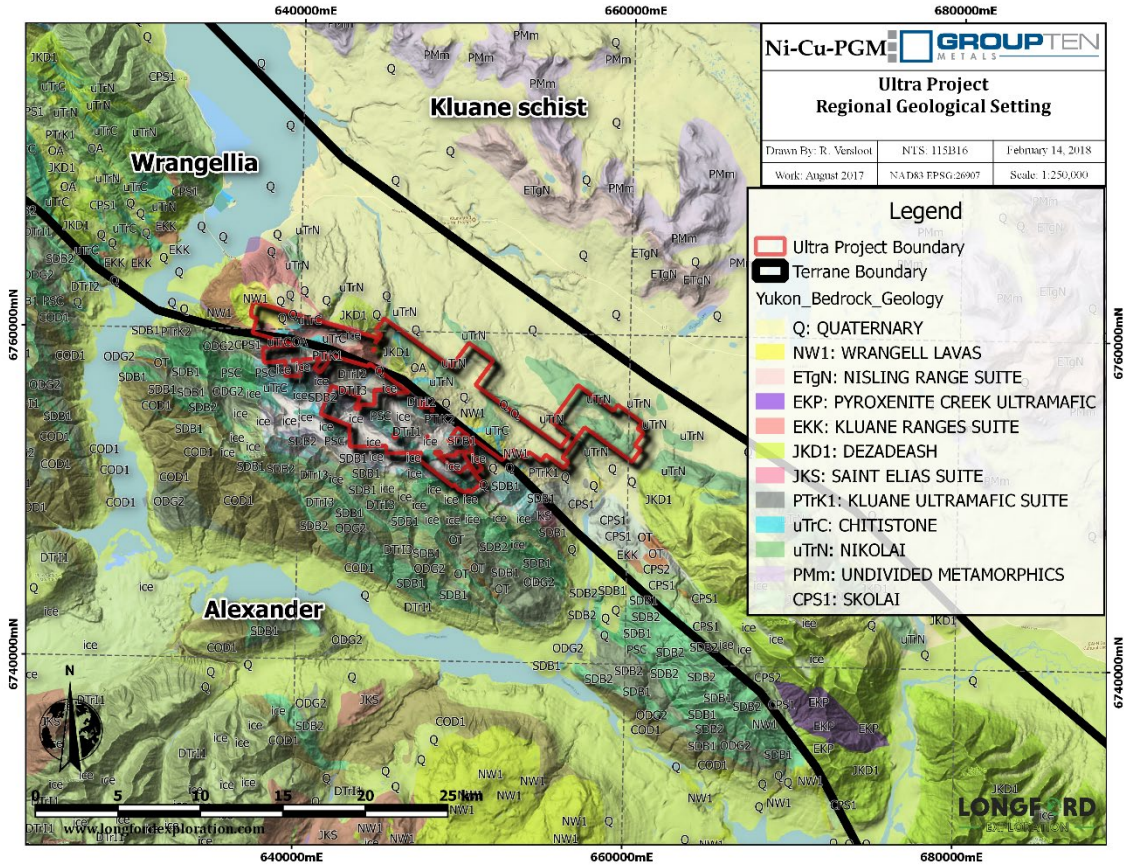


Figure 5.1: Ultra project regional geological setting.

### 5.2 Regional Mineralization

There are four main types of Ni-Cu-PGE mineralization in the Kluane Ultramafic Belt that have potential to occur on the Ultra Property and are found in all the mineralized sills from southeast Alaska to northern B.C. (Hulbert, 1997):

1. Basal accumulations of massive sulphides
2. Disseminated sulphides at the gabbro-ultramafic contact in each intrusion
3. PGE and Au+Cu rich zones associated with hydrothermal quartz-carbonate alteration at the edges of the sills and extending into the country rock.
4. Disseminated and lesser net textured or massive sulphides in the ultramafic core of each sill.

Other types of mineralization present in the Kluane Ranges include (Hulbert, 1997):

1. Skarn ores developed in Permian carbonates.
2. Ni-rich ores within the footwall in the White River sill.
3. Cu-rich mineralization in shear zones and deformed intervals of Nikolai basalt.
4. Cyprus type volcanogenic massive sulphide (VMS) mineralization in mafic volcanic rocks.

The Kloo, Telluride and Nunatak minifile occurrences in the Jarvis River area represent potential VMS occurrences proximal to ultramafic sills with model characteristics summarized by Pautler, J. (2006):

“The secondary deposit model for the Ultra Property is volcanic hosted copper-gold massive sulphide, possibly of the Cyprus type. The following characteristics of the Cyprus massive sulphide deposit model are primarily summarized from Höy (1995).

Deposits of this type typically comprise one or more concordant lenses of massive pyrite and chalcopyrite (sometimes brecciated or banded) hosted by mafic volcanic rocks, underlain by a well-developed pipe-shaped stockwork zone. The stockwork zone consists of a cross-cutting zone of intense alteration with disseminated, vein and stockwork mineralization and hydrothermally altered wallrock. The lenses may be overlain by or associated with chert layers, locally brecciated and containing disseminated sulphides. Lenses commonly occur in tholeiitic or calcalkaline marine basalts, commonly pillowed, near a transition with overlying argillaceous sediments generally within ophiolitic complexes formed at oceanic or back-arc spreading ridges and possibly within marginal basins above subduction zones or near volcanic islands within an intraplate environment. Many lenses appear to be structurally controlled, aligned near steep normal faults.

Ore mineralogy includes pyrite, chalcopyrite, magnetite, sphalerite, with lesser marcasite, galena, pyrrhotite, cubanite, stannite-besterite, hematite in a gangue of talc, chert, magnetite and chlorite. Alteration consists of chlorite, talc, carbonate, sericite and quartz veins in the core of the stringer zone, sometimes with an envelope of weak albite with illite alteration. Goethite alteration of the top of the sulphide layer may occur. Pyritic horizons occur distally and can be useful regional indicators.”

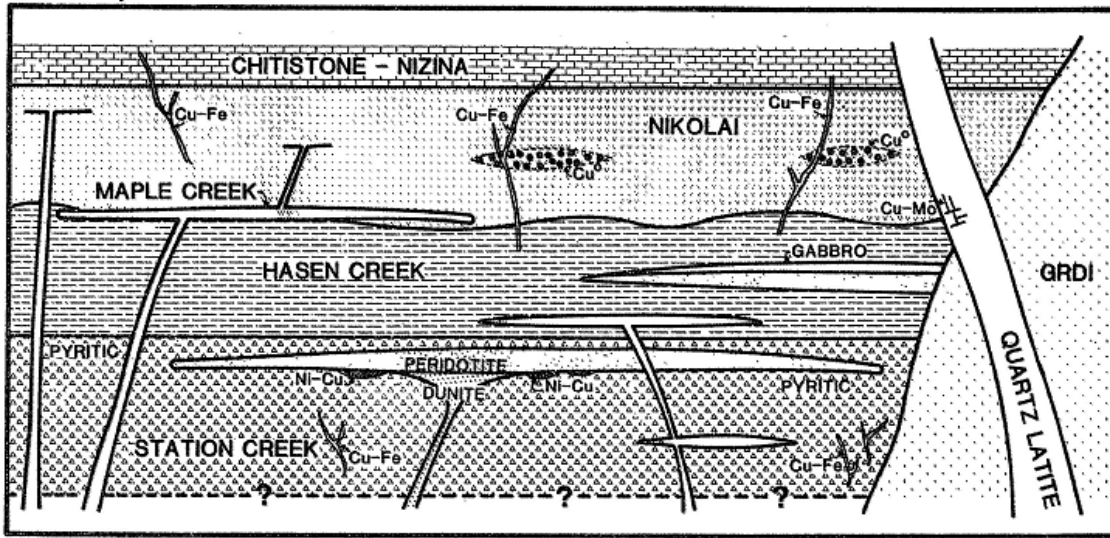


Figure 5.2: Cross section of mineral occurrences in the Klauane Ranges (from Campbell W., 1981).

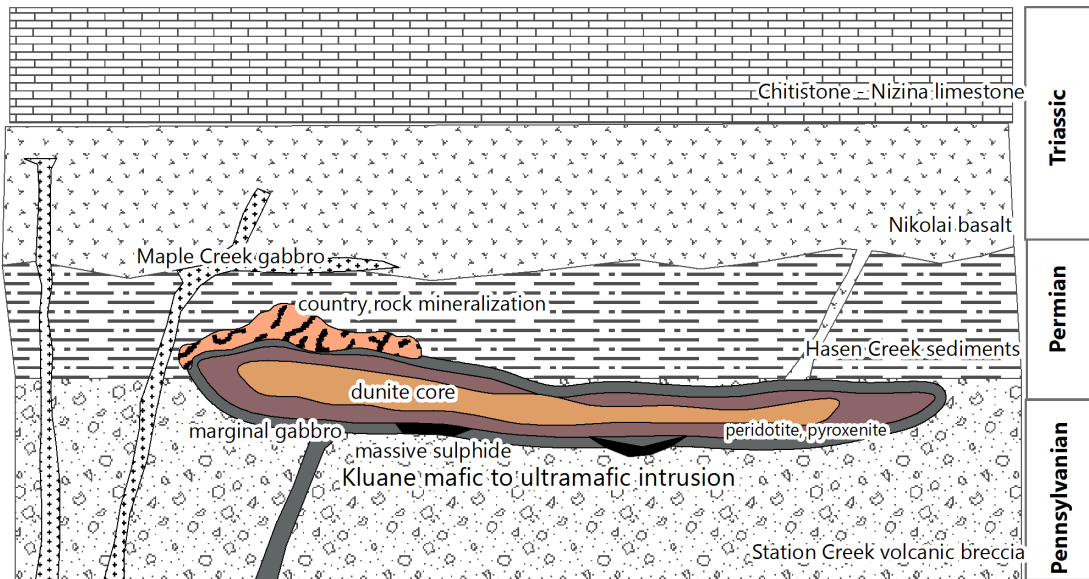


Figure 5.3: Deposit model for the Klauane Belt ultramafic sill (modified from Hulbert, 1997).

### 5.3 Property Geology

The recent work areas included the southeastern UZE claims east of the Denali Fault where the Late Triassic Bear Creek Assemblage (uTB), considered an overlap assemblage, outcrops on glaciated ridge tops consisting of strongly foliated rusty weathering massive intermediate to mafic meta-volcanic rocks, lesser meta-clastics, volcanoclastics, phyllite and carbonate

horizons intruded by quartz monzonite, aplite and pegmatite sills and dykes of the Early Cretaceous Kluane Ranges Suite (EKK, KGd).

A second overlap assemblage consisting of Upper Jurassic to Lower Cretaceous Dezadeash Formation clastic sediments (JKD), mapped east of the Denali Fault consists of dark buff-gray lithic greywacke, sandstone, siltstone, shale, argillite, phyllite and conglomerate beds (Israel, S., 2014). The Dezadeash Formation is a sedimentary map unit occurring southeast and northwest of the Ultra Property that is similar to the McCarthy Formation (uTM), generally seen in fault contact with the Late Triassic mafic volcanic rocks in stream banks. Locally, the Dezadeash Formation appears as argillite or pelite with less common greywacke, sandstone and pebble conglomerate. Quartz-filled veins and vugs have been observed in the pelite variation with no visible sulphides. Hydrothermal brecciation appears to follow the dominant fracture set with visible arsenopyrite and pyrite mineralization throughout.

Traverses to the west of the Denali Fault crossed the Wrangell Terrane in areas underlain by Permian Station Creek volcanic rocks (PS) and Hasen Formation (PH) sediments overlain by Late Triassic Nikolai basalts (uTN) and McCarthy Formation (uTM) calcareous sediments intruded by sills of the Kluane Ultramafic Suite (uTu), the Maple Creek gabbro (uTmg) and granitic intrusions of the Kluane Ranges Suite (EKK).

The most common unit is the Late Triassic Nikolai Formation, mapped as comprising two discontinuous, subparallel bands outcropping primarily in stream banks and along higher ridges. Locally, the Nikolai basalts are porphyritic or very fine grained and aphanitic. Porphyritic crystals include hornblende with tremolite, feldspar, chlorite, and quartz. The more schistose variations are observed to contain biotite and rarely muscovite mica. Fibrous serpentine appears as an alteration mineral along fracture surfaces. Albite veining/augens were also observed. The Nikolai greenstone may contain clean, unaltered, disseminated sulphides (primarily pyrite-arsenopyrite) and large pyrite crystals (0.5-1.5 cm) were observed in more schistose variations. Malachite staining was seen in greenstone along an un-named tributary to Silver Creek, located in a very weathered, iron-stained rock. Weathering is usually red-orange and black with less common purple and brown variations. While the Nikolai volcanics are common in outcrop the correlative sedimentary McCarthy Formation is recessive and only seen on steeper talus slopes and in recently exposed areas caused by glacial retreat. The McCarthy Formation is typically dark grey thin bedded mudstone with common calcareous intervals, gypsum beds and black carbonaceous to reddish brown limestone containing common pyrite and calcite veining.

The western edge of the Wrangell Terrane on the Ultra Property features recessive weathering older rocks of the Mississippian to Permian Skolai Group, consisting of volcanic and sedimentary strata of the Station Creek Formation and the overlying Hasen Creek Formation, primarily sedimentary rocks underlying the Late Triassic strata of the Nikolai and McCarthy Formations. The Station Creek Formation is a sequence of volcanic and volcano-

clastic rocks with increasing sedimentary content in the upper half. In the upper 400m of the Station Creek Formation, shale siltstone, limestone and argillite are interbedded with fine grained tuff layers that decrease in abundance upwards. The contact with the overlying Hasen Creek Formation is gradual and is placed at the top of the tuff layers. The Hasen Creek Formation is a subaqueous sequence consisting of shale, cherty argillite, chert and siltstone grading up into limestone, gypsum, conglomerate, greywacke and sandstone.

The southwest property area, west of the Duke River Fault is underlain by the Alexander Terrane, comprised of the Devonian to Triassic Bullion Suite and Icefield Formation. The Bullion Suite features massive beds and cliffs of light gray limestone or marble, more recessive argillite and phyllite on talus slopes, with widespread cliffs and talus of dark green meta-basalt and greenschist (Dv). Coarse pyrite cubes and quartz-carbonate veining are common in the massive volcanics. The Icefield Formation is composed of volcanoclastic rock including banded tuff, volcanoclastic sandstone, volcanic breccia and agglomerate. Also, sedimentary units of lithic conglomerate, chert, mudstone, siltstone and gypsum.

Intrusions and sills of the Late Triassic Maple Creek Gabbro and the Kluane mafic/ultramafic Suite are seen in outcrop in units of the Alexander and Wrangell Terranes on the Ultra Property proximal to the Duke River and Denali Faults. The Main Sill, an elongate peridotite body and the nearby Frohberg showing were mapped in detail and sampled extensively during the 2019 program.

Table 5.1: Table of formations (after Open File 2014-18, YGS).

Period	Units
Q – Quaternary	Unconsolidated alluvium, colluvium and glacial deposits.
NW, Miocene to Pliocene Wrangell Lavas	NW1 - Extensive volcanic unit, volumetrically significant but not associated with mineralization. Occur on the southwest side of Wrangellia overlapping onto the Alexander Terrane. Abundant west of the Donjek River and typically form piles 400-1000m thick. Mafic to felsic volcanic rock with NW2 – volcanic conglomerate.
MW, Mid to late Miocene Wrangell Suite	MW - Youngest intrusions in the area. Related to the Wrangell Lavas. Felsic to mafic composition.
OT, Oligocene Tkope Suite	OT-Homogeneous granite with lesser granodiorite, diorite and gabbro. Subvolcanic rhyolite, rhyodacite and dacite.
EKK, EKP, Early Cretaceous Kluane Ranges Suite	EKK, EKP - medium to coarse-grained, biotite-hornblende granodiorite, quartz diorite, quartz monzonite and hornblende diorite. Minor diorite and gabbro. Pegmatite and porphyry dykes.

Period	Units
JKD, Early Cretaceous Dezadeash Formation	JKD - lithic greywacke, sandstone, siltstone, shale, argillite and conglomerate, rare tuff.
JKS, Jurassic, ST. Elias Suite	JKS - coarse grained hornblende-biotite granodiorite and quartz diorite.
uTM, Late Triassic McCarthy Fm.	uTM - Conformably overlies the Nikolai Group, varying in thickness from zero to several hundred metres. Argillaceous limestone and argillite; massive limestone, limestone breccia and well-bedded limestone, gypsum and anhydrite. (McCarthy, Chitstone and Nazina limestone).
uTu, uTmg, LTKp, LTKg, LTKd Late Triassic Kluane Ultramafic Suite.	Preferentially intrudes at or near the Hasen Creek-Station Creek contact. uTu / LTKp - peridotite, dunite and clinopyroxenite, layered intrusions, locally with uTg / LTKg gabbroic chilled margins. LTKd – diabase. uTmg - Maple Creek gabbro. Fine to coarse grained diabase and gabbro sills and dykes. Intrudes the Skolai Group and locally the Kluane ultramafic suite.
uTN, Late Triassic Nikolai formation	uTN3 – thinly bedded grey limestone, gypsum and argillite. uTN – dark green to maroon amygdaloidal basalt and basaltic andesite flows, locally pyroxene and plagioclase phyric. (Nicolai Greenstone) uTN1 – light to dark green volcanic breccia, pillow lava and basal conglomerate.
uTB, Late Triassic Bear Creek Assemblage	uTBm - strongly foliated to massive intermediate to mafic metavolcanic rocks, lesser metaclastics, volcanoclastics and carbonate horizons uTBs – meta-siltstone, mudstone and sandstone; phyllitic to schistose, pyritic. uTBv – strongly foliated to intermediate to mafic metavolcanic rocks, greenschist.
PH, Mississippian to Permian Hasen Creek Fm.	PH – fine-grained clastic rocks. Lower part contains volcanoclastics, rare basalts, rare chert beds and chert-pebble conglomerate. PHc – limestone, locally fossiliferous, massive to bedded, gypsum.
CS, Mississippian to Permian Station Creek Fm.	CS - dark green basalt flows, pillows, pillow breccia, local magnetite-rich jasper. CSvt – bedded to massive chert, tuff. CSv – interbedded volcanic breccia, volcanoclastics; minor basalt flow. CSvt – laminated volcanic tuff and volcanoclastic siltstone.
DTI, Devonian to Upper Triassic Icefields Formation	DTIq – quartzite, light orange. DTII – limestone, light orange, calcite stockwork. DTIe – gypsum, white, cream, massive beds. DTLa - argillite with quartzite, cream, massive beds, pyrite. DTLaf – Frohberg siliceous unit, pale green, disseminated sulphides. DTLS – silicified schist, buff, +/- chlorite. DTLp – phyllite, dark grey, foliated. DTLv – metavolcanics, green to purple, volcanoclastics and flows.

<b>Period</b>	<b>Units</b>
Dp, Dc, Dv Silurian to Devonian, Bullion Creek Assemblage	Dp – fine grained phyllite and calcareous phyllite. Dc – light grey to cream marble, strongly deformed. Dv – dark green meta-basalt, greenschist.

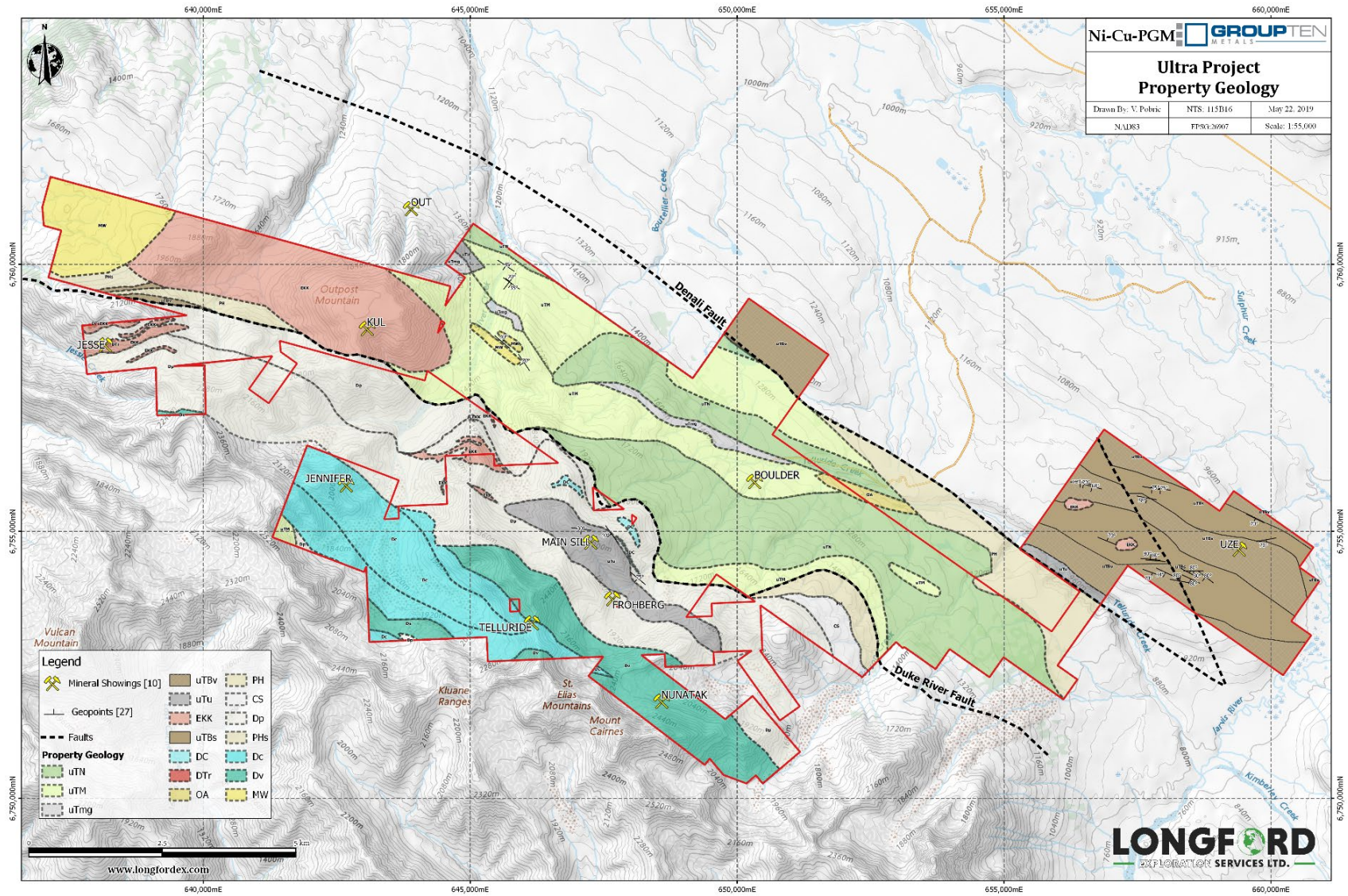


Figure 5.4: Ultra Property geology.

#### 5.4 Property Mineralization (after Pautler, 2015)

The Ultra Property covers the Telluride-Nunatak-Boulder volcanogenic massive sulphide occurrences and the Frohberg-Main Sill nickel-copper-PGE occurrences, the Jennifer copper-silver vein prospect, and the Kul & UZE nickel-copper-PGE prospect as documented by the Yukon Geology Program as Minfile Numbers 115B 008, 115B 013 and 115B 012 (Deklerk, 2009). The locations of the showings on the Property are illustrated in Figure 5.4 and summarized below in Table 5.2.

Table 5.2: Ultra Project showings.

Showing Name	UTM NAD83 Zone 7N,		Deposit Type
	Northing (mN)	Easting (mE)	
Frohberg	6753718	647688	Flood Basalt Cu-Ni-PGE
UZE	6754000	659000	Cu-Ni-PGE, Cu-Ag Vein, Skarn
Kul	6758270	642475	Cu-Ni-PGE, Cu-Ag Vein, Skarn
Telluride	6753800	646260	VMS
Boulder	6755980	650430	VMS
Nunatak	6751708	648715	VMS
Jennifer	6755437	642576	Cu-Ag Vein
Main Sill	6754800	647253	Flood Basalt Cu-Ni-PGE

The Telluride horizon has been discontinuously traced, due to glacier cover, 6 km along strike to the southeast. A bedded massive sulphide lens and associated stockwork zone (Nunatak zone) was discovered in 2006 partially exposed in a nunatak 3 km southeast of the Telluride showing. One km further along strike to the southeast of the nunatak (4 km southeast of the Telluride showing) semi massive pyritic horizons, sulphide bearing quartz veins and pyrite-chalcopyrite stockwork type mineralization are exposed along a rugged north facing slope. The horizon thins 6 km along strike to the southeast and a glacier obscures the northwestern strike extent of the Telluride showing.

The Telluride volcanogenic massive sulphide showing (Figure 5.6) appears to be consistent with the Cyprus type deposit model and exhibits similarities to the Windy Craggy deposit described in a report by Pautler, J. (2015) as follows. "The Telluride massive sulphide horizon trends 130-140°/45-70°S, ranges from 0.5 to 4m wide, has been traced for 200m and remains open along strike. The central portion overlies a 35m stockwork zone. The showing itself contains economic values of 3.23% Cu, 6.75% Zn, 17.8 Ag, 0.15 Au over 4m with select values of 13.4% Cu, 6.75% Zn, 56 ppm Ag, 0.48 ppm Au and >100 ppm Co. The system has been discontinuously traced 6 km to the southeast and appears to continue beneath glacier cover to the northwest.

The Telluride showing consists of an upper 0.5 to 4m wide zone of bedded massive sulphide, consisting of fine-grained pyrite, lesser chalcopyrite, minor sphalerite and trace galena in a quartz-carbonate gangue, similar in appearance to the boulders at the Boulder showing. The massive

sulphide is underlain by a 35m wide cherty to silicified stockwork zone with pyrite and lesser chalcopyrite stringers. The host rock consists of chloritic mafic pillow lavas near the contact with massive basalts, all of probable Paleozoic age (Ordovician) within the Alexander Terrane.

The massive sulphide horizon, trending 130-140°/45-70°S, has been traced over a 200m strike extent at the Telluride showing, disappearing under a glacier to the northwest and under a talus slope and glacier to the southeast. It appears to be offset 35m by a steeply dipping apparent sinistral strike slip fault that follows a gully near the centre of the exposure. Other prominent fractures in the area trend 030°/70°E.

The Nunatak Zone, a bedded massive sulphide lens and associated stockwork zone, occurs 3 km southeast along strike of the Telluride showing with results of 11.54% Cu, 1514 ppm Zn and 7.2 g/t Ag over 3m. Semi-massive pyritic horizons, sulphide bearing quartz veins and pyrite-chalcopyrite stockwork type mineralization are exposed four km southeast of the Telluride showing along a rugged north facing slope with highly anomalous values including 2.34% Cu, 50.9 g/t Ag over 2m.”

Southeast along strike, stockwork vein boulders are noted in Bryson Creek. Across the uplands downslope of the Telluride showing massive sulphide boulders (Boulder showing) are found in the creek beds that appear to have originated from the Telluride showing, although dating suggests a younger age. The Boulder showing consists of numerous layered massive sulphide boulders, reportedly weighing up to 15 tons that occur in a terminal moraine along Cub Creek. The largest boulder is located at UTM co-ordinates 6756140mN, 650480mE using Nad 83, Zone 7 projection. The boulders consist of fine-grained pyrite with lesser sphalerite (which occurs as distinct bands), chalcopyrite and trace galena in a quartz-carbonate gangue. The host rock appears to be a chloritic mafic volcanic, of probable Mesozoic to Paleozoic age.

Geophysical surveys across the upland on the Redball grid (Figure 5.7) have identified several coincident conductors that occur approximately 300m upstream of the Boulder showing area, including conductors outlined by the 1961 Turam electromagnetic survey, the 2002 horizontal loop electromagnetic survey, the 2004 airborne electromagnetic survey and the 2003 and 2005 horizontal loop electromagnetic surveys on the Redball grid. The conductors correspond to the area of Clarke's (1956) resistivity anomaly and open southeastern strike extent. Minor native copper was intersected in the 1962 drilling along Alteration Creek and may be associated with a 120°/85°N trending fault zone that was mapped in 2006 that follows the trend of the 1961 Turam anomaly.

The main conductor originally thought to have been the possible source of the boulders has never been tested since the first four drill holes did not reach bedrock. Potential drill targets are evident on the 1964 Redball grid from the MMI soil interpretation, coincident with the central part of the 1961 Turam EM anomaly (Pautler, J. 2015).

The Frohberg stockwork zone (Figure 5.8) discussed under the Telluride Minfile prospect (115B 008), is a separate showing that is associated with a mafic to ultramafic sill of the Kluane Belt. Mineralization consists of pyrite, chalcopyrite and pyrrhotite, which occur as fracture fillings, stringers and in quartz-carbonate veinlets and quartz veins within Icefield Formation tuffaceous beds that are commonly variably silicified and are hornfelsed to calc-silicate proximal to gabbroic sills and dykes and within the dykes and sills themselves. Significant rock sample values including 5.54 g/t Pt, 13.46 g/t Pd, 4.07% Cu and 1.73% Ni over 0.5m obtained at the Frohberg showing from the southeast end of the exposure in the 2002 trenching program (Pautler, 2002). Sampling by Tom Morgan in 2008 returned 2.56% Cu, 2.30% Ni, 1.85 g/t Pd, and 220 ppb Pt, 0.315 ppm Rh over 0.25m along the gabbro footwall, 200m to the northwest, towards the lower peridotite body.

At the Frohberg, the sills range up to 5m wide and trend 140-170°/65-90°SW and the dykes trend 050-60°/77°S. The dykes and sills coalesce into the Main Sill, a much larger gabbro to ultramafic body to the north, found to extend over 3 to 4 km along strike, which is partially covered by boulder talus and moraine. The Main Sill was one of the areas targeted by the 2018 field program and results are reported in section 9.2 of this report.

The UZE & Kul prospects are skarn and vein occurrences associated with Kluane Range granitic intrusive (EKK) and Late Triassic metasedimentary rocks. Mineralization consists of pyrite-chalcopyrite veinlets and lenses in quartz-carbonate veining and skarn bands. No significant rock sample results are documented from these occurrences.

The Jennifer prospect features stockwork quartz-carbonate veining hosting disseminated and narrow bands of chalcopyrite and sphalerite mineralization. Vein widths are reported to be narrow with local values in silver and gold however no significant results are documented for this occurrence.

