

Prospecting, Geological and Geochemical Survey Report

On the

Ultra & Outpost Property

Telluride & Silver Creeks, Whitehorse Mining District, Yukon, Canada

Located Within: NTS Sheet 115B16

Centered at Approximately: Latitude 60.54° North by Longitude 138.15° West

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

Grouping Certificate: HWO7704

Field Work Conducted: June 22 - July 7, 2018

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traverse the earth

February 28, 2019

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1 Introduction

The Ultra Project comprises 465 mineral claims (9050 hectares) located 42 kilometers northwest of Haines Junction and 201km from Whitehorse, Yukon Territory. The contiguous Outpost claim block to the northwest comprises 71 mineral claims (1420 hectares). 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 July 16, 2018. The 2018 work program was undertaken on behalf of Group Ten Metals Inc. by Longford Exploration Services Ltd. under the supervision of James Rogers.

The program comprised geological mapping, rock sampling, XRF survey and soil geochemical surveys on to target aeromagnetic anomalies outlined by the re-processed airborne magnetic data released in Open File 2017-33 by the YGS. The program also targeted mafic and ultramafic sills and dykes of the Kluane Ultramafic/Mafic Suite and Nikolai volcanic rocks.

The present assessment report is a summary of the geological and geochemical survey conducted over the project area from June 22 - July 7, 2018 utilizing helicopter access. A total of 1011 soil samples and 112 rock samples were collected by a four person crew (65 man days) based out of the Silver City B&B.

1.1 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 26909 NAD83 UTM Zone 9N unless otherwise stated. The following is a list of abbreviations which may be used in this report:

Abbreviation	Description	Abbreviation	Description
%	percent	li	Limonite
AA	atomic absorption	m	Metre
Ag	silver	m2	square metre
AMSL	above mean sea level	m3	cubic metre
as	arsenic	Ма	million years ago
Au	gold	mg	Magnetite
AuEq	gold equivalent grade	mm	Millimetre
Az	azimuth	mm ²	square millimetre
b.y.	billion years	mm₃	cubic millimetre
CAD\$	Canadian dollar	mn	Pyrolusite
cl	chlorite	Мо	Molybdenum
cm	centimetre	Moz	million troy ounces
Cm ²	square centimetre	ms	Sericite
cm₃	cubic centimetre	Mt	million tonnes
сс	chalcocite	mu	Muscovite
ср	chalcopyrite	m.y.	million years
		NAD	North American Datum
Cu	copper	NI 43-101	National Instrument 43-101
су	clay	opt	ounces per short ton
°C	degree Celsius	OZ	troy ounce (31.1035 grams)
°F	degree Fahrenheit	Pb	Lead

Table 1.1.1 Abbreviations and Units of Measurement

Abbreviation	Description
DDH	diamond drill hole
ер	epidote
ft	feet
ft ²	square feet
ft₃	cubic feet
g	gram
gl	galena
go	goethite
GPS	Global Positioning
	System
gpt	grams per tonne
ha	hectare
hg	mercury
hm	hematite
ICP	induced coupled
	plasma
kf	potassic feldspar
kg	kilogram
km	kilometre
km ²	square kilometre
Ι	litre

Abbreviation	Description
pf	Plagioclase
ppb	parts per billion
ppm	parts per million
ру	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

2 Summary of Previous Investigations

The project area has been intermittently explored since 1892 during which year Jack Dalton and E.J. Glave 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. Dalton established trading posts and improved the trail as far north as the Nordenskold River. Klondike prospectors used the Dalton Trail extensively during the 1898-1900 period en-route to the goldfields of the Klondike, but prospecting in the Front Ranges was not established until about 1903 when Silver City (or Kluane) was settled at the eastern end of Kluane Lake and became the center of mining activity in the region. Silver City boasted a post office, N.W.M.P. post and Mining Recorder; a wagon road led east through Champagne to Whitehorse. The threat of Japanese invasion sparked the building of the Alaska Highway in 1942 and the Haines Road followed in 1944. Improved access in the post war period brought on an exploration boom, although no lode mining production is known from the immediate project area. Placer mining has been discontinuous with placer activity on Telluride and Kimberly Creeks. Placer miners first noticed massive sulphide boulders in glacial till at the mouth of Telluride Creek in 1904.

The Ultra occurrence covers the Telluride, Nunatak Zone 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 massive sulphide 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. Initial drilling, geochemistry and ground geophysical surveys were undertaken. The prospect was re staked in 2004 by the Kluane Joint Venture, and later by Tom Morgan and Vern Matkovich with exploration campaigns that targeted massive sulphides, Ni-Cu-PGE and Au mineralization within the Ultra group. A database of geochemical samples, airborne and ground geophysics, and geological mapping was compiled in 2013-2014 by Ashburton Ventures Inc.

The most significant showing on the Ultra Project is the Telluride volcanogenic massive sulphide showing (J. Pautler, 2014), "which appears to be consistent with the Cypress type deposit model. The massive sulphide horizon trends 130-140^o/ 45-70^oS, 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 maximum 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 Telluride horizon has been discontinuously traced, due to glacier cover, 6 km along strike to the southeast. The Nunatak Zone, a bedded massive sulphide lens and associated stockwork zone was discovered 3 km southeast of the Telluride showing with results of 11.54% Cu, 1514 ppm Zn and 7.2 g/t Ag over 3m. Four 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 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 lower elevations near Telluride Creek have been the focus of recent work (2010-2017) consisting of geophysical surveys including aeromagnetic and ground geophysical surveys, soil geochemistry and rock sampling.

3 Property Description and Location

3.1 Location

The Ultra Property is located in southwest Yukon and is centered approximately 40km northwest of Haines Junction, Yukon within NTS map sheet 115B16 (Figure 3.1). The Kluane Front Ranges forms a narrow facade to the St. Elias Mountains, rising steeply from the Shakwak Valley to a maximum elevation of 8500 feet. The slopes are steep and uniform with long straight talus screes; in general terms the Front Ranges comprise two or three major ridges parallel to the main front connected by high saddles and dissected within the project area by major transverse V-shaped valleys containing the Jarvis River and Silver Creek. The forest cover of this area is light, with treeline at approximately 4000 feet elevation. Black spruce, white spruce, balsam, poplar and white poplar dominate the forested slopes; alder willow and sub-alpine flora are found at and above the timberline. Outcrop is extensive on upper alpine slopes, creek gullies and even on lower ridges in the Shakwak valley where glacial action has left bedrock exposures.

Game is plentiful as the project area lies wholly within the Kluane Game Sanctuary. Airstrips are located at Haines Junction and Silver City and charter helicopter and fixed wing service is available at Haines Junction and seasonally at 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 services and casual labour pool available that early stage exploration requires.



Figure 3.1 Ultra project location.

The claims are bounded to the south by Kluane National Park and lie generally northwest of the Jarvis River on the west side of the Shakwak Valley. The claims encompass the Telluride and Silver Creeks drainages and extend from low valley bottom elevations to the upper alpine slopes of the Kluane Ranges.

The property area is shielded from the Pacific Ocean by the high St. Elias Mountains and thus has a dry continental climate despite the proximity of tidewater. Summers are short and hot with temperatures up to 35 degrees Celsius; winters are severe with short daylight hours and temperatures down to -50 degrees Celsius.

The Alaska Highway runs parallel and approximately 10 kilometers northeast of the claim group, and the Haines Highway extends 192 miles south from Haines Junction to the deep water port of Haines, Alaska. A narrow four wheel drive road extends from Boutellier Summit south from the Alaska Highway to Telluride Creek on the southern portion of the Ultra Claims. Access to the claim area in 2018 was facilitated by utilizing helicopter for set outs and pick-ups.

The areas of focus for the 2018 field season were the ultramafic/mafic sill near the Frohberg showing, the Uze area, the Boutelier area and the Outpost magnetic anomaly.

3.2 Mineral Titles

Group Ten Metals Inc. owns the majority claims comprising the Ultra Property and has a 100% interest in the remainder. The Outpost claims are under option to Group Ten Metals Inc. from Longford Exploration Services Ltd. Ryan Versloot of Longford Exploration Services filed an Application to Group Mineral Claims (YQMA Form 12) and an Application for a Certificate of Work (YQMA Form 4) in respect of these claims on August 17th, 2018.

The 536 mineral claims under Grouping Certificate HW07704 that are subject of this Assessment Report are summarized in Table 3.1.

