Arch Project

Geophysical Interpretation Assessment Report

NTS: 115G05 and 115G12

Latitude 61° 29' 18" North, Longitude 139° 40' 36" West

UTM NAD83 07V 570567E 6817806N

Whitehorse Mining District

Work performed between August 10 and 17, 2016

AR 1-38	YE69001-038
AR 39-68,70-77	YE69039-068, 070-077
ARCH 1-37	YE69501-537
ARCH 38	YD58910
ARCH 39-40	YD58913-914
JEK 44	YE69244
JEK 51, 53, 55	YE69251,253,255
JEK 116, 118, 120,122-126, 128, 130	YE69316,318,320, 322-326,328, 330
AR 1-9	YD12517-525
AR 61	YC18892

For: Group Ten Metals Inc. 1450-789 W. Pender St., Vancouver, BC V6C 1H2

By: Debbie James, B.Sc., P.Geo 11-3194 Gibbins Road, Duncan, BC, V9L 1G8 August 31, 2016

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Summary

Between August 10th and 17th, 2016, Peter E. Walcott & Associates Limited undertook a geophysical data review over the Catalyst Property, located in the Kluane Lake Area, Yukon, for Group Ten Metals Inc. The geophysical maps and interpretations were then overlain with geological mapping, stream sediment sampling results and results from historic work to generate targets outside of known showings. No field work was done and work was funded by Group Ten Metals Inc. The review covered claims belonging to Group Ten Metals Inc. outside of the Arch Project, but in this report the focus is on the Arch Project.

The study was focused on regional government data sets, along with other historic digital data found within the Yukon government assessment files in an effort to develop targets similar to that of the Wellgreen PGM Deposit.

The Arch Project is located in the Southwest corner of Yukon, 260 km due west of Whitehorse and 40 km northwest of Burwash Landing, the nearest community. On the east, the project is adjacent to the west end of Wellgreen Platinum's Wellgreen property. The Arch project is made up of 140 claims covering approximately 2739 hectares in the Whitehorse Mining District. The project is covered by NTS maps 115G05 and 115G12 and is centered at latitude 61° 29' 18" North and longitude 139°40'36" West. The claims are within the Kluane Wildlife Sanctuary, where mining is allowed. The project is located in the traditional territories of the Kluane and White River First Nations.

Road access to the east side of the project area is by a road that leaves the Alaska Highway at kilometre 1788. From here, a 13km long maintained 2WD gravel road leads to Wellgreen's upper camp near the portal. From the upper camp, a gravel 4X4 road leads for 11 km to a placer operation on Arch Creek. The condition of this road is dependent on exploration and placer mining activity and is regularly washed out by flooding.

The Arch project is within the Kluane Ultramafic Belt, a 600km long belt of rocks in the southwest corner of the Yukon that are characterized by mineralized mafic to ultramafic Triassic aged sills known as the Kluane mafic-ultramafic suite. The Kluane Ultramafic Belt extends from northern BC into Alaska and hosts magmatic Ni-Cu-PGE (+/- Au) deposits and occurrences. It is the second largest Ni-Cu-PGE mafic-ultramafic belt in North America after the Circum-Superior Belt in central Canada (Hulbert, 1997).

The Kluane mafic-ultramafic sills are elongated cumulate bodies than are postulated to be the crystallized magma chambers that fed the overlying Triassic Nikolai basalts. The sills 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.

The best known deposit and the sole producer in the belt is Wellgreen Platinum's Wellgreen Deposit (Minfile 115G024). Located 15 km to the east of the Donjek River, the deposit completed the Preliminary Economic Assessment (PEA) stage in 2015. A measured and indicated resource contains 5.1 million ounces Pt+Pd (50/50) and 1.9 billion pounds Ni (330 Million tonnes @ 0.26% Ni, 0.24 g/t Pt and 0.24 g/t Pd). There is an inferred resource of 846 million tonnes of 0.24% Ni, 0.23 g/t Pt and 0.23 g/t Pd, containing 12.5 million ounces Pt and Pd and 4.4 billion pounds Ni. (www.wellgreenplatinum.com).

On the Arch project, rocks of the Pennsylvanian to Lower Permian Skolai Group (Station Creek and Hasen Creek formations) make up the majority of bedrock. The Skolai rocks are locally intruded by ultramafic sills, close to the favourable unit contact, which host the target PGE-Ni-Cu mineralization. The second largest rock type is the overlying upper Triassic Nikolai formation. Younger Wrangell Lavas form mountains southwest of the project. All rocks have been folded into a series of anticlines and synclines along fold axis parallel to the dominant 290-310° trend and then folded again along NE axes. At lower elevations, all of the above units are locally overlain by Quaternary unconsolidated glacial, glaciofluvial and glaciolacustrine deposits.