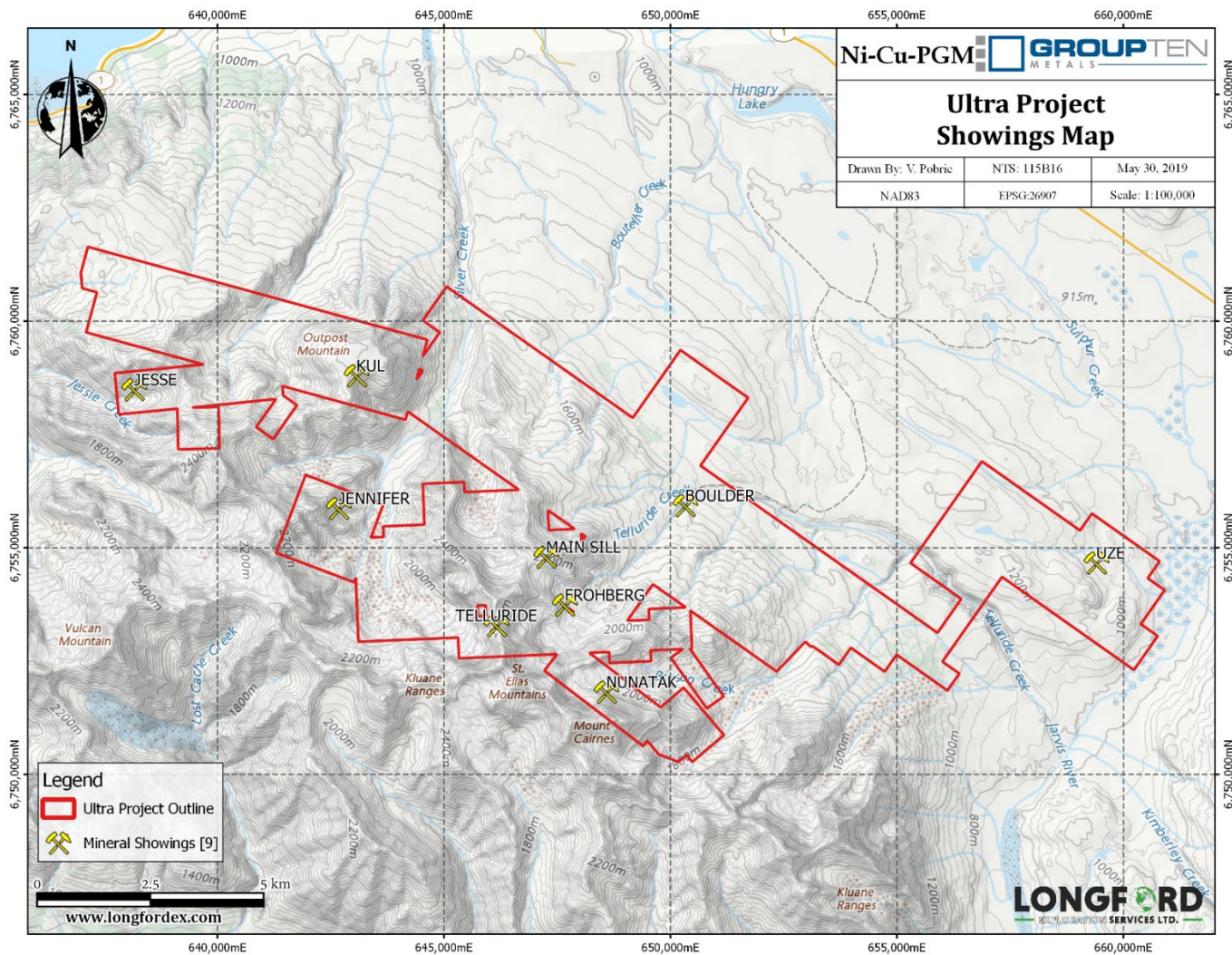


Figure 5.5: Mineral showings on the Ultra Property.

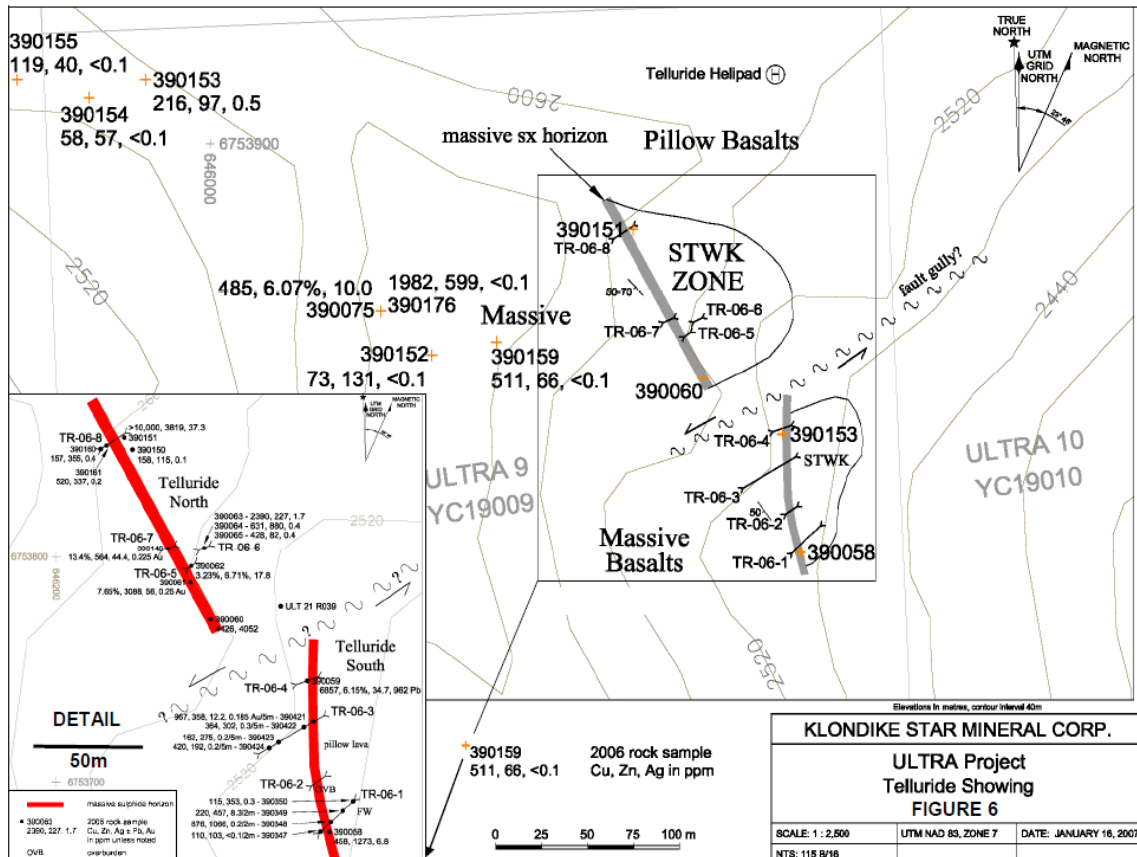


Figure 5.6: The Telluride showing after Pautler, 2015.

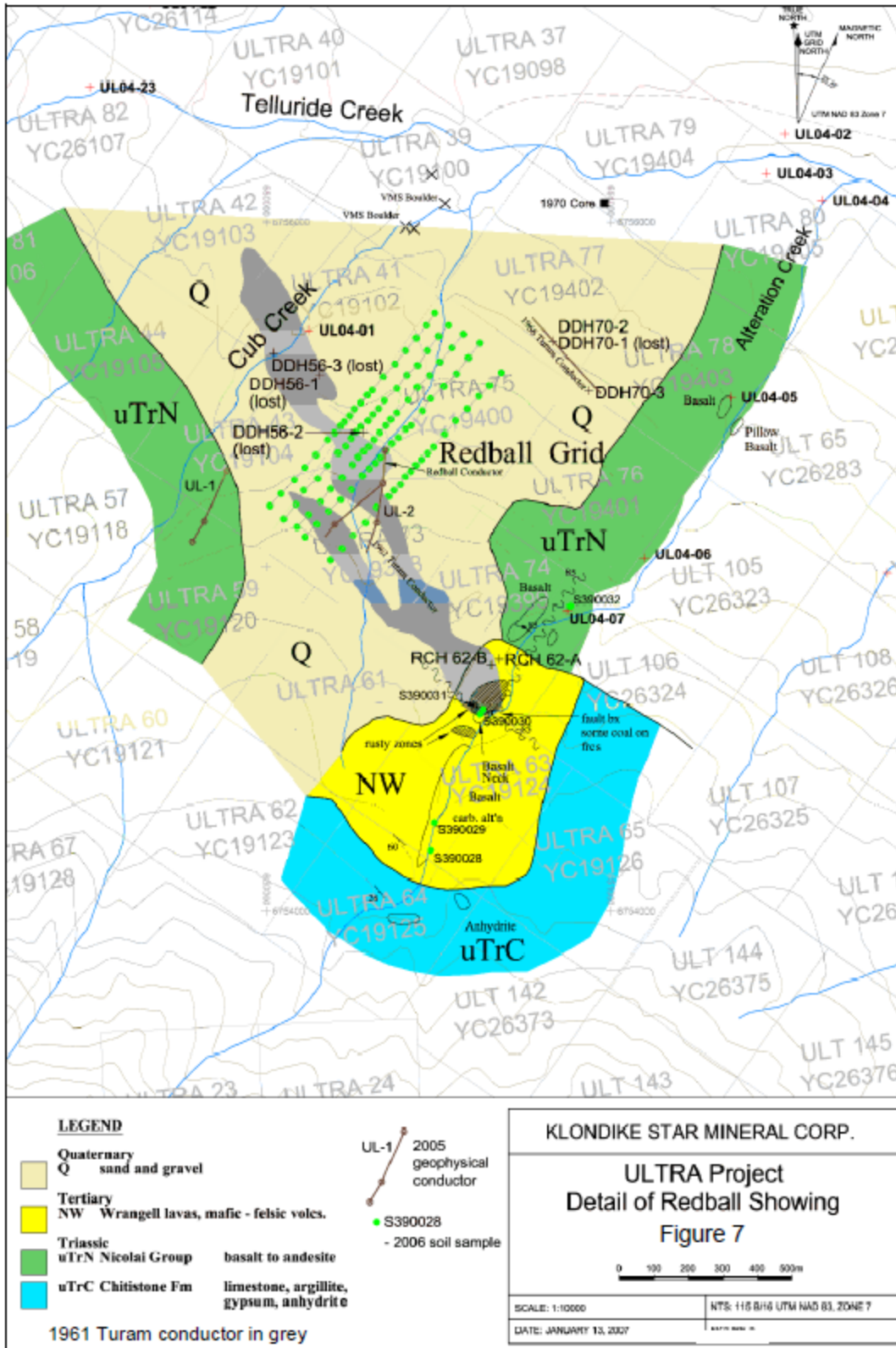


Figure 5.7: The Redball showing after Pautler, 2015.

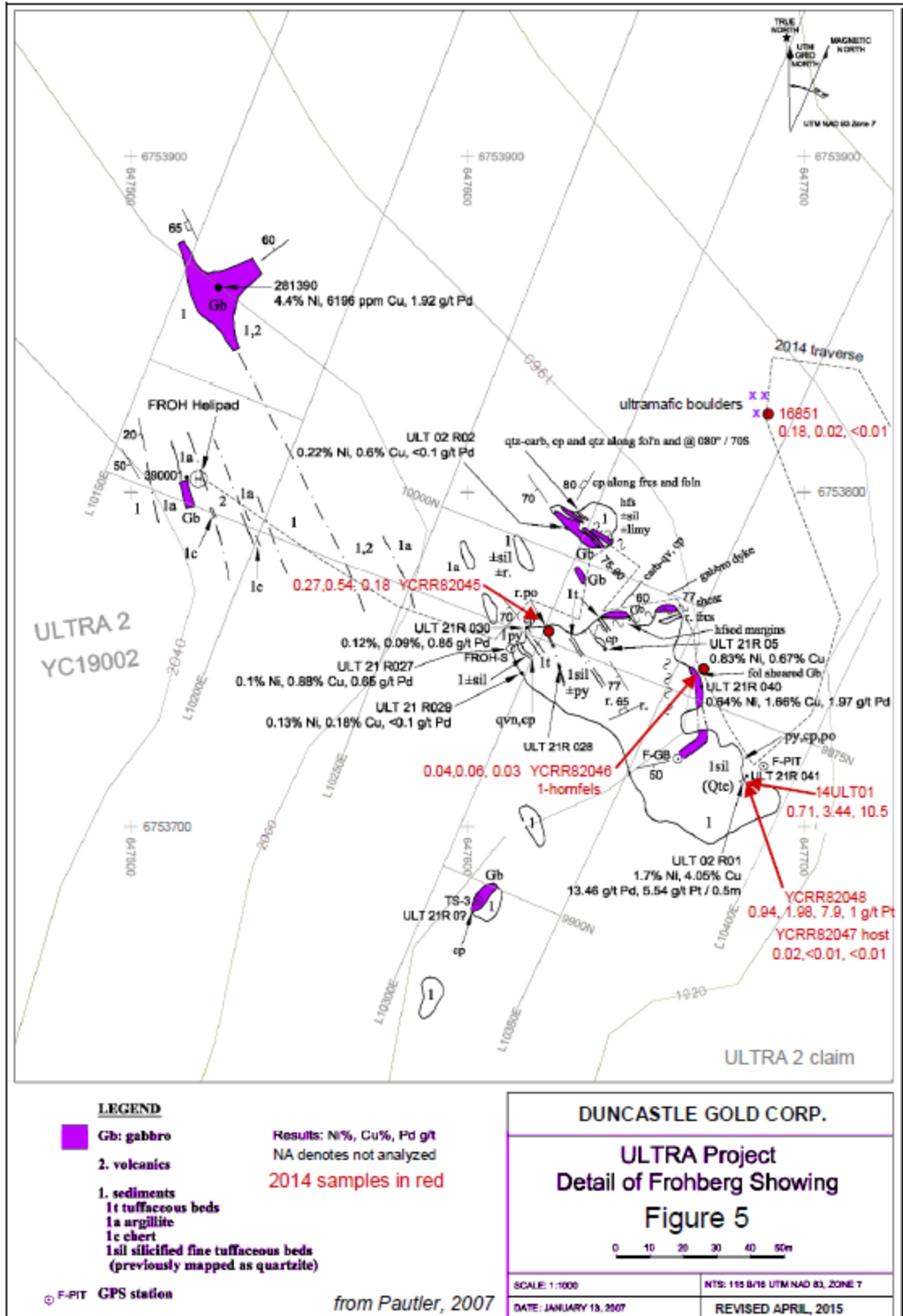


Figure 5.8: The Frohberg showing after Pautler, 2015.

## 6 Deposit Types (after Pautler, J., 2012, 2015)

The Ultra Property encompasses seven different occurrences of multiple mineralization styles. The two main styles observed on the Property consists of volcanic hosted Cu-Zn-Ag-Au massive sulphide (VMS) and flood basalt associated Ni-Cu-PGE style deposit. Other styles of mineralization on the Property includes Cu-Ag veins hosted within a fault bounded block of limestone at the Jennifer showing and minor polymetallic veins in the Jennifer and surrounding area and Kul showing areas.

### 6.1 Volcanic Hosted Cu-Zn-Ag-Au Massive Sulphide Style Deposit (VMS)

There are 4 showings with the Ultra Property that display mineralization styles consistent with the VMS deposit model, namely the Boulder, the in-situ Telluride - Nunatak zone and UZE occurrences.

The particular type of VMS deposit found on the Property has been debated with Besshi type proposed due to its close proximity to Wind Craggy (within the same terrane) and Kuroko type proposed due to locally higher Zn values. It was also noted by Pautler (1995) that the Windy Craggy deposit itself has similarities to both Besshi and Cypress type massive sulphide deposits (*British Columbia Minfile, 2005*). The Telluride, Nunatak and probable related Boulder showings are thought to belong to the Cyprus type, based on pillow basalt host rock, lense shaped morphology with associated stringer zone, associated cobalt geochemistry, obvious structural control by steep, normal faults and presence of regional pyritic horizons (Pautler, J., 2015).

The Bear Creek Assemblage, east of the Denali Fault is similar in age (204 Ma) and composition to the upper Hyde Group, which hosts the Windy Craggy copper-cobalt-gold volcanogenic massive sulphide deposit. The Bear Creek Assemblage also underlies the Ellen Property, approximately 6 km southeast of the UZE aeromagnetic anomaly on the southeastern Ultra Property. The Ellen covers the Kloo Minfile volcanogenic massive sulphide prospect with reported assay results of 7.23% Cu, 1.01 g/t Au with 1.01 g/t Pd over 2.5m from the main sulphide horizon and drill results of 3.15% Cu over 5.2m in MC-1, 1.64% Cu over 10.4m in MC-2 and 1.96% Cu, 2.1 g/t Au over 2.1m in DDH 95-3, and 0.17% Ni over 12 and 15m in DDH 95-4 and 95-5 from a serpentinite sill (Pautler, 2012b).

Deposits of this type typically comprise one or more concordant lenses of massive pyrite and chalcopyrite (sometimes brecciated or banded) hosted by mafic volcanic rocks, underlain by a pipe-shaped stockwork zone. The stockwork zone consists of a cross-cutting zone of intense alteration with disseminated, vein and stockwork mineralization and hydrothermally altered wallrock. The lenses may be overlain by or associated with chert layers, locally brecciated and containing disseminated sulphides. Lenses commonly occur in tholeiitic or calc-alkaline marine basalts, commonly pillowed, near a transition with overlying argillaceous sediments generally within ophiolitic complexes formed at oceanic or back-arc spreading ridges and possibly within marginal basins above subduction zones or near volcanic islands within an intraplate environment. Many lenses appear to be structurally controlled, aligned near steep normal faults.

Ore mineralogy includes pyrite, chalcopyrite, magnetite, sphalerite, with lesser marcasite, galena, pyrrhotite, cubanite, stannite-besterite, hematite in a gangue of talc, chert, magnetite and chlorite. Alteration consists of chlorite, talc, carbonate, sericite and quartz veins in the core of the stringer zone, sometimes with an envelope of weak albite with illite alteration. Goethite alteration of the top of the sulphide layer may occur. Pyritic horizons occur distally and can be useful regional indicators.

Published average grade and tonnage figures for Cyprus type deposits are 1.6 million tonnes containing 1.7 % Cu, 0 to 33 g/t Ag, 0 to 1.9 g/t Au, 0 to 2.1 % Zn. Examples in British Columbia include Chu Chua with reserves of 1.043 million tonnes of 2.97 % Cu, 0.4 % Zn, 8.0 g/t Ag, 1.0 g/t Au and Anyox with several deposits ranging from 0.2 to 23.7 million tonnes of approximately 1.5% Cu, 9.9 g/t Ag and 0.17 g/t Au. Associated deposit types include vein and stockwork copper gold mineralization, manganese and iron rich cherts and massive magnetite talc deposits.

## 6.2 Flood Basalt/Ultramafic sill Associated Ni-Cu-PGE Style Deposits

The Frohberg showing is one of at least twenty-five documented occurrences of nickel copper-PGE+gold mineralization in the Kluane Range, Yukon Territory that constitute the singularly most important mineral resource in the Kluane Range. The deposit model is consistent with that of flood basalt associated nickel-copper-PGE deposits. The following description of the mineralization is summarized from the Metallogeny of the Kluane Ranges by Carne, (2003).

The nickel-copper-PGE occurrences are genetically and geographically linked to a number of relatively large sill-like mafic-ultramafic intrusions of Triassic age, the Kluane Mafic/Ultramafic Suite, which occurs within the Wrangell Terrane and extends from Northern British Columbia, through Yukon and into Alaska. The most significant occurrence is the former producing Wellgreen mine, which is hosted by the Quill Creek Mafic-Ultramafic Complex. Wellgreen currently contains the largest resource of nickel-copper-PGE mineralization in the North American Cordillera. Due to weak metal prices, excessive dilution and erratic distribution only 171,652 tonnes of ore were mined between 1972 and 1973 with an average grade of 2.23% Ni, 1.39% Cu, 0.073% Co and 2.15 g/t Pt and Pd. Reserves at Wellgreen in the 1980's were 49.9 million tonnes grading 0.36% Ni, 0.35% Cu, 0.51 g/t Pt and 0.34 g/t Pd (Hulbert, 1997). The current resource is reported in Section 1.

The Quill Creek mafic-ultramafic complex is a highly serpentinized and moderately deformed 16.5 km long northwest-trending group of sill-like bodies that vary in thickness from 10 to 600m. These intrude the host sedimentary-volcanic sequence in a variety of settings ranging from upper Station Creek Formation to lower Nikolai Formation levels. Generally, non-cumulus gabbro forms the floor along much of the west part of the Wellgreen segment of the complex, with repeated injections of gabbro and chilled margins at the contacts, grading more mafic upwards to much more volumetric pyroxenites and peridotites containing disseminated sulphides. The gabbros commonly contain disseminated to heavily disseminated sulphide minerals and schlieren or lenses of massive sulphide mineralization displaying classic sulphide silicate melt immiscibility

features. Massive sulphide mineralization and better grades of disseminated sulphide mineralization are often spatially associated with irregular footwall contacts of the sills.

“The major ore minerals include pyrrhotite and pentlandite followed by chalcopyrite and magnetite. Trace amounts of cobaltite-gersdorffite, covellite, arsenopyrite, ullmannite, chromite, ilmenite, violarite, galena, sphalerite, barite, Au-Ag alloy, and altaite are also present. Platinum group elements are present in a number of diverse minerals as fine grained disseminations, dominantly in magnetite, pyrrhotite, pentlandite-violarite and chalcopyrite. The Wellgreen mineralization contains high levels of the rare PGE’s rhodium, ruthenium, osmium, and iridium, comparable to the near age-equivalent Noril’sk deposits in Russia as indicated by a 1986 chip sample across the discovery outcrop at Wellgreen, which returned an average grade of 2.44% Ni, 2.07% Cu, 0.94% Co, 2400 ppb Pt, 2200 ppb Pd, 1020 ppb Au, 560 ppb Rh, 650 ppb Ru, 440 ppb Os, and 550 ppb Ir over 9.8m. In addition, high-grade PGE mineralization can be associated with relatively thin sill-like apophyses of the main ultramafic body in the Wellgreen area” (Carne, 2003).

## 7 Recent Exploration

### 7.1.1 Frohberg and Main Sill Area

The Main Sill, Frohberg showing & local lithologies were examined in some detail by Colm Long and Lauren Blackburn, producing a new map and legend (Figure 7.3 and Appendix A). Rock Units were distinguished and separated from each other by field observations and by using historical regional work (Colpron et al. 2016). Colm Long summarized the mapping program as follows:

The Kluane Ultramafics are interpreted to be the deep feeders that fed the Nikolai Formation volcanics (Hulbert, 1997). The mapped gabbro and diabase could possibly be the stratigraphically higher-level equivalent of the ultramafic feeders that fed the Nikolai Volcanism. The Duke River Thrust fault is present beneath cover to the North of the property and has caused pervasive thrust faulting across the property.

The Frohberg showing is contained within a greenish siliceous unit (DTlaf), of which its protolith is unknown. Mineralization is observed in outcrop in close proximity with the (DTIp) phyllite contact, the extent of this showing is not known due to talus cover. The overlying DTIp may have acted as a fluid boundary that helped trap mineralizing fluids ascending from the ultramafic sill and/or other source beneath. Mineralization consists of pyrite, pyrrhotite and chalcopyrite along veinlets, stringers and is disseminated throughout in some places. There are zones of intense malachite, azurite and limonite formation accompanied by open boxworks. Highly anomalous PGE and Cu values were obtained from a SE extension of the Frohberg showing interpreted to be stratigraphically slightly above the original occurrence (Table 7.1). This showing could be explained by the possible upward migration of a PGE & Cu rich fluid from the ultramafic sill beneath along a nearby fault/fracture. The best rhodium value from the 3 high grade samples assayed 0.004 ppm Rh.

From detailed mapping at least three generations of ductile deformation were defined. D1 deformation produced a strong S1 foliation that is primarily visible in phyllite (DTIp). Its main dip direction is toward the SW, possibly heavily influenced by the Duke River Thrust. Tight complex parasitic folding and boudinages of diabase (LTKd) bodies within DTIp are interpreted to be F1 folds as their axis are planar to S1 foliation. The precise orientations of F1 folds could not be deduced due to the lack of outcrop displaying F1 folding, combined with the ductile nature of phyllite that created such a strong S1 that bedding (D0) is hardly ever preserved (Figure 7.1).

D2 deformation created NW-SE trending tight folding visible along a ridgeline. Folds produced from this event may be difficult to determine due to later thrusting, which may have caused S1 foliation planes to align in a ductile fashion with thrust sheet planes and therefore overprint and hide evidence of D2 structures. Also fold hinges are very likely to be eroded due to them being a coherent weakness.

D3 deformation created NE-SW trending gentle folds. S3 foliation is apparent as brittle deformation, creating extensional veining and jointing parallel with the F3 fold axial planes. F3 folding is difficult to determine due to its orientation relative to the strong S1. The F3 fold axial planes are perpendicular to S1 foliation planes resulting in it being very difficult to see this generation of folding. F3 folding near Frohberg has been defined by recording opposing plunge directions of F2 fold hinge lines.

Brittle deformation consists of veining, jointing and faulting. Three generations of veining were deduced. First generation consisted of multiphase, multi-deformed quartz +/- limonite +/- hematite. Second generation consisted of bull white quartz with chlorite +/- sulphides. Third generation consists of massive quartz and calcite infill +/- limonite +/- hematite (Figure 7.2).

Brittle faulting is present as thrust faults and strike-slip dextral motion faults. Intense thrust faulting appeared to have formed initially as thrust sheets associated with the Duke River Thrust. Duplex thrust structures are present towards the central North of the mapped area, where (DTII) limestone and (DTIp) phyllite units are repeated. Dextral strike-slip faults appear to offset thrust fault bound lithologies and therefore formed after thrusting.

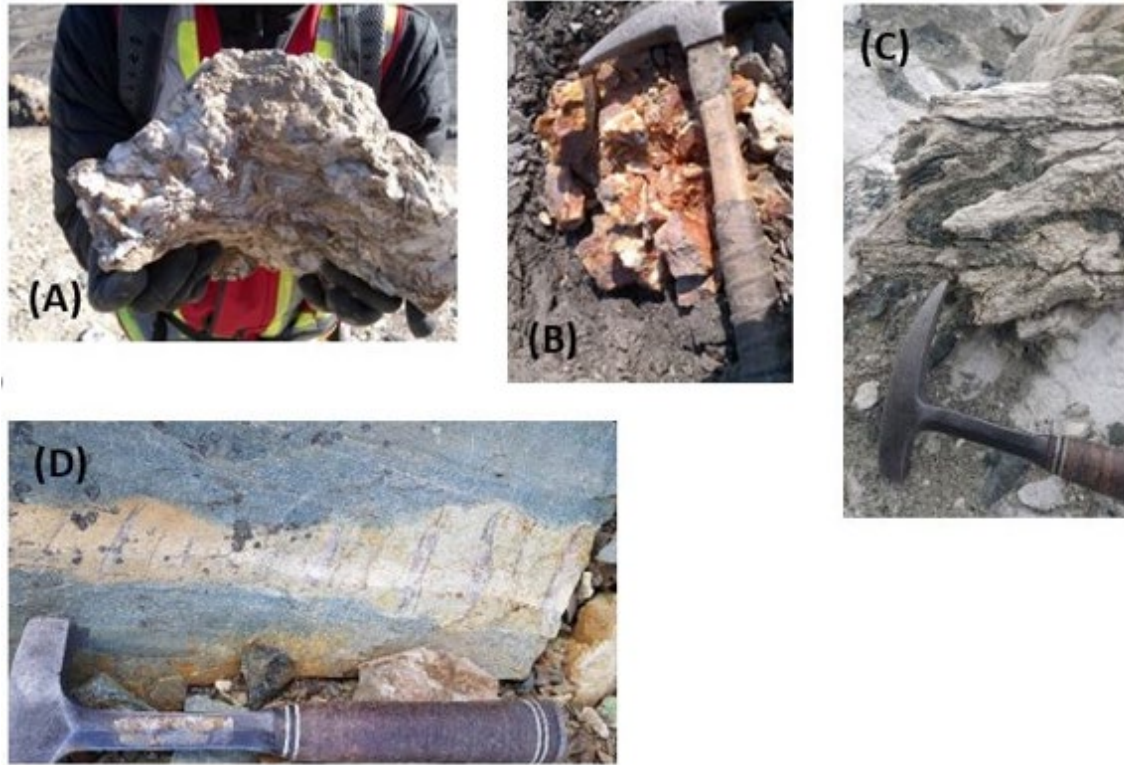
Table 7.1: Select rock sample locations and descriptions from the Frohberg area.