Table 3.1 Mineral tenure summary

GRANT NUMBERS	CLAIM NAME	OWNER	STAKE DATE	EXPIRY DATE
YC18433 - YC18436	ELI 11 - ELI 14	Group Ten Metals Inc 100%	2000-02-22	2022-02-11
YC19001 - YC19030	ULTRA 1 - ULTRA 30	Group Ten Metals Inc 100%	2000-12-06	2022/23-02-11
YC19079, 81, 83	GAB 35, 37, 39	Group Ten Metals Inc 100%	2001-02-09	2022-02-11
YC19098 - YC19105	ULTRA 37 - ULTRA 44	Group Ten Metals Inc 100%	2001-02-07	2022-02-11
YC19106 - YC19119	ULTRA 45 - ULTRA 58	Group Ten Metals Inc 100%	2001-02-08	2022-02-11
YC19120 -YC19133	ULTRA 59 - ULTRA 72	Group Ten Metals Inc 100%	2001-02-08	2022-02-11
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	2022-02-11
YC19398 - YC19405	ULTRA 73 - ULTRA 80	Group Ten Metals Inc 100%	2001-10-10	2022-02-11
YC19406 - YC19409	TELL 1 - TELL 4	Group Ten Metals Inc 100%	2001-10-03	2022-02-11
YC26106 - YC26115	ULTRA 81 - ULTRA 90	Group Ten Metals Inc 100%	2003-11-24	2022-02-11
YC26239 - YC26285	ULT 21 - ULT 67	Group Ten Metals Inc 100%	2004-02-09	2022-02-11
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	2022-02-11
YC26323 - YC26341	ULT 105 - ULT 123	Group Ten Metals Inc 100%	2004-02-09	2022-02-11
YC26359 - YC26372	ULT 8 - ULT 21	Group Ten Metals Inc 100%	2004-02-09	2022-02-11
YC26373 - YC26383	ULT 142 - ULT 152	Group Ten Metals Inc 100%	2004-02-12	2022-02-11
YC26408 - YC26447	JEN 1 - JEN 40	Group Ten Metals Inc 100%	2004-02-12	2021/22-02-11
YC26448, 449	JEN 120, 251	Group Ten Metals Inc 100%	2004-02-12	2021/22-02-11
YC40233 - YC40248	ULT 177 - ULT 192	Group Ten Metals Inc 100%	2005-09-11	2022-02-11
YC53937 - YC53948	VMS 1 - VMS 12	Group Ten Metals Inc 100%	2006-09-01	2022-02-11
YE69101 - YE69135	UM 1 - UM 35	Group Ten Metals Inc 100%	2011-08-01	2021/22-02-11
YE69701 - YE69789	UZ 1 - UZ 89	Group Ten Metals Inc 100%	2011-08-16	2021/22-02-11
YE69899 - YE69902	UZ 199 - UZ 202	Group Ten Metals Inc 100%	2011-08-16	2022-02-11
YE69919 - YE69959	UZ 219 - UZ 259	Group Ten Metals Inc 100%	2011-08-17	2022-02-11
YE69974 - YE69976	UM 39 - UM 41	Group Ten Metals Inc 100%	2011-08-16	2021-02-11
YE69977 - YE69980	UM 62 - UM 65	Group Ten Metals Inc 100%	2011-08-16	2021-02-11
YF45969 - YF45986	UZE 1 - UZE 18	Group Ten Metals Inc 100%	2017-08-08	2022-02-11
YE33717 - YE33787	Outpost 1-71	Longford Exploration Services Ltd 100%	2011-05-11	2022-02-11



Figure 3.2 View across the UZE claims southeast toward Mount Decoeli.



Figure 3.3 Claim map of the Ultra project area.

Longford Exploration Services Ltd.

4 Geological Setting and Mineralization

4.1 Regional Geology

The Ultra-Outpost Property is underlain by the Alexander Terrane to the southwest and Wrangell Terrane to the northeast, together comprising the accreted Insular Super Terrane. The southwestern portion of the project area is underlain by clastic rocks of the Upper Jurassic to Lower Cretaceous Dezadeash formation. To the northeast, the Dezadeash Formation is in fault contact with the Upper Triassic Nikolai Group comprising amygdaloidal basaltic and andesitic flows with local tuff, breccia, thin bedded shale and bioclastic limestone. Towards the northwestern portion of the project area near Silver Creek and Boutilier Creek the Kluane Ranges Intrusive Suite of grey medium to coarse grained biotite-hornblende granodiorite, quartz diorite, quartz monzonite and hornblende diorite locally intrude the Wrangellian strata. East of the Denali Fault Triassic meta-volcanic and meta-sediments are mapped as the Late Triassic Bear Creek Assemblage. Sills of the Upper Triassic Kluane Ultramafic Suite occur throughout the Kluane Ranges and are thought to be the subvolcanic feeder of the basic to mafic volcanics within the Wrangellian Strata (Figure 4.1).

Topographically, the Kluane Ultramafic Belt is in the Kluane Ranges which are foothills to the St. Elias Mountains that range along the Yukon-Alaska border. The ultramafic rocks are distinctively coloured (glossy black to dark brown or light green to pale grey when altered) and can be seen as distinctive linear features. The dominant structural direction, controlled by the major Duke River and Denali faults, ranges in orientation from 290° to 310°. Movement of Wrangellia 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, 2001).

The Kluane mafic-ultramafic sills are elongated cumulate bodies than are layered, 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 Pennsylvanian to Permian Skolai Group near the contact between the lower 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, 2016).

The Skolai Group contains the oldest rocks in the ultramafic belt, the Station Creek Formation a sequence of volcanic and volcaniclastics 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.

Sill-like gabbroic bodies of the Maple Creek Gabbro intrude the Hasen Creek Formation. They 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, 2016).



Figure 4.1 Ultra project regional geological setting.

4.2 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-Outpost 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 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 have a limited range (Hulbert, 1997):

- 1. Skarn ores developed in Permian carbonates at Wellgreen.
- 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 minfile occurrences in the Jarvis River area represent potential VMS occurrences proximal to ultramafic sills with model characteristics summarized by Pautler J., 2007:

"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."

The Telluride volcanogenic massive sulphide showing, on the Ultra Property has reported sample values of 3.23% Cu, 6.75% Zn, 17.8 Ag, 0.15 Au over a 4m width and the Nunatak zone 3km along strike to the southeast of the Telluride occurrence has recorded assay values of 11.54% Cu, 1514 ppm Zn and 7.2 g/t Ag over a 3m width (Pautler J., 2007).



Figure 4.2 - Cross section of mineral occurrences in the Kluane Ranges (from Campbell W., 1981)



Figure 4.3 Deposit model for the Kluane Belt ultramafic sill (modified from Hulbert, 1997)

5 History

Previous exploration on the Ultra Project, undertaken from 1955 to early 2014, has involved approximately 440m 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, a 1977 airborne electromagnetic survey, a 2004 airborne total magnetic field and electromagnetic survey and 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.

Table 5.1 Exploration History of Ultra Property (after Pautler J., 2015).

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).
1984	Geological mapping and prospecting of Jennifer showing by S. J. Hill, with values up to 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 up to 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 up to 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 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 using the McPhar Hummingbird
	system, outlining 54 conductors, and a geological mapping and prospecting program by
	Klondike Gold Corporation under option from Morgan (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 3.23% Cu, 6.75% Zn, 17.8 Ag, 0.15 Au over 4m (Pautler, 2006).
2008	2008 More detailed sampling of the Telluride volcanogenic massive sulphide horizon and
	Frohberg showing was conducted by Tom Morgan with 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 and gold enrichment of 480 and 410 ppb in the footwall portion
	of the two largest 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).
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
2012.14	(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 ultramatic units and one gabbro sample have a consistent and high magnetic
	and gabbrois samples, and the minoralized units all have a low resistivity signature sounded
	and gabbroic samples, and the mineralized units an nave a low resistivity signature coupled with high chargeshility (lackcon, 2014)
2014	With high chargedbility (Jackson, 2014).
2014	Autora Geosciences completed a ground magnetometer and VLF survey (1/km) on the UZE
	comprehensive report for Duncastle Gold Corp
2016	LIAV mag survey (28.0km) by Longford Evploration 1td, and Dianaar Evploration on the UZ
2010	claims for Group Ten Metals Inc
2017	Longford Evaluation 1td performed programs of soil geochemistry geological manning and
2017	respecting on the UZ claims and on the Outpost block for Group Tan Motals Inc.

5.1 Previous Geochemistry

Table 5.2 Previous Geochemistry (after Pautler J., 2015).

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 values up to 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 (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 up to 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 containing values up to 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. Eight grab samples were also collected from the Jennifer showing in 1984 with values up to 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 values up to 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 up to 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 1.97 g/t Pd, 0.203 Pt g/t and 1.66% Cu from the Frohberg showing and up to 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 Pt, 13.46 g/t Pd, 4.07% Cu and 1.73% Ni over 0.5m from trenching on the Frohberg showing (see section 5.5, "Prevolus Trenching").
2004	Numerous quartz-pyrite stockwork boulders were identified by Klondike Gold Corporation in the headwaters of Bryson Creek returning 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	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).
2006	On the Redball grid the airborne geophysical conductor occurs at L100N/9975E. The best correlations between elements occur between 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). This latter location would make a favourable drill set up if the Boulder showing was considered to have a source other than the Telluride showing. A vertical hole at this location and a -45° hole directed towards the L100N/9850E anomaly at about 065° would be a good test of the Redball zone. 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.
2006	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.
2008	Rock geochemical sampling 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, at the Frohberg showing. Rhodium (Rh) is one of the rarest elements in the Earth's crust. 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.

2012	The 2012 program by Tom Morgan 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 (Figure 10). 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). Results indicated copper, palladium, platinum enrichment along the inner edge of the magnetic high (maximum values of 2019 ppm Cu, 34 ppb Pd, 12 ppb Pt) and zinc, copper, silver, nickel, ±molybdenum, ±gold enrichment at the outer edges over almost 3 km, centred approximately 1 km to the west (maximum 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 similar anomaly to the latter appears to be emerging at L17/025N with 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). The results confirm the tenor of mineralization here. 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 (12 mandays) on the Outpost Claims from Aug. 16th to 19th, 2017 collecting 72 soil samples and a total of 32 rock samples were collected across the face of an ultramafic outcrop in a creek gully. Geochemical results from soil sampling show the elevated values corresponding directly to the geophysical anomaly. Geochemical results from the panel sampling show consistent nickel mineralization over 33m associated with a dark grey fine grained peridotite with trace pyrrhotite and moderate magnetism. On the UZ claims the 2017 work program collected 13 rock samples and 387 soil samples on soil lines targeting geochemical and geophysical anomalies. The 2017 exploration work on the UZ 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.

5.2 Previous Geophysics

Previous geophysical programs are summarized in Table 5.3 and Figures 5.1 and 5.2.

Table 5.3 Previous Geophysics (after Pautler J., 2015).