The Musketeer minfile occurrence (115G026) on the Arch claims includes the both the Teck and Conwest showings. The Teck showing of Ni-Cu-PGE mineralization is located close to Serpentine Creek (local name), a tributary on the north side of Arch Creek. The ultramafic sill continues north for 100m before disappearing under overburden. The actual contact between the volcaniclastics and ultramafic is obscured by strong calcite alteration and limonite staining that has destroyed original textures. Below the contact is a 2m wide pyritic fault zone within Station Creek formation that runs 0.543 ppm PGE + Au, 1005 ppm Cu and 389 ppm Ni over 0.8m. The ultramafic sill above the contact grades from strongly calcite and limonite altered to a dark greenish-black, serpentinized, magnetic peridotite with up 2% disseminated pyrrhotite. The best value in the ultramafic from limited sampling in 2013 was a strongly altered sample just above the contact that assayed 0.535 ppm PGE+Au, 1660 ppm Cu and 2130 ppm Ni.

The Conwest showing is located 1km north of the Teck showing on the western fork of Serpentine Creek. It consists of a 200m long pair of oxidized basal chilled olivine gabbros subparallel to a southeast trending fault and hosted in volcanics that have stockwork quartz and calcite stringer zones at the contact. Both the gabbro and the stockwork volcanics are mineralized with disseminated and interstitial pyrite, chalcopyrite and lesser pentlandite (up to 7% total). A chip sample taken in 2000 returned 2015 ppm Ni, 5448 ppm Cu and 154 ppb Au.

The Arch claims have been worked on since 1952 when they were staked and explored as a possible extension to the Wellgreen deposit. The Arch claims on the west side of the Donjek River have received considerably more work than the Jek claims on the east side, although both were staked around the same time.

Preliminary results from the 2016 interpretation has highlighted targets that are supported by the available geological evidence compiled from historic programs and recent prospecting. Target Area A

outlines the known extent of the ultramafic sill that outcrops at the Teck Showing. Target B is on trend with the same ultramafic sill and with topographic lineaments, and at its southern end it is close to gossans in an Arch Creek tributary and a stream sediment sample with elevated Ni (108 ppm). Target C coincides with elevated PGE+Au, Ni and Cu values in a soil line on the Donjek flats south of Arch Creek. A ground magnetic survey done at the same time also produced a magnetic anomaly the same as that seen in the airborne geophysics.

There are two prospective areas that do not show up in the geophysics but for which geological evidence is promising. The first is the Conwest showing and its possible extensions to the northwest and southeast. A pyritic quartz-sericite schist which resembles volcanogenic massive sulphide style mineralization is situated along a fault running 330° from the Conwest and there is also a topographic lineament running at 300° on strike with the Conwest gabbro that should be prospected as a possible extension of the Conwest.

The second area is the lower elevations on the south side of Arch Creek valley. The fertile contact area between the Hasen Creek and Station Creek formations runs through this area. The first vertical derivative of the magnetic survey shows linear bodies in this area, one is close to the mapped location of the Maple Creek gabbro. The airborne EM survey did not cover this area.

The following recommendations are taken from the geophysical report.

- 1. A number of EM responses noted in the data should also be ground truth to attempt to locate their causative sources.
- 2. While the regional datasets do aid with the identification of target areas, detailed airborne magnetics and electromagnetics should be employed to follow-up select targets and to select new ones.
- 3. Ground geophysical methods, focusing on magnetic and induced polarization techniques, should be further employed to improve targeting.
- 4. A comprehensive compilation of historic data, partially done in this review, should be undertaken and merged with the resulting products from the above.

Other recommendations include:

- Investigate the use of the coplanar in-phase 900Hz product in future EM surveys over PGE-Ni-Cu projects in the Kluane Ultramafic Belt. The data for this product is collected during airborne EM surveys and could be collected during ground HLEM surveys, although it can be affected by noise. Coplanar in-phase has been used by Walcott & Associates recently to explore for ultramafics in Alaska. Is used to define intense magnetic bodies and has been used to estimate magnetite percentages.
- 2. Continue with the geophysical interpretation work started in this report. Focus on the less defined areas such as the Conwest showing and the south side of the Arch Creek valley.