Sample Number	Location (E)	Location (N)	Description	Cu (ppm)	Ni (ppm)	Pt (ppb)	Pd (ppb)
3249062	647603	6753683	High-grade grab outcrop sample. Along sulphide vein and disseminated in siliceous unit. Open boxworks, pervasive oxidation	46970	1041	9760	7530
3249063	647604	6753682	High-grade grab outcrop sample. Along sulphide vein and disseminated in siliceous unit. Open boxworks, pervasive oxidation	45990	1361	48200	19100
3249064	647605	6753678	High-grade grab outcrop sample. Along sulphide vein and disseminated in siliceous unit. Open boxworks, pervasive oxidation	5440	438	400	19800
3249065	647627	6753777	Outcrop. Cpy and Py in quartz vein, 1cm wide	15870	1845	482	1257
3294066	647623	6753793	Outcrop. Malachite and Azurite stained siliceous Frohberg unit.	2932	1450	331	1793
3249067	647637	6753752	Outcrop. Massive sulphide in gabbro	42780	2093	211	2326



*(A) F1 fold folding LTKd body with DPlp displaying S1 foliation. (B) LTKd body folded by F1 Z-fold, limbs are thinned while hinge is swollen due to ductile P/T conditions. Sinistral fault offset visible at hinge. (C) Shallow SSE plunging F2 fold in DTla next to claim posts. (D) Possible F2 fold in DTlp in-situ (?) talus affected by frost heave. (E) F3 crenulation cleavage developed on phyllite foliation plane. (F) Boulder showing of massive sulphide in Telluride Creek, tight fold present folding bands of sulphide.*

*Figure 7.1: Evidence of folding in the Frohberg area.*



*(A) V1 vein, multiphase quartz veining that experienced polyphase deformation. (B) V3 quartz vein with limonite. (C) Gypsum displaying chaotic parasitic folding, likely due to its ductile emplacement as a thrust sheet. (D) Near horizontal extension caused extensional veins and boudinage within a competent layer in ductile DTIp. Possibly thrust fault related.*

*Figure 7.2: Three generations of veining at the Frohberg area.*

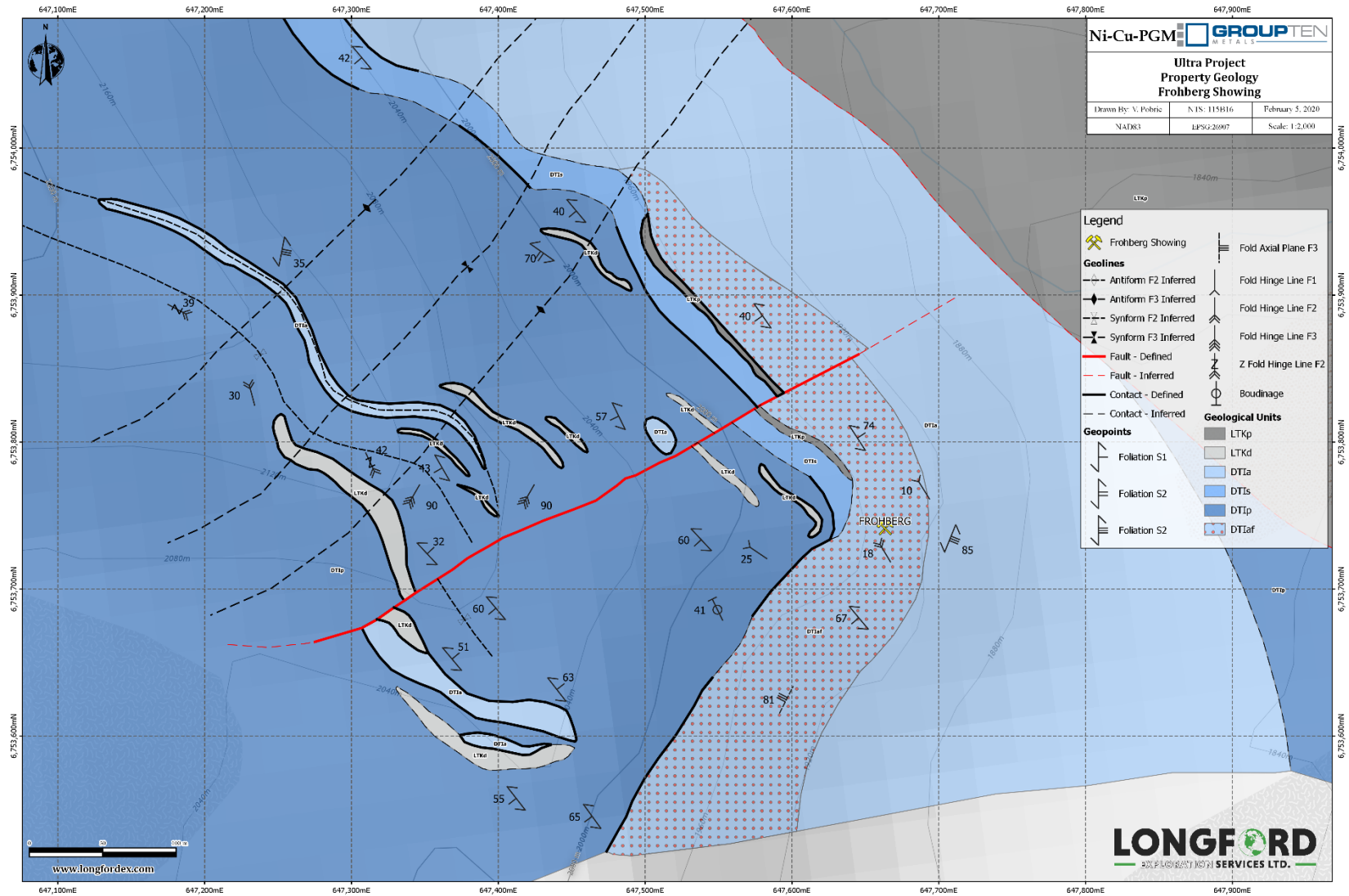


Figure 7.3: Interpreted geological map of the Frohberg area showing structural measurements and related inferred structures. For rock unit description and key see Figure 7.4.

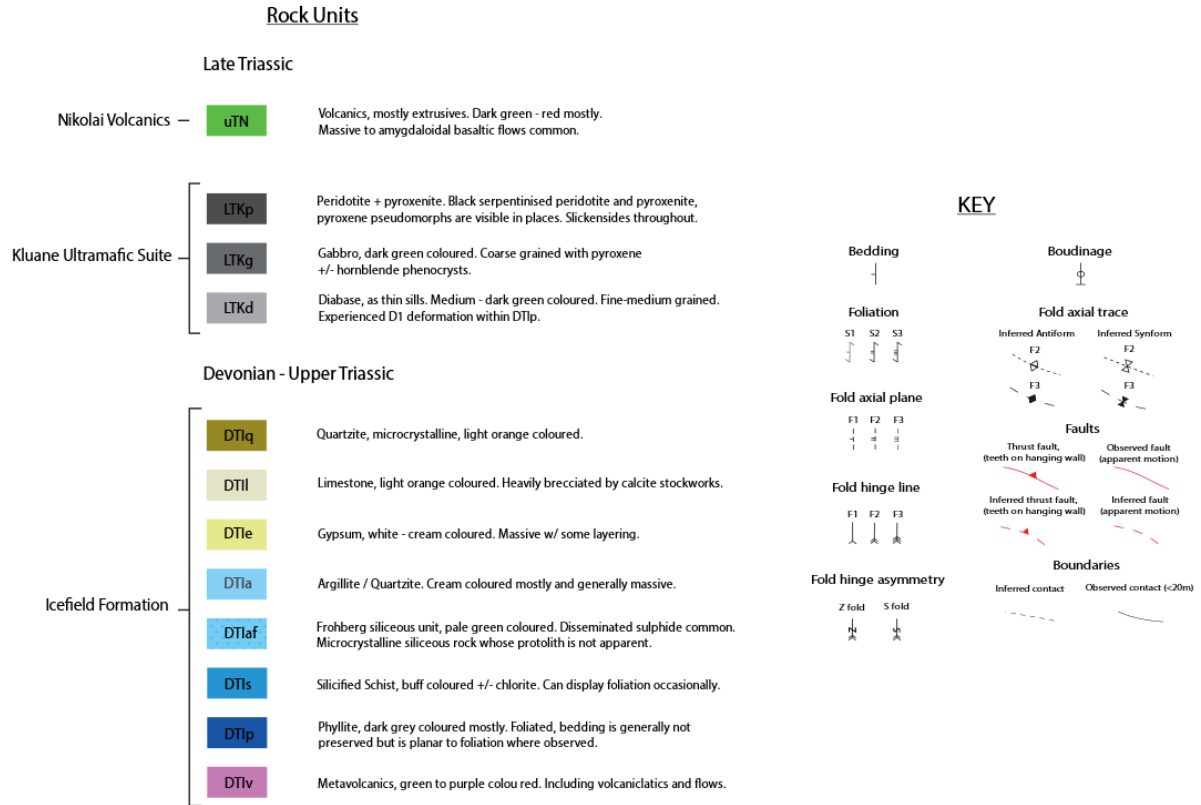


Figure 7.4: Legend for Frohberg area mapping.

Traverses (September 7-8, 10-11, 16, 2019) to the northwest and southeast of the Frohberg showing traced outcrop, moraine and talus of gabbro and ultramafic rock that define the Main Sill until it disappears under glacial moraine and ice. Rock sampling targeted contacts between the irregular dykes and sills of the Kluane Suite and argillite, phyllite and pelite of the Icefield Formation. The contacts are often gossanous with quartz-carbonate veining and minor pyrite and chalcopyrite. Chip and grab samples (3249006-3249012, 3249021, 3249023) from the contacts of the main sill near the ridge top produced Ni values of 1137-1949ppm, detailed in Table 7.2 and located on Figure 7.5. The Main Sill is exposed in several large outcrops to the northwest at the margin of a glacier on a tributary of Silver Creek where samples (3249013-3249016) assayed 896-1371 ppm Ni.

Ultramafic float was traced across the ridge west of the Frohberg below large cliffs of Bullion Creek Assemblage dark green meta-volcanic rock. Large boulders of the volcanics beneath the cliffs contain abundant quartz-carbonate-chlorite veining with spotty chalcopyrite, sample (3249011) assayed 3.42% Cu. Cu results for the area are shown in Figure 7.6.

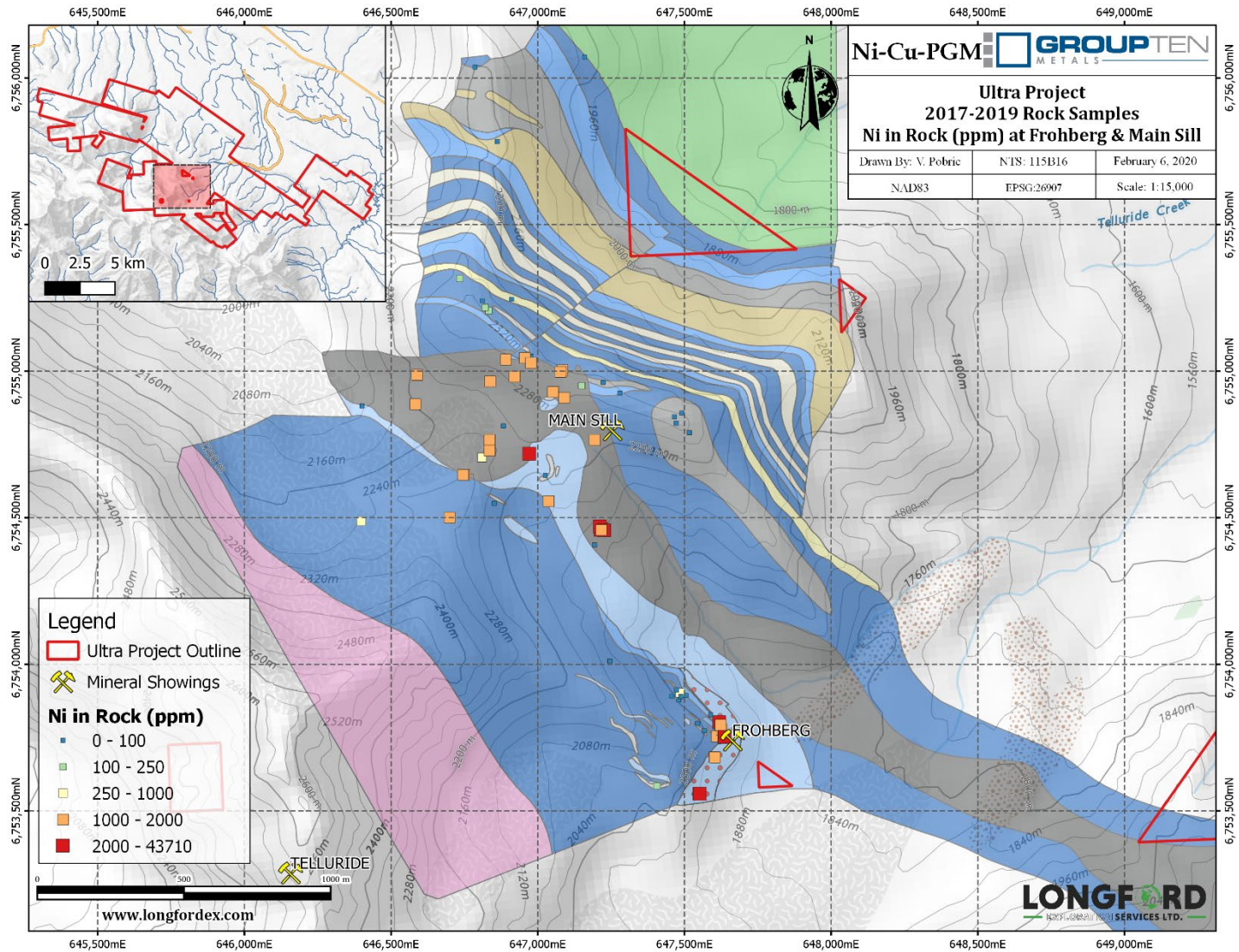


Figure 7.5: Frohberg and Main Sill area Ni in rock results (ppm).

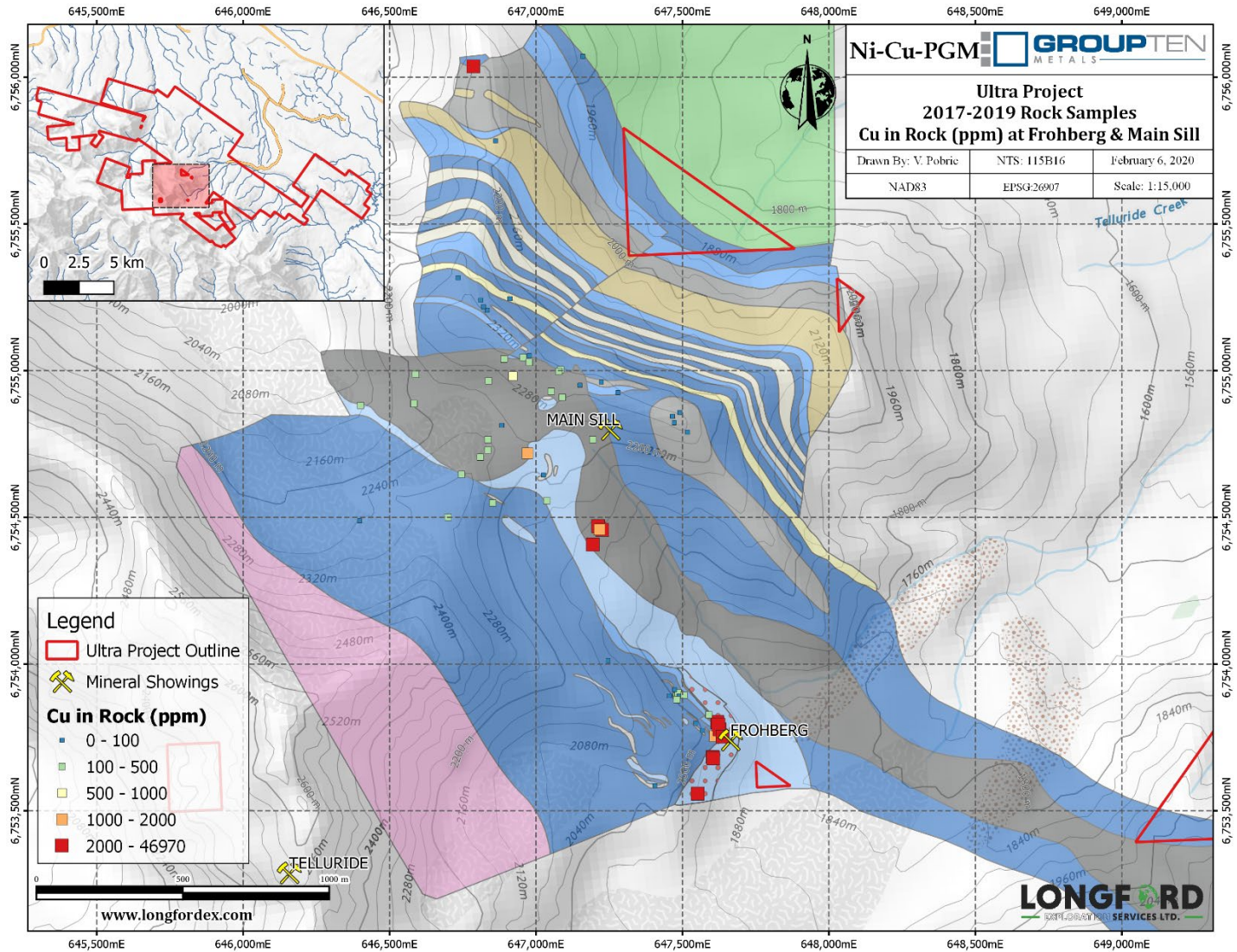


Figure 7.6: Frohberg and Main Sill area Cu in rock results (ppm).

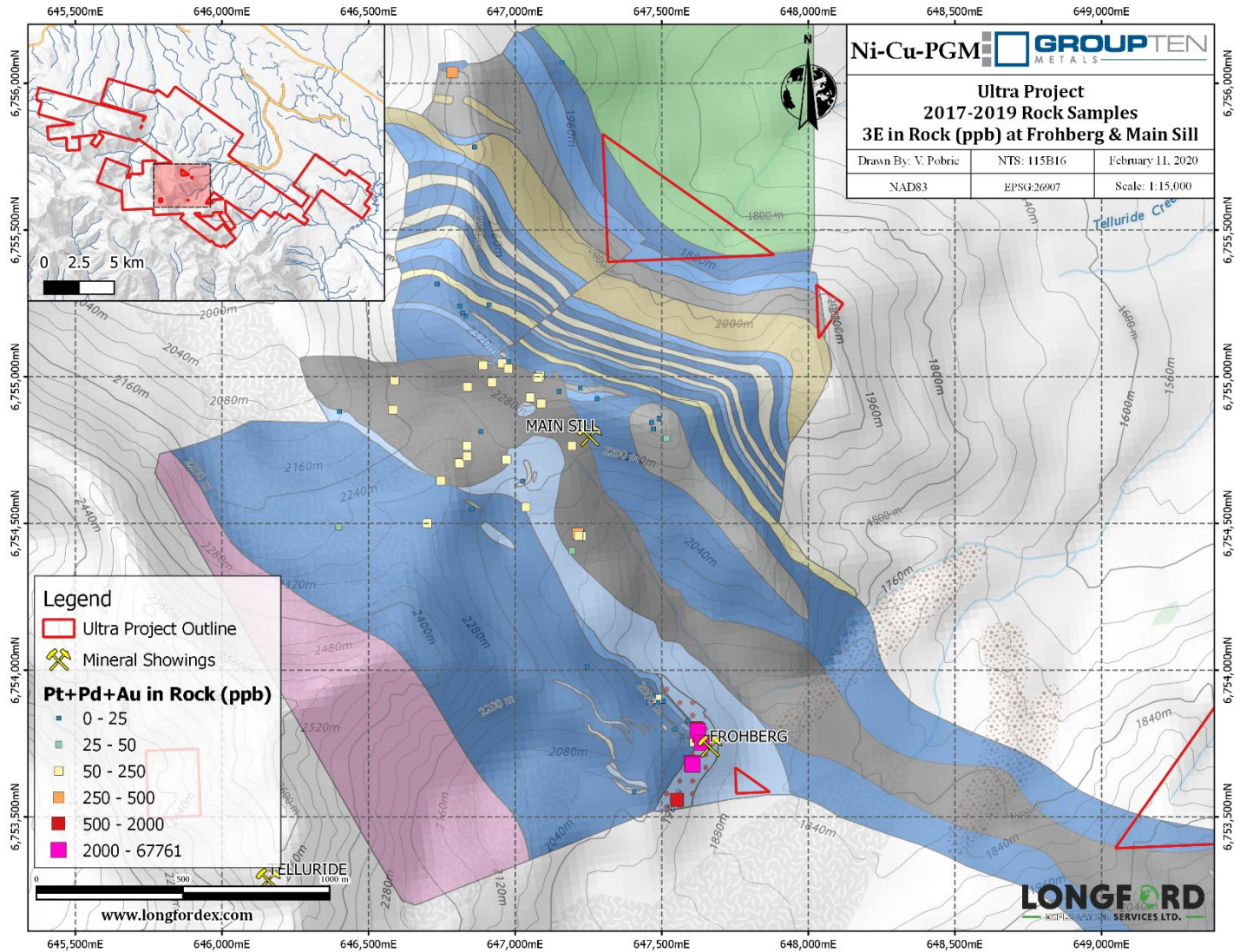


Figure 7.7: Frohberg and Main Sill area Pt+Pd+Au in rock results (ppb).

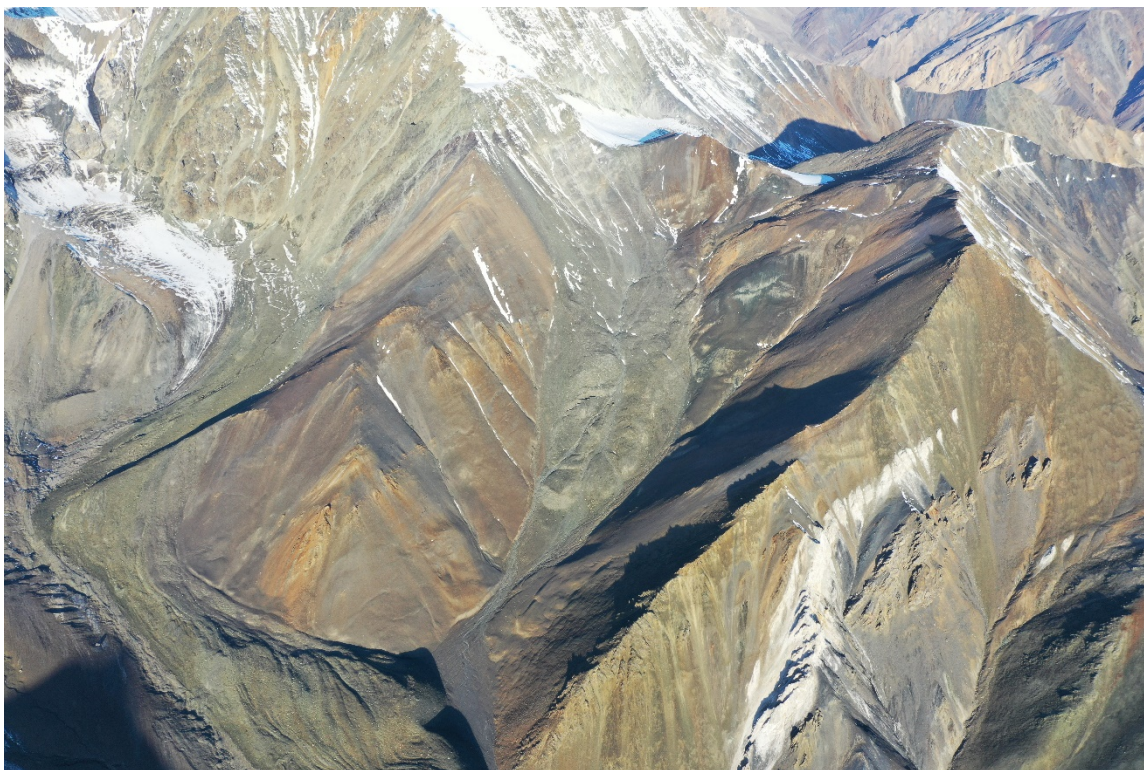


Figure 7.8: Aerial view of the Froberg and Mail Sill area.

Table 7.2: Select regional rock sample locations and descriptions from the Main Sill trend.

Sample Number	Location (E)	Location (N)	Description	Cu (ppm)	Ni (ppm)	PGE + Au (ppb)
3249006	646956	6755045	5m chip of black fine-grained peridotite with serpentine bands, calcite veins, net textured pyrrhotite and pyrite	328	1336	63
3249007	646977	6755028	5m chip of pyroxenite, orange brown weathering, manganese stain, minor chalcopyrite, pyrrhotite and pyrite.	281	1419	80
3249008	647090	6754909	5m chip of quartz carbonate veins in siliceous meta-volcanic rock, chlorite clots, 5% chalcopyrite.	332	1527	72
3249009	647194	6754765	5m chip of black fine-grained peridotite at footwall contact of main sill, blue grey sheen, magnetite, trace pyrrhotite.	224	1214	79
3249010	647217	6754458	Grab sample of pyroxenite, orange brown weathering, manganese stain, minor chalcopyrite, pyrrhotite and pyrite.	1460	1949	186
3249011	647194	6754407	Grab sample of quartz carbonate veins in siliceous meta-volcanic rock, chlorite clots, 5% chalcopyrite.	34200	8	48
3249012	646838	6754965	Grab sample of black fine-grained peridotite at footwall contact of main sill, blue grey sheen, magnetite, trace pyrrhotite.	183	1238	62
3249013	646583	6754887	Grab sample of black fine grained ultramafic, magnetic (3), trace pyrrhotite.	145	1371	88

3249014	646589	6754987	Grab sample of green black gabbro next to waxy serpentinite, minor pyrite and pyrrhotite, magnetic (3).	297	1050	110
3249021	646746	6754646	5m chip of Black, fine grained gabbro + peridotite, brown weathering, trace pyrrhotite.	133	1137	68
3249023	647037	6754556	5m chip sample of Black glassy serpentinite, magnetic (3), trace pyrrhotite.	213	1544	80

### 7.1.2 Bryson Glacier and Ridges Area

Traverses on the ridge between Telluride and Bryson Creek, along the margins of the Bryson glacier and southeast of the Bryson glacier (Sept. 9, 12, 15, 2019) targeted several ultramafic/mafic sills identified by previous programs and the Telluride-Nunatak trend. Extensive outcrop and talus slopes occur along the high alpine ridges and cirques. Lower elevations feature moraine and talus with rounded grassy uplands. Outcrop consists of massive green meta-basite and meta-volcanic rocks of the Bullion Suite with lesser black to orange weathering sedimentary rocks of the Icefield Formation mainly phyllite, argillite, limestone and siltstone. Prominent orange-grey limestone cliffs are present in the cirque walls to the southwest. Ultramafic/mafic sills were sampled on the ridge along trend to the southeast of the Main Sill and were also sampled at higher elevation along the Telluride trend. Chip samples (3249018-3249029) from ultramafic outcrops on the high ridge assayed 1096-1663 ppm Ni.

Along the sides of the Bryson glacier samples (3249037-3249045) of gabbro, meta-basite and meta-volcanic rocks produced background values.

Further to the southeast on the Nunatak-Telluride trend, outcrops and cliffs of meta-basite and mafic volcanics occur above the Bryson glacier and on steep ridges near Bryson Creek. Fault bounded intervals of recessive meta-sediments occurring within the massive volcanics are intruded by light grey-green boudinaged diabase sills often with abundant quartz-carbonate veining, spotty pyrrhotite and trace chalcopyrite similar to the Frohberg occurrence. One grab sample 3249104 of greenschist, meta-basalt with 10% pyrite on the Nunatak Trend assayed 1.62% Cu with background PGE+Au value.

Table 7.3: Select rock sample locations from ridges in the Bryson Drainage area.

Sample Number	Location (E)	Location (N)	Description	Cu (ppm)	Ni (ppm)	PGE + Au (ppb)
3249017	649310	6753019	3m chip of black, Gabbro and serpentinite in hanging wall of main sill, trace calcite veins, minor pyrrhotite.	119	283	15
3249018	649400	6753213	3m chip of black peridotite at contact with gabbro, serpentinitized, xrf 3500ppm Ni, trace pyrrhotite.	222	1663	56
3249019	649400	6753378	3m chip of waxy black ultramafic adjoining gabbro in footwall of sill, near gypsum bed, minor pyrrhotite.	274	1138	53
3249020	649394	6753389	4m chip of gabbro in contact with gypsum, footwall contact.	200	1096	49

3249028	649484	6751243	Grab sample of rusty weathering meta-volcanic, occasional quartz veins, patchy malachite, trace pyrite.	1816	265	5
3249104	649317	6751307	Grab sample of basalt, rusty weathering sheared interval with pyrite + pyrrhotite (10%).	16190	42	17

### 7.1.3 Lower Telluride-Bryson Area

A helicopter set out on Sept. 16, 2019 started in the grassy upland near Bryson Creek checking several narrow gullies exposing McCarthy Formation gypsum beds intruded by narrow black gabbro dykes and sills. Continuing across the slope into Cub Creek, gossanous cliffs of andesitic to dacitic volcanic rock (MW) occur along the narrow gully near the Turam EM anomaly which was the target of early drill programs on the property. Traversed across the upland, numerous laths indicate the old geophysical survey grids that covered the area to the Boulder occurrence where the original massive sulphide boulder is located beside a spring. Four XRF readings on the large banded pyrite-sphalerite-arsenopyrite boulder produced readings of 2-12% Zn, 0.5-3% Cu and 0.1-0.5% Pb. Several smaller massive sulphide boulders found in the creek bed were collected (3249031-3249033, 3249044).

Continued the traverse to the top of the Telluride Creek canyon where cliffs of gabbro and basalt (uTN) overlie argillite (uTM). Pyritic volcanic breccia occurs at the contact with the gabbro sill containing minor chalcopyrite, malachite and azurite.

Table 7.4: Select rock sample locations from the lower Telluride Creek area.

Sample Number	Location (E)	Location (N)	Description	Cu (ppm)	Zn (%)	PGE + Au (ppb)
3249031	650327	6755937	Massive sulphide boulder from creek bed, banded silvery, pyrite + pyrrhotite, less sphalerite and minor galena.	1263	7.83	124
3249032	650325	6755940	Massive sulphide boulder from creek bed, banded silvery, pyrite + pyrrhotite, less sphalerite and minor galena.	10360	4.44	100
3249033	650479	6756136	Massive sulphide boulder from creek bed, banded silvery, pyrite + pyrrhotite, less sphalerite and minor galena.	13860	10.06	94
3249044	651055	6756181	Banded fine grained massive sulphide boulder, mainly pyrite + pyrrhotite, less sphalerite and galena, trace quartz inclusions.	18330	1.51	93
3249045	651214	6756217	Grab sample of rusty weathering meta-volcanic breccia, gabbroic inclusions, quartz - carbonate veining, pyrite + pyrrhotite (2-5%).	376	0.0043	45



Figure 7.9: Massive sulphide boulder, lower Telluride Creek area.

#### 7.1.4 Boutellier Drainage Area

Helicopter set outs on Sept. 13 & 19, 2019 on long rocky ridges above a tributary of Silver Creek started two traverses from the alpine to the upland plateau in the Boutellier area. Outcrop along the higher ridges consisted of Icefield Formation quartzite, calcareous phyllite and greenschist intruded by a few narrow gabbro dykes. At the head of Boutellier Creek near the Duke River thrust fault, prominent gypsum beds in talus and are intruded by narrow dark green to black fine-grained gabbroic sills and dykes. Lower on Boutellier Creek outcrop is sparse in the broad grassy expanse, limited to the steep creek banks exposing buff to black weathering graphitic limestone (uTM). Several NW-SE trending ridges consist of more resistant dark green Nikolai volcanics (uTN) with gabbroic intervals and patchy quartz-carbonate veining. Local aeromagnetic highs correlate with more gabbroic sections of the Nikolai volcanic rocks.

Further down in the main Boutellier Creek, highly weathered rusty outcrops of argillite and metabasalt (uTN) occur in the hanging-wall of a 100m wide Kluane Suite mafic/ultramafic sill. The pyritic breccia contains 2-5% pyrite with trace chalcopyrite and azurite, the volcanic rocks are slightly offset across the base of a nearby canyon by faulting (Casselmann, 2004). A defined linear NW-SE trending aeromagnetic anomaly correlates with the mafic/ultramafic outcrop. Grab samples produced background values however the aeromagnetic anomaly that extends from

Silver Creek to Telluride Creek requires a more thorough examination and can be accessed on existing trails by ATV.

Table 7.5: Select rock sample locations and descriptions from the Boutellier area.