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 well defined magnetic high and resistivity low was defined approximately 300m upstream (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 (Figure 7) outlined a northwest trending broad conductive zone with several 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 (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 (Figures 2 and 6) 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, as noted under
	"Mineralization", 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 ultramatic 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 the southern grid area,
	corresponding to the open ended copper-nickel-PGE soil anomaly from 2012 (Figure 10).
	Strong magnetic highs were identified in the northern half of the grid and are consistent with
	ultramatic 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
2016	defined VLF response (2), which is slightly less distinct to the east of the interpreted fault (3).
2016	UAV mag survey (28.9km) by Longford Exploration Ltd. and Pioneer Exploration on the UZE
	claims for Group len Metals inc. contiguous to the 2014 survey identified a magnetic high
2017	through the center of the claim block.
2017	Aurora Geosciences Ltd. released reprocessed geophysical imagery for map sheet 115B (see
1	Figure 5.1).



Figure 5.1 Historical geophysical surveys on the Ultra property.

Longford Exploration Services Ltd.



Figure 5.2 2017 reprocessed airborne geophysical survey RTP-TDR.

5.3 Previous Trenching

Table 5.4 Previous Trenching and Rock Sampling (after Pautler J., 2015).					
10018 3.4 FIEVIOUS HEHLIIIIU UHU NOLK SUHDIIIU TUTEI FUUTEI J., 2013).	Table 5 / Dravious	Tranching and	Pock Camplina	(after Dautler I	2015)
	TUDIE 5.4 PLEVIOUS	menunny unu	ROCK SUITIDIIIIQ	<i>(u)lei Puuliei J.,</i>	2013).

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 in 2006, but with no associated gold. Previous sampling from this body 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. 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 ^o / 45-70 ^o 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 maximum 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 showing with 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 (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.

5.4 Previous 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 Boulder showing area, between 1956 and 1970, testing for the source of the massive sulphide boulders. Table 6.5 below summarizes the drill programs. Most of the drill holes were located in the field in recent years. GPS coordinates with specifications are tabulated below.

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

Table 5.5 Historic Drilling (after Pautler J., 2015).

	sulphides. The cuttings were reported to contain some disseminated native copper			
	(Woodcock, 1967).			
1970	Atlas Exploration Limited 3 diamond 216 m, The 1970 drill program tested a conductor along			
the Shakwak ice trend. One hole was lost in overburden and another hole i				
	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 exan				
	author in 2006 at UTM coordinates 6756057mN, 650981mE, Nad 83, Zone 7 but is in a state of			
	total disrepair (Pautler, J., 2015).			

6 Property Geology

The 2018 work areas included the southeastern Uze claims east of the Denali Fault where the Upper Triassic Bear Creek Assemblage (uTB) outcrops on glaciated ridge tops consisting of strongly foliated rusty weathering massive intermediate to mafic meta-volcanic rocks, lesser meta-clastics, volcaniclastics, phyllite and carbonate horizons intruded by quartz monzonite, aplite and pegmatite sills and dykes of the Early Cretaceous Kluane Ranges Suite (EKK, KGd). The Bear Creek Assemblage is known to host PGE enriched VMS style mineralization at the Ellen property, 6 km southeast of the northeastern Ultra property, and ultramafic sills have been intersected in the footwall.

Considerable work was completed west of the Denali Fault (Wrangellia Terrane) on Outpost Mountain and at the headwaters of Boutellier and Telluride Creeks, 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 Mapple Creek gabbro (uTmg) and granitic intrusions of the Kluane Ranges Suite (EKK).

The southwest property area is underlain by the Alexander terrane, comprised of Silurian to Devonian Bullion Suite massive, well bedded, light gray limestone or marble, argillite and phyllite (Dp, Dc)). The above rocks are overlain by Upper Jurassic to Lower Cretaceous Dezadeash Group clastic sediments (JKD), by Paleocene to Oligocene Amphitheatre Group sediments (OA) and intruded and overlain by Miocene to Pliocene Wrangell Lavas (NW). The Dezadeash Group consists of a succession of dark buff-gray lithic greywacke, sandstone, siltstone, shale, argillite, phyllite and conglomerate.

The Upper Triassic Nikolai Formation was mapped in 2011 as comprising two discontinuous, subparallel bands straddling the eastern portion of the Outpost Claim Group, outcropping primarily in stream cutbanks (R. Rogers, 2012). 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 arsenopyrite), but 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.

The Upper Jurassic to Lower Cretaceous Dezadeash Formation is the dominant map unit of the western portion of the Outpost Claims, generally seen in contact with the Nikolai volcanics in stream cutbanks. 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. Locally, hydrothermal brecciation appears to follow the dominant fracture set with visible arsenopyrite and pyrite mineralization throughout. The Dezadeash Formation lies in unconformable contact over the Nikolai Formation. Where visible in the field, the contact ranges from unaltered to heavily altered orange and weathered rock. The contact between

the Dezadeash Formation and the Early Cretaceous Kluane Ranges Suite of granodiorite was mapped on the northern flank of Outpost Mountain (R. Rogers, 2012).

Table 6.1 Table of Formations	(after Open File 2014-18, YGS).
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Q – Quaternary	Unconsolidated alluvium, colluvium and glacial deposits.			
NW,	NW1 - Extensive volcanic unit, volumetrically significant but not associated with			
Miocene to	mineralization.			
Pliocene	Occur on the southwest side of Wrangellia overlapping onto the Alexander Terrane			
Wrangell Lavas	Abundant west of the Donjek River and typically form piles 400-1000m thick.			
	Mafic to felsic volcanic rock with			
	NW2 – volcanic conglomerate.			
MW,	MW - Youngest intrusions in the area. Related to the Wrangell Lavas. Felsic to matic			
Mid to late	composition.			
Suito				
	OT Homogeneous granite with lesser granodiorite, diorite and gabbro. Subvolcanic			
Oligocene	chyolite, rhyodacite and dacite			
Tkope Suite	myonite, myouacite and dacite.			
FKK FKP	EKK EKP - medium to coarse-grained biotite-hornblende granodiorite guartz			
Early Cretaceous	diorite, guartz monzonite and hornblende diorite. Minor diorite and gabbro.			
Kluane Ranges	Pegmatite and porphyry dykes.			
Suite				
JKD,	JKD - lithic greywacke, sandstone, siltstone, shale, argillite and conglomerate, rare			
Early Cretaceous	tuff.			
Dezadeash				
Formation				
JKS,	JKS - coarse grained hornblende-biotite granodiorite and quartz diorite.			
Jurassic,				
ST. Elias Suite				
uTM,	uTM - Conformably overlies the Nikolai Group, varying in thickness from zero to			
Late Triassic	several hundred metres. Argillaceous limestone and argillite; massive limestone,			
McCarthy Fm.	limestone breccia and well-bedded limestone, gypsum and anhydrite. (McCarthy,			
_	Chitistone and Nazina limestone).			
uTu,	Preferentially intrudes at or near the Hasen Creek-Station Creek contact.			
Late Triassic	u lu - peridotite, dunite and clinopyroxenite, layered intrusions, locally with gabbroic			
Kluane Ultramatic	chilled margins. (Kluane-type matic-Ultramatics Gabbro-Diabase Sills)			
Sulle.	uting - Maple Creek gabbro. Fine to coarse grained diabase and gabbro sills and dykes. Intrudes the Skelei Creup and legally the Kluope ultremetic suite			
μTN	uykes. Intrudes the Skolal Group and locally the Ridane diffamilianc suite.			
Late Triassic	uTNS – triming bedded grey innestone and arginite.			
Nikolai formation	nvroyene and plagioclase phyric (Nicolai Greenstone)			
Nikolarionnation	uTN1 – light to dark green volcanic breccia, pillow lava and basal conglomerate			
uTB.	uTBm - strongly foliated to massive intermediate to mafic metavolcanic rocks, lesser			
Late Triassic Bear	metaclastics, volcaniclastics and carbonate horizons			
Creek	uTBs – meta-siltstone, mudstone and sandstone; phyllitic to schistose, pyritic.			
Assemblage	uTBv – strongly foliated to intermediate to mafic metavolcanic rocks, greenschist.			
PH,	PH - fine-grained clastic rocks. Lower part contains volcaniclastics, rare basalts,			
Mississippian to	rare chert beds and chert-pebble conglomerate.			
Permian	PHc – limestone, locally fossiliferous, massive to bedded.			
Hasen Creek Fm.				

CS,	CS - dark green basalt flows, pillows, pillow breccia, local magnetite-rich jasper.		
Mississippian to	CSvt – bedded to massive chert, tuff.		
Permian Station	CSv – interbedded volcanic breccia, volcaniclastics; minor basalt flow.		
Creek Fm.	CSvt – laminated volcanic tuff and volcanoclastic siltstone.		
Dp, Dc, Dv	Dp – fine grained phyllite and calcareous phyllite		
Devonian, Bullion	Dc – light grey to cream marble, strongly deformed		
Creek	Dv – dark gren meta-basalt, greenschist		
Assemblage			

6.1 Property Mineralization (after Pautler, J., 2015)

The Ultra project covers the Telluride volcanogenic massive sulphide and the Frohberg nickel-copper-PGE showings, the Jennifer copper-silver vein prospect, and the Kul nickel-copper-PGE prospect as documented by the Yukon Geology Program as Minfile Numbers 115B 008, 115B 013 and 115B 012 (Deklerk, 2009). The Jesse anomaly, Telluride, Boulder and Nunatak volcanogenic massive sulphide showings, the Jennifer copper-silver vein/stockwork showing, the Out (possible porphyry copper) occurrence and the Uze aeromagnetic anomaly coincident with a conductor. The locations of the showings on the property are shown in Figure 6.1 and summarized below in Table 6.2.