Arch Claims – Teck & Conwest Showings

- 1. Prospect north of the Teck Showing to find the base of the ultramafic sill. Hand trench or use a small portable excavator to expose and sample new outcrop and trace the basal contact to the northwest and southeast.
- 2. Starting at the Teck showing, trace and expose the top contact of the sill to the northwest and southeast.
- 3. Prospect the area between the top of the 2013 grid and the Conwest showing in the vicinity of the west fork of Serpentine Creek.
- 4. Prospect west of the Conwest Showing to trace the base of the sill. Prospect north of the Conwest showing to find the middle and top of the sill.

Arch Claims – Outside of known showings

- Prospect and take geochemical samples (stream, soil, rock, etc.) the creek valleys and uplands in Target Areas B and C. Creek valleys will be best approached from the Donjek River flats while uplands from the east side or by helicopter.
- 2. Follow up anomalous stream sediment samples and prospect creeks for outcrops in Target Area A and on the south side of the Arch Creek valley.

1.0 Introduction

Between August 10th and 17th, 2016, Peter E. Walcott & Associates Limited undertook a geophysical data review for over the Catalyst Property, located in the Kluane Lake Area, Yukon, for Group Ten Metals Inc. The review covered claims belonging to Group Ten Metals Inc. outside of the Arch Project, but in this report the focus is on the Arch Project. No field work was done and work was funded by Group Ten Metals Inc.

The study was focused on regional government data sets, along with other historic digital data found within the Yukon government assessment files in an effort to develop targets similar to that of the Wellgreen PGM Deposit. The compilation and data review is currently ongoing, thus only preliminary results and targets selections are presented here.

The geophysical maps and interpretations were then overlain with geological mapping, stream sediment sampling results and results from historic work to generate targets outside of known showings.

2.0 Project Location & Access

The Arch Project is located in the Southwest corner of Yukon, 260 km due west of Whitehorse and 40 km northwest of Burwash Landing, the nearest community. On the west, the Jek claims sit on the west side of the Donjek River, 15 km south of the road bridge on the Alaska Highway. On the east, the project is adjacent to the west end of Wellgreen Platinum's Wellgreen property. See location map (figure 1).

The project is covered by NTS maps 115G05 and 115G12 and is centered at latitude 61° 29' 18" North and longitude 139°40'36" West. The claims are within the Kluane Wildlife Sanctuary, where mining is allowed. The project is located in the traditional territories of the Kluane and White River First Nations.

Road access to the east side of the project area is by a road that leaves the Alaska Highway at kilometre 1788 where the old Wellgreen mill site and the current Wellgreen Platinum field office are located. From here, a 13km long maintained 2WD gravel road leads to Wellgreen's upper camp near the portal. From the upper camp, a gravel 4X4 road leads for 11 km to a placer operation owned by Russell Nelson on Arch Creek. The condition of this road is dependent on exploration and placer mining activity and is regularly washed out by flooding. A rough ATV trail continues west from the placer operation, following Arch Creek through a canyon down to the Donjek River. Depending on stream conditions, this trail is often impassible. The claims on the west side of the Donjek River are best accessed by helicopter, but an alternative access is along a rough road that follows the Donjek River from the Alaska Highway.



Figure 1 Location Map









3.0 Legal Description

The Arch project is made up of 140 claims covering approximately 2739 hectares in the Whitehorse Mining District. A summary of the claims with new expiry dates is in table 1 below. See figure 2 for a claim map and appendix 1 for a full listing of claims. The program was carried out on all claims. The 13 remaining Jek claims were part of a larger block optioned by Group Ten. In 2016, most of the claims lapsed and have since been restaked by other owners.

Claim name	Grant no.	No of claims	Registered owner	Current expiry date	New expiry date*
AR 1-38	YE69001-038	38	Tom Morgan	Aug 18, 2016	Aug 18, 2017
AR 39-68,70-77	YE69039-068, 070-	38	Tom Morgan	Aug 22, 2015	Aug 22, 2017
	077				
ARCH 1-37	YE69501-537	37	Bill Harris	Aug 18, 2016	Aug 18, 2017
ARCH 38	YD58910	1	Bill Harris	Aug 17, 2016	Aug 17, 2017
ARCH 39-40	YD58913-914	2	Bill Harris	Aug 22, 2016	Aug 22, 2017
JEK 44	YE69244	1	Bill Harris	Aug 18, 2016	Aug 18, 2017
JEK 51, 53, 55	YE69251, 253,255	3	Bill Harris	Aug 18, 2016	Aug 18, 2017
JEK 116,118,	YE69316,318,320,	10	Bill Harris	Aug 18, 2016	Aug 18, 2017
120,122-126,	322-326,328, 330				
128, 130					
AR 1-9	YD12517-525	9	Tom Morgan	Jun 22, 2017	na
AR 61	YC18892	1	Tom Morgan	Sep 20, 2017	Na
TOTAL		140			