Sample Number	Location (E)	Location (N)	Description	Cu (ppm)	Ni (ppm)	PGE + Au (ppb)
3249030	646850	6757004	Grab sample of black gabbro dyke in gypsum, epidote bands, trace pyrrhotite.	69	20	21
3249107	647659	6758080	Grab sample of meta-volcanic brecciated by quartz carbonate veining, disseminated pyrite + pyrrhotite (2-5%), trace chalcopyrite.	790	32	41
3249108	647813	6757881	Grab sample of Maple Creek gabbro, green, quartz carbonate veining, trace pyrite + pyrrhotite.	74	64	39
3249111	647477	6759206	Grab sample of rusty weathering greenschist, meta-volcanic, minor pyrite.	123	55	26
3249112	647564	6759423	Grab sample of ultramafic sill, amphibolite and gabbro breccia, local carbonate veining, trace pyrrhotite.	13	62	8
3249113	647554	6759409	Grab sample of ultramafic sill, amphibolite and gabbro, local quartz carbonate veining, trace pyrrhotite.	133	62	21

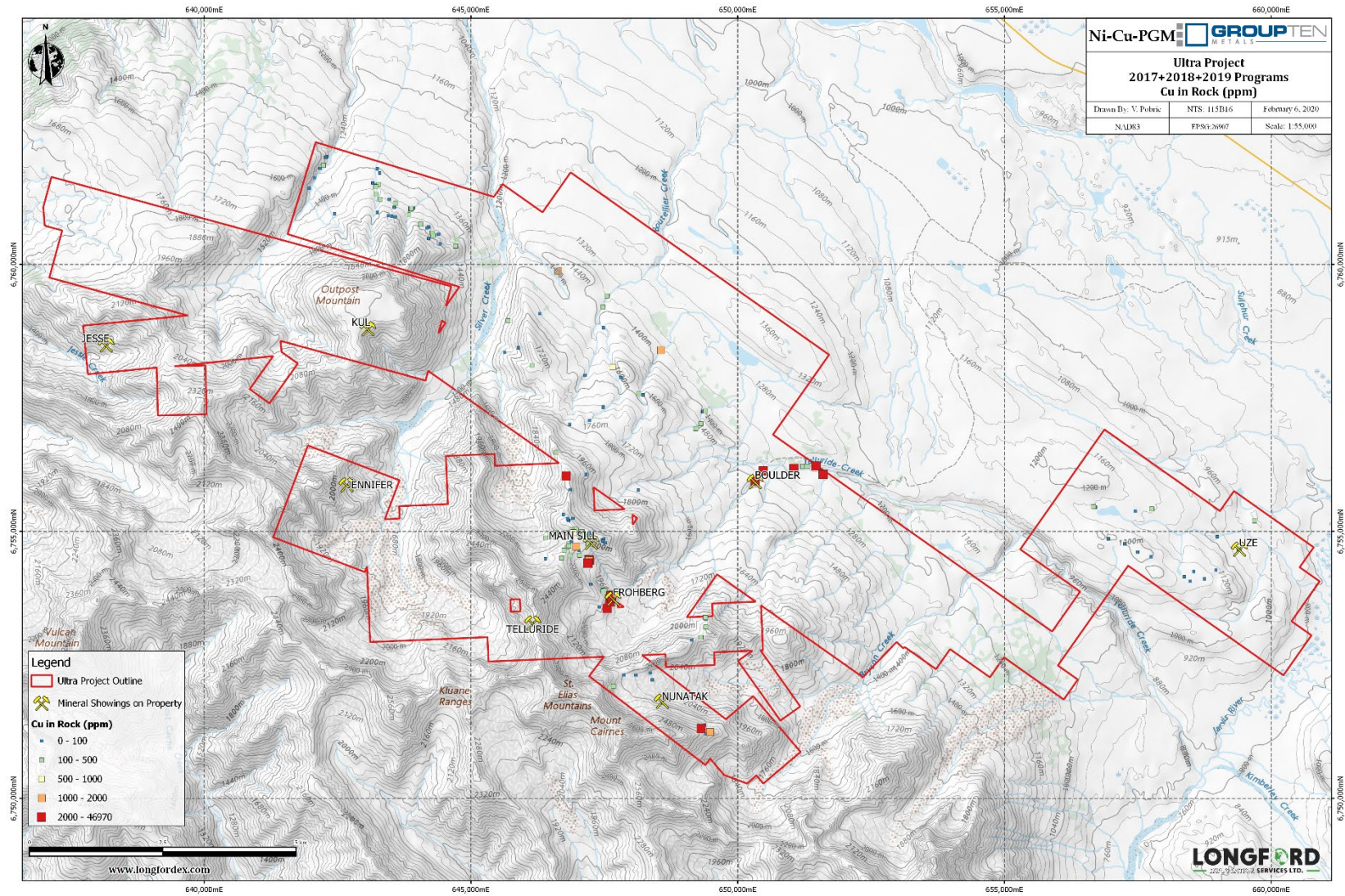


Figure 7.10: Property wide Cu in rock results (ppm).

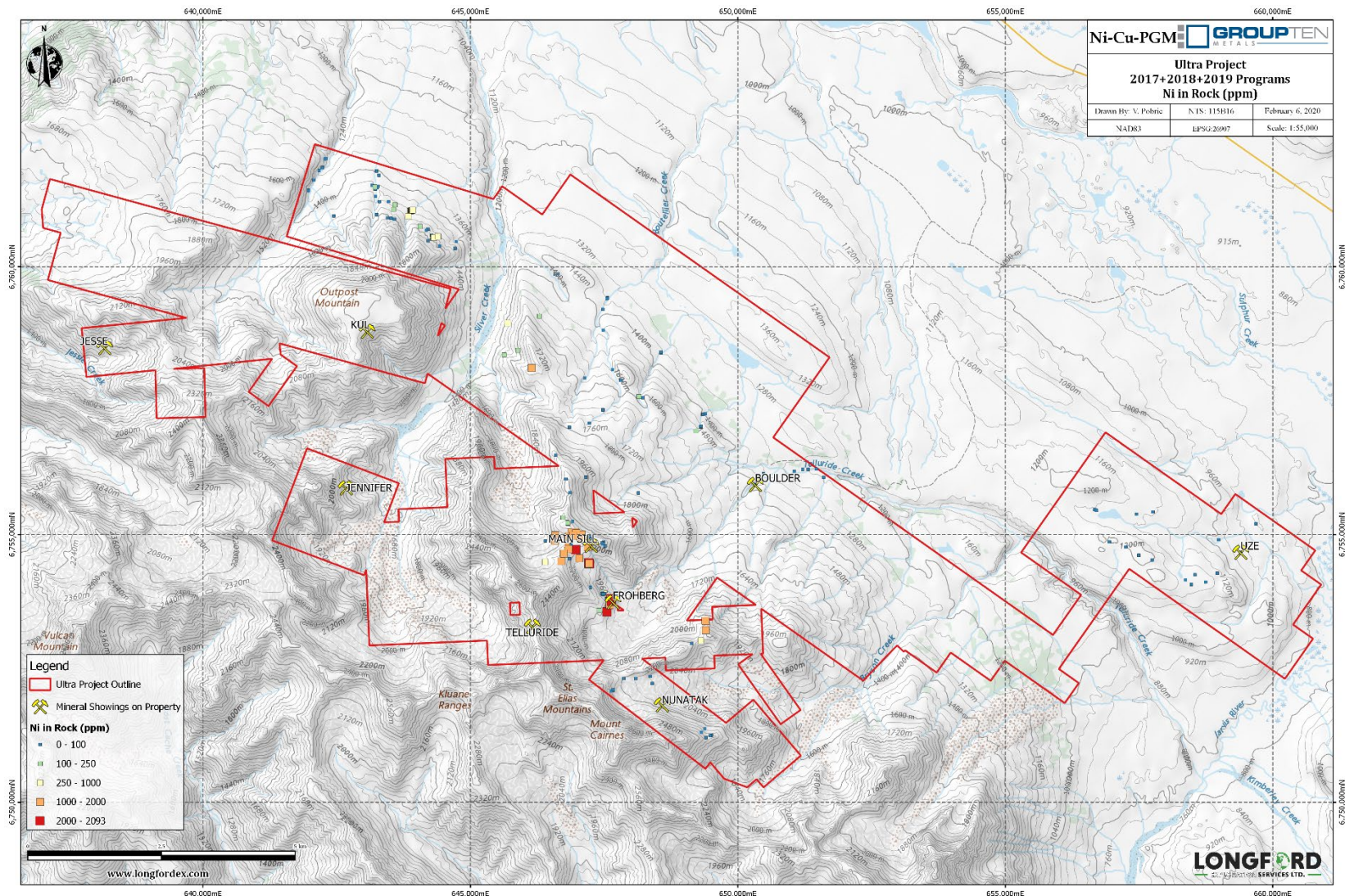


Figure 7.11: Property wide Ni in rock results (ppm).

### 7.2 UZE Area Geochemistry

The 2019 soil sampling on the UZE block continued the 2017-2018 grid to the northwest. The Cu response showed elevated values where magnetite-epidote-actinolite skarn lenses occur associated with quartz monzonite (EKK) intrusion into the Bear Creek (uTB) metavolcanic - metasedimentary rocks. The Ni response was weak in the new portion of the grid (Figures 7.12 & 7.13).

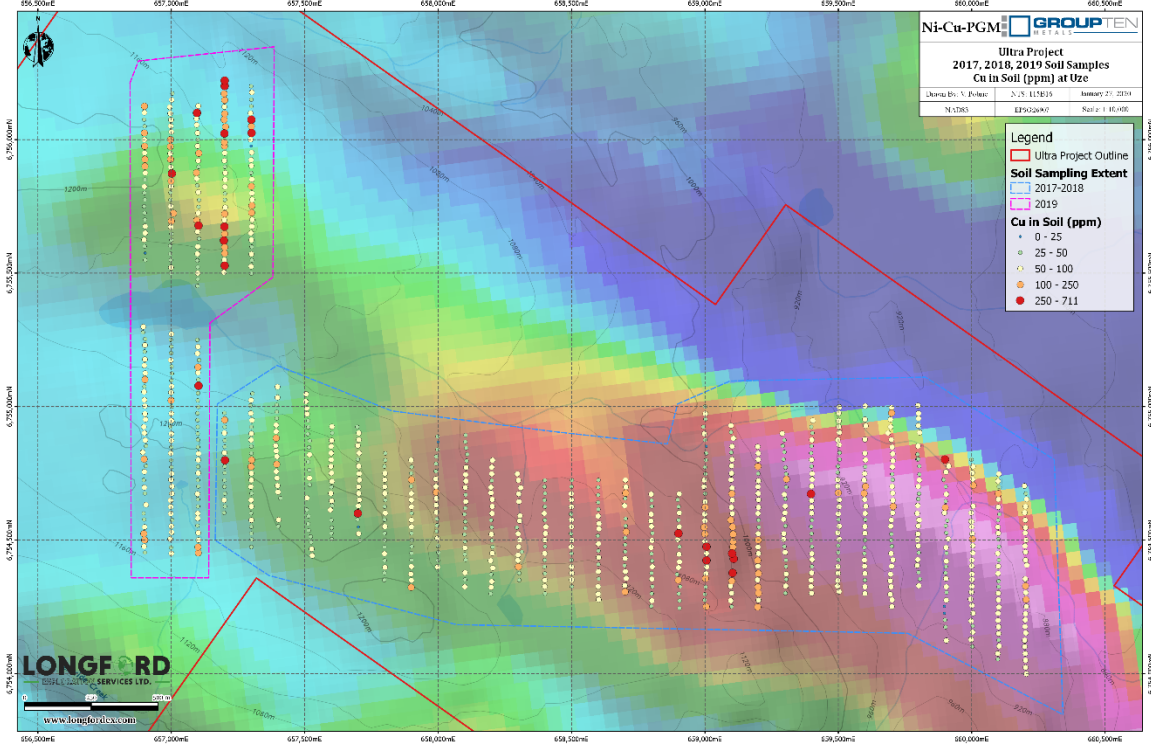


Figure 7.12: 2017-2019 Cu in soil results in the Uze area.

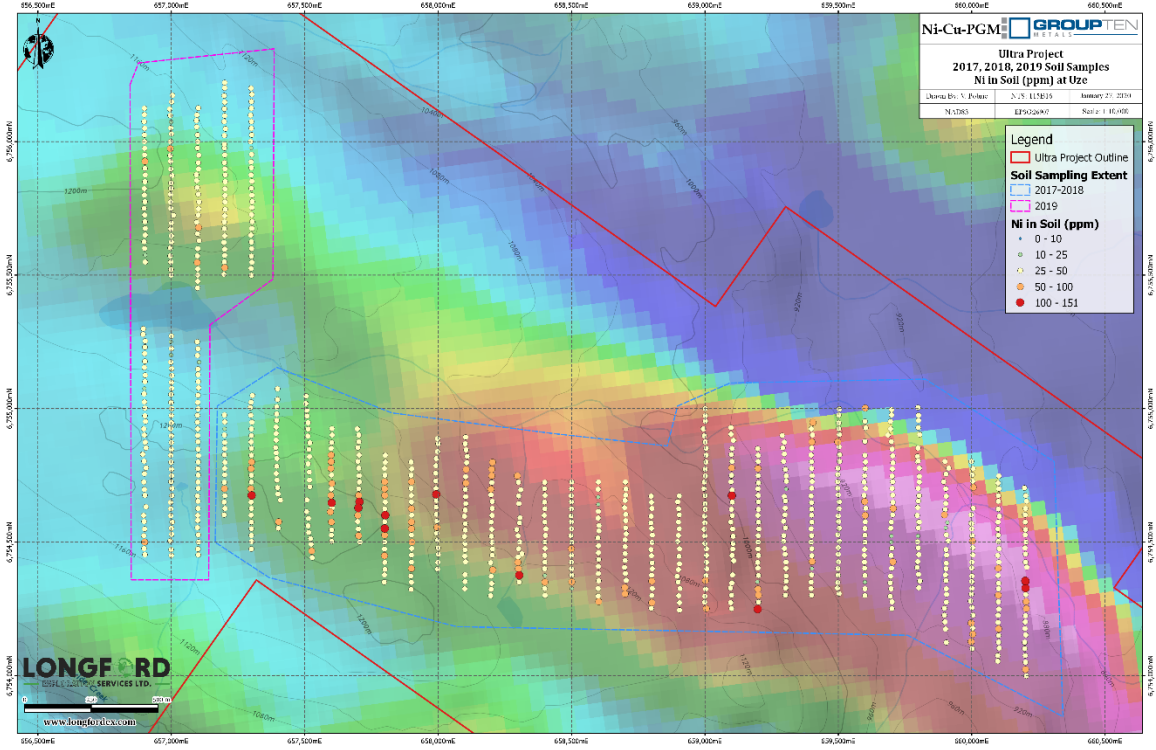


Figure 7.13: 2017-2019 Ni in soil results in the Uze area.

## 8 Sample Preparation, Analysis, and Security

### 8.1 2019 Program

Longford Field Crews conducted geological and geochemical exploration surveys of the claims from September 7 - 20, 2019 from a base in Haines Junction.

A total of 78 rock samples were collected and an additional 147 geological points were recorded during traverses around the property. Rock descriptions and GPS coordinates were recorded for each sample and geological reference point then entered into an MS Excel spreadsheet. Rock samples were packaged in numbered plastic bags, secured with plastic zap straps and packed into a rice bag for delivery to Bureau Veritas Laboratories in Whitehorse. Samples were crushed to less than 2mm after which a 250g split was pulverized to below 75µm (PRP70-250) and a 0.5g split was analyzed for 33 elements by Aqua Regia ICP-ES (AQ300) as well as a 30g split analyzed for Au, Pt, Pd by Fire Assay ICP-ES (FA330). Analytical certificates can be found in Appendix B.

During the 2019 work program a total of 250 soil samples were collected on soil lines targeting geochemical and geophysical anomalies on the UZE claims extending the grid to the northwest from 2017-2018 sample areas. Samples were collected using soil augers in an attempt to sample below organic, ash and permafrost layers. The target soil horizon was the B horizon, but immature soil development in many areas and shallow permafrost meant that sample quality was not ideal. In many cases the soils were developing on glacial material and were too young to have formed B horizons. Average sample depth was 0.50 m, with a wide range from 0.15 to 1.0 m. Soil descriptions show that while some samples were from the B horizon, others were mixtures of A, B and C horizons. At locations mainly on south facing slopes, good quality samples were collected below volcanic ash and narrow permafrost layers. Complete results, method descriptions and analysis certificates are in Appendix C. The field crew recorded GPS readings at all sample sites and data on the sample site characteristics; including soil type, depth, slope, vegetation and moisture content. It was often necessary to dig several holes to get a good sample. After the fieldwork was completed information from the sample form was entered into an MS Excel spreadsheet.

Soil samples were submitted directly to Bureau Veritas Laboratories in Whitehorse where they were dried and sieved to 80 mesh (SS80) and a 0.5 g split was analyzed for 33 elements by Aqua Regia ICP-ES (AQ300) as well as a 30 g split analyzed for Au, Pt, Pd by Fire Assay ICP-ES (FA330). Assay certificates can be found in Appendix B and digital spreadsheets have been submitted electronically.

Certificates of analysis for rock and soils are available in Appendix D and E.

## 9 Interpretation and Conclusions

The 2019 exploration work on the Ultra Property focussed on mapping and sampling of the Frohberg-Main Sill locale and continued sampling of mafic/ultramafic rocks of the Kluane Ultramafic/Mafic Suite across the property.

The Frohberg showing proved the most interesting occurrence which was mapped in detail outlining mineralization within a greenish siliceous unit (DTlaf), of which its protolith is unknown. Mineralization occurs in close proximity with the (DTIp) phyllite contact, the extent of this showing is not known due to talus cover. The overlying DTIp may have acted as a fluid boundary that helped trap mineralizing fluids ascending from the ultramafic sill and/or other source beneath. Mineralization consists of pyrite, pyrrhotite and chalcopyrite along quartz-carbonate vein stockwork and is disseminated throughout the siliceous volcanoclastic unit in some places. There are zones of intense malachite, azurite and limonite staining accompanied by open boxworks. Highly anomalous PGE & Cu values were obtained in rock samples grading up to 48.2 g/t Pt from a SE extension of the Frohberg showing interpreted to be stratigraphically above the original occurrence. This showing could be explained by the possible upward migration of a PGE & Cu rich fluid from the ultramafic sill beneath along a fault/fracture.

Rock sample results from the Main Sill mafic/ultramafic rock and elsewhere on the property targeting the margins of the sills were weakly elevated in nickel (generally 1000-2000 ppm). Potential low-grade copper-nickel-PGE mineralization within or at the base of the Kluane Suite sills was not found by this sampling program. The Kluane Suite is extensive and as has been concluded by previous writers to require ongoing investigation to evaluate the potential Cu-Ni-PGE mineralization with emphasis on a basal cumulate and feeder zone of the mafic/ultramafic rocks.

Rock sampling in the lower upland area of Boutellier Creek located a mafic/ultramafic sill in outcrop along the creek bank which has a strong NW-SE linear aeromagnetic expression extending to the head of the Telluride Creek canyon. Hanging wall meta-volcanic rocks exhibit a pyritic breccia with spotty chalcopyrite, malachite and azurite seen at the base of several unnamed creek canyons and in outcrop at the top of the Telluride Creek canyon. No anomalous results were obtained from Initial samples but the long sinuous aeromagnetic anomaly requires a more thorough examination and can be accessed on existing trails by ATV.

The 2019 soil sample grid on the UZE block at the southeast end of the Property was an extension to an area sampled in 2017-2018 targeting an aeromagnetic anomaly. Soil results show an association with skarn lenses at the periphery of a quartz monzonite (EKK) intrusion into Bear Creek metavolcanic - metasedimentary rocks and faults mapped through the area. The nickel response is linear in the northwest portion of the grid while copper results show an anomalous zone in the centre of the grid on the margin of the magnetic anomaly.

The Telluride occurrence was not examined in the 2019 program due ice and snow conditions. Fairly close to the Frohberg showing the Telluride occurrence appears to be the source of the massive sulphide boulders sampled from the creek bed. These new samples and previous

significant Cu-Zn-Au values obtained by J. Pautler (2006, 2012, 2015) from the Telluride occurrence along with the good results from the 2019 sampling at the Frohberg provide a promising target for further geological mapping and sampling when access permits. The Telluride occurrence and slopes around the Frohberg are targets for a proposed exploration program to include an EM or IP survey.

## 10 Recommendations

### 10.1 Proposed Exploration Budget

The primary targets for follow up are the Telluride and Frohberg showings. A detailed mapping and rock sampling program is recommended to cover the Frohberg area and the Telluride massive sulphide occurrence and to follow the trend along strike to the southeast towards the Bryson Glacier where previous programs have located similar mineralization across a talus slope and in boulders. An IP or EM survey over the Frohberg ridge and Main Sill is also recommended.

The strong linear aeromagnetic anomaly extending across the upland from Silver Creek to Telluride Creek outlines a Kluane Suite mafic/ultramafic sill that has pyritic breccia with spotty chalcopyrite in the hanging wall. Due to depth of cover and muted response in soils so far, a soil gas hydrocarbon program or sampling by probe might produce actionable results. Existing trails along Boutellier and Telluride Creeks provide ATV access to this anomaly. A synthesis study to characterize the different sills on the property and across the belt would also be of interest.

Contingent on results from the initial exploration work, a second phase program of diamond drilling is recommended to evaluate the Frohberg-Main Sill occurrence.

A Phase 1 budget of \$200,000 is proposed, followed by a Phase 2 budget of \$500,000 contingent on results from Phase 1:

#### Phase I \$200,000

- Geological mapping and rock sampling \$65,000
  - Detailed mapping and sampling of Frohberg area and Telluride massive sulphide occurrence. Investigate the potential for gold, PGE, copper, nickel bearing mineralization at the showings and general property area.
- IP Geophysical survey \$75,000
- Soil Geochemistry \$40,000
- Report and compilation, digitization, and interpretation of all available data \$20,000

#### Phase II \$500,000

- Diamond Drilling \$300,000
  - 5 x 200m holes across the Frohberg and Main Sill
- Geological supervision, mapping and rock sampling \$50,000
  - Drill supervision, core logging and sampling, further geological mapping
- Soil and rock geochemistry \$30,000
- Report and compilation, digitization, and interpretation of all available data \$20,000

## 11 References

Aurora Geosciences, (2017): Open File 2017-33, Reprocessing of airborne magnetic data for NTS 115B.

Abbott, J. G. and Cathro, R.J., 1977. Report on Cub (Telluride) Creek property, Kluane District, YT. Aquitaine Co. of Canada Ltd. Company Report.

British Columbia Minfile, 2005. 114 P 002; British Columbia Ministry of Energy, Mines and Petroleum Resources.

Bosschart, R. A., 1966. Report on Turam electromagnetic survey, Cub Creek Area, Yukon Territory, on behalf of Coranex Limited. Yukon Assessment Report 17473.

Brickner, R. D., 2002. Geological and geochemical report on the Ultra, Gab & Eli claims. Yukon Assessment Report 094395.

Campbell, S.W., 1976. Nickel-copper-sulfide deposits in Kluane Ranges, (115 F, G) Exploration and Geological Services Division, Yukon, Indian and Northern Affairs

Campbell, S.W. (1981): Geology and Genesis of Copper Deposits and associated Host Rocks in and near the Quill Creek Area, UBC Thesis.

Carne, R.C., 2003. Metallogeny of the Kluane Ranges Southwest Yukon Territory. Archer, Cathro & Associates (1981) Limited for Yukon Regional Mineral Development Program.

Casselman, S. G., 2005. Geological mapping and airborne geophysical surveying program on the Ultra Property, Haines Junction area, Yukon Territory. Report by Aurora Geosciences Ltd. for Klondike Gold Corporation. Yukon Assessment Report 094485.

Casselman, S. G. and Morgan, T., 2003. Horizontal loop electromagnetic, total magnetic field and VLF-EM surveys on the Ultra Property. Yukon Assessment Report 094413.

Clark, A. R., 1956. Gaymont Prospecting Syndicate, Cub Creek Area, Yukon. Yukon Mining Assessment Report 091722.

Coates, M. E., 1970. Report on diamond drilling, Cub Project, Cub & Rog Mineral Claim Groups. Yukon Assessment Report 91315.

Cobbet, R. et al, 2016. Structure and kinematic evolution of the Duke River Fault, southwestern Yukon.

Davidson, G., 2018. Prospecting, Geological and Geochemical Survey Report on the Ultra Property for Group Ten Metals Inc.

Davidson, G., 2019. Prospecting, Geological and Geochemical Survey Report on the Ultra Property for Group Ten Metals Inc.

Davidson G. & Versloot R., 2019. YUKON MINERAL EXPLORATION PROGRAM PROPOSAL FOR A TARGET EVALUATION PROGRAM ON THE ULTRA PROJECT

Deklerk, R., 2009. The MINFILE Manual. Yukon Geological Survey, CD-ROM

Eaton, W.D. 1988a. Report on prospecting and geochemical program, Ultra 1-20 claims. Report for Nordac Mining Corp. Yukon Assessment Report 092130.

Eaton, W.D., 1988b. Report on prospecting and geochemical program, Sugar 1-25 claims. Report for Reed Creek JV. Assessment Report 092000. Geddes Resources Ltd. Annual Report 1991.

Geddes Resources Ltd. Annual Report 1991.

Gordey, S.P. and Makepeace, A.J., 2003. Yukon Digital Geology, version 2.0, S.P. Gordey and A.J. Makepeace (comp). Geological Survey of Canada, Open File 1749 and Yukon Geological Survey, Open File 2003-9 (D).

Greene, A.R., Scoates, J.S., Weis, D. and Israel, S., 2005. Flood basalts of the Wrangellia terrane, southwest Yukon: Implications for the formation of oceanic plateaus, continental crust and Ni-Cu-PGE mineralization. In: Yukon Exploration and Geology 2004, D.S. Emond, L.L. Lewis and G.D. Bradshaw (eds.), Yukon Geological Survey, p. 109-120.

Hearst, R., 2004. Final report on a helicopter-borne geophysical survey, Ultra property southwestern Yukon Territory. McPhar Geosurveys Ltd.

Hildes, D., 2014. Ultra Property, Jarvis River East Grid –TMF and VLF surveys. Memo for Duncastle Gold Corp. by Aurora Geosciences Ltd.

Hildes, D, 2006. Horizontal loop electromagnetic survey on the Ultra Property, Haines Junction area, Yukon Territory. Report for Klondike Star Mineral Corporation by Aurora Geosciences Ltd.

Høy, Trygve, 1995. Besshi massive sulphide Zn-Cu-Pb; and Cyprus massive sulphide Cu (Zn), in Selected British Columbia Mineral Deposit Profiles, Volume 1 -Metallics and Coal, Lefebure, D.V. and Ray, G.E., Editors, British Columbia Ministry of Energy of Employment and Investment, Open File 1995-20, pages 49-52.

Hulbert, L. J., 1997. Geology and metallogeny of the Kluane Mafic-Ultramafic Belt Yukon Territory, Canada: Eastern Wrangellia – a new Ni-Cu-PGE metallogenic terrane. Geological Survey of Canada, Bulletin 506.

Israel, S., 2004. Geology of Southwestern Yukon (1:250,000 scale). Yukon Geological Survey, Open File 2004-16.

Israel, S., Colpron, M., Cubley, J., Moynihan, D., Murphy and D., Relf, C., 2014. Preliminary geological map of the of Mt. Decoeli area, NTS 115A/12,13 and 115B/9,16 (1:50,000 scale). Yukon Geological Survey, Open File 2014-18.

Jackson, P., 2014. Assessment report on the Ultra property 2013-2014 exploration programs, Whitehorse Mining District, located in the Haines Junction area, Yukon Territory. Prepared for Ashburton Ventures Inc. by Aurora Geosciences Ltd.

Jackson, P. and Morgan, T., 2003. Horizontal loop electromagnetic survey extensions on the Ultra Property. Report by Aurora Geosciences Ltd. Yukon Assessment Report 094465.

James, D., 2017. Assessment Report on the SPY Project for Group Ten Metals Inc.

Kiss, F., 2010a. First vertical derivative of the magnetic field, Kluane area aeromagnetic survey, Parts of NTS 115 A/13, 115 A/14 and 115 B/16, Yukon; Geological Survey of Canada, Open File 6585; Yukon Geological Survey, Open File 2010- 22, scale 1:50,000.

Kiss, F., 2010b. Residual total magnetic field, Kluane area aeromagnetic survey, Parts of NTS 115 A/13, 115 A/14 and 115 B/16, Yukon. Yukon Geological Survey, Open File 2010-21.

Liverton, T., 2006. The Ultra Property: Mineralogy and some economic considerations. Report for Klondike Star Mineral Corporation. *In*: Pautler, 2006, Assessment Report 094750.

Mann, W. and O'Shea, C. 2006. Prospecting, rock geochemistry and geophysical surveying program on the Ultra Property. Assessment Report for Klondike Star Mineral Corporation. Yukon Assessment Report 094690.

Morgan, T., 2013. Geochemical and prospecting assessment report based on geophysics.

Morgan, T., 2009. PROSPECTING, GEOCHEMICAL and TRENCHING REPORT on the 2008 ULTRA PROJECT.

Morgan, T. and Matkovich, V., 2003. Assessment report for claims Ult, Ultra, Eli and Tell, Haines Junction area, Yukon Territory. Yukon Assessment Report 094413.

Pautler, J.M., 2015. Geochemical and Geophysical Assessment Report on the Ultra Project for Duncastle Gold Corp.

Pautler, J., 2014. Technical report on the Ultra Project in the Kluane Ultramafic Belt, Yukon Territory. Report for Duncastle Gold Corp.

Pautler, J., 2012a. Geological and geochemical assessment report on the Ultra Project. Yukon Assessment Report 096112.

Pautler, J., 2012b. Geological and geochemical assessment report on the Ellen Project. Yukon Assessment Report.

Pautler, J., 2006a. Geological, geochemical and trenching report on the 2006 Ultra Project. Yukon Assessment Report 094750.

Pautler, J.M., 2006b. Geological and geochemical evaluation report on the Ellen Project. Assessment Report.

Peter, J.M., 1989. The Windy Craggy copper-cobalt-gold massive sulphide deposit, northwestern British Columbia (114P). British Columbia Ministry of Energy Mines and Petroleum Resources, Geological Fieldwork, 1988, Paper 1989-1, 455-466.

Reid, R.P., 1985. NORANDA EXPLORATION CO. LTD, May/85. Assessment Report on the Kul #091636

Rogers, J., 2016. 2016 AGATE ASSESSMENT REPORT UAV-AIRBORNE MAGNETIC SURVEY for Group Ten Metals Inc.

Rogers, R.S., 2011 prospecting, geological survey and geochemical survey report: Outpost Property. Report for Solomon Resources Ltd. Yukon Assessment Report 096108.

Rogers, R.S., 1985. Jennifer 1-10 Claims, assessment report. Report for S.J. Hill. Yukon Assessment Report 19657.

Simpson, R.G., 2014. 2014 Mineral Resource Estimate on the Wellgreen PGM-Ni-Cu Project. Prepared by GeoSim Services Inc. for Wellgreen Platinum Ltd. Effective date September 8, 2014.

Stack, R., 1989. Assessment report on the Kincora 1 – 30 Mineral Claims, Kluane Range, Whitehorse Mining District. Assessment Report 092811.

Van Der Heever D., Nowak, M., Johnson M., Rowe, D., 2011. Mineral Resource Estimation, Niblack Polymetallic Sulphide Project, Alaska, U.S.A. Report for Heatherdale Resources Ltd. and Niblack Mineral Development Inc. by SRK Consulting (Canada) Inc.

Watson, R. K., 1961. Report on Turam electromagnetic survey in the Cub Creek Area, Yukon Territory for Canadian Exploration Limited, by Hunting Survey Corporation Limited. Yukon Assessment Report 17469.

Woodcock, J. R., 1967. Geochemistry of Cub Creek Project, Yukon Territory. Assessment Report 19068.