The Ultra project covers intrusions with the same age and chemistry as those which host the nickelcopper-PGE deposit at the former Wellgreen mine. At the Frohberg showing mineralization is associated with gabbroic dykes and sills with highly significant values including 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. 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, 200m to the northwest, towards the lower peridotite body. Rhodium (Rh) is one of the rarest elements in the Earth's crust.

The Telluride volcanogenic massive sulphide showing appears to be consistent with the Cyprus type deposit model and exhibits similarities to the Windy Craggy deposit. 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 maximum 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 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. Semimassive 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.

The massive sulphide boulders at the Boulder showing appear to have originated from the Telluride showing, although dating suggests a younger age. In addition, the main conductor originally thought to have been the source has never been tested since the original drill holes did not reach bedrock. Valid drill targets are evident on the Redball grid from the MMI soil interpretation, coincident with the central part of the 1961 Turam survey.



Figure 6.1 Ultra project mineral showings.

Showing Name	Nothing (mN)	Easting (mE)	Deposit Type
Frohberg	6753718	647688	Flood basalt Cu-Ni-PGE
Jesse	6758300	637930	Flood basalt Cu-Ni-PGE
Uze	6754000	659000	Flood basalt Cu-Ni-PGE, VMS
Kul	6758270	642475	Cu-Ni-PGE, Cu-Ag vein, Skarn, Porphyry Cu
Out	6759500	643300	Flood basalt Cu-Ni-PGE
Telluride	6753800	646260	Volcanogenic massive sulphide
Boulder	6755980	650430	Volcanogenic massive sulphide
Nunatak	6751708	648715	Volcanogenic massive sulphide
Jennifer	6755437	642576	Volcanogenic massive sulphide

7 2018 Work Program: Geological and Geochemical Survey

Longford Field Crews conducted geological and geochemical exploration surveys of the claims from June 22- July 7th, 2018. Field personnel included: project manager James Rogers, geologists Graham Davidson, Ryan Versloot, Sarah Ryan, and student geologist Matt Martinolich. Field work was staged from a lodge at Silver City and helicopter support was provided by TRK Helicopters based out of Haines Junction. The program focussed on airborne magnetic anomalies generated by the reinterpretation of YGS aeromagnetic data and intrusions of the Kluane Mafic/Ultramafic Suite.

During the 2018 work program a total of 402 soil samples were collected on soil lines targeting geochemical and geophysical anomalies on the UZE claims, a further 495 soil samples were collected on the northeast facing slope of Outpost Mountain over an ultramafic sill and several contour soil lines were completed south of Silver Creek across the Nikolai Formation. 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 0.46 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

A total of 112 rock samples were collected and an additional 51 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 (see Appendix A). 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.

Geological mapping and sampling in the Telluride, Boutellier & Silver Creek drainages and surrounding uplands utilized helicopter set out traverses. Mapping was focused on potential Cu-Ni-PGE mineralization associated with gabbro and peridotite sills of the Kluane Mafic/Ultramafic Intrusive complex and on sulphide mineralization in Nikolai volcanic rock and in zones of quartz-carbonate-chlorite veining. The historic Frohberg occurrence exposed on a steep talus slope was examined and sampled (see Table 7.1). Ultramafic rocks outcropping at the head of Telluride Creek near the Frohberg showing were tested with an XRF device and 36 spot readings recorded with GPS locations (see Table 7.2). Traverses in the Boutellier,

Outpost Mountain and UZE areas mapped and collected rock samples described in the following sections. Rock samples were analyzed with an infield XRF device before samples were sent to Bureau Veritas Laboratories in Whitehorse. Property scale geological mapping is shown in Figure 7.1.

7.1 Geological Mapping and Rock Sampling

7.1.1 Frohberg Main Sill Area

The Frohberg showing & Main Sill area were examined during three traverses on a high ridge and talus slope around the Telluride Minfile prospect (115B 008) at the headwaters of Telluride Creek. The Frohberg consists of a quartz carbonate vein stockwork in phyllite and argillite of the Devonian Bullion Creek Assemblage proximal to gabbroic sills and dykes of the Kluane Ultramafic/Mafic Suite. Mineralization consists of pyrite, chalcopyrite and pyrrhotite, which occur as fracture fillings, stringers and in quartz-carbonate veinlets and quartz veins within tuffaceous beds that are commonly variably silicified and are hornfelsed to calc-silicate. The sills range up to 5m wide and trend 140-170°/65-90°SW and the dykes trend 050-60°/77°S. To the north the dykes and sills coalesce into a larger gabbro to ultramafic body ("Main Sill") which outcrops across a saddle and several ridges but is primarily covered by boulder talus and moraine in the drainages. The Main sill and a second sill about 500m to the north were found to extend over 3 to 4 km along strike (Pautler J., 2015). The high elevation Telluride showing was not accessed during the 2018 program due to variable winds and weather conditions.

A traverse to top of the col north of the Frohberg showing crossed the Main Sill that features lenses of quartz-carbonate veining, inclusions of rusty argillite, carbonate rock and tuffaceous volcanic rock caught up in a swarm of ultramafic/mafic sills. Continuing to the east onto a ridge crest (Figure 7.1) the ultramafic/mafic sills occur in light-grey calcareous siltstone. The fine grained margin of the peridotite/gabbro sill contains quartz-carbonate and serpentine veining with minor pyrrhotite.

A traverse south down the moraine and boulder slope at head of Telluride Creek crossed the Main Sill, a wide black waxy peridotite that outcrops among the debris beside a small creek. Rusty heavily weathered intervals of red-brown-grey peridotite with decayed sulphide minerals (5% Po+Py+Cpy) were sampled and XRF readings of up to 3673 ppm Cu and 1.22% Ni were recorded.

Rock samples collected from the Frohberg showing and Main Sill area are tabulated in Table 7.1. The infield XRF device was utilized to test the ultramafic outcrops across the Main Sill collecting 36 readings which are presented in Table 7.2. A small lense of massive sulphide sampled (K736166) near the Frohberg showing recorded the highest nickel value of the summer at 4.37% Ni (Figure 7.3). Copper and PGE+Au values were also anomalous (Figure 7.4). Rock samples from the Main Sill area of peridotite recorded up to 2316ppm Cu and 2271ppm Ni.



Figure 7.1 Property geology of the Ultra project.

Longford Exploration Services Ltd.



Figure 7.2 Sampling above Frohberg Main Sill along ridge crest looking north.

Table 7.1 Select rock sample locations and	descriptions from Frohberg showing and Main Sill areas.
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Sample	Location	Location	Description	Cu	Ni	PGE + Au
Number	(E)	(N)		(ppm)	(ppm)	(ppb)
K736164	647485	6753902	Gabbro, green to grey, quartz-carbonate	9	11	8.5
			veins with 1 to 2% Py+Po blebs and veinlets			
K736165	647485	6753902	Gabbro, green, quartz-carbonate veins with	108	834	92
			1 to 2% Py+Po blebs and veinlets.			
K736166	647552	6753558	Argillite, massive sulphides (Frohberg) in	8623	43710	1713
			siliclastic rocks			
K736167	647619	6753802	Mafic volcanic, green, quartz-carbonate	5607	1944	1723
			veins in sheared green meta-volcanics,			
			strike 130, dip 40, quartz-muscovite schist,			
			black-orange oxidation on sulphide bearing			
			veins and lenses, malachite and azurite			
K736168	647619	6753802	Gabbro, quartz-carbonate veins 20-30 cm	2226	2122	23
			wide in cliff face, heavy malachite and			
			azurite staining			
K736169	647611	6753754	Gabbro, old trench (Frohberg), sheared,	1706	1695	186
			quartz-carbonate veins with heavy			
			oxidation, malachite and azurite, rusty			
			bands, stained quartz-carbonate bands in			
			gabbro and siliclastic rocks.			
K736170	659688	6755199	Peridotite, magnetite rocks, Ultramafic	317	25	22
			with serpentinite veins, crystalline			
			hornblende			
K736172	646971	6754718	Peridotite, dark grey-green, fine to medium	1098	2271	239
			grained. Visible medium grained olivine			

		1			1	r
			phenocrysts and magnetite. Trace			
K726472	646040	6754705	Sulphides (PO). Possible dunite?	220	6.46	60
K/361/3	646810	6754705	Grey-green, peridotite, carbonate veining	330	646	68
			present, nignly altered, serpentinized			
			peridotite, visible sulphide crystals $PY + PO$			
			=/- Cpy (1 to 2%). Sulphides observed			
			mostly on rock surfaces. Magnetite also			
			observed.			
K736174	647078	6754997	Gabbro, dark green, fine grained,	184	1175	62
			Py+Po+Cpy, magnetic (2 out of 5			
			magnetism), rusty weathering red-brown,			
			dark grey fresh, disseminated to net-			
			textured sulphides in gabbroic chill margin.			
K736175	646734	6755316	Dark green, med to coarse grained gabbro,	85	159	16
			visible phenocrysts of olivine, pyroxene,			
			biotite, and magnetite. Carbonate vein with			
			sulphides suspended within the vein.			
K736176	647491	6754857	Sub-crop, brown-green gabbro, pyrite	7	22	4.5
			cubes, disseminated to lenses of 5% Py +			
			Po, quartz-carbonate veins, mafic volcanic			
			rock scree slope.			
K736177	646862	6755783	Quartz-carbonate veins with 1 to 2% Py +	32	1	4.5
			Po blebs and veinlets. Gabbro pinches and			
			swells along strike with inclusions of black			
			argillite.			
K736183	647214	6754459	Rock sample, rusty band in ultramafic	1942	2072	225
			rocks, red-brown-grey, oxidized peridotite			
			with decayed sulphide minerals 5%; xrf			
			reading 1999 ppm Cu, 6010 ppm Ni.			
			Halfway down slope, outcrop of ultramafic			
			sill, quartz-carbonate veins, James suggests			
			I.P. over ultramafic sill to find conductive			
			zones.			
K736184	647212	6754470	Peridotite, green-black, heavily weathered	2055	2012	198
			(rusty red), sub-crop of peridotite			
			(ultramafic sill), visible sulphide			
			phenocrysts (trace) and disseminated, xrf			
			reading Ni 1.07%, Cu 2253 ppm.			
K736185	647214	6754466	Peridotite, green, rusty red weathering sub-	1378	1173	143
			crop.			
K736186	647214	6754466	Green, rusty red weathering sub-crop of	1318	1514	169
			peridotite.			
K736187	647214	6754466	Green, rusty red weathering sub-crop of	1752	1737	256
			peridotite.			
K736188	647219	6754465	Rusty red-brown and some white patches	1996	1969	229
			of weathering, fine grained peridotite.			
K736189	647226	6754457	Black, fine grained peridotite, Visible	2316	2068	227
	017220	0.0.101				
	017220		sulphides: Po + Pent, blue			
	017220		sulphides: Po + Pent, blue staining/discolouration. Xrf reading Ni 8238			



Figure 7.3 2018 Ni in rock results at the Main Sill.