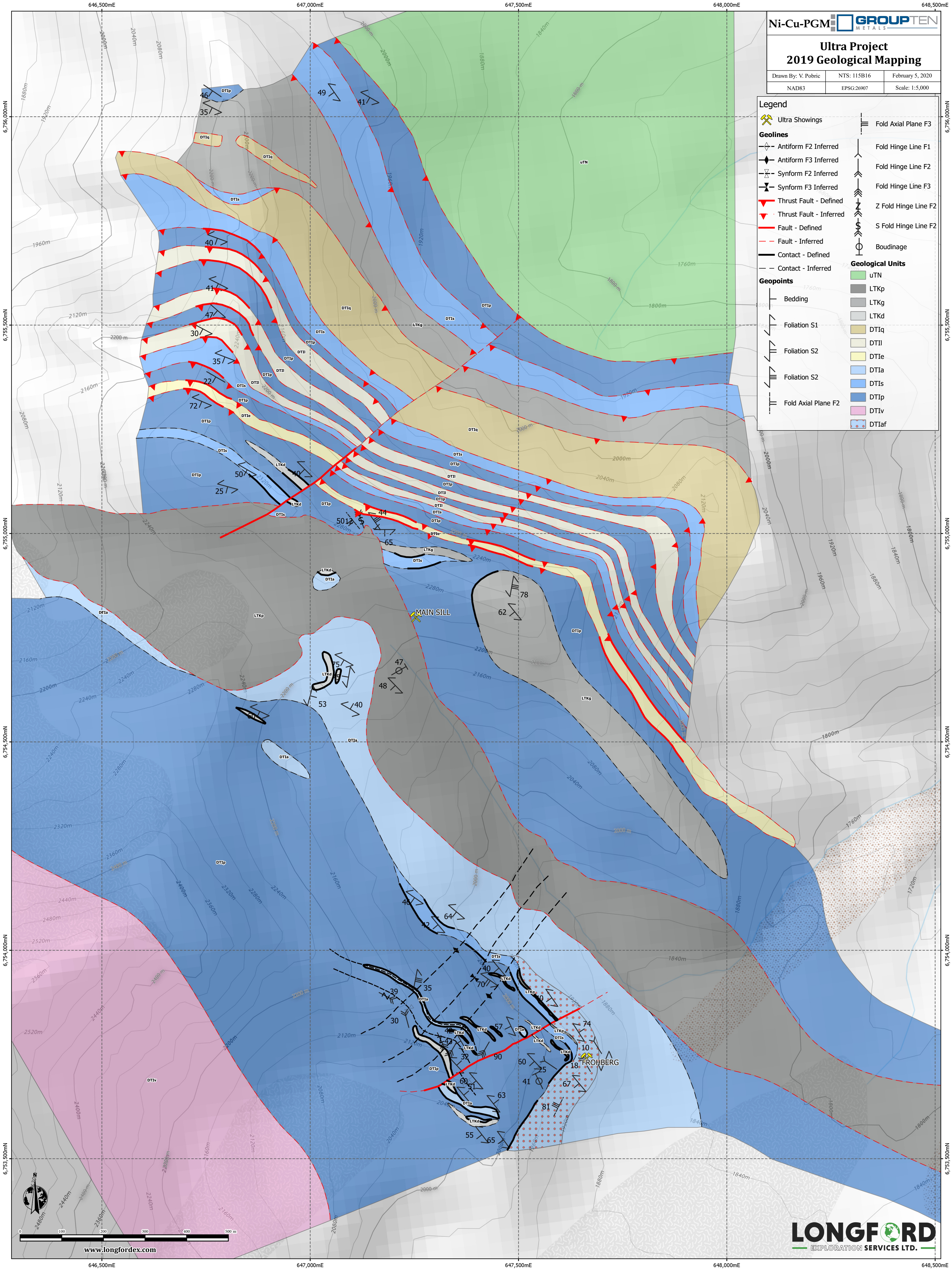
## APPENDIX A: Frohberg and Main Sill Geological Map

### Ultra Project 2019 Geological Mapping

Drawn By: V. Pobric    NTS: 115B16    February 5, 2020  
 NAD83    EPSG:26907    Scale: 1:5,000

**Legend**

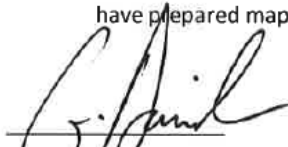
- Ultra Showings
- Geolines**
  - Antiform F2 Inferred
  - Antiform F3 Inferred
  - Synform F2 Inferred
  - Synform F3 Inferred
  - Thrust Fault - Defined
  - Thrust Fault - Inferred
  - Fault - Defined
  - Fault - Inferred
  - Contact - Defined
  - Contact - Inferred
- Geopoints**
  - Bedding
  - Foliation S1
  - Foliation S2
  - Foliation S2
  - Fold Axial Plane F2
- Fold Symbols**
  - Fold Axial Plane F3
  - Fold Hinge Line F1
  - Fold Hinge Line F2
  - Fold Hinge Line F3
  - Z Fold Hinge Line F2
  - S Fold Hinge Line F2
  - Boudinage
- Geological Units**
  - uTN
  - LTKp
  - LTKg
  - LTKd
  - DTIq
  - DTII
  - DTIe
  - DTIa
  - DTIs
  - DTIp
  - DTIv
  - DTIaf



## APPENDIX B: Date, Signature and Certificate of Author

I, Graham Davidson of 53 Grandin Woods, St. Albert, Alberta T8N 2Y4, do hereby certify the following:

- I am a member in good standing with Association of Professional Engineers, Geologists and Geophysicists of Alberta (# 42308);
- For the purposes of the Assessment Report entitled: "Prospecting, Geological and Geochemical Survey Report on the Ultra Property Haines Junction, Yukon, CANADA", effective date Jan. 31, 2020 of which I am the author and responsible person.
- I hold a Bachelor of Science (Honours) degree in Geology (1981) from the University of Western Ontario;
- I have practiced my profession as a geologist since graduation;
- I have worked in the Yukon since 1981 and been involved in mineral exploration programs on prospects at and around the Ultra Property including numerous Ni-Cu-PGE occurrences in the Kluane Ranges from the British Columbia border to Beaver Creek in southwest YT from 1982 to 2019 including the nearby Ellen Property, the Spy, Tobi, Arch Creek, Donjek, Burwash Uplands and White River area prospects.
- I supervised and participated in the 2019 work program on the Ultra Property including the most recent work program performed from Sept. 7-20, 2019 to conduct exploration work for Longford Exploration Services Ltd. on behalf of Group Ten Metals Inc.;
- This report includes mapping and sampling by geologists L. Blackburn, R. Versloot, and C. Long who have prepared maps and charts with personnel from Longford Exploration Services Ltd.;



Graham Davidson P.Geol. #42308

Date: Jan 31, 2020

APPENDIX C: Statement of Expenditures

DATE: September 30, 2019



SEND TO:  
 Group Ten Metals Inc.  
 #904-409 Granville Street  
 Vancouver, BC  
 Canada V6C 1T2  
 604-357-4790

Longford Exploration Services Ltd.  
 #860-688 West Hastings Street  
 Vancouver, BC  
 Canada, V6B 1P1  
 778-809-7009

Ultra 2019

Personnel		Days	Rate	Line Total
Pgeo - Davidson	September 2019	11	\$ 800.00	\$ 8,800.00
Project Manager / Geologist - Versloot		11	\$ 700.00	\$ 7,700.00
Sr. Geologist - Blackburn		4	\$ 700.00	\$ 2,800.00
Geologist - Krukowski		2	\$ 600.00	\$ 1,200.00
Junior Geologist - Long		11	\$ 500.00	\$ 5,500.00
Senior Field Tech / Medic - Mckenzie		4	\$ 450.00	\$ 1,800.00
	total man days	43	Cat. Total	\$ 27,800.00
<b>Food and Lodging</b>		Units	Rate	Line Total
Food and Groceries	per diem	43	\$ 55.00	\$ 2,365.00
Lodging	Haines Junction	43	\$ 75.00	\$ 3,225.00
			Cat. Total	\$ 5,590.00
<b>Transportation</b>		Units/Days	Unit Price	Line Total
Truck	1 ton with safety and recovery gear	26	\$ 140.00	\$ 3,640.00
Trailer	18' 7000lb covered trailer	11	\$ 50.00	\$ 550.00
Fuel	per km for truck	570	\$ 0.55	\$ 313.50
Heli	A-Star, Capital Helicopters	11.9	\$ 1,850.00	\$ 22,015.00
Jet Fuel	190L / hour	2261	\$ 1.65	\$ 3,730.65
			Cat. Total	\$ 30,249.15
<b>Equipment Rentals</b>		Units	Unit Price	Line Total
Electronics Kit	Radios, Sat phones, GPS, Drone, per man day	43	\$ 25.00	\$ 1,075.00
Portable XRF with Stand	Per Day	11	\$ 175.00	\$ 1,925.00
			Cat. Total	\$ 3,000.00
<b>Geophysics</b>		Units	Unit Price	Line Total
2004 HEM Survey	Updating geotiffs	1	\$ 1,500.00	\$ 1,500.00
			Cat. Total	\$ 1,500.00
<b>Consumable</b>		Units	Unit Price	Line Total
Sample Bags		43	\$ 10.00	\$ 430.00
Flagging Tape		43	\$ 5.00	\$ 215.00
Office Consumables		43	\$ 5.00	\$ 215.00
			Cat. Total	\$ 860.00
<b>Analytical</b>		Units	Unit Price	Line Total
Analysis - Soil	SS80, AQ300, FA330	250	\$ 32.40	\$ 8,100.00
Analysis - Rock	PRP70-250, FA330, AQ300	79	\$ 36.80	\$ 2,907.20
			Cat. Total	\$ 11,007.20
<b>Pre/Post Field</b>		Units	Unit Price	Line Total
Assessment Report prep and work filing	Including detailed mapping and sill genesis study, planning	1	\$ 2,500.00	\$ 2,500.00
			Cat. Total	\$ 2,500.00
				Estimated Sub Total \$ 82,506.35
				Management 15% \$ 12,375.95
				SUB TOTAL \$ 94,882.30
				GST 5 % \$ 4,744.12
				Total \$ 99,626.42

## 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-Whitehorse  
Received: September 25, 2019  
Analysis Start: October 03, 2019  
Report Date: January 22, 2020  
Page: 1 of 4

**CERTIFICATE OF ANALYSIS** WHI19000600.2

**CLIENT JOB INFORMATION**

Project: 2019-Ultra  
Shipment ID:  
P.O. Number  
Number of Samples: 79

**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
PRP70-250	79	Crush, split and pulverize 250 g rock to 200 mesh			WHI
FA330	79	Fire assay fusion Au Pt Pd by ICP-ES	30	Completed	VAN
EN002	79	Environmental disposal charge-Fire assay lead waste			VAN
AQ300	79	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed	VAN
SHP01	79	Per sample shipping charges for branch shipments			VAN
AQ370-X	11	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN

**ADDITIONAL COMMENTS**

Version 2: AQ370-Cu & Zn included.

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

CC:

MAY LAI  
Data Verification 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

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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:** 2019-Ultra  
**Report Date:** January 22, 2020

**Page:** 2 of 4

**Part:** 1 of 2

**CERTIFICATE OF ANALYSIS**

**WHI19000600.2**

Method	Analyte	WGHT	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
			Wgt	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi
Unit		kg	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MDL		0.01	2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	2	1	0.5	3	3	1
3249102	Rock	2.19	3	<3	<2	<1	4	7	115	<0.3	7	3	365	3.01	<2	3	49	<0.5	<3	<3	18
3249103	Rock	2.08	3	<3	<2	2	34	<3	194	0.9	30	15	1350	5.28	2	<2	35	<0.5	<3	<3	122
3249104	Rock	1.40	14	<3	<2	19	>10000	3	853	5.8	42	124	838	19.15	12	<2	2	<0.5	<3	<3	208
3249107	Rock	1.19	30	3	8	<1	790	<3	22	0.6	32	81	485	6.40	13	<2	48	<0.5	<3	<3	86
3249108	Rock	1.33	5	11	23	<1	74	<3	50	1.0	64	36	911	6.99	<2	<2	116	<0.5	<3	<3	223
3249109	Rock	1.02	3	<3	<2	<1	42	<3	19	0.4	36	17	344	1.93	<2	<2	130	<0.5	<3	<3	47
3249110	Rock	1.30	10	5	17	<1	33	<3	50	<0.3	80	31	722	4.41	<2	<2	51	<0.5	<3	<3	88
3249111	Rock	1.17	6	5	15	1	123	<3	22	0.4	55	33	638	3.75	2	<2	36	<0.5	<3	<3	82
3249112	Rock	1.80	3	<3	3	<1	13	<3	35	0.4	62	17	500	3.33	<2	<2	116	<0.5	<3	<3	124
3249113	Rock	2.89	6	6	9	<1	133	<3	47	0.5	62	24	534	4.62	<2	<2	126	<0.5	<3	<3	176
3249006	Rock	3.20	4	15	44	<1	328	5	10	0.4	1336	114	807	7.60	14	<2	22	<0.5	<3	<3	52
3249007	Rock	3.43	5	21	54	<1	281	4	8	0.4	1419	112	964	7.30	7	<2	21	<0.5	<3	<3	33
3249008	Rock	2.01	7	18	47	<1	332	4	11	<0.3	1527	122	700	8.35	7	<2	5	<0.5	<3	<3	30
3249009	Rock	1.98	4	21	54	<1	224	4	15	<0.3	1214	93	998	6.81	7	<2	41	<0.5	<3	<3	70
3249010	Rock	0.96	6	48	132	<1	1460	5	33	0.9	1949	162	726	9.89	10	<2	10	<0.5	<3	<3	106
3249011	Rock	0.37	22	3	23	<1	>10000	<3	15	35.9	8	2	90	3.62	<2	<2	6	9.0	<3	<3	1
3249012	Rock	1.05	9	16	37	<1	183	3	15	<0.3	1238	116	730	8.71	4	<2	5	<0.5	<3	<3	34
3249013	Rock	0.72	5	20	63	<1	145	<3	18	<0.3	1371	121	828	7.89	<2	<2	2	<0.5	<3	<3	29
3249014	Rock	0.99	6	33	71	<1	297	6	22	0.4	1050	103	917	8.01	29	<2	27	<0.5	<3	<3	84
3249015	Rock	2.04	10	<3	<2	<1	166	19	76	0.4	37	13	215	3.87	5	<2	51	1.1	<3	<3	112
3249016	Rock	2.77	3	14	21	<1	60	6	37	<0.3	896	99	681	7.65	13	<2	91	<0.5	<3	<3	106
3249017	Rock	2.25	4	7	4	<1	119	<3	45	<0.3	283	44	507	4.40	2	<2	90	<0.5	<3	<3	64
3249018	Rock	2.68	5	14	37	<1	222	4	27	<0.3	1663	111	767	7.33	14	<2	34	<0.5	<3	<3	47
3249019	Rock	2.36	6	13	34	<1	274	<3	24	<0.3	1138	112	658	8.38	13	<2	15	<0.5	<3	4	93
3249020	Rock	2.63	5	14	30	<1	200	<3	31	<0.3	1096	112	721	8.16	3	<2	24	<0.5	<3	<3	71
3249021	Rock	1.84	4	22	42	<1	133	4	36	<0.3	1137	109	892	7.86	<2	<2	5	<0.5	<3	<3	43
3249022	Rock	0.90	2	<3	<2	5	198	4	801	0.6	57	18	170	1.96	<2	<2	39	6.1	<3	<3	103
3249023	Rock	2.29	11	20	49	<1	213	5	26	<0.3	1544	102	902	7.11	6	<2	31	<0.5	<3	<3	87
3249024	Rock	2.08	12	<3	<2	<1	49	11	32	<0.3	43	11	378	2.01	43	<2	133	<0.5	<3	<3	46
3249025	Rock	1.01	3	<3	<2	<1	121	<3	39	<0.3	33	34	712	7.05	<2	<2	97	<0.5	<3	<3	361

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

**Project:** 2019-Ultra  
**Report Date:** January 22, 2020

**Page:** 3 of 4 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** **WH19000600.2**

Method	Analyte	Unit	MDL	WGHT	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300		
				Wgt	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V
				kg	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
3249026	Rock			1.87	2	<3	<2	3	67	5	65	<0.3	19	24	774	6.16	6	<2	83	<0.5	<3	<3	168
3249027	Rock			1.75	2	<3	<2	1	180	<3	337	0.4	31	28	1091	6.72	2	<2	17	4.2	<3	<3	126
3249028	Rock			2.27	2	<3	<2	<1	1816	<3	265	0.9	45	33	1227	5.77	<2	<2	8	<0.5	<3	<3	147
3249029	Rock			1.88	3	<3	<2	1	22	<3	112	0.7	24	11	818	4.66	4	<2	110	<0.5	<3	3	85
3249030	Rock			1.73	6	8	12	<1	69	<3	95	0.4	20	24	1073	4.31	<2	5	532	<0.5	<3	<3	155
3249031	Rock			3.25	99	3	12	5	1263	58	>10000	6.4	7	25	122	28.38	42	<2	1	226.3	29	5	1
3249032	Rock			4.38	87	6	7	14	>10000	984	>10000	24.6	20	372	187	35.25	202	<2	2	100.0	36	26	8
3249033	Rock			2.49	84	<3	8	19	>10000	1752	>10000	54.3	32	88	505	31.77	321	<2	33	238.4	62	15	7
3249037	Rock			3.41	3	<3	<2	<1	57	<3	137	1.0	6	37	926	8.87	<2	<2	43	<0.5	<3	<3	316
3249038	Rock			1.91	3	<3	<2	2	83	<3	191	0.5	23	32	765	6.87	<2	<2	26	<0.5	<3	<3	64
3249039	Rock			1.54	3	<3	2	<1	187	<3	49	0.6	16	20	602	4.80	<2	<2	35	<0.5	<3	<3	125
3249040	Rock			1.76	3	<3	<2	1	101	<3	92	<0.3	<1	23	1425	11.13	<2	<2	41	<0.5	<3	<3	8
3249041	Rock			1.48	4	<3	<2	<1	6	<3	30	0.6	13	26	315	4.25	<2	<2	22	<0.5	<3	<3	113
3249042	Rock			1.24	3	<3	2	<1	48	<3	32	<0.3	52	24	402	3.07	<2	<2	11	<0.5	<3	<3	44
3249043	Rock			1.87	4	<3	2	4	59	<3	37	<0.3	3	19	398	6.88	<2	<2	95	<0.5	<3	<3	27
3249044	Rock			1.60	81	5	7	17	>10000	2584	>10000	19.7	17	38	581	28.14	392	<2	26	27.9	20	7	51
3249045	Rock			1.89	10	6	29	1	376	<3	43	0.5	68	50	605	9.43	<2	<2	24	<0.5	<3	<3	49
3249051	Rock			1.71	7	16	46	<1	280	4	20	<0.3	1405	127	699	8.53	4	<2	4	<0.5	<3	<3	32
3249052	Rock			1.73	8	22	49	<1	78	5	31	<0.3	1191	117	1056	8.54	13	<2	7	<0.5	<3	<3	36
3249053	Rock			1.79	4	18	42	<1	142	4	37	<0.3	853	97	1353	7.18	76	<2	184	<0.5	<3	<3	86
3249054	Rock			1.50	4	<3	<2	<1	31	11	21	<0.3	55	11	1157	2.01	<2	<2	767	<0.5	<3	<3	65
3249055	Rock			1.18	5	<3	2	2	38	<3	130	1.1	3	10	1329	10.15	<2	<2	16	<0.5	<3	<3	185
3249056	Rock			1.20	3	<3	<2	<1	20	<3	31	0.4	20	24	565	3.80	7	<2	74	<0.5	<3	<3	96
3249057	Rock			2.75	3	<3	3	<1	27	<3	47	0.5	22	26	708	4.60	4	<2	108	<0.5	<3	<3	138
3249058	Rock			2.02	35	7	2	1	18	4	63	<0.3	28	22	952	4.76	10	<2	186	<0.5	<3	<3	75
3249059	Rock			1.59	3	7	11	<1	84	<3	29	<0.3	208	32	516	3.17	15	<2	53	<0.5	<3	<3	66
3249060	Rock			2.45	142	<3	153	<1	9760	<3	17	6.9	10	19	628	2.04	4	2	60	0.6	<3	<3	21
3249061	Rock			2.32	4	20	58	<1	184	5	29	<0.3	1312	109	868	7.75	<2	<2	27	<0.5	<3	<3	48
3249062	Rock			1.91	128	>10000	7925	2	>10000	14	83	32.8	1041	13	111	6.94	8	<2	61	2.2	5	4	22
3249063	Rock			2.68	461	>10000	>10000	2	>10000	41	83	34.5	1361	18	142	6.54	16	<2	66	2.5	16	7	21

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Project: 2019-Ultra  
Report Date: January 22, 2020

Page: 1 of 2 Part: 1 of 2

**QUALITY CONTROL REPORT** WHI19000600.2

Method	Analyte	WGHT	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
			Unit	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi
MDL		kg	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	2	1	0.5	3	3	1
Pulp Duplicates																					
REP 3249017	QC		5	8	4																
3249023	Rock	2.29	11	20	49	<1	213	5	26	<0.3	1544	102	902	7.11	6	<2	31	<0.5	<3	<3	87
REP 3249023	QC					1	215	6	27	<0.3	1581	105	928	7.32	6	<2	32	<0.5	<3	<3	90
REP 3249059	QC		3	8	9																
3249065	Rock	1.01	106	482	1257	2	>10000	10	39	2.8	1845	133	123	6.92	12	<2	26	<0.5	<3	<3	32
REP 3249065	QC																				
3249066	Rock	2.45	52	331	1793	1	2932	4	35	3.2	1450	47	246	3.46	13	<2	140	<0.5	<3	<3	25
REP 3249066	QC					1	2886	4	35	3.2	1440	47	244	3.41	13	<2	138	<0.5	<3	<3	25
1895771	Rock	1.00	3	<3	<2	<1	184	<3	65	0.3	38	39	768	8.38	<2	<2	42	<0.5	<3	<3	189
REP 1895771	QC		3	<3	<2																
1895774	Rock	1.31	3	<3	<2	<1	40	<3	102	<0.3	49	42	1309	9.92	8	<2	31	<0.5	<3	<3	297
REP 1895774	QC					<1	40	4	101	<0.3	48	42	1321	10.08	8	<2	31	<0.5	<3	<3	296
Core Reject Duplicates																					
3249017	Rock	2.25	4	7	4	<1	119	<3	45	<0.3	283	44	507	4.40	2	<2	90	<0.5	<3	<3	64
DUP 3249017	QC		5	8	4	<1	117	<3	45	<0.3	260	42	495	4.25	<2	<2	92	<0.5	<3	<3	65
3249059	Rock	1.59	3	7	11	<1	84	<3	29	<0.3	208	32	516	3.17	15	<2	53	<0.5	<3	<3	66
DUP 3249059	QC		3	11	11	<1	79	<3	30	<0.3	211	31	503	3.18	15	<2	52	<0.5	<3	<3	64
Reference Materials																					
STD BVGEO01	Standard					10	4440	180	1726	3.0	164	24	717	3.82	117	12	58	6.1	<3	24	74
STD CDN-ME-9A	Standard																				
STD CDN-ME-14A	Standard																				
STD DS11	Standard					14	146	138	341	1.6	77	13	1012	3.11	43	6	63	2.0	7	11	48
STD DS11	Standard					14	150	135	351	1.8	79	13	1037	3.19	45	6	69	2.2	7	11	50
STD OREAS262	Standard					<1	122	55	154	0.5	63	27	545	3.34	36	7	36	<0.5	3	<3	22
STD OREAS262	Standard					<1	120	56	150	0.5	66	27	540	3.39	38	8	37	0.5	<3	<3	23
STD OREAS262	Standard					<1	116	55	147	0.5	65	27	529	3.30	36	8	36	<0.5	<3	<3	22
STD OREAS683	Standard		211	1812	874																
STD OREAS683	Standard		210	1727	879																

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Vancouver British Columbia V6B 1P1 Canada

Project: 2019-Ultra  
Report Date: January 22, 2020

Page: 1 of 2 Part: 2 of 2

**QUALITY CONTROL REPORT** **WHI19000600.2**

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ370	AQ370
		Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc	Cu	Zn
Unit		%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%
MDL		0.01	0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	5	0.001	0.01
Pulp Duplicates																				
REP 3249017	QC																			
3249023	Rock	1.50	0.028	5	886	14.13	35	0.050	81	2.78	<0.01	0.05	<2	0.13	<1	<5	6	14		
REP 3249023	QC	1.56	0.029	5	907	14.59	36	0.051	84	2.86	<0.01	0.05	<2	0.14	<1	<5	8	14		
REP 3249059	QC																			
3249065	Rock	1.30	0.054	5	25	0.33	190	0.244	560	0.40	0.03	0.01	4	1.97	<1	<5	<5	<5	1.587	<0.01
REP 3249065	QC																		1.606	<0.01
3249066	Rock	6.94	0.058	8	24	0.36	180	0.183	957	0.58	0.02	0.08	<2	0.52	<1	<5	<5	<5		
REP 3249066	QC	6.95	0.057	8	25	0.36	183	0.178	974	0.58	0.02	0.08	<2	0.53	<1	<5	<5	<5		
1895771	Rock	3.14	0.073	3	68	2.13	34	0.491	176	3.07	<0.01	<0.01	<2	0.90	<1	<5	<5	13		
REP 1895771	QC																			
1895774	Rock	1.51	0.093	3	77	2.58	7	0.789	<20	4.07	0.02	<0.01	<2	1.11	<1	<5	<5	14		
REP 1895774	QC	1.47	0.093	3	80	2.61	7	0.757	<20	4.09	0.02	<0.01	<2	1.11	<1	<5	<5	14		
Core Reject Duplicates																				
3249017	Rock	1.50	0.041	4	203	4.45	75	0.132	31	1.73	0.05	0.12	<2	<0.05	<1	<5	5	5		
DUP 3249017	QC	1.52	0.042	5	188	4.30	79	0.137	26	1.71	0.05	0.13	<2	<0.05	<1	<5	7	5		
3249059	Rock	1.92	0.043	2	548	3.63	10	0.116	<20	2.89	0.15	0.04	<2	<0.05	<1	<5	5	6		
DUP 3249059	QC	1.95	0.041	2	573	3.53	11	0.111	<20	2.81	0.15	0.04	<2	<0.05	<1	<5	6	6		
Reference Materials																				
STD BVGEO01	Standard	1.32	0.074	25	166	1.34	344	0.233	<20	2.37	0.20	0.90	5	0.66	<1	<5	<5	6		
STD CDN-ME-9A	Standard																		0.649	0.01
STD CDN-ME-14A	Standard																		1.218	3.05
STD DS11	Standard	1.04	0.069	16	55	0.84	424	0.087	<20	1.11	0.07	0.40	<2	0.28	<1	<5	<5	<5		
STD DS11	Standard	1.07	0.073	17	57	0.86	439	0.095	<20	1.17	0.07	0.41	4	0.29	<1	<5	7	<5		
STD OREAS262	Standard	3.04	0.039	16	41	1.20	259	0.003	<20	1.28	0.07	0.32	<2	0.26	<1	<5	<5	<5		
STD OREAS262	Standard	3.02	0.041	18	42	1.22	268	0.003	<20	1.33	0.07	0.32	<2	0.27	<1	<5	6	<5		
STD OREAS262	Standard	2.93	0.040	18	43	1.18	262	0.003	<20	1.35	0.07	0.33	<2	0.27	<1	<5	<5	<5		
STD OREAS683	Standard																			
STD OREAS683	Standard																			

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**Project:** 2019-Ultra  
**Report Date:** January 22, 2020

**Page:** 2 of 2 **Part:** 1 of 2

**QUALITY CONTROL REPORT** **WHI19000600.2**

		WGHT	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		kg	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V
		0.01	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
STD PD05	Standard		532	422	598																
STD PG04	Standard		1029	946	1259																
STD DS11 Expected						13.9	156	138	345	1.71	81.9	14.2	1055	3.2082	42.8	7.65	67.3	2.37	7.2	12.2	50
STD BVGEO01 Expected						10.8	4415	187	1741	2.53	163	25	733	3.7	121	14.4	55	6.5	2.2	25.6	73
STD OREAS262 Expected							118	56	154	0.45	62	26.9	530	3.284	35.8	9.33	36	0.61	3.39		22.5
STD PD05 Expected			519	430	596																
STD OREAS683 Expected			207	1760	853																
STD PG04 Expected			996	910	1210																
STD CDN-ME-9A Expected																					
STD CDN-ME-14A Expected																					
BLK	Blank					<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1
BLK	Blank					<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1
BLK	Blank					<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1
BLK	Blank		3	<3	<2																
BLK	Blank		3	<3	<2																
BLK	Blank		3	<3	5																
BLK	Blank																				
Prep Wash																					
ROCK-WHI	Prep Blank		3	<3	<2	<1	4	<3	27	<0.3	1	3	501	1.84	<2	<2	23	<0.5	<3	<3	26
ROCK-WHI	Prep Blank		3	<3	<2	<1	6	<3	32	<0.3	2	4	598	2.11	<2	<2	29	<0.5	<3	<3	33

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**BUREAU VERITAS** MINERAL LABORATORIES  
Canada

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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: 2019-Ultra  
Report Date: January 22, 2020

Page: 2 of 2 Part: 2 of 2

**QUALITY CONTROL REPORT** WHI19000600.2

		AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ370	AQ370
		Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc	Cu	Zn	
		%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	%	
		0.01	0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	5	0.001	0.01	
STD PD05	Standard																				
STD PG04	Standard																				
STD DS11 Expected		1.063	0.0701	18.6	61.5	0.85	417	0.0976	6	1.129	0.0694	0.4	2.9	0.2835	0.3	4.9	4.7	3.1			
STD BVGEO01 Expected		1.3219	0.0727	25.9	171	1.2963	340	0.233		2.347	0.1924	0.89	3.5	0.6655		7.37	5.97				
STD OREAS262 Expected		2.98	0.04	15.9	41.7	1.17	248	0.003		1.204	0.071	0.312		0.253		3.73	3.24				
STD PD05 Expected																					
STD OREAS683 Expected																					
STD PG04 Expected																					
STD CDN-ME-9A Expected																				0.654	0.0096
STD CDN-ME-14A Expected																				1.24	2.97
BLK	Blank	<0.01	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5			
BLK	Blank	<0.01	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5			
BLK	Blank	<0.01	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5			
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																			<0.001	<0.01
Prep Wash																					
ROCK-WHI	Prep Blank	0.67	0.041	6	4	0.52	55	0.084	<20	0.93	0.09	0.10	<2	<0.05	<1	<5	<5	<5			
ROCK-WHI	Prep Blank	0.79	0.042	6	6	0.64	67	0.097	<20	1.13	0.10	0.11	<2	<0.05	<1	<5	<5	<5			

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To: **LONGFORD EXPLORATION SERVICES LTD.**  
**460-688 WEST HASTINGS STREET**  
**VANCOUVER BC V6B 1P1**

Page: 1  
 Total # Pages: 2 (A)  
 Plus Appendix Pages  
 Finalized Date: 9-FEB-2020  
 This copy reported on  
 10-FEB-2020  
 Account: LOFOREX