Figure 7.4 2018 Au+Pt+Pd in rock results at the Main Sill.

XRF Site	Location	Location	Description	Cu	Ni
	(E)	(N)		(ppm)	(ppm)
Ultra-1	646912	6754838	Peridotite, black, fine to medium grained	103	1305
Ultra-2	646927	6754852	Peridotite, black, fine to medium grained	1961	2944
Ultra-3	646950	6754863	Peridotite, black, fine to medium grained	407	2751
Ultra-4	646966	6754878	Peridotite, black, fine to medium grained	57	1394
Ultra-5	646983	6754900	Peridotite, black, fine to medium grained	136	1995
Ultra-6	646999	6754930	Peridotite, black, fine to medium grained	45	1438
Ultra-7	647016	6754979	Peridotite, black, fine to medium grained	142	1538
Ultra-8	647024	6754975	Peridotite, black, fine to medium grained	396	1795
Ultra-9	647029	6755010	Peridotite, black, fine to medium grained,	189	2466
			dusty blue tinge		
Ultra-10	647044	6755017	Peridotite, reddish weathering, limonite	496	2239
Ultra-11	647079	6755000	Peridotite, fine grained, contact zone with	869	3269
			argillite		
Ultra-13	647121	6754993	Coarse grained ultramafic	263	1289
Ultra-14	647059	6754985	Small pit, peridotite, calacite veins and	416	2183
			malachite stain.		
Ultra-15	647063	6754954	Ultramafic sill, black, fine grained peridotite,	271	2052
			15 meters from edge of sill		
Ultra-16	647075	6754938	Ultramafic sill, contact with argillite, fine	170	1801
			grained peridotite		
Ultra-17	647065	6754925	Very fine grained, black peridotite,	293	1728
			weathering red-brown, 2% Po		
Ultra-18	646895	6754816	Peridotite, fine grained, black	329	1571
Ultra-19	646858	6754781	Ultramafic sub-crop, fine grained peridotite,	57	1500
			2% Py		
Ultra-20	646838	6754768	Medium grained peridotite, black and waxy	3029	3118
			weathering, 2 to 5% net-textured sulphides		
Ultra-21	646799	6754752	Sub-crop, black grey peridotite, fine grained,	204	1769
			2% disseminated Py+Po, carbonate float		
Ultra-23	646765	6754731	Black, fine to medium grained ultramatic,	198	1885
	6 47005		trace calcite veins, trace sulphides		4000
Ultra-24	647035	6754551	Ultramafic, black-green, serpentine, trace	114	1096
1.11tma 2.5	647044	6754400		100	4005
Ultra-25	647211	6754493	Oltramatic (peridotite) outcrop in moraine,	100	1335
Liltra 26	647169	6754747	Carbonate verniets	FF0	1075
Ultra-20	647168	0/54/4/	black woathoring	558	1075
Illtra 27	647102	6754710	Plack dark grov fine grained ultramafic	170	2100
01018-27	047195	0754719	(peridotite Black-green weathering	1/5	2100
Liltra_28	647182	6754665	Black fine grained Illtramatic (peridotite)	261	2552
01118-20	047182	0754005	visible trace sulphides	201	2333
Ultra-29	647205	6754522	Green-black fine grained peridotite	217	1387
	047203	5757522	serpentinized with rusty weathering		1307
Ultra-30	647216	6754459	Dark green, fine grained peridotite very	290	1.22%
5			weathered, visible trace sulphides		/0

Table 7.2 XRF test locations, descriptions and values from Main Sill at the headwaters of Telluride Creek.

Ultra-31	647212	6754470	Heavily weathered, rusty, sub-crop of peridotite (ultramafic sill), visible sulphides phenocrysts (trace).	2253	1.07%
*K736184	647212	6754470	Rock sample at Ultra 31 xrf site	2055	2012
Ultra-32	647216	6754465	Green-black, fine grained peridotite (ultramafic sill).	2042	5680
Ultra-33	647226	6754460	Green-black, fine grained peridotite, rusty red weathering.	67	4582
Ultra-34	647224	6754459	Black, fine grained peridotite, disseminated Po+Pent+Cpy	2097	1.20%
Ultra-35	647226	6754457	Black, fine grained peridotite, ultramafic sill	3673	8238
*K736189	647226	6754457	Rock sample at Ultra 35 xrf site	2316	2068
Ultra-36	647226	6754457	Green-black peridotite, rusty red weathering	1794	2080

7.1.2 Uze Claim Area

Outcrop examined during soil sampling consisted of Late Triassic Bear Creek Assemblage phyllites and quartz sericite schist (uTBs) with foliation orientated at 270 deg strike and steep dip to the south. Boudins of bluish and white quartz are elongated along the foliation and rusty weathering lenses can also be traced along strike. The lenses contain disseminated to small bands of pyrite and pyrrhotite weathering to a redbrown appearance. Discontinuous dykes and lenses of fine-grained aplite and coarser pegmatite intrude the metamorphic rocks and a larger plug of pale-yellow quartz monzonite outcrops and is outlined by the 2014 & 2016 magnetometer surveys. Several lenses of skarn with bands of magnetite, epidote and actinolite where found at the contacts with the EKK intrusive rocks. Four rock samples were collected in 2018 and analyzed (Table 7.3).

Table	7.3	Rock sample	locations a	nd desci	riptions	from	the UZE	claim area.	
i abic		noen sample	locations al	na acoci	iptions.	,	022	. crainin ai cai	

Sample Number	Location (E)	Location (N)	Description	Cu (ppm)	Ni (ppm)	PGE + Au (ppb)
K736144	658989	6754902	Skarn, light green, medium grained, actinolite, mica, quartz-carbonate veins, 2 - 5% Py, magnetism (3 out of 5), epidote alteration, black magnetite bands	83	5	12
K736145	658989	6754902	Skarn, rusty weathering, actinolite, 2 - 5% Py, moderate magnetism. Skarn on east side of creek is similar to skarn seen to the north last year.	94	9	13
K736146	658963	675427	Old hand trench in mafic meta-volcanic rock, rusty weathering, quartz bands with 2% Py	83	29	13
K736147	658963	675427	Argillite with quartz-carbonate veins, muscovite schist, bands of rusty weathering phyllite, trace Py.	4	1	3.5

7.1.3 Boutellier Area

Helicopter set outs at the top of the Boutellier Creek drainage landed on buff weathering limestone (PHc) outcrops of the Hasen Creek Formation. Traverses to the northeast crossed Nikolai volcanics (uTN) and

Triassic sedimentary rocks descending toward the Shakwak Valley. Several rugged creek canyons exposed outcrop of amygdaloidal mafic Nikolai volcanics with a few gabbroic intervals, common chloritic alteration, less quartz-carbonate veining, 1 to 2% pyrite in rocks, up to 5% in narrow bands, abundant magnetite throughout the section and lenses of epidote alteration. At the base of several canyons close to the valley bottom rusty red bands and lenses of silicified argillite occur in red weathering mafic volcanics, previously mapped by Casselman, 2004. Described as pyritic breccia containing 2-5% pyrite with trace chalcopyrite and azurite the volcanic are slightly offset across the base of canyon by faulting.

One of the creek canyons features sub crop of an ultramafic/mafic sill in contact with deformed sedimentary rocks of the McCarthy Formation (uTM) shown in Figure 7.5. Poorly exposed, this sill is delineated by the airborne magnetic survey from 2004 as a narrow northwesterly trending anomaly. Downslope in the canyon outcrop is mafic reddish brown weathering Nikolai volcanic rocks with a few gabbroic intervals.

A traverse along the ridge overlooking Silver Creek crossed argillite, siltstone and mafic volcanic rocks intruded by quartz feldspar porphyry and younger mafic volcanic dykes. Ultramafic float was seen at a saddle along the ridge but not found in outcrop. Sample K736148 of the peridotite assayed 1031ppm Ni (Figure 7.6). The traverse continued down a ridge towards Silver Creek crossing talus slopes of argillite and phyllite of the McCarthy Formation (uTM) with a few outcrops of mafic volcanic sills and dykes. Walking northeasterly across the talus slope south of Silver Creek, the metasediments are intruded by a few volcanic sills and dykes with minor volcanic breccia containing clasts of argillite, limestone, pyritic stringers and quartz-carbonate veining. One Maple Creek gabbroic sill intrudes the argillites but no sulphide minerals were found. Continued downstream across the talus slope to large cliffs of argillite above Silver Creek and then along strike from an ultramafic cobbles and boulders. Continued walking up a small tributary trending southeast from Silver Creek along a canyon exposing grey-green cliffs of Nikolai (uTN) mafic volcanic rock near the Denali Fault. Rock samples recorded low mineral values from this area and an aggressive grizzly bear in the local area led to an early pick up.



Figure 7.5 Deformed sediments in contact with peridotite/gabbro sill on right from Boutellier area.



Figure 7.6 Ni in rock results from the Boutellier area.

Sample	Location	Location	Description	Cu	Ni	PGE + Au
Number	(E)	(N)		(ppm)	(ppm)	(ppb)
K736136	647225	6757080	Gabbro, brown-green, trace disseminated sulphides, quartz-carbonate alteration, veins, limonite stain	33	29	5.5
K736137	647479	6757327	Gabbro, green-grey, 2 - 5 % Py + trace Cpy, net-texture sulphides, red-brown weathering	30	36	13
K736138	648226	6757556	Dark green Nilolai basalt, foliated, quartz- carbonate alteration zone, beside gabbroic interval.	19	31	14
K736139	648150	6757579	Gabbro sill crosses creek, quartz-carbonate alteration (listwanite) zone at upper contact with argillite and schist. Strike 290/80	112	216	33
K736140	648150	6757579	Quartz-carbonate alteration zone in Ultramafic hanging-wall, trace Po + Cpy.	21	14	5.5
K736141	648138	6755776	Coarse gabbro, close to hanging wall of sill, biotite, feldspar, rusty patches, trace Py+Po	52	21	7
K736148	646145	6758112	Black, fine grained peridotite, trace disseminated Po, magnetite (moderate magnetism, 3 out of 5), brown weathering, quartz-carbonate veins	125	1091	54
K736149	645889	6758439	Grey-green volcanic porphyry sill in black argillite, trace Py, strike 310, dip 64	9	6	50.5
			Sample has occasional inclusions of more mafic gabbro in volcanic porphyry, rusty weathering			
K736150	645633	6758354	Gabbro sills in volcanic and seds, med to coarse grained, black, hornblende laths, biotite, trace Po, occasional feldspar phenocrysts. Continues across slope, argillite, a few calcareous beds, volcanic to gabbro sills	62	137	33
K736151	645697	6758950	Volcanic breccia, green-black weathering, rusty brown inclusions, clasts of argillite and limestone in mafic volcanic matrix, quartz-carbonate alteration, disseminated and veins of Py.	166	628	21
K736152	646585	6759866	Meta volcanic rocks, 2% Py, quartz- carbonate alteration	30	39	20
К736153	646637	6759870	Outcrop, meta-volcanics, 2% Py, quartz- carbonate veins. Blue-grey, rusty weathering, disseminated sulphides	1665	44	127
K736154	659400	6754670	Pyroxenite from outcrop beside soil line. Ultramafic, trace Po, magnetism 3 out of 5.	200	22	33

Sample is fine-med grained, grey-green-

black, gabbroic, black-green weathering, occasional quartz-carbonate veins and

Table 7.4 Select rock sample locations and descriptions from Boutellier area.

649210

6756926

K736155

42

146

94

			alteration, chloritic, some amygdules, trace Po, magnetite (2-3 out of 5)			
K736156	649222	6756932	Most mafic section of gabbroic interval in volcanics just above quartz-carbonate alteration zone in underlying volcanics	19	143	27
K736157	649226	6756930	Rusty weathering in greenschist volcanic rocks in footwall of more gabbroic interval, quartz-carbonate veins and alteration, trace sulphides, moderate magnetism (2 out of 5)	121	67	40
K736158	649307	6757003	Gabbro, medium green, fine to med grained, quartz-carbonate, amygdules, trace Po + Py + Cpy, magnetism 3 out of 5. Brown-green weathering, chloritic patches	50	27	36
K736159	649311	6757020	Fine grained, mafic gabbroic rocks, chlorotic alteration, minor quartz- carbonate veins, magnetism 3 out of 5, magnetite and trace Py, dark green to black appearance.	128	31	38
K736160	649351	6757246	Gossanous volcanic rocks. Medium grey andesite volcanic, feldspar phenocrysts, rusty weathering, 2 to 5% Py, trace Cpy, trace malachite, azurite, magnetite, moderate magnetism (2 out of 5)	37	38	36
K736161	649394	6757255	Gossan zone in volcanic rocks, rusty red to brown weathering, volcanic porphyry	343	52	51
K736162	648564	6758394	Gossan zone in gulley, volcanic rocks with 2 to 5% Py, trace azurite siliclastic volcanic rocks	1019	36	44
K736163	648562	6758406	Outcrop in creek draw, dark grey-black, fine grained gabbro, above gossan, trace Po, weak magnetism (1 to 2 out of 5)	40	42	32

7.1.4 Outpost Mountain Area

Traverses on the Outpost block (June 22-26, 2018) targeted a large ultramafic/mafic sill identified in the 2017 exploration program. Outcrop and talus slopes are common within creek gullies and along upper slopes of the Outpost claims. Lower elevations feature rounded grassy uplands with outcrop primarily on incised creek drainages consisting of black to orange weathering sedimentary rocks mainly graphitic argillite and siltstone with less limestone, sandstone and minor conglomerate beds of the McCarthy Formation (uTM) (Figure 7.7). Visible arsenopyrite and pyrite mineralization occur throughout the section. Locally, the Nikolai basalts occur within the sediments with porphyritic and/or very fine grained to aphanitic intervals. Porphyritic bands contain crystals of hornblende, tremolite, feldspar, chlorite, and quartz. The more schistose variations contain biotite and rarely muscovite with occasional fibrous serpentine along fracture surfaces. Minor sulphide mineralization in Nikolai volcanics includes pyrite, chalcopyrite and arsenopyrite with trace malachite staining. Weathering is usually red-orange and black with less common purple and brown variations. Much of Outpost Mountain is granodorite (EKK) of the Kluane Ranges Suite which was mapped on the claims along the northeast flank of Outpost Mountain.

The ultramafic sill described in the 2017 report; "is broken into several sills and dykes with inclusions of argillite caught up in the main sill section. Patchy quartz-carbonate veining, fractures and alteration, are heavily weathered and oxidized, common limonite and calcite precipitates are present on fractures and rock faces. Platey Py + Po occurs on fractures in argillite. Some Po and Pent seen in carbonate veining at the top of the ultramafic sill. Narrow dykes of grey-green gabbro intrude the sediments upstream of the main ultramafic/mafic sill." (Rogers, J. 2017).

In 2018, the sill was traced to the northwest and seen in outcrop in two creek gullies especially at a large outcrop along a creek bank at the west end of the claim block where a 100 metre wide exposure of peridotite and gabbro occur (Figure 7.8). Several other narrow gabbro dykes were mapped upstream along the cliffs. The main sill was also followed to the southeast to the edge of the Silver Creek valley where it outcrops in several small gullies. Rock samples of the ultramafic/mafic sills collected across the claims produced fairly low nickel and copper values (Table 7.5) suggesting mineralization may have been remobilized by the extensive Outpost granodiorite intrusion.



Figure 7.7 Ni in rock results in the Outpost Mountain area.



Figure 7.8 Mafic/Ultramafic sill below Hasen Formation argillites along creek bank, northwest Outpost claims.

Sample	Location	Location	Description	Cu	Ni	PGE + Au
Number	(E)	(N)		(ppm)	(ppm)	(ppb)
K736083	643563	6761071	Silicified silstone, possible sills of andesite	93	180	15
			prophyry. Med to dark grey, fine grained silstone,			
			2% Py + Cpy, slight rusty weathering, trace calcite			
			veins, chloritic alteration along fractures			
K736084	643585	6761145	Hanging wall of sill, fractured, rusty argillite, light-	46	21	10.5
			med grey, 2% Py blebs and veins			
K736085	643585	6761145	Black, ultramafic sill, hornblendite, peridotite,	103	95	22
			trace Po, slightly brown-red weathering, trace			
			olivine, trace chlorite, weakly magnetic			
K736086	643592	6761156	Rusty weathering layer in ultramafic-peridotite,	100	122	27
			black, fine to med grey, trace Po			
K736087	643471	6761219	Ultramafic sill upper contact, hornblendite,	49	67	10.5
			pyroxenite, slight red-brown weathering, trace			
			Po, coarse crystalline			
K736088	643298	6761218	Porphyry dyke intrudes rusty black argillite with a	12	6	3.5
			few limestone beds. Outcrop top of quartz			
			feldspar porphyry dyke, trace net texture			
			sulphides in rocks. Light grey porphyry, orange-			
			yellow weathering			
K736089	643298	6761218	Ultramafic float, boulder beside porphyry dyke,	187	25	18
			massive pyroxenite, 1-2% Po, disseminated and in			
			veinlets			
K736090	643289	6761710	light green, to light brown, porphyry dyke, Py	45	29	8.5
			along fractures. Porphyry dyke intrudes red to			
			black weathering argillites and a few limestone			
			beds			
K736091	643257	6761477	Ultramafic sill, dark grey-black, fine to med	66	96	7.5
			grained occ crystalline peridotite			

Table 7.5 Select rock sample locations and descriptions from Outpost Mountain area.