**CERTIFICATE VA20029465**

Project: Ultra  
 This report is for 3 Pulp samples submitted to our lab in Vancouver, BC, Canada on 7-FEB-2020.  
 The following have access to data associated with this certificate:  
 VEDRAN POBRIC                      JAMES ROGERS                      RYAN VERSLOOT

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP27	Ore grade Pt, Pd and Au by ICP	ICP-AES
Rh-MS25	Rh 30g FA ICP-MS	ICP-MS

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



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To: **LONGFORD EXPLORATION SERVICES LTD.**  
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**VANCOUVER BC V6B 1P1**

Page: 2 - A  
 Total # Pages: 2 (A)  
 Plus Appendix Pages  
 Finalized Date: 9-FEB-2020  
 Account: LOFOREX

Project: Ultra

**CERTIFICATE OF ANALYSIS VA20029465**

Sample Description	Method Analyte Units LOD	PGM-ICP27	PGM-ICP27	PGM-ICP27	Rh-MS25
		Au ppm 0.01	Pt ppm 0.01	Pd ppm 0.01	Rh ppm 0.001
3249062		0.42	9.76	7.53	0.002
3249063		0.35	48.2	19.10	0.004
3249064		0.22	4.00	19.80	<0.001

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



## APPENDIX E: 2019 Soil Sample Analytical Certificates



**BUREAU VERITAS** MINERAL LABORATORIES  
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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-Whitehorse  
Received: September 25, 2019  
Analysis Start: October 01, 2019  
Report Date: January 14, 2020  
Page: 1 of 10

**CERTIFICATE OF ANALYSIS** WHI19000597.1

**CLIENT JOB INFORMATION**

Project: 2019-Ultra  
Shipment ID:  
P.O. Number  
Number of Samples: 250

**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	250	Dry at 60C			WHI
SS80	250	Dry at 60C sieve 100g to -80 mesh			WHI
FA330	250	Fire assay fusion Au Pt Pd by ICP-ES	30	Completed	VAN
EN002	250	Environmental disposal charge-Fire assay lead waste			VAN
AQ300	250	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed	VAN
SVRJT	250	Save all or part of Soil Reject			WHI
SHP01	250	Per sample shipping charges for branch shipments			VAN

**ADDITIONAL COMMENTS**

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

CC:



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**BUREAU VERITAS** MINERAL LABORATORIES  
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Vancouver British Columbia V6B 1P1 Canada

**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 2 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** WHI19000597.1

Method	Analyte	Unit	MDL	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300		
				Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
				ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
3248301	Soil			9	<3	7	2	47	7	73	<0.3	32	17	578	3.66	18	<2	34	<0.5	<3	<3	64	0.57
3248302	Soil			10	<3	6	3	25	7	63	<0.3	25	15	650	3.16	15	<2	30	<0.5	<3	<3	58	0.41
3248303	Soil			19	<3	5	3	34	9	69	<0.3	28	15	517	3.51	18	<2	39	<0.5	<3	<3	65	0.70
3248304	Soil			6	<3	4	<1	61	5	57	<0.3	32	15	396	3.16	13	<2	39	<0.5	<3	<3	59	0.50
3248305	Soil			7	<3	7	2	80	5	66	<0.3	32	20	558	3.30	12	<2	32	<0.5	<3	<3	64	0.38
3248306	Soil			6	<3	<2	2	55	7	90	<0.3	35	15	470	3.70	18	<2	26	<0.5	<3	<3	66	0.39
3248307	Soil			5	<3	<2	2	38	8	79	<0.3	32	16	465	3.63	16	<2	25	<0.5	<3	<3	68	0.44
3248308	Soil			6	<3	7	1	42	4	49	<0.3	29	11	388	2.87	11	<2	34	<0.5	<3	<3	53	0.60
3248309	Soil			6	<3	5	<1	42	5	59	<0.3	33	14	524	3.10	12	<2	31	<0.5	<3	<3	59	0.51
3248310	Soil			4	<3	3	1	34	7	64	<0.3	32	13	412	3.35	14	<2	30	<0.5	<3	<3	70	0.54
3248311	Soil			8	3	5	1	46	6	61	<0.3	34	12	358	3.24	12	<2	30	<0.5	<3	<3	67	0.50
3248312	Soil			33	<3	4	<1	66	4	63	<0.3	37	13	427	3.33	12	<2	38	<0.5	<3	<3	61	0.69
3248313	Soil			7	<3	5	1	50	7	61	<0.3	35	14	371	3.44	14	<2	32	<0.5	<3	<3	66	0.66
3248314	Soil			6	<3	15	<1	90	4	62	0.4	47	28	626	5.40	5	<2	18	<0.5	<3	<3	123	0.65
3248315	Soil			3	<3	11	<1	136	<3	57	<0.3	43	29	750	5.96	3	<2	11	<0.5	<3	<3	133	0.54
3248316	Soil			3	<3	16	<1	123	<3	84	<0.3	72	42	886	6.33	5	<2	19	<0.5	<3	<3	120	0.70
3248317	Soil			15	<3	11	2	97	6	64	<0.3	31	18	577	3.51	14	<2	27	<0.5	<3	<3	70	0.42
3248318	Soil			6	6	13	1	148	3	61	<0.3	33	26	837	4.64	8	<2	20	<0.5	<3	<3	94	0.53
3248319	Soil			10	<3	10	2	59	8	54	<0.3	29	13	325	3.52	15	<2	24	<0.5	<3	<3	63	0.41
3248320	Soil			81	<3	10	2	58	5	54	<0.3	29	14	349	3.60	15	<2	26	<0.5	<3	3	64	0.42
3248321	Soil			8	<3	4	2	113	5	66	<0.3	35	17	495	3.69	14	<2	30	<0.5	<3	<3	74	0.50
3248322	Soil			6	<3	6	2	33	8	62	<0.3	29	15	564	3.65	17	<2	35	<0.5	<3	<3	68	0.59
3248323	Soil			9	<3	7	1	44	4	57	<0.3	34	17	598	3.38	13	<2	36	<0.5	<3	<3	68	0.54
3248324	Soil			7	<3	10	2	68	7	61	<0.3	32	16	537	3.40	16	<2	32	<0.5	<3	<3	63	0.58
3248325	Soil			6	<3	21	1	186	6	64	<0.3	34	16	566	3.44	14	<2	32	<0.5	<3	<3	66	0.54
3248401	Soil			4	<3	4	1	36	6	59	<0.3	30	12	372	3.20	13	<2	35	<0.5	<3	<3	64	0.52
3248402	Soil			7	<3	4	1	53	6	67	<0.3	34	16	483	3.47	16	<2	42	<0.5	<3	<3	67	0.79
3248403	Soil			5	<3	11	1	114	7	61	<0.3	30	17	526	3.68	16	<2	28	<0.5	<3	<3	73	0.45
3248404	Soil			9	4	22	<1	255	3	70	<0.3	47	23	590	4.48	8	<2	23	<0.5	<3	<3	84	0.67
3248405	Soil			50	<3	5	2	52	8	79	<0.3	27	16	639	3.23	12	<2	36	<0.5	<3	<3	68	0.69

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**Client:** Longford Exploration Services Ltd.  
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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

Page: 2 of 10

Part: 2 of 2

**CERTIFICATE OF ANALYSIS**

WHI19000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5
3248301	Soil	0.060	10	42	0.74	300	0.024	<20	1.68	0.01	0.05	<2	<0.05	<1	<5	<5
3248302	Soil	0.059	5	39	0.72	204	0.026	<20	1.54	0.01	0.05	<2	<0.05	<1	<5	<5
3248303	Soil	0.077	8	42	0.70	350	0.023	<20	1.67	0.01	0.04	<2	<0.05	<1	<5	<5
3248304	Soil	0.036	8	41	0.81	253	0.059	<20	1.53	0.02	0.06	<2	<0.05	<1	<5	<5
3248305	Soil	0.070	8	40	0.90	160	0.058	<20	1.56	0.02	0.11	<2	<0.05	<1	<5	<5
3248306	Soil	0.043	8	43	0.83	194	0.032	<20	1.81	0.01	0.07	<2	<0.05	<1	<5	<5
3248307	Soil	0.053	7	42	0.87	143	0.049	<20	1.66	0.02	0.08	<2	<0.05	<1	<5	<5
3248308	Soil	0.035	7	34	0.68	138	0.045	<20	1.34	0.02	0.06	<2	<0.05	<1	<5	<5
3248309	Soil	0.040	8	37	0.74	159	0.042	<20	1.56	0.02	0.06	<2	<0.05	<1	<5	<5
3248310	Soil	0.046	8	42	0.80	202	0.034	<20	1.88	0.02	0.05	<2	<0.05	<1	<5	5
3248311	Soil	0.029	10	43	0.81	137	0.042	<20	1.80	0.02	0.06	<2	<0.05	<1	<5	5
3248312	Soil	0.032	10	42	0.81	172	0.053	<20	1.59	0.03	0.07	<2	<0.05	<1	<5	6
3248313	Soil	0.036	9	45	0.84	110	0.052	<20	1.94	0.02	0.06	<2	<0.05	<1	<5	<5
3248314	Soil	0.015	4	101	2.24	77	0.295	<20	2.68	<0.01	0.16	<2	<0.05	<1	<5	<5
3248315	Soil	0.038	2	89	1.79	58	0.228	<20	2.64	<0.01	0.13	<2	<0.05	<1	<5	<5
3248316	Soil	0.026	1	135	2.55	57	0.243	<20	3.12	<0.01	0.21	<2	<0.05	<1	<5	<5
3248317	Soil	0.062	12	46	0.81	192	0.045	<20	2.03	0.01	0.05	<2	<0.05	<1	<5	6
3248318	Soil	0.052	4	28	1.61	121	0.097	<20	2.19	<0.01	0.12	<2	<0.05	<1	<5	<5
3248319	Soil	0.056	9	44	0.77	204	0.026	<20	1.88	0.01	0.04	<2	<0.05	<1	<5	<5
3248320	Soil	0.054	9	44	0.79	206	0.029	<20	1.97	0.01	0.04	<2	<0.05	<1	<5	6
3248321	Soil	0.031	13	51	0.87	170	0.052	<20	2.13	0.02	0.05	<2	<0.05	<1	<5	6
3248322	Soil	0.072	10	44	0.79	285	0.028	<20	1.87	0.02	0.04	<2	<0.05	<1	<5	<5
3248323	Soil	0.055	11	42	0.82	195	0.060	<20	1.68	0.03	0.06	<2	<0.05	<1	<5	5
3248324	Soil	0.051	9	42	0.78	200	0.036	<20	1.63	0.02	0.05	<2	<0.05	<1	<5	<5
3248325	Soil	0.052	10	45	0.82	179	0.047	<20	1.81	0.02	0.05	<2	<0.05	<1	<5	5
3248401	Soil	0.053	9	41	0.73	206	0.036	<20	1.68	0.02	0.06	<2	<0.05	<1	<5	<5
3248402	Soil	0.080	15	42	0.77	204	0.031	<20	1.85	0.02	0.05	<2	<0.05	<1	<5	<5
3248403	Soil	0.059	11	44	0.80	169	0.059	<20	1.97	0.02	0.04	<2	<0.05	<1	<5	<5
3248404	Soil	0.034	4	77	1.72	85	0.188	<20	2.25	<0.01	0.11	<2	<0.05	<1	<5	<5
3248405	Soil	0.060	8	41	0.72	204	0.046	<20	1.64	0.02	0.06	<2	<0.05	<1	<5	<5

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460-688 West Hastings St.  
Vancouver British Columbia V6B 1P1 Canada

**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 3 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS**

**WHI19000597.1**

Method	Analyte	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	1	0.5	3	3	3	1	0.01
3248406	Soil	5	<3	14	<1	195	4	73	<0.3	38	23	689	4.58	10	<2	30	<0.5	<3	<3	111	0.82
3248407	Soil	6	<3	4	1	51	4	65	<0.3	40	18	585	3.64	12	<2	27	<0.5	<3	<3	68	0.49
3248408	Soil	6	<3	17	<1	159	<3	76	<0.3	67	38	851	5.69	<2	<2	10	<0.5	<3	<3	104	0.63
3248409	Soil	8	<3	10	2	174	7	92	<0.3	31	15	447	3.65	15	<2	26	<0.5	<3	<3	73	0.40
3248410	Soil	6	<3	13	2	83	6	69	<0.3	31	19	610	3.79	15	<2	24	<0.5	<3	<3	74	0.31
3248411	Soil	9	<3	15	3	61	8	77	<0.3	32	17	637	3.88	18	<2	34	<0.5	<3	<3	76	0.52
3248412	Soil	10	<3	5	2	71	6	61	<0.3	22	9	305	3.03	10	<2	34	<0.5	<3	<3	72	0.61
3248413	Soil	7	4	12	1	62	5	63	<0.3	32	14	519	3.34	12	<2	35	<0.5	<3	<3	67	0.49
3248414	Soil	8	<3	8	1	65	5	79	<0.3	32	16	555	3.46	13	<2	41	<0.5	<3	<3	71	0.72
3248415	Soil	12	<3	7	1	63	6	66	<0.3	45	15	366	3.90	15	<2	37	<0.5	<3	<3	86	0.49
3248416	Soil	6	<3	4	2	27	6	83	<0.3	33	14	414	3.75	15	<2	27	<0.5	<3	<3	80	0.38
3248451	Soil	7	<3	2	2	42	6	89	<0.3	34	15	466	3.75	17	<2	29	<0.5	<3	<3	77	0.45
3248452	Soil	14	<3	7	1	70	4	61	<0.3	37	17	606	3.80	10	<2	32	<0.5	<3	<3	81	0.51
3248453	Soil	8	<3	8	1	109	4	67	<0.3	32	14	517	3.23	11	<2	34	<0.5	<3	<3	64	0.48
3248454	Soil	7	<3	5	2	50	4	69	<0.3	36	15	477	3.61	13	<2	34	<0.5	<3	<3	68	0.45
3248455	Soil	10	3	8	2	54	8	70	<0.3	44	18	629	3.69	14	<2	35	<0.5	<3	<3	74	0.52
3248456	Soil	10	<3	13	2	209	6	75	<0.3	41	16	549	3.75	17	<2	36	<0.5	<3	4	71	0.53
3248457	Soil	9	<3	16	2	72	10	87	<0.3	37	18	655	3.72	15	<2	39	<0.5	<3	<3	73	0.54
3248458	Soil	10	4	12	2	48	6	77	<0.3	38	18	643	3.94	17	<2	39	<0.5	<3	<3	75	0.67
3248459	Soil	18	<3	11	2	59	5	75	<0.3	40	18	692	3.84	15	<2	36	<0.5	<3	<3	72	0.54
3248460	Soil	6	<3	6	1	55	8	93	<0.3	37	15	373	4.03	14	<2	29	<0.5	<3	<3	86	0.42
3248461	Soil	7	<3	9	1	60	7	98	<0.3	37	16	428	3.83	14	<2	29	<0.5	<3	<3	85	0.39
3248462	Soil	6	<3	11	2	79	7	127	<0.3	28	15	512	3.53	14	<2	27	<0.5	<3	<3	73	0.41
3248463	Soil	9	4	20	2	602	6	93	<0.3	32	12	323	3.41	14	<2	24	<0.5	<3	<3	75	0.39
3248464	Soil	11	4	10	2	56	6	92	<0.3	37	19	718	3.84	16	<2	46	<0.5	<3	<3	77	0.80
3249151	Soil	6	<3	8	3	47	8	93	<0.3	41	18	516	4.09	21	<2	30	<0.5	<3	<3	83	0.51
3249152	Soil	10	<3	5	2	56	6	67	<0.3	47	17	453	4.09	15	<2	37	<0.5	<3	<3	84	0.65
3249153	Soil	9	9	10	3	111	6	95	<0.3	55	18	379	4.03	23	<2	29	<0.5	<3	3	72	0.49
3249154	Soil	6	4	8	3	127	6	80	<0.3	48	17	333	4.25	22	<2	26	<0.5	<3	<3	81	0.44
3249155	Soil	11	<3	6	3	67	6	92	<0.3	49	17	485	4.11	22	<2	31	<0.5	<3	<3	78	0.55

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 3 of 10

**Part:** 2 of 2

**CERTIFICATE OF ANALYSIS** WH119000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	
3248406	Soil	0.072	6	62	1.26	209	0.111	<20	2.35	0.01	0.08	<2	<0.05	<1	<5	<5	
3248407	Soil	0.048	7	61	1.11	153	0.096	<20	1.86	0.02	0.06	<2	<0.05	<1	<5	<5	
3248408	Soil	0.062	<1	126	2.73	47	0.229	<20	2.88	<0.01	0.41	<2	<0.05	<1	<5	<5	
3248409	Soil	0.074	10	50	0.88	167	0.047	<20	2.15	0.01	0.05	<2	<0.05	<1	<5	<5	
3248410	Soil	0.045	11	48	0.87	159	0.059	<20	2.22	0.01	0.05	<2	<0.05	<1	<5	<5	
3248411	Soil	0.067	12	52	0.88	224	0.035	<20	2.18	0.02	0.05	<2	<0.05	<1	<5	<5	
3248412	Soil	0.063	11	41	0.75	176	0.073	<20	1.82	0.02	0.05	<2	<0.05	<1	<5	<5	
3248413	Soil	0.054	9	43	0.81	180	0.082	<20	1.74	0.02	0.06	<2	<0.05	<1	<5	<5	
3248414	Soil	0.095	13	44	0.81	214	0.058	<20	2.08	0.03	0.06	<2	<0.05	<1	<5	<5	
3248415	Soil	0.025	10	50	0.95	115	0.092	<20	2.54	0.02	0.07	<2	<0.05	<1	<5	<5	
3248416	Soil	0.029	9	48	0.89	155	0.077	<20	2.32	0.02	0.06	<2	<0.05	<1	<5	<5	
3248451	Soil	0.047	10	47	0.87	149	0.071	<20	2.02	0.02	0.06	<2	<0.05	<1	<5	<5	
3248452	Soil	0.037	10	54	1.16	124	0.141	<20	1.88	0.03	0.10	<2	<0.05	<1	<5	<5	
3248453	Soil	0.059	12	45	0.76	137	0.073	<20	1.70	0.03	0.08	<2	<0.05	<1	<5	<5	
3248454	Soil	0.027	11	45	0.86	170	0.091	<20	1.68	0.02	0.07	<2	<0.05	<1	<5	<5	
3248455	Soil	0.039	9	53	0.94	184	0.083	<20	1.98	0.03	0.08	<2	<0.05	<1	<5	<5	
3248456	Soil	0.059	14	48	0.89	153	0.067	<20	1.87	0.02	0.08	<2	<0.05	<1	<5	<5	
3248457	Soil	0.052	14	47	0.85	219	0.066	<20	1.96	0.03	0.07	<2	<0.05	<1	<5	<5	
3248458	Soil	0.065	13	48	0.89	235	0.054	<20	1.99	0.02	0.07	<2	<0.05	<1	<5	<5	
3248459	Soil	0.052	10	51	0.95	192	0.068	<20	1.99	0.02	0.07	<2	<0.05	<1	<5	<5	
3248460	Soil	0.038	10	50	0.90	188	0.079	<20	2.52	0.02	0.05	<2	<0.05	<1	<5	<5	
3248461	Soil	0.037	11	49	0.86	180	0.081	<20	2.35	0.02	0.05	<2	<0.05	<1	<5	<5	
3248462	Soil	0.036	7	47	0.87	104	0.091	<20	1.73	0.02	0.08	<2	<0.05	<1	<5	<5	
3248463	Soil	0.053	9	46	0.89	107	0.077	<20	2.06	0.01	0.05	<2	<0.05	<1	<5	<5	
3248464	Soil	0.090	12	46	0.92	230	0.059	<20	1.95	0.03	0.06	<2	<0.05	<1	<5	<5	
3249151	Soil	0.058	10	56	0.94	196	0.063	<20	2.05	0.02	0.08	<2	<0.05	<1	<5	<5	
3249152	Soil	0.036	9	49	1.05	100	0.084	<20	2.15	0.02	0.07	<2	<0.05	<1	<5	<5	
3249153	Soil	0.055	9	50	0.95	86	0.039	<20	2.09	0.01	0.09	<2	<0.05	<1	<5	<5	
3249154	Soil	0.032	9	54	0.94	165	0.056	<20	2.19	0.01	0.08	<2	<0.05	<1	<5	<5	
3249155	Soil	0.035	11	53	0.94	268	0.051	<20	2.09	0.02	0.08	<2	<0.05	<1	<5	<5	

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460-688 West Hastings St.  
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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 4 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** **WHI19000597.1**

Method	Analyte	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
		ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	1	0.5	3	3	1	0.01	
3249156	Soil	8	<3	5	3	47	6	74	<0.3	37	14	320	3.93	24	<2	26	<0.5	<3	<3	79	0.51
3249157	Soil	14	12	7	2	45	6	68	<0.3	39	16	418	3.68	17	<2	31	<0.5	<3	<3	73	0.54
3249158	Soil	8	<3	6	1	72	4	76	<0.3	44	15	433	3.56	16	<2	40	<0.5	<3	<3	68	0.65
3249159	Soil	9	<3	2	5	45	9	85	<0.3	32	15	441	4.52	30	<2	26	<0.5	<3	<3	80	0.40
3249160	Soil	8	<3	4	1	64	5	76	<0.3	41	18	655	3.79	13	<2	66	<0.5	<3	<3	81	2.07
3249161	Soil	7	<3	5	<1	47	4	68	<0.3	29	16	628	4.29	10	<2	49	<0.5	<3	3	97	0.87
3249162	Soil	10	<3	3	3	53	8	105	<0.3	44	18	562	3.93	24	<2	36	<0.5	<3	<3	63	0.51
3249163	Soil	9	4	3	2	45	5	83	<0.3	42	17	569	3.82	19	<2	37	<0.5	<3	<3	68	0.63
3249164	Soil	9	7	13	2	168	16	81	<0.3	38	14	461	3.88	14	<2	30	<0.5	<3	<3	82	0.57
3249165	Soil	8	<3	4	2	59	8	88	<0.3	47	19	466	4.16	19	<2	31	<0.5	<3	<3	85	0.51
3249166	Soil	14	<3	2	<1	50	3	53	<0.3	36	13	403	3.33	12	<2	42	<0.5	<3	<3	69	0.79
3249167	Soil	9	<3	4	<1	54	3	57	<0.3	33	14	473	3.21	12	<2	66	<0.5	<3	<3	65	2.04
3249168	Soil	10	<3	<2	<1	51	6	69	<0.3	39	16	494	2.91	11	<2	72	<0.5	<3	<3	63	2.61
3249169	Soil	16	<3	5	<1	52	6	71	<0.3	37	17	592	3.22	14	<2	57	<0.5	<3	<3	69	1.68
3249170	Soil	24	<3	3	<1	53	6	67	<0.3	39	17	606	3.24	14	<2	50	<0.5	<3	<3	70	1.28
3249171	Soil	10	<3	8	1	73	12	90	<0.3	36	14	592	3.12	5	<2	45	<0.5	<3	<3	71	0.37
3249172	Soil	17	<3	5	4	51	7	79	<0.3	40	20	634	3.41	16	<2	38	<0.5	<3	<3	69	0.78
3249173	Soil	14	<3	4	3	58	8	77	<0.3	42	19	561	3.56	32	<2	39	<0.5	<3	<3	70	0.67
3249174	Soil	10	<3	<2	2	53	9	76	<0.3	39	18	652	3.46	16	<2	44	<0.5	<3	<3	67	0.66
3249175	Soil	10	<3	3	3	65	7	114	0.3	44	19	611	3.71	22	<2	39	<0.5	<3	<3	65	0.62
3249176	Soil	11	<3	6	2	27	8	71	<0.3	25	15	460	2.92	14	4	35	<0.5	<3	<3	64	0.68
3249177	Soil	12	<3	13	1	117	7	65	<0.3	48	22	455	3.28	16	<2	52	<0.5	<3	<3	74	0.73
3249178	Soil	12	5	13	1	67	5	84	<0.3	37	18	595	3.34	13	<2	50	<0.5	<3	<3	73	0.80
3249179	Soil	9	<3	4	2	71	9	124	0.4	42	18	695	3.32	17	<2	46	0.8	<3	<3	62	1.12
3249180	Soil	10	<3	6	2	75	8	107	<0.3	38	17	541	3.48	18	<2	40	<0.5	<3	<3	65	0.77
3249181	Soil	12	<3	6	1	43	7	77	<0.3	26	12	357	2.61	8	<2	39	<0.5	<3	<3	50	0.82
3249182	Soil	9	3	3	3	57	9	96	<0.3	36	18	584	3.75	21	<2	34	<0.5	<3	<3	65	0.60
3249183	Soil	8	<3	4	2	36	9	91	<0.3	32	16	481	3.70	17	<2	36	<0.5	<3	<3	73	0.65
3249184	Soil	8	<3	4	1	37	6	68	<0.3	32	14	479	3.32	11	<2	33	<0.5	<3	<3	70	0.53
3249185	Soil	10	<3	14	2	75	8	90	<0.3	42	19	566	3.62	17	2	40	<0.5	<3	<3	69	0.71

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**Page:** 4 of 10 **Part:** 2 of 2

**CERTIFICATE OF ANALYSIS** WHI19000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	5
3249156	Soil	0.027	9	54	0.92	149	0.046	<20	2.16	0.01	0.07	<2	<0.05	<1	<5	<5	<5
3249157	Soil	0.039	10	50	0.87	179	0.057	<20	1.90	0.02	0.07	<2	<0.05	<1	<5	<5	5
3249158	Soil	0.052	11	51	0.91	127	0.060	<20	2.03	0.02	0.09	<2	0.06	<1	<5	<5	<5
3249159	Soil	0.053	9	53	0.80	266	0.022	<20	2.27	0.01	0.05	<2	<0.05	<1	<5	<5	6
3249160	Soil	0.079	11	48	1.16	176	0.096	<20	1.96	0.04	0.09	<2	<0.05	<1	<5	<5	7
3249161	Soil	0.077	11	31	1.25	203	0.165	<20	2.41	0.05	0.05	<2	<0.05	<1	<5	<5	5
3249162	Soil	0.075	10	46	0.81	157	0.060	<20	1.50	0.02	0.07	<2	<0.05	<1	<5	<5	6
3249163	Soil	0.068	11	46	0.86	187	0.057	<20	1.71	0.02	0.07	<2	<0.05	<1	<5	<5	5
3249164	Soil	0.049	9	37	1.08	111	0.115	<20	1.87	0.02	0.28	<2	<0.05	<1	<5	<5	7
3249165	Soil	0.023	12	60	1.06	150	0.073	<20	2.38	0.02	0.07	<2	<0.05	<1	<5	<5	7
3249166	Soil	0.019	11	41	0.90	113	0.098	<20	1.71	0.04	0.07	<2	<0.05	<1	<5	<5	6
3249167	Soil	0.042	10	37	0.88	131	0.083	<20	1.51	0.04	0.08	<2	<0.05	<1	<5	<5	6
3249168	Soil	0.071	11	36	0.93	132	0.076	<20	1.51	0.04	0.08	<2	<0.05	<1	<5	6	5
3249169	Soil	0.064	11	42	0.85	180	0.068	<20	1.58	0.03	0.09	<2	<0.05	<1	<5	6	6
3249170	Soil	0.061	12	41	0.86	162	0.080	<20	1.59	0.04	0.09	<2	<0.05	<1	<5	6	6
3249171	Soil	0.030	8	31	1.81	234	0.108	<20	2.25	0.01	0.36	<2	0.11	<1	<5	9	7
3249172	Soil	0.056	12	46	0.79	197	0.053	<20	1.67	0.02	0.11	<2	<0.05	<1	<5	<5	6
3249173	Soil	0.080	12	46	0.84	134	0.073	<20	1.55	0.03	0.08	<2	<0.05	<1	<5	6	6
3249174	Soil	0.083	12	40	0.74	152	0.069	<20	1.47	0.03	0.07	<2	<0.05	<1	<5	6	6
3249175	Soil	0.084	11	46	0.78	207	0.051	<20	1.48	0.02	0.07	<2	<0.05	<1	<5	<5	6
3249176	Soil	0.059	7	47	0.71	143	0.048	<20	1.48	0.02	0.05	<2	<0.05	<1	<5	<5	<5
3249177	Soil	0.072	7	51	0.96	122	0.091	<20	1.71	0.03	0.07	<2	<0.05	<1	<5	6	5
3249178	Soil	0.092	10	42	0.82	131	0.082	<20	1.45	0.04	0.07	<2	<0.05	<1	<5	<5	6
3249179	Soil	0.080	10	43	0.73	276	0.027	<20	1.46	0.02	0.07	<2	0.05	<1	<5	<5	6
3249180	Soil	0.107	11	45	0.74	206	0.030	<20	1.55	0.02	0.06	<2	<0.05	<1	<5	<5	6
3249181	Soil	0.094	9	37	0.66	194	0.036	<20	1.36	0.02	0.05	<2	0.06	<1	<5	<5	<5
3249182	Soil	0.083	11	44	0.74	194	0.043	<20	1.51	0.02	0.06	<2	<0.05	<1	<5	<5	6
3249183	Soil	0.074	10	44	0.82	221	0.058	<20	1.87	0.02	0.06	<2	<0.05	<1	<5	<5	<5
3249184	Soil	0.052	12	38	0.88	128	0.104	<20	1.59	0.03	0.07	<2	<0.05	<1	<5	6	6
3249185	Soil	0.082	13	43	0.82	180	0.067	<20	1.61	0.03	0.08	<2	<0.05	<1	<5	5	6

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 5 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS**