K736092	643246	6761790	Quartz-carbonate alteration zone beside ultramafic sill, rotted-out clasts, patchy Po in fresh sample, Po + Pent, magnetic, rusty weathering, highly oxidized material	22	9	7.5
K736093	643272	6761500	Ultramafic sill, fractured, Py +Po sample. Med- dark grey, rusty to black oxide weathering, Py + Po on fractures, a few calcite vugs, black sulphide mineral	110	77	12.5
К736094	643220	6761456	Gabbro and argillite below Ultramafic sill, mineralized, calcareous, Py + Po + Pent on fractures, rusty weathering, white dusting on rocks precip., 2 metre thick section of altered, limonite and calc weathering, gabbro to argillite below sill, extremely oxidized with white calcareous precipitates. Py + Po on fractures faces and as blebs, black sulphide mineral, 2-5% disseminated to net texture sulphides	145	36	7.5
К736095	643220	6761456	Gabbro and argillite below Ultramafic sill, mineralized, calc, Py + Po + Pent on fractures, rusty weathering, white calc. dusting on rocks precip, 2 metre thick section of altered, limonite and calc weathering, gabbro to argillite below sill, extremely oxidized with white calcareous precipitates. Py + Po on fractures faces and as blebs, black sulphide mineral, 2-5% disseminated to net texture sulphides	139	32	13.5
K736096	642446	6760948	Med grey, fine grained, gabbroic, disseminated Py + Po 2%	27	20	3.5
K736097	643162	6761525	Ultramafic sill, pyroxenite, medium to coarse grained, rusty brown weathering, 2% patchy disseminated Po + Py, 2-5% quartz-carbonate veins with some sulphide minerals, weak magnetism (1 out of 5)	63	50	12.5
K736098	643171	6761508	Orange-red stained argillite in footwall of sill, light grey, siliceous, heavy red and black oxide stain, 5% sulphide casts, trace Aspy + Py, non-magnetic	28	9	16.5
K736099	643180	6761509	Highly oxidized and weathered argillite, 1 meter below the ultramafic sill, open casts, black, yellow, red, limonite, hematite, alteration zone, carbonate veining	37	7	11.5
К736100	643215	6761491	Quarts-carbonate alteration in Ultramafic rocks, peridotite cut by mainly calcite veins, oxidized, rusty weathering, black, red, and yellow oxides, trace Po, weak magnetism (1 out of 5), open casts	74	108	16
K736101	643219	6761458	Rusty argillite directly under the Ultramafic sill, grey-black, silicified, 2 - 5% platy Po along fractures and in veinlets. Dusty calcareous weathering on surface outcrop	55	39	13.5
K736102	643218	6761452	Black, dark-grey siltstone, heavy. Limonite weathering in fractures, 2 to 5% disseminated Py + Po. Immediately below ultramafic sill	240	46	31

K736103	643225	6761316	Contact between black argillite and intrusive dyke (gabbro). Mainly fine to medium grained, green to grey gabbro, 2% disseminated Po + Py, slight rusty weathering. Calcite veining at contact	122	31	13.5
К736104	642070	676122	Quartz-feldspar porphyry sill in argillite and shale, 2 to 5% quartz-calcite veins	67	44	7.5
K736105	642170	6761798	Black pyroxenite, calcite veins, 1% Py + Po, occasional feldspar phenocrysts, rusty weathering, limonite faces	75	58	6.5
K736106	642237	6761856	Main ultramafic sill, roughly 75 meters wide, Pyroxenite outcrop along creek bank for roughly 75 meters. Occasional plag. feldspar phenocrysts, 1% Po + Py (disseminated to veinlets), weakly magnetic	182	23	27
K736107	642301	6762020	Gabbro dyke intrudes calc. argillite, brown to orange weathering. Gabbro weathers green- brown, minor carbonate veining, trace Po	32	80	8.5
К736108	642277	6762009	Contact between main sill overlying silicified argillite. Argillite is white to grey to black, white silicified area has Po blebs (2%) and occasional veins and lenses of Po, magnetic (2 out of 5), also has Py and Aspy along fractures, orange to brown to black, best mineralized sample is roughly 30 cm below footwall of sill	94	60	14.5
К736109	642277	6762009	Sill is gabbro, hornblende laths, feldspar phenocrysts, spotty Py + Po along fractures and disseminated through rock, reddish brown weathered surfaces, green black fresh surfaces. Quartz-carbonate alteration and calcite veins (2 to 5%), weakly magnetic (2 out of 5)	60	20	6.5
K736111	642229	6761850	Gabbro dyke above main sill, approx. 20 meters upstream, coarse grained, black inclusions in gabbro, trace Po	65	48	8.5
К736112	641972	6761426	Gabbro dyke, dark grey to black-green, orange- brown weathering, weak magnetism (1 out of 5)	38	85	5.5
К736113	643247	6760975	Light-grey felsic volcanic rocks, trace disseminated Py	14	3	10.5
K736114	643273	6761017	Base of gabbro sill, 2 - 5% Py + Po, a few 2 to 5 cm calcite veins along fractures in gabbro	77	50	7.5
K736115	643289	6761012	Gabbro to dacite porphyry (5 meter wide) sill in argillite parallel to adjoining sill. 2% Py, quartz- carbonate alteration to serpentine	25	25	6.5
K736116	643450	6760915	Peridotite and gabbro sill to quartz-feldspar porphyry. Sample of carbonate veining in peridotite portion of sill	40	29	4.5
K736117	643516	6760907	Gabbroic to quartz-feldspar porphyry, brown-red weathering, 2 - 5% Po + Py, trace Cpy, trace Bornite, well mineralized across from ultramafic sill, moderate magnetism (2 to 3 out of 5)	46	42	5.5
K736118	643578	6760887	Black and rusty weathering lense in argillite outcrop (Py?), footwall of gabbroic sill	33	51	18

K736119	643838	6760928	Hanging wall of ultramafic sill upstream contact with argillite + siltstone trace Po	148	94	17
К736120	643840	6760944	Gabbro, quartz-carbonate veining, trace Po, med grained, black to dark green weathering, calcite veins up to 5 cm wide, serpentine on fracture surfaces	11	346	3.5
K736121	644058	6760756	Dark-grey gabbro, black inclusions, green-black, trace net-textured sulphides 2%, weakly magnetic (1 to 2 out of 5), slight brown to rusty brown weathering surfaces	103	168	12.5
K736122	644275	6760588	Gabbro, brown to reddish brown weathering, med to coarse grained, trace Po, non-magnetic	187	43	21
К736124	644315	6760546	Peridotite sill outcrop, fine to med grained, black, brown to black, glossy weathering, trace carbonate veins, moderately magnetic (2 to 3 out of 5), trace Po	51	893	12.5
К736125	644292	6760538	Gabbro above peridotite sill, weakly magnetic (1 out of 5), black to med grey, med grained, trace Po, brown weathering, trace calcite veins, trace chlorite	115	105	12.5
K736129	644176	6760683	Fine grained gabbro, brown weathering, trace PO+PY, net-textured in-part, intrudes argillite of McCarthy formation or Nikolai?, olivine, 1 - 2% net-textured sulphides, Po + Py +Cpy, footwall of Ultramafic sill	23	13	3.5
K736128	644208	6760702	Fine to med grained gabbro, green, green-brown weathering, minor calcite veins, 1 to 2% net-textured sulphides, Po +Py +Cpy +Bornite	87	20	7.5
К736130	644393	6760567	Black to dark grey gabbro, bordering on peridotite in part, brown to black weathering, trace olivine, trace carbonate veins, 2% net-textured sulphides, Po + Py, trace Cpy, magnetite, moderate magnetism (2 to 3 out of 5), lighter phase green- grey gabbro above	44	708	7.5
K736131	644277	6760512	Upper contact of pale green-grey gabbro sill with overlying red-black argillite. As above, gabbro with 2 to 5% net-textured sulphides, trace Cpy, also minor carbonate veining	5	4	3.5
К736132	644205	6760487	Narrow band of gabbro in argillite and minor limestone. Gabbro is grey-green, light-grey to green weathering, fine to medium grained, 2 to 5% net textured sulphides, trace Cpy and Mn	4	5	3.5
K736133	644426	6760389	Fine to medium grained, green gabbro, weathering brown-grey, trace olivine, 2 to 5% net- textured sulphides Py+Po+Cpy	54	86	5.5
K736134	644713	6760344	Light to medium grey gabbro, orange-brown weathering, quartz-carbonate alteration prevalent, 2 to 5% disseminated sulphides, Po + Py + Cpy +Mn	152	41	30
K736135	644737	6760472	Under gabbro sill, chert-argillite, breccia, conglomerate, fragments of argillite in a cherty matrix to silty matrix, trace Py	115	69	8.5

7.2 Soil Geochemistry

7.2.1 Uze Area



Figure 7.9 2017 and 2018 Cu in soil results in the Uze area.



Figure 7.10 2017 and 2018 Ni in soil results in the Uze area.



7.2.2 Outpost Mountain Area

Figure 7.11 2017 and 2018 Cu in soil results in the Outpost Mountain area.



Figure 7.12 2017 and 2018 Ni in soil results in the Outpost Mountain area.

7.2.3 Boutellier Area



Figure 7.13 2018 Cu in soil results in the Boutellier area.



Figure 7.14 2018 Ni in soil results in the Boutellier area.

8 Interpretation and Conclusions

The 2018 exploration work on the Ultra-Outpost property focussed on aeromagnetic anomalies and occurrences of ultramafic/mafic rocks of the Kluane Ultramafic/Mafic Suite. At the northern end of the property on the Outpost block a thick ultramafic/mafic sill was mapped over a 4km strike length exposed in creek gullies and cliff faces at the base of the northeast facing wall of the Shakwak Valley. Several narrow gabbro dykes and lenses were mapped upslope of the primary sill. The soil sample grid on this area outlined a nickel anomaly that had the highest Ni values of the whole property, which more or less follow the mapped ultramafic/mafic sill. Rock sample values were weakly anomalous in nickel and copper but the footwall section of the primary sill is generally recessive, located along a grassy slope and was not seen in outcrop. This remains a favourable target for further evaluation.

Rock and soil sampling in the upper drainages of Boutellier Creek-Silver Creek were inconclusive even though sample quality was generally good. Sample values were generally low with one ultramafic rock sample (K736148) of black glassy peridotite assayed at 1031ppm Ni. Several aeromagnetic and EM anomalies well defined by the 2004 airborne survey by Klondike Gold Corp. require follow up sampling and mapping in the Boutellier area.