**WHI19000597.1**

Method	Analyte	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MDL		2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	1	0.5	3	3	1	1	0.01
3249186	Soil	9	<3	2	2	28	7	96	<0.3	33	16	467	3.33	16	<2	30	<0.5	<3	<3	65	0.37
3249187	Soil	6	<3	<2	3	35	10	104	<0.3	34	19	603	3.85	22	<2	32	<0.5	<3	<3	72	0.42
3249188	Soil	8	<3	3	2	54	9	139	<0.3	38	22	906	3.62	16	<2	35	<0.5	<3	<3	73	0.55
3249189	Soil	9	<3	4	2	41	9	113	<0.3	35	19	602	3.64	16	<2	32	<0.5	<3	<3	74	0.51
3249190	Soil	11	<3	<2	1	33	9	102	<0.3	55	18	499	3.66	13	<2	48	<0.5	<3	<3	80	0.83
3249191	Soil	14	<3	5	<1	57	6	81	<0.3	36	14	472	3.27	11	<2	40	<0.5	<3	<3	68	0.65
3249192	Soil	13	5	<2	1	61	6	85	<0.3	44	17	577	3.57	13	<2	40	<0.5	<3	<3	68	0.61
3249193	Soil	16	<3	5	1	30	6	56	<0.3	32	14	391	3.18	14	<2	34	<0.5	<3	<3	61	0.50
3249194	Soil	9	<3	4	2	54	7	118	<0.3	43	19	685	3.79	17	<2	45	<0.5	<3	<3	74	0.68
3249195	Soil	13	4	3	1	442	7	92	<0.3	67	23	457	4.42	17	<2	48	<0.5	<3	<3	79	0.46
3249196	Soil	13	<3	7	2	108	7	81	<0.3	38	19	373	3.79	15	<2	42	<0.5	<3	<3	84	0.61
3249197	Soil	9	<3	4	<1	64	7	66	<0.3	39	16	533	3.30	11	<2	44	<0.5	<3	<3	75	0.66
3249198	Soil	19	<3	3	<1	48	6	60	<0.3	38	15	466	3.45	11	<2	37	<0.5	<3	<3	72	0.47
3249199	Soil	12	<3	<2	1	41	8	68	<0.3	38	16	598	3.53	14	6	37	<0.5	<3	<3	75	0.55
3249200	Soil	10	<3	<2	1	54	8	71	<0.3	40	16	458	3.46	15	<2	38	<0.5	<3	<3	74	0.54
3249201	Soil	10	<3	11	<1	61	4	57	<0.3	31	12	273	3.03	9	<2	18	<0.5	<3	<3	64	0.33
3249202	Soil	12	<3	11	2	45	7	72	<0.3	34	18	423	3.22	18	<2	35	<0.5	<3	<3	64	0.71
3249203	Soil	8	<3	4	2	69	8	82	<0.3	42	18	546	3.58	15	<2	36	<0.5	<3	<3	84	0.73
3249204	Soil	9	<3	6	2	66	8	84	<0.3	39	16	437	3.41	18	<2	31	<0.5	<3	<3	74	0.51
3249205	Soil	9	<3	4	2	61	9	85	<0.3	39	19	600	3.42	16	<2	35	<0.5	<3	<3	74	0.68
3249206	Soil	8	<3	7	2	36	9	96	<0.3	33	20	654	3.56	18	<2	26	<0.5	<3	<3	80	0.45
3249207	Soil	8	<3	6	2	55	8	84	<0.3	37	19	420	3.49	15	<2	25	<0.5	<3	<3	77	0.43
3249208	Soil	9	<3	7	2	53	8	91	<0.3	40	19	741	3.48	18	<2	33	<0.5	<3	<3	71	0.57
3249209	Soil	9	<3	8	3	68	11	178	0.3	38	22	737	4.03	23	<2	32	<0.5	<3	<3	76	0.54
3249210	Soil	9	<3	8	2	63	8	92	0.3	41	15	367	3.62	18	<2	36	<0.5	<3	<3	73	0.67
3249211	Soil	12	<3	4	1	52	7	76	<0.3	38	14	417	3.07	13	4	35	<0.5	<3	<3	65	0.66
3249212	Soil	14	<3	4	<1	70	9	181	0.3	46	18	312	3.08	13	<2	36	<0.5	<3	<3	80	0.76
3249213	Soil	10	<3	9	1	69	8	81	0.5	48	18	422	3.55	16	<2	37	<0.5	<3	<3	69	0.90
3249214	Soil	11	4	9	2	49	7	102	<0.3	40	18	457	3.72	19	<2	28	<0.5	<3	<3	70	0.37
3249215	Soil	14	3	<2	2	40	6	78	<0.3	38	23	491	3.74	14	<2	27	<0.5	<3	<3	84	0.49

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 5 of 10 **Part:** 2 of 2

**CERTIFICATE OF ANALYSIS** WHI19000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	
3249186	Soil	0.103	8	42	0.80	125	0.062	<20	1.49	0.01	0.10	<2	<0.05	<1	<5	5	<5
3249187	Soil	0.083	10	46	0.79	194	0.045	<20	1.74	0.02	0.08	<2	<0.05	<1	<5	5	<5
3249188	Soil	0.089	14	46	0.81	240	0.046	<20	1.91	0.02	0.08	<2	<0.05	<1	<5	6	6
3249189	Soil	0.058	11	46	0.83	238	0.057	<20	1.93	0.02	0.08	<2	<0.05	<1	<5	6	6
3249190	Soil	0.061	11	74	1.37	207	0.087	<20	2.56	0.07	0.07	<2	<0.05	<1	<5	9	7
3249191	Soil	0.063	13	39	0.81	160	0.069	<20	1.72	0.04	0.11	<2	<0.05	<1	<5	6	7
3249192	Soil	0.062	12	47	0.87	156	0.074	<20	1.69	0.03	0.14	<2	<0.05	<1	<5	6	7
3249193	Soil	0.054	8	37	0.70	141	0.067	<20	1.45	0.02	0.07	<2	<0.05	<1	<5	<5	<5
3249194	Soil	0.063	11	54	0.96	226	0.071	<20	1.81	0.03	0.10	<2	<0.05	<1	<5	6	6
3249195	Soil	0.065	11	53	0.96	168	0.078	<20	2.10	0.03	0.07	<2	0.05	<1	<5	6	6
3249196	Soil	0.034	9	48	0.83	133	0.077	<20	1.91	0.02	0.07	<2	<0.05	<1	<5	8	<5
3249197	Soil	0.047	12	44	0.88	153	0.078	<20	1.76	0.05	0.08	<2	<0.05	<1	<5	7	7
3249198	Soil	0.043	11	44	0.83	182	0.071	<20	1.81	0.03	0.09	<2	<0.05	<1	<5	<5	6
3249199	Soil	0.045	14	64	0.91	160	0.073	<20	1.87	0.02	0.07	<2	<0.05	<1	<5	7	7
3249200	Soil	0.051	12	45	0.79	163	0.065	<20	1.75	0.03	0.07	<2	<0.05	<1	<5	6	6
3249201	Soil	0.025	9	47	0.82	73	0.067	<20	1.82	0.01	0.04	<2	<0.05	<1	<5	<5	<5
3249202	Soil	0.057	8	42	0.71	126	0.055	<20	1.46	0.02	0.10	<2	0.06	<1	<5	<5	<5
3249203	Soil	0.059	11	54	0.82	290	0.064	<20	2.15	0.03	0.05	<2	<0.05	<1	<5	5	7
3249204	Soil	0.048	11	49	0.80	184	0.049	<20	1.86	0.02	0.06	<2	<0.05	<1	<5	5	5
3249205	Soil	0.062	12	49	0.79	232	0.044	<20	1.88	0.02	0.06	<2	<0.05	<1	<5	<5	6
3249206	Soil	0.045	9	50	0.81	195	0.058	<20	1.86	0.02	0.06	<2	<0.05	<1	<5	<5	5
3249207	Soil	0.032	9	56	0.74	158	0.061	<20	1.89	0.02	0.04	<2	<0.05	<1	<5	6	<5
3249208	Soil	0.064	10	46	0.74	255	0.042	<20	1.75	0.02	0.05	<2	<0.05	<1	<5	<5	6
3249209	Soil	0.079	12	54	0.80	242	0.034	<20	2.05	0.01	0.05	<2	<0.05	<1	<5	5	6
3249210	Soil	0.083	12	49	0.72	286	0.029	<20	1.95	0.02	0.04	<2	<0.05	<1	<5	5	6
3249211	Soil	0.087	11	44	0.73	202	0.055	<20	1.54	0.03	0.04	<2	<0.05	<1	<5	<5	6
3249212	Soil	0.138	12	53	0.69	428	0.020	<20	2.10	0.02	0.03	<2	0.05	<1	<5	6	7
3249213	Soil	0.107	13	51	0.74	499	0.026	<20	2.01	0.02	0.04	<2	<0.05	<1	<5	<5	6
3249214	Soil	0.060	12	50	0.84	163	0.059	<20	1.86	0.01	0.07	<2	<0.05	<1	<5	<5	6
3249215	Soil	0.039	8	51	1.00	127	0.101	<20	1.69	0.02	0.13	<2	<0.05	<1	<5	6	<5

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 6 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** **WHI19000597.1**

Method	Analyte	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
		ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Unit																					
MDL								0.3	1	1	2	0.01	2	2	1	0.5	3	3	1	0.01	
3249216	Soil	10	<3	<2	1	51	7	63	<0.3	37	13	421	3.15	13	<2	38	<0.5	<3	<3	66	0.66
3249217	Soil	10	3	5	<1	49	7	60	<0.3	32	14	464	2.81	11	<2	65	<0.5	<3	<3	62	2.37
3249218	Soil	38	<3	5	<1	55	7	48	<0.3	33	14	461	2.56	17	<2	159	<0.5	<3	<3	52	6.84
3249219	Soil	12	<3	3	<1	61	7	61	<0.3	40	15	545	3.22	12	<2	70	<0.5	<3	<3	71	1.27
3249220	Soil	10	<3	3	<1	47	6	58	<0.3	36	14	401	3.01	13	<2	45	<0.5	<3	<3	64	0.98
3249221	Soil	8	<3	3	2	33	8	70	<0.3	33	15	435	3.35	17	<2	34	<0.5	<3	<3	73	0.66
3249222	Soil	9	<3	5	1	63	8	77	0.3	34	20	599	3.35	13	<2	45	<0.5	<3	<3	71	0.92
3249223	Soil	10	<3	6	2	59	9	81	0.3	41	21	623	3.77	20	<2	42	<0.5	<3	<3	77	0.73
3249224	Soil	8	<3	3	2	49	7	82	<0.3	37	19	552	3.36	18	<2	42	<0.5	<3	<3	71	0.88
3249225	Soil	9	4	12	2	166	8	79	0.3	38	19	600	3.19	14	<2	46	<0.5	<3	<3	63	1.09
3249226	Soil	9	<3	2	2	52	6	90	<0.3	35	14	533	3.37	14	2	39	<0.5	<3	<3	66	0.69
3249227	Soil	14	<3	7	3	61	8	94	<0.3	38	19	450	3.71	21	<2	39	<0.5	<3	<3	68	0.80
3249228	Soil	22	<3	6	4	43	8	73	<0.3	34	20	717	3.56	22	<2	47	<0.5	<3	<3	61	1.07
3249229	Soil	12	<3	8	3	48	8	70	0.3	28	16	415	3.27	18	<2	35	<0.5	<3	<3	68	0.66
3249230	Soil	14	8	10	3	38	11	79	<0.3	28	21	759	3.47	19	<2	34	<0.5	<3	<3	77	0.63
3249231	Soil	9	<3	4	2	56	11	78	0.4	35	20	809	3.36	15	<2	44	<0.5	<3	<3	76	0.84
3249232	Soil	9	<3	3	2	27	6	65	<0.3	25	11	342	2.89	11	<2	33	<0.5	<3	<3	65	0.55
3249233	Soil	8	<3	3	2	40	9	67	<0.3	32	27	705	3.61	15	<2	30	<0.5	<3	<3	78	0.50
3249234	Soil	8	<3	<2	2	27	9	63	<0.3	24	15	529	3.15	11	<2	34	<0.5	<3	<3	72	0.53
3249235	Soil	8	<3	<2	2	54	8	70	<0.3	31	18	679	3.46	14	<2	43	<0.5	<3	<3	66	0.85
3249236	Soil	8	24	4	2	59	8	100	<0.3	38	23	734	3.99	17	2	30	<0.5	<3	<3	80	0.41
3249237	Soil	7	<3	<2	1	328	8	103	<0.3	57	42	657	3.65	14	<2	36	<0.5	<3	<3	78	0.42
3249238	Soil	7	<3	3	1	68	9	80	<0.3	38	19	465	3.62	15	<2	38	<0.5	<3	<3	78	0.55
3249239	Soil	14	<3	5	1	107	7	80	<0.3	34	17	560	3.47	12	<2	151	<0.5	<3	<3	73	1.27
3249240	Soil	8	7	3	1	101	4	77	<0.3	32	16	553	3.30	11	<2	150	<0.5	<3	<3	61	1.56
3249241	Soil	7	<3	2	1	123	4	86	<0.3	34	20	619	3.43	12	<2	53	<0.5	<3	<3	69	0.72
3249242	Soil	8	<3	3	3	339	3	63	<0.3	45	21	422	5.64	14	<2	86	<0.5	<3	<3	93	0.41
3249243	Soil	8	12	<2	2	146	5	63	<0.3	33	17	416	3.72	15	<2	43	<0.5	<3	<3	80	0.53
3249244	Soil	8	<3	2	2	473	<3	63	<0.3	38	15	298	3.67	13	<2	33	<0.5	<3	<3	73	0.32
3249245	Soil	8	<3	<2	2	61	6	61	<0.3	30	16	534	3.57	14	<2	35	<0.5	<3	<3	77	0.59

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**Page:** 6 of 10 **Part:** 2 of 2

**CERTIFICATE OF ANALYSIS** WHI19000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	
3249216	Soil	0.028	11	40	0.79	141	0.073	<20	1.52	0.04	0.07	<2	<0.05	<1	<5	<5	7
3249217	Soil	0.065	9	37	0.82	135	0.072	<20	1.43	0.03	0.10	<2	<0.05	<1	<5	<5	5
3249218	Soil	0.044	9	30	0.86	115	0.057	<20	1.25	0.04	0.06	<2	<0.05	<1	<5	<5	<5
3249219	Soil	0.031	13	41	1.10	142	0.089	<20	1.84	0.04	0.08	<2	<0.05	<1	<5	6	7
3249220	Soil	0.032	12	37	0.74	150	0.060	<20	1.48	0.03	0.07	<2	<0.05	<1	<5	<5	6
3249221	Soil	0.035	9	44	0.76	220	0.044	<20	1.85	0.02	0.07	<2	<0.05	<1	<5	<5	5
3249222	Soil	0.100	12	45	0.67	419	0.035	<20	1.86	0.02	0.04	<2	<0.05	<1	<5	<5	6
3249223	Soil	0.092	12	50	0.77	338	0.030	<20	1.97	0.02	0.05	<2	<0.05	<1	<5	<5	6
3249224	Soil	0.076	10	46	0.73	302	0.029	<20	1.77	0.02	0.05	<2	<0.05	<1	<5	<5	5
3249225	Soil	0.093	12	42	0.70	257	0.028	<20	1.65	0.02	0.05	<2	0.06	<1	<5	<5	5
3249226	Soil	0.071	9	40	0.73	220	0.063	<20	1.47	0.03	0.07	<2	<0.05	<1	<5	<5	6
3249227	Soil	0.084	11	44	0.75	206	0.032	<20	1.59	0.02	0.06	<2	<0.05	<1	<5	<5	6
3249228	Soil	0.088	9	41	0.66	252	0.023	<20	1.52	0.02	0.05	<2	0.06	<1	<5	<5	<5
3249229	Soil	0.081	10	42	0.67	198	0.025	<20	1.62	0.02	0.05	<2	<0.05	<1	<5	<5	5
3249230	Soil	0.097	10	45	0.67	205	0.030	<20	1.83	0.01	0.04	<2	<0.05	<1	<5	5	<5
3249231	Soil	0.106	13	47	0.67	245	0.031	<20	1.94	0.02	0.04	<2	<0.05	<1	<5	5	<5
3249232	Soil	0.066	8	36	0.63	145	0.049	<20	1.69	0.02	0.05	<2	<0.05	<1	<5	<5	<5
3249233	Soil	0.069	15	49	0.64	181	0.042	<20	2.14	0.02	0.04	<2	<0.05	<1	<5	6	7
3249234	Soil	0.074	10	40	0.67	170	0.063	<20	1.79	0.02	0.05	<2	<0.05	<1	<5	<5	<5
3249235	Soil	0.081	14	40	0.71	202	0.045	<20	1.73	0.02	0.06	<2	<0.05	<1	<5	<5	6
3249236	Soil	0.053	11	50	0.86	137	0.077	<20	2.03	0.02	0.08	<2	<0.05	<1	<5	6	6
3249237	Soil	0.058	11	48	0.87	128	0.089	<20	1.84	0.02	0.12	<2	<0.05	<1	<5	6	6
3249238	Soil	0.055	10	45	0.84	124	0.080	<20	1.76	0.02	0.12	<2	<0.05	<1	<5	5	5
3249239	Soil	0.150	10	37	0.89	188	0.062	<20	1.50	0.04	0.11	<2	0.15	<1	<5	<5	<5
3249240	Soil	0.147	9	33	0.80	219	0.047	<20	1.31	0.04	0.13	<2	0.16	<1	<5	<5	<5
3249241	Soil	0.090	8	38	0.75	260	0.049	<20	1.70	0.02	0.06	<2	<0.05	<1	<5	<5	<5
3249242	Soil	0.087	11	44	0.84	284	0.087	<20	1.92	0.08	0.13	<2	0.33	<1	<5	6	<5
3249243	Soil	0.057	8	46	0.79	178	0.037	<20	1.93	0.01	0.06	<2	<0.05	<1	<5	5	<5
3249244	Soil	0.035	9	43	0.85	114	0.067	<20	2.10	0.01	0.07	<2	<0.05	<1	<5	<5	<5
3249245	Soil	0.051	10	43	0.79	200	0.048	<20	1.96	0.02	0.04	<2	<0.05	<1	<5	<5	<5

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 7 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** **WHI19000597.1**

Method	Analyte	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	
		Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
		ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	1	0.5	3	3	1	0.01	
3249246	Soil	8	4	8	<1	104	<3	82	<0.3	26	25	534	4.32	6	<2	63	<0.5	<3	<3	106	0.58
3249247	Soil	10	5	12	1	94	3	83	<0.3	37	18	593	3.50	11	<2	41	<0.5	<3	<3	71	0.67
3249248	Soil	8	<3	6	2	47	6	73	<0.3	30	17	609	3.60	16	<2	36	<0.5	<3	<3	66	0.64
3249249	Soil	7	<3	8	2	48	5	94	<0.3	35	16	496	3.75	16	<2	25	<0.5	<3	<3	71	0.35
3249250	Soil	7	<3	6	2	69	5	76	<0.3	32	14	401	3.92	18	<2	25	<0.5	<3	<3	79	0.44
3249251	Soil	13	11	35	3	113	5	98	<0.3	31	11	268	3.22	12	<2	35	<0.5	<3	<3	63	0.90
3249252	Soil	10	8	22	2	125	4	137	<0.3	38	13	357	3.78	15	<2	37	<0.5	<3	<3	73	0.83
3249253	Soil	10	<3	11	2	57	7	87	<0.3	42	15	444	4.14	22	<2	31	<0.5	<3	<3	73	0.59
3249254	Soil	9	<3	<2	1	52	3	66	<0.3	35	13	444	3.35	14	<2	31	<0.5	<3	<3	62	0.54
3249255	Soil	10	<3	4	2	46	6	100	<0.3	39	15	457	3.52	15	<2	31	<0.5	<3	<3	66	0.74
3249256	Soil	8	<3	<2	1	52	4	86	<0.3	38	15	562	3.71	17	<2	37	<0.5	<3	<3	69	0.81
3249257	Soil	9	<3	4	1	64	7	73	<0.3	38	15	491	3.50	16	<2	33	<0.5	<3	<3	68	0.68
3249258	Soil	10	<3	<2	<1	48	4	82	<0.3	34	13	446	3.26	14	<2	40	<0.5	<3	<3	61	0.85
3249259	Soil	7	<3	<2	3	47	7	82	<0.3	33	15	469	3.85	22	<2	29	<0.5	<3	<3	70	0.44
3249260	Soil	8	4	7	<1	56	7	68	<0.3	35	16	626	3.61	17	<2	38	<0.5	<3	<3	73	0.85
3249261	Soil	6	<3	5	2	35	7	73	<0.3	35	13	535	3.59	14	<2	30	<0.5	<3	<3	65	0.60
3249262	Soil	9	<3	5	2	44	7	70	<0.3	37	14	514	3.43	14	<2	27	<0.5	<3	<3	59	0.51
3249263	Soil	10	<3	4	2	53	4	68	<0.3	38	15	610	3.81	18	<2	34	<0.5	<3	<3	69	0.62
3249264	Soil	8	<3	<2	<1	46	7	77	<0.3	41	13	430	3.58	14	<2	41	<0.5	<3	<3	76	0.93
3249265	Soil	22	<3	3	1	61	5	72	<0.3	46	16	473	3.99	19	<2	45	<0.5	<3	<3	83	0.86
3249266	Soil	16	<3	<2	<1	59	6	56	<0.3	34	13	505	3.16	13	<2	38	<0.5	<3	<3	62	0.93
3249267	Soil	5	<3	2	<1	42	6	73	<0.3	26	10	652	3.20	5	<2	33	<0.5	<3	<3	53	0.46
3249268	Soil	14	<3	2	3	41	7	82	<0.3	31	15	489	3.94	18	<2	26	<0.5	<3	<3	73	0.37
3249269	Soil	8	<3	3	3	44	7	97	<0.3	31	16	486	3.98	21	<2	31	<0.5	<3	<3	73	0.51
3249270	Soil	9	<3	2	3	49	10	96	<0.3	31	18	505	3.97	22	<2	33	<0.5	<3	<3	74	0.55
3249271	Soil	8	<3	<2	2	40	6	65	<0.3	33	16	597	3.44	15	<2	54	<0.5	<3	<3	65	1.22
3249272	Soil	8	<3	<2	2	42	8	70	<0.3	32	15	604	3.49	17	<2	35	<0.5	<3	<3	62	0.56
3249273	Soil	10	<3	<2	2	50	8	79	<0.3	37	17	569	3.66	19	<2	37	<0.5	<3	<3	61	0.72
3249274	Soil	9	<3	<2	3	45	8	82	<0.3	31	17	572	3.97	21	<2	37	<0.5	<3	<3	69	0.71
3249275	Soil	8	<3	<2	2	39	5	70	<0.3	32	16	701	3.61	17	<2	35	<0.5	<3	<3	64	0.54

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 7 of 10

**Part:** 2 of 2

**CERTIFICATE OF ANALYSIS** WH119000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5
3249246	Soil	0.055	3	15	2.05	82	0.123	<20	2.12	0.02	0.21	<2	<0.05	<1	<5	<5
3249247	Soil	0.072	9	45	0.95	229	0.061	<20	1.75	0.02	0.06	<2	<0.05	<1	<5	<5
3249248	Soil	0.072	9	39	0.72	261	0.028	<20	1.75	0.02	0.04	<2	<0.05	<1	<5	<5
3249249	Soil	0.041	11	46	0.82	180	0.042	<20	1.94	0.01	0.05	<2	<0.05	<1	<5	<5
3249250	Soil	0.037	7	46	0.96	133	0.064	<20	1.95	0.01	0.07	<2	<0.05	<1	<5	<5
3249251	Soil	0.104	10	39	0.82	106	0.056	<20	1.38	0.03	0.12	<2	<0.05	<1	<5	<5
3249252	Soil	0.117	10	49	0.90	185	0.063	<20	1.81	0.04	0.08	<2	<0.05	<1	<5	<5
3249253	Soil	0.035	10	43	0.88	229	0.043	<20	1.75	0.03	0.07	<2	<0.05	<1	<5	<5
3249254	Soil	0.046	10	35	0.75	147	0.062	<20	1.45	0.03	0.06	<2	<0.05	<1	<5	<5
3249255	Soil	0.055	9	42	0.79	256	0.037	<20	1.79	0.02	0.04	<2	<0.05	<1	<5	<5
3249256	Soil	0.045	10	38	0.83	214	0.045	<20	1.64	0.03	0.05	<2	<0.05	<1	<5	<5
3249257	Soil	0.052	10	39	0.80	205	0.043	<20	1.72	0.02	0.06	<2	<0.05	<1	<5	<5
3249258	Soil	0.078	10	35	0.75	182	0.044	<20	1.57	0.02	0.09	<2	<0.05	<1	<5	<5
3249259	Soil	0.040	10	40	0.73	226	0.029	<20	1.80	0.02	0.05	<2	<0.05	<1	<5	<5
3249260	Soil	0.068	10	39	0.91	166	0.055	<20	1.71	0.03	0.06	<2	<0.05	<1	<5	<5
3249261	Soil	0.074	8	40	0.87	230	0.044	<20	1.73	0.02	0.04	<2	<0.05	<1	<5	<5
3249262	Soil	0.032	11	39	0.85	160	0.063	<20	1.63	0.02	0.08	<2	<0.05	<1	<5	<5
3249263	Soil	0.046	12	37	0.82	176	0.056	<20	1.58	0.03	0.06	<2	<0.05	<1	<5	<5
3249264	Soil	0.032	10	53	1.11	139	0.091	<20	1.90	0.04	0.07	<2	<0.05	<1	<5	<5
3249265	Soil	0.041	13	42	1.05	135	0.072	<20	1.97	0.06	0.06	<2	<0.05	<1	<5	<5
3249266	Soil	0.024	11	32	0.82	120	0.066	<20	1.44	0.03	0.06	<2	<0.05	<1	<5	<5
3249267	Soil	0.038	6	21	1.51	113	0.098	<20	1.99	<0.01	0.18	<2	<0.05	<1	<5	<5
3249268	Soil	0.042	10	41	0.83	198	0.039	<20	2.05	0.01	0.06	<2	<0.05	<1	<5	<5
3249269	Soil	0.061	10	46	0.80	353	0.022	<20	2.03	0.01	0.05	<2	<0.05	<1	<5	<5
3249270	Soil	0.071	12	45	0.79	383	0.020	<20	2.04	0.01	0.05	<2	<0.05	<1	<5	<5
3249271	Soil	0.112	9	40	0.69	407	0.022	<20	1.75	0.02	0.03	<2	0.07	<1	<5	<5
3249272	Soil	0.075	9	39	0.77	182	0.040	<20	1.52	0.02	0.05	<2	<0.05	<1	<5	<5
3249273	Soil	0.082	10	39	0.71	256	0.026	<20	1.53	0.02	0.05	<2	<0.05	<1	<5	<5
3249274	Soil	0.109	11	43	0.79	258	0.020	<20	1.90	0.01	0.05	<2	<0.05	<1	<5	<5
3249275	Soil	0.096	9	37	0.74	223	0.036	<20	1.54	0.02	0.05	<2	<0.05	<1	<5	<5

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 8 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** WHI19000597.1

Method	Analyte	Unit	MDL	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	
				Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
				ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
3249276	Soil			9	<3	3	2	39	6	94	<0.3	28	13	445	2.97	13	<2	47	<0.5	<3	<3	60	0.97
3249277	Soil			10	<3	6	2	548	6	104	0.3	48	26	611	3.56	16	<2	43	<0.5	<3	<3	69	0.72
3249278	Soil			9	<3	3	2	40	7	79	<0.3	28	15	536	3.48	17	<2	35	<0.5	<3	<3	67	0.55
3249279	Soil			6	<3	3	3	62	7	84	<0.3	36	17	519	3.94	21	<2	34	<0.5	<3	<3	76	0.51
3249280	Soil			8	<3	6	2	102	8	92	<0.3	40	18	629	4.01	21	<2	33	<0.5	<3	<3	70	0.48
3249281	Soil			12	<3	5	2	39	7	77	<0.3	20	17	535	2.93	11	<2	39	<0.5	<3	<3	70	0.63
3249283	Soil			8	<3	4	3	74	7	65	<0.3	34	18	864	3.76	19	<2	45	<0.5	<3	<3	70	0.74
3249284	Soil			9	<3	<2	2	62	7	96	<0.3	35	18	596	3.82	20	<2	34	<0.5	<3	<3	71	0.52
3249285	Soil			9	<3	<2	2	50	6	116	<0.3	34	17	573	3.67	19	<2	29	<0.5	<3	<3	67	0.41
3249286	Soil			8	<3	<2	2	42	7	104	<0.3	35	17	778	3.69	17	<2	39	<0.5	<3	<3	67	0.63
3249287	Soil			7	<3	<2	1	55	8	114	<0.3	40	17	582	3.92	15	<2	44	<0.5	<3	<3	74	0.74
3249288	Soil			10	<3	<2	1	42	5	71	<0.3	34	16	487	3.57	13	<2	42	<0.5	<3	<3	71	0.67
3249289	Soil			9	<3	4	1	94	7	92	<0.3	39	17	573	3.85	15	<2	53	<0.5	<3	<3	74	0.87
3249290	Soil			11	<3	5	1	93	7	94	<0.3	38	16	560	3.75	15	<2	51	<0.5	<3	<3	72	0.84
3249291	Soil			6	<3	<2	2	30	8	73	<0.3	31	13	330	3.70	15	<2	30	<0.5	<3	<3	76	0.44
3249292	Soil			7	<3	<2	2	82	7	78	<0.3	37	18	341	4.31	15	2	31	<0.5	<3	<3	90	0.40
3249293	Soil			6	<3	3	1	57	5	62	<0.3	38	15	534	3.79	14	<2	36	<0.5	<3	<3	74	0.59
3249294	Soil			8	<3	<2	<1	78	5	56	<0.3	39	13	339	3.22	11	<2	38	<0.5	<3	<3	68	0.51
3249295	Soil			7	3	<2	1	58	5	71	<0.3	35	16	383	3.71	16	<2	42	<0.5	<3	<3	80	0.55
3249296	Soil			7	4	5	<1	182	3	73	<0.3	31	22	531	4.04	8	<2	72	<0.5	<3	<3	97	0.82
3249297	Soil			6	3	4	1	159	4	84	<0.3	34	20	600	4.06	11	<2	65	<0.5	<3	<3	91	0.85
3249298	Soil			11	<3	5	2	52	7	96	<0.3	37	17	598	3.72	16	<2	44	<0.5	<3	<3	65	0.80
3249299	Soil			7	4	3	2	54	6	91	<0.3	39	18	576	3.80	16	<2	36	<0.5	<3	<3	73	0.48
3249300	Soil			8	3	7	<1	101	<3	73	<0.3	50	29	885	5.73	4	<2	14	<0.5	<3	<3	165	0.75
3249301	Soil			9	5	8	1	59	4	59	<0.3	30	14	438	3.22	11	<2	38	<0.5	<3	<3	64	0.57
3249302	Soil			7	4	5	2	39	7	80	<0.3	34	14	326	3.74	15	<2	32	<0.5	<3	<3	76	0.51
3249303	Soil			7	4	4	1	65	5	63	<0.3	36	15	369	3.46	13	2	35	<0.5	<3	<3	70	0.61
3249304	Soil			6	<3	4	<1	62	4	61	<0.3	31	15	560	3.43	11	<2	43	<0.5	<3	<3	71	0.56
3249305	Soil			6	<3	4	2	57	5	67	<0.3	36	14	464	3.51	13	2	32	<0.5	<3	<3	74	0.46
3249306	Soil			7	5	3	1	22	7	61	<0.3	19	9	275	2.48	9	<2	30	<0.5	<3	<3	67	0.59

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**Page:** 8 of 10 **Part:** 2 of 2