Rock sample and XRF results at the Frohberg showing and Main Sill area were the best on the property. The sill is mapped to be dipping 40 degrees to the SW. With this in mind, and looking at the increasing values of Ni, Cu and PGE at lower elevations, it is hypothesized that the values at lower elevation represent a basal cumulate and feeder zone of the ultramafic sill. The Main Sill is extensive and as has been concluded by previous writers to require detailed sampling and mapping to evaluate potential Cu-Ni-PGE mineralization.

The Telluride and Nunatak occurrences were not examined in the 2018 program due to strong winds at high elevation. Previous conclusions by Pautler on the Telluride, Nunatak and Frohberg showings included; "preliminary geological mapping suggests that the geological package is consistent along strike easterly from the Telluride occurrence where encouraging Cu and Au values up to 8.55% Cu and 990 ppb Au have been identified. The sampling of up to 19.7 g/T Au and 2.5% Cu from the original Frohberg showing and the high grade Cu float sample reported from Telluride Creek by earlier operators together with values of up to 17 g/T Au on the showing suggest that there may be a larger regional scale Cu-Au mineralizing system extending from the Main ultramafic Sill & Telluride areas to the Jarvis River." (J. Pautler, 2014). When access permits, further evaluation of the massive sulphide trend could target the area southeast of the Nunatak showing.

The 2018 soil sample grid on the UZE block at the southeast end of the property was an extension to an area sampled in 2017 targeting an aeromagnetic anomaly. Soil results show an association with the periphery of a quartz monzonite (EKK) intrusion into Bear Creek metavolcanic - metasedimentary rocks and faults mapped through the area. The Ni response is linear in the northwest portion of the grid while Cu results show an anomalous zone in the centre of the grid on the margin of the magnetic anomaly. Four rock samples of skarn and rusty metavolcanic rocks were not anomalous.

9 Recommendations

The primary target for follow up should be the Main Sill and Frohberg showing. An IP geophysics program is recommended to cover the main sill and delineate a zone of basal cumulate that may exist at depths of up to 100m. A more detailed mapping program that will cover the NW and SE extents of the sill is also recommended. Geophysical re-interpretation of available historical aeromagnetic and ground geophysical data is necessary to provide new targets for soil geochemistry and geological evaluation. Further work on geophysical anomalies and the footwall interval of the ultramafic/mafic sills at Outpost and Boutellier areas is necessary. Contingent on results from this work in 2019, a first pass RC drill program is recommended over the Main Sill in 2020 ahead of a more ambitious diamond drill program in subsequent years.

A budget of \$ 150,000 is proposed:

Phase I \$150,000

- Geological mapping and prospecting \$40,000
 - Detailed mapping and sampling to identify additional shear zones and investigate the potential for gold, Pt, Pd, copper, nickel bearing mineralization throughout the property
- Geophysics, IP survey \$70,000
- Soil geochemistry \$25,000
- Report and compilation, digitization, and interpretation of all available historic data \$15,000

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11 Statement of Qualifications

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 Exploration Report entitled: "Prospecting, Geological and Geochemical Survey Report on the Ultra & Outpost property at Telluride and Silver Creeks, Yukon, CANADA", effective date February 28, 2019 of which I am the author and responsible person, I am a Qualified Person as defined in National Instrument 43-101;
- 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 project and in the Kluane Ranges since 1982;
- I participated in a work program on the Ultra & Outpost property from June 22 July 7, 2018 as part of the assessment program performed by Longford Exploration Ltd. for Group Ten Metals Inc.;
- I am responsible for all sections in this report;
- That to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Graham Davidson P.Geol. #42308

Date: Feb. 28, 2019.



APPENDIX A: Detailed Descriptions of Samples

See data folder

APPENDIX B: 2018 Analytical Certificates

See data folder.

APPENDIX C:

Statement of Costs

DATE:

October 22, 2018



Longfor #460-60 Vancou Canada 278-800

Longford Exploration Services Ltd. #460-688 West Hastings Street Vancouver, BC Canada, V6B 1P1 778-809-7009

ULTRA 2018

Vancouver, BC

Canada V6C 1T2

604-357-4790

SEND TO:

Group Ten Metals Inc.

#904-409 Granville Street

Personnel		Days	Rate		Line Total	
Pgeo - Davidson	June 27, June 29 - July 5, July 7 - 8	11	\$ 600.00	\$	6,600.00	
Geologist - Versloot	June 29 - July 3, July 7 - 8	7	\$ 500.00	\$	3,500.00	
Junior Geologist - Ryan	June 29 - July 5, July 7 - 8	10	\$ 350.00	\$	3,500.00	
Student Geologist - Martinolich	June 29 - July 5, July 7 - 8	10	\$ 300.00	\$	3,000.00	
	total man days	38	Cat. Total	\$	16,600.00	
Food and Lodging		Units	Rate	Line Total		
Food and Groceries	per diem	38	\$ 55.00	\$	2,090.00	
Silver City B&B		11	\$ 250.00	\$	2,750.00	
			Cat. Total	\$	4,840.00	
Transportation		Units/Days	Unit Price		Line Total	
Truck	1 ton with safety and recovery gear	27	\$ 140.00	\$	3,780.00	
Trailer	18' 7000lb covered trailer	20	\$ 50.00	\$	1,000.00	
Fuel	per km for truck	1030	\$ 0.55	\$	566.50	
Jet Ranger		12.6	\$ 975.00	\$	12,285.00	
A-Star		0.9	\$ 1,775.00	\$	1,597.50	
Jet Fuel - 206B + A-Star		1557	\$ 1.55	\$	2,413.35	
			Cat. Total	\$	21,642.35	
Equipment Rentals		Units	Unit Price		Line Total	
Electronics Kit	Radios, Sat phones, GPS, per man day	38	\$ 20.00	\$	760.00	
Portable XRF with Stand	Per Day	11	\$ 177.42	\$	1,951.62	
			Cat. Total	\$	2,711.62	
Consumable		Units	Unit Price		Line Total	
Sample Bags		38	\$ 5.00	\$	190.00	
Flagging Tape		38	\$ 5.00	\$	190.00	
Office Consumables		38	\$ 3.00	\$	114.00	
			Cat. Total	\$	494.00	
Analytical		Units	Unit Price		Line Total	
Analysis - Soil	SS80, AQ300 FA330	518	\$ 30.25	\$	15,669.50	
Analysis - Rock	PRP70-250, FA330, AQ300	60	\$ 34.25	\$	2,055.00	
			Cat. Total	\$	17,724.50	
Pre/Post Field		Units	Unit Price		Line Total	
GIS and Planning		10	\$ 150.00	\$	1,500.00	
Assessment Report prep and work filing		1	\$ 2,500.00	\$	2,500.00	
			Cat. Total	\$	4,000.00	
Estimated Sub Total					68,012.47	
Management 15%					10,201.87	
SUB TOTAL					78,214.34	
GST 5 %					3,910.72	
Total					82,125.06	

October 22, 2018

DATE:

LONGF®RD _____

EXPLORATION -

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

Longford Exploration Services Ltd. #460-688 West Hastings Street Vancouver, BC Canada V6B 1P1 778-809-7009

Outpost 2018

Personnel			Days	Rat	Rate Line		Line Total
	Pgeo - Davidson	June 22 - 28	6.5	\$	600.00	\$	3,900.00
	Geologist - Versloot	June 22 - 28	6.5	\$	500.00	\$	3,250.00
	Junior Geologist - Ryan	June 22 - 28	6.5	\$	350.00	\$	2,275.00
	Student Geologist - Martinolich	June 22 - 28	6.5	\$	300.00	\$	1,950.00
	Project Manager - Rogers	June 22	1	\$	700.00	\$	700.00
			27		Cat. Total	\$	12,075.00
Food and Lodging			Units		Rate		Line Total
	Food and Groceries		27	\$	55.00	\$	1,485.00
	Silver City B&B		8	\$	250.00	\$	2,000.00
					Cat. Total	\$	1,485.00
Transportation			Units/Days		Unit Price		Line Total
	Mob/Demob		1	\$	1,000.00	\$	1,000.00
	Truck	1 ton with safety and recovery gear	19.5	\$	140.00	\$	2,730.00
	Trailer	18' 7000lb covered trailer	13	\$	50.00	\$	650.00
	Fuel	per km for truck	400	\$	0.55	\$	220.00
	Jet Ranger		12.7	\$	975.00	\$	12,382.50
	Jet Fuel		1397	\$	1.55	\$	2,165.35
					Cat. Total	\$	19,147.85
Eq	uipment Rentals		Units		Unit Price		Line Total
	Electronics Kit	Radios, Sat phones, GPS, per man day	27	\$	20.00	\$	540.00
	Portable XRF with Stand	Per Day	6.5	\$	177.42	\$	1,153.23
					Cat. Total	\$	1,693.23
Consumable			Units		Unit Price		Line Total
	Sample Bags		27	\$	5.00	\$	135.00
	Flagging Tape		27	\$	5.00	\$	135.00
	Office Consumables		27	\$	3.00	\$	81.00
					Cat. Total	\$	351.00
Analytical			Units		Unit Price		Line Total
	Analysis - Soil	SS80, AQ300 FA330	493	\$	30.25	\$	14,913.25
	Analysis - Rock	PRP70-250, FA330, AQ300	52	\$	34.25	\$	1,781.00
					Cat. Total	\$	16,694.25
Post Field			Units		Unit Price		Line Total
	Assessment Report prep and work filing		1	\$	2,500.00	\$	2,500.00
					Cat. Total	\$	2,500.00
Estimated Sub Total						\$	53,946.33
Management 15%					\$	8,091.95	
SUB TOTAL					\$	62,038.28	
GST 5 %					\$	3,101.91	
Total					\$	65,140.19	