**CERTIFICATE OF ANALYSIS** WH119000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	
3249276	Soil	0.076	7	37	0.73	154	0.046	<20	1.48	0.02	0.06	<2	0.06	<1	<5	<5	
3249277	Soil	0.096	14	46	0.75	256	0.036	<20	1.92	0.02	0.07	<2	<0.05	<1	<5	<5	
3249278	Soil	0.086	10	41	0.73	206	0.042	<20	1.74	0.01	0.05	<2	<0.05	<1	<5	<5	
3249279	Soil	0.045	12	49	0.80	288	0.044	<20	1.97	0.01	0.06	<2	<0.05	<1	<5	<5	
3249280	Soil	0.055	12	46	0.82	193	0.052	<20	1.76	0.01	0.07	<2	<0.05	<1	<5	<5	
3249281	Soil	0.051	9	37	0.57	151	0.064	<20	1.49	0.02	0.05	<2	<0.05	<1	<5	<5	
3249283	Soil	0.124	12	46	0.73	362	0.031	<20	1.97	0.02	0.05	<2	0.05	<1	<5	<5	
3249284	Soil	0.059	12	47	0.76	289	0.040	<20	1.91	0.01	0.06	<2	<0.05	<1	<5	<5	
3249285	Soil	0.054	9	44	0.79	163	0.047	<20	1.75	0.01	0.06	<2	<0.05	<1	<5	<5	
3249286	Soil	0.074	11	46	0.84	189	0.061	<20	1.70	0.02	0.07	<2	<0.05	<1	<5	<5	
3249287	Soil	0.063	14	50	0.91	233	0.067	<20	2.03	0.02	0.08	<2	<0.05	<1	<5	<5	
3249288	Soil	0.060	10	42	0.87	199	0.074	<20	1.93	0.02	0.08	<2	<0.05	<1	<5	<5	
3249289	Soil	0.061	12	44	0.89	228	0.076	<20	1.86	0.04	0.08	<2	<0.05	<1	<5	<5	
3249290	Soil	0.061	12	43	0.85	228	0.071	<20	1.79	0.03	0.08	<2	<0.05	<1	<5	<5	
3249291	Soil	0.040	9	45	0.83	122	0.068	<20	2.01	0.01	0.08	<2	<0.05	<1	<5	<5	
3249292	Soil	0.036	8	50	0.90	102	0.088	<20	2.29	<0.01	0.07	<2	<0.05	<1	<5	6	
3249293	Soil	0.059	11	62	0.94	180	0.068	<20	2.15	0.01	0.07	<2	<0.05	<1	<5	<5	
3249294	Soil	0.029	10	50	0.82	104	0.068	<20	1.98	0.02	0.06	<2	<0.05	<1	<5	<5	
3249295	Soil	0.078	8	44	0.93	139	0.071	<20	1.95	0.01	0.08	<2	<0.05	<1	<5	5	
3249296	Soil	0.186	10	45	1.49	128	0.082	<20	2.23	0.02	0.12	<2	<0.05	<1	<5	6	
3249297	Soil	0.131	10	47	1.28	208	0.069	<20	2.11	0.02	0.09	<2	<0.05	<1	<5	5	
3249298	Soil	0.103	13	46	0.82	239	0.055	<20	1.71	0.02	0.06	<2	<0.05	<1	<5	<5	
3249299	Soil	0.043	11	49	0.88	221	0.068	<20	1.93	0.02	0.07	<2	<0.05	<1	<5	<5	
3249300	Soil	0.018	3	141	2.43	33	0.466	<20	2.88	<0.01	0.05	<2	<0.05	<1	<5	11	
3249301	Soil	0.047	7	41	0.78	155	0.075	<20	1.63	0.02	0.07	<2	<0.05	<1	<5	<5	
3249302	Soil	0.029	9	46	0.82	128	0.077	<20	2.05	0.02	0.08	<2	<0.05	<1	<5	<5	
3249303	Soil	0.028	11	45	0.83	103	0.080	<20	1.89	0.02	0.10	<2	<0.05	<1	<5	<5	
3249304	Soil	0.047	9	39	0.95	131	0.093	<20	1.79	0.03	0.06	<2	<0.05	<1	<5	<5	
3249305	Soil	0.042	9	44	0.88	146	0.083	<20	2.04	0.02	0.06	<2	<0.05	<1	<5	<5	
3249306	Soil	0.057	8	40	0.72	207	0.066	<20	1.66	0.01	0.05	<2	<0.05	<1	<5	5	

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

**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 9 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** **WH119000597.1**

Method	Analyte	Unit	MDL	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	
				Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
				ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
				2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	1	0.5	3	3	1	0.01	
3249307	Soil			7	6	6	<1	96	<3	78	<0.3	42	20	574	3.76	10	<2	26	<0.5	<3	<3	81	0.50
3249308	Soil			9	7	25	1	313	5	63	<0.3	28	15	608	3.20	13	<2	51	<0.5	<3	<3	64	1.43
3249309	Soil			7	4	7	<1	101	4	72	<0.3	33	14	507	3.23	10	<2	41	<0.5	<3	<3	65	0.68
3249310	Soil			10	<3	10	<1	113	4	71	<0.3	32	13	502	3.12	10	<2	42	<0.5	<3	<3	63	0.70
3249311	Soil			26	9	71	2	711	5	84	<0.3	28	10	280	3.00	12	<2	47	<0.5	<3	<3	61	1.06
3249312	Soil			5	<3	<2	1	65	8	74	<0.3	36	16	422	3.73	14	<2	35	<0.5	<3	<3	78	0.69
3249313	Soil			12	<3	<2	2	36	8	78	<0.3	34	17	447	3.74	16	<2	27	<0.5	<3	<3	77	0.38
3249314	Soil			13	<3	4	2	29	7	68	<0.3	31	16	459	3.44	14	<2	26	<0.5	<3	<3	69	0.40
3249315	Soil			6	<3	10	2	53	7	78	<0.3	34	17	543	3.48	16	<2	32	<0.5	<3	<3	69	0.52
3249316	Soil			9	<3	3	2	34	10	72	<0.3	31	12	336	3.40	15	<2	31	<0.5	<3	<3	71	0.49
3249351	Soil			7	<3	9	<1	52	5	58	<0.3	37	17	488	3.42	12	<2	37	<0.5	<3	<3	71	0.52
3249352	Soil			7	<3	6	2	66	6	67	<0.3	36	16	520	3.62	15	<2	38	<0.5	<3	<3	76	0.50
3249353	Soil			8	<3	9	2	47	8	74	<0.3	32	17	602	3.43	17	<2	40	<0.5	<3	<3	69	0.81
3249354	Soil			9	<3	5	1	70	8	119	<0.3	39	17	585	3.67	14	<2	32	<0.5	<3	<3	79	0.58
3249355	Soil			6	<3	7	2	65	8	76	<0.3	34	17	535	3.71	14	<2	25	<0.5	<3	<3	81	0.42
3249356	Soil			6	3	20	2	119	10	85	<0.3	34	17	484	3.69	13	<2	26	<0.5	<3	<3	82	0.48
3249357	Soil			27	<3	21	2	114	10	77	<0.3	33	19	568	3.75	15	<2	34	<0.5	<3	<3	79	0.70
3249358	Soil			8	4	22	2	395	7	88	<0.3	33	16	527	3.36	14	<2	32	<0.5	<3	<3	73	0.62
3249359	Soil			7	<3	19	2	250	8	91	<0.3	33	17	374	3.57	15	<2	23	<0.5	<3	<3	81	0.41
3249360	Soil			15	4	16	2	205	7	84	<0.3	32	16	423	3.45	13	<2	26	<0.5	<3	<3	79	0.41
3249361	Soil			7	<3	18	2	174	9	100	<0.3	33	20	646	3.84	17	2	37	<0.5	<3	<3	79	0.62
3249362	Soil			7	<3	7	<1	131	5	71	<0.3	30	15	547	3.17	10	<2	41	<0.5	<3	<3	70	0.62
3249363	Soil			5	<3	7	2	92	8	70	<0.3	29	16	493	3.17	13	<2	33	<0.5	<3	<3	67	0.60
3249364	Soil			5	<3	11	2	103	7	88	<0.3	29	17	561	3.31	15	<2	36	<0.5	<3	<3	69	0.74
3249365	Soil			7	3	12	<1	233	6	79	<0.3	35	17	502	3.34	11	<2	49	<0.5	<3	<3	70	0.87
3249366	Soil			8	4	34	<1	387	8	71	<0.3	32	17	423	3.06	14	<2	45	<0.5	<3	<3	69	0.97
3249367	Soil			8	3	35	<1	346	7	91	<0.3	28	10	177	2.12	4	<2	45	<0.5	<3	<3	56	0.91
3249388	Soil			5	<3	6	1	49	10	119	<0.3	35	19	799	3.59	14	<2	34	<0.5	<3	<3	69	0.52
3249389	Soil			3	<3	4	2	67	6	115	<0.3	31	22	654	3.93	12	<2	45	<0.5	<3	<3	82	0.60
3249390	Soil			299	<3	4	2	38	10	108	<0.3	34	19	646	3.70	17	<2	31	<0.5	<3	<3	75	0.53

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

Page: 9 of 10

Part: 2 of 2

**CERTIFICATE OF ANALYSIS**

WHI19000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5
3249307	Soil	0.041	7	66	1.30	97	0.154	<20	2.12	0.01	0.07	<2	<0.05	<1	<5	<5
3249308	Soil	0.141	11	42	0.70	264	0.032	<20	1.71	0.02	0.05	<2	0.07	<1	<5	<5
3249309	Soil	0.088	11	39	0.83	130	0.101	<20	1.49	0.04	0.08	<2	<0.05	<1	<5	<5
3249310	Soil	0.089	11	39	0.80	135	0.086	<20	1.49	0.03	0.08	<2	<0.05	<1	<5	<5
3249311	Soil	0.144	11	44	0.81	157	0.039	<20	1.68	0.02	0.07	<2	0.06	<1	<5	<5
3249312	Soil	0.033	8	54	0.94	104	0.089	<20	1.92	0.01	0.07	<2	<0.05	<1	<5	<5
3249313	Soil	0.033	11	48	0.82	117	0.070	<20	2.04	0.01	0.06	<2	<0.05	<1	<5	<5
3249314	Soil	0.029	9	43	0.80	143	0.077	<20	1.83	0.02	0.06	<2	<0.05	<1	<5	<5
3249315	Soil	0.042	13	47	0.80	196	0.047	<20	1.75	0.02	0.05	<2	<0.05	<1	<5	<5
3249316	Soil	0.045	10	45	0.77	180	0.044	<20	1.87	0.02	0.05	<2	<0.05	<1	<5	<5
3249351	Soil	0.034	12	41	0.86	165	0.080	<20	1.73	0.02	0.07	<2	<0.05	<1	<5	<5
3249352	Soil	0.038	13	47	0.79	191	0.071	<20	1.80	0.02	0.07	<2	<0.05	<1	<5	<5
3249353	Soil	0.117	13	45	0.72	300	0.026	<20	1.88	0.02	0.04	<2	<0.05	<1	<5	<5
3249354	Soil	0.045	14	49	0.76	174	0.054	<20	2.22	0.02	0.04	<2	<0.05	<1	<5	<5
3249355	Soil	0.034	9	51	0.83	138	0.067	<20	2.21	0.02	0.05	<2	<0.05	<1	<5	<5
3249356	Soil	0.059	11	54	0.85	161	0.060	<20	2.28	0.01	0.04	<2	<0.05	<1	<5	<5
3249357	Soil	0.065	14	51	0.80	226	0.036	<20	2.19	0.02	0.04	<2	<0.05	<1	<5	<5
3249358	Soil	0.070	13	47	0.74	157	0.041	<20	1.89	0.02	0.06	<2	<0.05	<1	<5	<5
3249359	Soil	0.041	11	48	0.76	113	0.059	<20	2.17	0.01	0.04	<2	<0.05	<1	<5	<5
3249360	Soil	0.043	11	46	0.78	116	0.071	<20	2.02	0.02	0.05	<2	<0.05	<1	<5	<5
3249361	Soil	0.076	12	51	0.84	203	0.047	<20	2.07	0.02	0.06	<2	<0.05	<1	<5	<5
3249362	Soil	0.067	9	39	0.75	140	0.085	<20	1.52	0.03	0.06	<2	<0.05	<1	<5	<5
3249363	Soil	0.077	9	40	0.72	175	0.047	<20	1.65	0.02	0.05	<2	<0.05	<1	<5	<5
3249364	Soil	0.095	9	45	0.79	209	0.045	<20	1.67	0.02	0.05	<2	<0.05	<1	<5	<5
3249365	Soil	0.099	14	48	0.84	157	0.063	<20	1.80	0.03	0.06	<2	<0.05	<1	<5	<5
3249366	Soil	0.078	10	40	0.72	157	0.062	<20	1.48	0.03	0.06	<2	<0.05	<1	<5	<5
3249367	Soil	0.090	10	39	0.70	164	0.031	<20	1.49	0.02	0.05	<2	0.06	<1	<5	<5
3249388	Soil	0.108	11	44	0.81	218	0.061	<20	1.71	0.02	0.08	<2	<0.05	<1	<5	<5
3249389	Soil	0.141	8	50	1.11	158	0.088	<20	1.64	0.02	0.16	<2	0.05	<1	<5	<5
3249390	Soil	0.065	12	46	0.82	174	0.055	<20	1.82	0.02	0.08	<2	<0.05	<1	<5	<5

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 10 of 10 **Part:** 1 of 2

**CERTIFICATE OF ANALYSIS** **WH119000597.1**

Method	Analyte	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	2	1	0.5	3	3	1	0.01
3249391	Soil	6	<3	4	2	41	9	86	<0.3	34	18	613	3.55	16	<2	30	<0.5	<3	<3	70	0.49
3249392	Soil	5	<3	4	1	37	10	95	<0.3	30	16	520	3.49	13	<2	29	<0.5	<3	<3	71	0.46
3249393	Soil	6	3	2	1	38	7	75	<0.3	36	17	533	3.59	14	<2	30	<0.5	<3	<3	70	0.46
3249394	Soil	4	<3	2	1	40	10	95	<0.3	38	17	502	3.61	15	<2	30	<0.5	<3	<3	76	0.51
3249395	Soil	6	<3	<2	1	53	5	63	<0.3	37	16	409	3.37	13	<2	34	<0.5	<3	<3	75	0.45
3249396	Soil	7	4	3	1	142	7	68	<0.3	39	17	349	3.43	14	<2	95	<0.5	<3	<3	70	0.47
3249397	Soil	5	<3	7	2	101	8	74	<0.3	37	16	444	3.43	13	<2	41	<0.5	<3	<3	72	0.48
3249398	Soil	7	<3	4	<1	56	9	83	<0.3	36	17	498	3.44	14	<2	41	<0.5	<3	<3	72	0.84
3249399	Soil	9	<3	4	2	38	9	70	<0.3	33	18	571	3.56	14	<2	34	<0.5	<3	<3	79	0.56
3249400	Soil	6	<3	3	1	37	7	66	<0.3	32	18	543	3.44	12	<2	34	<0.5	<3	<3	76	0.54

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**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 10 of 10

**Part:** 2 of 2

**CERTIFICATE OF ANALYSIS** **WH119000597.1**

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	5
3249391	Soil	0.057	11	44	0.77	193	0.042	<20	1.77	0.02	0.06	<2	<0.05	<1	<5	<5	5
3249392	Soil	0.062	12	47	0.76	172	0.063	<20	1.80	0.02	0.07	<2	<0.05	<1	<5	<5	5
3249393	Soil	0.047	12	47	0.88	156	0.063	<20	1.91	0.02	0.09	<2	<0.05	<1	<5	<5	6
3249394	Soil	0.052	10	48	0.87	202	0.064	<20	1.86	0.02	0.07	<2	<0.05	<1	<5	<5	<5
3249395	Soil	0.028	9	45	0.89	134	0.081	<20	1.90	0.02	0.07	<2	<0.05	<1	<5	<5	5
3249396	Soil	0.064	10	45	0.85	198	0.063	<20	1.79	0.02	0.08	<2	<0.05	<1	<5	<5	<5
3249397	Soil	0.065	9	47	0.83	230	0.058	<20	1.90	0.02	0.07	<2	<0.05	<1	<5	<5	<5
3249398	Soil	0.056	12	47	0.78	268	0.041	<20	1.82	0.02	0.05	<2	<0.05	<1	<5	<5	<5
3249399	Soil	0.056	10	47	0.79	204	0.054	<20	2.00	0.02	0.06	<2	<0.05	<1	<5	<5	5
3249400	Soil	0.052	9	45	0.77	198	0.054	<20	1.88	0.02	0.06	<2	<0.05	<1	<5	<5	5

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Vancouver British Columbia V6B 1P1 Canada

**Project:** 2019-Ultra  
**Report Date:** January 14, 2020

**Page:** 1 of 3 **Part:** 1 of 2

**QUALITY CONTROL REPORT** **WHI19000597.1**

Method	Analyte	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	
		Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL		2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	2	1	0.5	3	3	1	0.01
Pulp Duplicates																					
3248311	Soil	8	3	5	1	46	6	61	<0.3	34	12	358	3.24	12	<2	30	<0.5	<3	<3	67	0.50
REP 3248311	QC				1	46	3	60	<0.3	34	12	358	3.27	12	<2	30	<0.5	<3	<3	66	0.50
3248321	Soil	8	<3	4	2	113	5	66	<0.3	35	17	495	3.69	14	<2	30	<0.5	<3	<3	74	0.50
REP 3248321	QC	7	<3	5																	
3248456	Soil	10	<3	13	2	209	6	75	<0.3	41	16	549	3.75	17	<2	36	<0.5	<3	4	71	0.53
REP 3248456	QC				2	204	5	73	<0.3	40	16	540	3.67	16	<2	35	<0.5	<3	<3	69	0.51
3249152	Soil	10	<3	5	2	56	6	67	<0.3	47	17	453	4.09	15	<2	37	<0.5	<3	<3	84	0.65
REP 3249152	QC	8	4	6																	
3249178	Soil	12	5	13	1	67	5	84	<0.3	37	18	595	3.34	13	<2	50	<0.5	<3	<3	73	0.80
REP 3249178	QC				1	68	5	86	<0.3	37	18	605	3.43	13	<2	51	<0.5	<3	<3	74	0.81
3249187	Soil	6	<3	<2	3	35	10	104	<0.3	34	19	603	3.85	22	<2	32	<0.5	<3	<3	72	0.42
REP 3249187	QC	7	<3	4																	
3249214	Soil	11	4	9	2	49	7	102	<0.3	40	18	457	3.72	19	<2	28	<0.5	<3	<3	70	0.37
REP 3249214	QC				2	48	7	102	<0.3	40	18	451	3.70	20	<2	27	<0.5	<3	<3	72	0.37
3249223	Soil	10	<3	6	2	59	9	81	0.3	41	21	623	3.77	20	<2	42	<0.5	<3	<3	77	0.73
REP 3249223	QC	11	<3	4																	
3249250	Soil	7	<3	6	2	69	5	76	<0.3	32	14	401	3.92	18	<2	25	<0.5	<3	<3	79	0.44
REP 3249250	QC				2	69	7	76	<0.3	32	14	402	3.93	17	<2	25	<0.5	<3	<3	79	0.43
3249259	Soil	7	<3	<2	3	47	7	82	<0.3	33	15	469	3.85	22	<2	29	<0.5	<3	<3	70	0.44
REP 3249259	QC	8	<3	8																	
3249287	Soil	7	<3	<2	1	55	8	114	<0.3	40	17	582	3.92	15	<2	44	<0.5	<3	<3	74	0.74
REP 3249287	QC				1	56	7	115	<0.3	41	17	595	3.98	16	<2	46	<0.5	<3	<3	74	0.75
3249296	Soil	7	4	5	<1	182	3	73	<0.3	31	22	531	4.04	8	<2	72	<0.5	<3	<3	97	0.82
REP 3249296	QC	7	4	8																	
3249357	Soil	27	<3	21	2	114	10	77	<0.3	33	19	568	3.75	15	<2	34	<0.5	<3	<3	79	0.70
REP 3249357	QC				2	115	8	78	<0.3	35	20	567	3.80	16	<2	35	<0.5	<3	<3	82	0.71
3249366	Soil	8	4	34	<1	387	8	71	<0.3	32	17	423	3.06	14	<2	45	<0.5	<3	<3	69	0.97
REP 3249366	QC	13	5	36																	

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**Page:** 1 of 3

**Part:** 2 of 2

**QUALITY CONTROL REPORT** WH119000597.1

Method	Analyte	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga
Unit		%	ppm	ppm	ppm	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5
Pulp Duplicates																
3248311	Soil	0.029	10	43	0.81	137	0.042	<20	1.80	0.02	0.06	<2	<0.05	<1	<5	<5
REP 3248311	QC	0.028	10	43	0.80	137	0.037	<20	1.78	0.02	0.06	<2	<0.05	<1	<5	<5
3248321	Soil	0.031	13	51	0.87	170	0.052	<20	2.13	0.02	0.05	<2	<0.05	<1	<5	<5
REP 3248321	QC															
3248456	Soil	0.059	14	48	0.89	153	0.067	<20	1.87	0.02	0.08	<2	<0.05	<1	<5	<5
REP 3248456	QC	0.058	13	46	0.86	150	0.062	<20	1.80	0.02	0.07	<2	<0.05	<1	<5	<5
3249152	Soil	0.036	9	49	1.05	100	0.084	<20	2.15	0.02	0.07	<2	<0.05	<1	<5	<5
REP 3249152	QC															
3249178	Soil	0.092	10	42	0.82	131	0.082	<20	1.45	0.04	0.07	<2	<0.05	<1	<5	<5
REP 3249178	QC	0.093	9	42	0.84	138	0.083	<20	1.48	0.04	0.07	<2	<0.05	<1	<5	5
3249187	Soil	0.083	10	46	0.79	194	0.045	<20	1.74	0.02	0.08	<2	<0.05	<1	<5	5
REP 3249187	QC															
3249214	Soil	0.060	12	50	0.84	163	0.059	<20	1.86	0.01	0.07	<2	<0.05	<1	<5	<5
REP 3249214	QC	0.060	12	49	0.83	163	0.060	<20	1.86	0.01	0.08	<2	<0.05	<1	<5	<5
3249223	Soil	0.092	12	50	0.77	338	0.030	<20	1.97	0.02	0.05	<2	<0.05	<1	<5	<5
REP 3249223	QC															
3249250	Soil	0.037	7	46	0.96	133	0.064	<20	1.95	0.01	0.07	<2	<0.05	<1	<5	<5
REP 3249250	QC	0.036	7	47	0.95	133	0.062	<20	1.94	0.01	0.07	<2	<0.05	<1	<5	<5
3249259	Soil	0.040	10	40	0.73	226	0.029	<20	1.80	0.02	0.05	<2	<0.05	<1	<5	<5
REP 3249259	QC															
3249287	Soil	0.063	14	50	0.91	233	0.067	<20	2.03	0.02	0.08	<2	<0.05	<1	<5	<5
REP 3249287	QC	0.064	14	51	0.92	236	0.070	<20	2.08	0.03	0.08	<2	<0.05	<1	<5	<5
3249296	Soil	0.186	10	45	1.49	128	0.082	<20	2.23	0.02	0.12	<2	<0.05	<1	<5	6
REP 3249296	QC															
3249357	Soil	0.065	14	51	0.80	226	0.036	<20	2.19	0.02	0.04	<2	<0.05	<1	<5	<5
REP 3249357	QC	0.066	15	51	0.80	226	0.039	<20	2.20	0.02	0.04	<2	<0.05	<1	<5	6
3249366	Soil	0.078	10	40	0.72	157	0.062	<20	1.48	0.03	0.06	<2	<0.05	<1	<5	<5
REP 3249366	QC															

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**Page:** 2 of 3 **Part:** 1 of 2

**QUALITY CONTROL REPORT** **WHI19000597.1**

	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	
	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca	
	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
	2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	2	1	0.5	3	3	1	0.01	
Reference Materials																					
STD BVGEO01 Standard				11	4465	197	1762	2.9	173	25	716	3.71	125	13	55	6.5	5	24	76	1.32	
STD BVGEO01 Standard				11	4709	194	1807	3.1	174	25	745	3.98	124	11	58	6.5	<3	25	77	1.38	
STD BVGEO01 Standard				10	4575	191	1770	2.3	169	24	739	3.87	121	14	57	5.9	<3	26	75	1.36	
STD DS11 Standard				14	150	139	353	1.8	81	14	1030	3.11	44	7	67	2.3	9	11	50	1.07	
STD DS11 Standard				15	155	148	354	2.1	83	14	1056	3.20	48	7	71	2.4	8	12	52	1.09	
STD DS11 Standard				14	151	136	350	2.0	79	13	1057	3.18	43	5	65	2.2	6	11	48	1.07	
STD DS11 Standard				13	153	133	349	1.7	77	13	1040	3.22	47	6	67	2.2	8	11	49	1.07	
STD KO74421 Standard	540	467	491																		
STD KO74421 Standard	515	452	473																		
STD KO74421 Standard	527	476	498																		
STD KO74421 Standard	517	460	485																		
STD OREAS262 Standard				<1	116	57	151	0.5	63	26	520	3.22	36	8	35	0.5	3	<3	21	2.92	
STD OREAS262 Standard				<1	119	57	152	0.5	63	26	526	3.19	35	8	35	0.6	4	<3	21	2.93	
STD OREAS262 Standard				<1	119	57	154	0.6	65	27	537	3.26	37	8	36	0.6	3	<3	22	3.00	
STD OREAS262 Standard				<1	120	51	147	0.5	64	27	536	3.36	36	7	35	<0.5	3	<3	21	3.06	
STD OREAS262 Standard				<1	118	55	142	0.5	64	26	532	3.36	36	7	35	0.7	3	<3	21	3.01	
STD OREAS262 Standard				<1	124	60	152	0.6	68	28	554	3.53	38	7	38	0.8	<3	<3	23	3.16	
STD OREAS262 Standard				<1	119	53	150	0.5	62	26	533	3.29	36	8	36	<0.5	<3	<3	22	3.00	
STD OREAS47 Standard	46	29	45																		
STD OREAS47 Standard	57	28	43																		
STD OREAS47 Standard	53	33	52																		
STD PD05 Standard	488	423	594																		
STD PD05 Standard	522	435	612																		
STD PD05 Standard	527	441	607																		
STD PG04 Standard	1012	942	1253																		
STD PG04 Standard	1007	918	1230																		
STD PG04 Standard	1022	954	1263																		
STD DS11 Expected				13.9	156	138	345	1.71	81.9	14.2	1055	3.2082	42.8	7.65	67.3	2.37	7.2	12.2	50	1.063	

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Page: 2 of 3 Part: 2 of 2

**QUALITY CONTROL REPORT** WHI19000597.1

		AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	%	ppm	ppm	ppm	ppm
		0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	5
Reference Materials																	
STD BVGE001	Standard	0.075	26	176	1.33	344	0.238	<20	2.32	0.19	0.91	5	0.70	<1	<5	10	6
STD BVGE001	Standard	0.076	25	173	1.37	359	0.236	<20	2.46	0.20	0.96	4	0.69	<1	<5	<5	6
STD BVGE001	Standard	0.075	26	174	1.36	351	0.246	<20	2.41	0.20	0.95	3	0.71	<1	<5	<5	6
STD DS11	Standard	0.071	18	57	0.84	430	0.090	<20	1.16	0.07	0.40	3	0.29	<1	<5	<5	<5
STD DS11	Standard	0.073	19	61	0.88	455	0.094	<20	1.22	0.08	0.42	2	0.30	<1	7	7	<5
STD DS11	Standard	0.072	16	54	0.87	420	0.089	<20	1.14	0.07	0.39	2	0.28	<1	<5	<5	<5
STD DS11	Standard	0.071	16	57	0.86	428	0.088	<20	1.15	0.07	0.40	3	0.28	<1	<5	<5	<5
STD KO74421	Standard																
STD KO74421	Standard																
STD KO74421	Standard																
STD KO74421	Standard																
STD OREAS262	Standard	0.040	16	41	1.17	243	0.003	<20	1.23	0.07	0.30	<2	0.27	<1	<5	<5	<5
STD OREAS262	Standard	0.039	16	42	1.19	250	0.003	<20	1.30	0.07	0.31	<2	0.27	<1	<5	<5	<5
STD OREAS262	Standard	0.040	17	43	1.21	256	0.003	<20	1.36	0.07	0.33	<2	0.28	<1	<5	<5	<5
STD OREAS262	Standard	0.038	13	39	1.19	256	0.003	<20	1.17	0.07	0.28	<2	0.26	<1	<5	<5	<5
STD OREAS262	Standard	0.038	13	40	1.18	254	0.003	<20	1.19	0.07	0.29	<2	0.26	<1	<5	5	<5
STD OREAS262	Standard	0.040	17	44	1.24	273	0.002	<20	1.41	0.08	0.34	<2	0.27	<1	<5	7	<5
STD OREAS262	Standard	0.039	17	41	1.19	256	0.003	<20	1.32	0.07	0.33	<2	0.26	<1	<5	<5	<5
STD OREAS47	Standard																
STD OREAS47	Standard																
STD OREAS47	Standard																
STD PD05	Standard																
STD PD05	Standard																
STD PD05	Standard																
STD PG04	Standard																
STD PG04	Standard																
STD PG04	Standard																
STD DS11 Expected		0.0701	18.6	61.5	0.85	417	0.0976	6	1.129	0.0694	0.4	2.9	0.2835	0.3	4.9	4.7	3.1

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**Page:** 3 of 3 **Part:** 1 of 2

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	FA330	FA330	FA330	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Th	Sr	Cd	Sb	Bi	V	Ca	
	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
	2	3	2	1	1	3	1	0.3	1	1	2	0.01	2	2	1	0.5	3	3	1	0.01	
STD BVGE001 Expected				10.8	4415	187	1741	2.53	163	25	733	3.7	121	14.4	55	6.5	2.2	25.6	73	1.3219	
STD OREAS282 Expected					118	56	154	0.45	62	26.9	530	3.284	35.8	9.33	36	0.61	3.39		22.5	2.98	
STD OREAS47 Expected	46.7	30.4	47																		
STD PG04 Expected	996	910	1210																		
STD PD05 Expected	519	430	596																		
STD KO74421 Expected	518	459	466																		
BLK Blank	3	<3	5																		
BLK Blank	2	<3	5																		
BLK Blank				<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1	<0.01	
BLK Blank				<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1	<0.01	
BLK Blank				<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1	<0.01	
BLK Blank				<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1	<0.01	
BLK Blank				<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1	<0.01	
BLK Blank	3	<3	3																		
BLK Blank				<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<1	<0.5	<3	<3	<1	<0.01	
BLK Blank	4	<3	2																		
BLK Blank	4	<3	<2																		
BLK Blank	5	<3	5																		
BLK Blank	4	<3	4																		

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**Page:** 3 of 3 **Part:** 2 of 2

**QUALITY CONTROL REPORT** **WHI19000597.1**

	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300	AQ300
	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Hg	Tl	Ga	Sc	
	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	%	ppm	ppm	ppm	ppm	
	0.001	1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	1	5	5	5	
STD BVGE001 Expected	0.0727	25.9	171	1.2963	340	0.233		2.347	0.1924	0.89	3.5	0.6655			7.37	5.97	
STD OREAS262 Expected	0.04	15.9	41.7	1.17	248	0.003		1.204	0.071	0.312		0.253			3.73	3.24	
STD OREAS47 Expected																	
STD PG04 Expected																	
STD PD05 Expected																	
STD KO74421 Expected																	
BLK	Blank																
BLK	Blank																
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5	
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5	
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5	
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5	
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5	
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<2	<0.05	<1	<5	<5	<5	
BLK	Blank																
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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.