Table 1: Claim Summary

*conditional on acceptance of report

4.0 Physiography

The project is located in the Kluane Ranges, foothills of the St. Elias Range, that border the flat, wide Shakwak valley. The claim blocks are divided by the braided Donjek River that flows in a 1.5km wide, glaciated valley. The claims are on moderate to steep terrain with elevations ranging from 300 to 1900 metres. A significant depth of cover, dominated by glaciofluvial terraces covers the Arch Creek valley. The valley is a deep trough with thick McConnell glacial deposits estimated to be 10 to 40m deep. Since ice retreat (~10,300 ya) Arch Creek has been eroding down through the glaciofluvial material into bedrock. At lower elevations, bedrock exposures are limited to creek valleys and canyons. At higher elevations there is considerable bedrock on ridges and mountain peaks. Permafrost can be a concern on north aspect slopes and in areas with thick moss cover.

5.0 Geology & Mineralization

5.1 Regional Geology

The Arch project is within the Kluane Ultramafic Belt, a 600km long belt of rocks in the southwest corner of the Yukon that are characterized by mineralized mafic to ultramafic Triassic aged sills known as the Kluane mafic-ultramafic suite. The Kluane Ultramafic Belt extends from northern BC into Alaska and hosts magmatic Ni-Cu-PGE (+/- Au) deposits and occurrences. It is the second largest Ni-Cu-PGE mafic-ultramafic belt in North America after the Circum-Superior Belt in central Canada (Hulbert, 1997).

The Kluane Ultramafic Belt lies within a displaced slice of the Wrangell Terrane which is bounded on the south by the Duke River Fault and on the north by the Denali Fault. The Wrangell Terrane is underlain by Carboniferous to Permian and Triassic sedimentary and volcanic rocks, intruded by the upper Triassic Kluane Ultramafic suite and Cretaceous granitic intrusions.

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 (black to dark brown or light green to pale grey when altered) and can be seen as distinctive linear features when driving northwest along the Alaska Highway.

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.

The Kluane mafic-ultramafic sills are elongated cumulate bodies than are postulated to be the crystallized magma chambers that fed the overlying Triassic Nikolai basalts. The sills 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.

The Skolai Group contains the oldest rocks in the ultramafic belt. The lowest formation is Station Creek which is a 1000m thick 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 up to 800m thick. It consists 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.

The Nikolai Group is one of the more extensive units in the region. It consists of a thick pile (up to 1 km thick) of basalt flows and pillow lavas with local interbedded limestone, unconformably overlying the Hasen Creek formation. The Wrangellia Terrane extends along the outer coast of B.C from the Yukon/Alaska border south to Vancouver Island and in all localities it is distinguished by thick layers of basalts capped with limestone. Nikolai rocks contain 10-35% vesicles or amygdules and show an increasing hematite content towards the top of the pile. The likely sources of the Nikolai volcanics are magma chambers represented by the Kluane ultramafic sills and feeders represented by the Maple Creek Gabbro.

Other units of less relevance to the Arch project are found in the ultramafic belt and are described in the table of formations below.

Q – Quaternary	Unconsolidated alluvium, colluvium and glacial deposits.
NW Miocene to	NW1 -Extensive volcanic unit, volumetrically significant but not associated with
Pliocene Wrangell	mineralization.
Lavas	Occur on the southwest side of Wrangellia overlapping onto the Alexander Terrane.
	Abundant west of the Donjek River and typically form piles 400-1000m thick.
	Mafic to felsic volcanic rock with
	NW2 – volcanic conglomerate.
MW Mid to late	Youngest intrusions in the area. Related to the Wrangell Lavas. Felsic to mafic composition.
Miocene Wrangell	
Suite	
OT Oligocene	Homogeneous granite with lesser granodiorite, diorite and gabbro. Subvolcanic rhyolite,
Tkope Suite	rhyodacite and dacite.
OA Paleocene to	Tertiary freshwater clastic rocks 60 to 575 metres thick with a limited occurrence.
Oligocene	Clastic rocks, minor carbonaceous shale and thin coal seams, mostly fluvial and lacustrine
Amphitheatre	deposits.
EKK late Early	Found along the length of the ultramafic belt but are more prevalent in the north.
Cretaceous Kluane	Medium to coarse-grained, biotite-hornblende granodiorite, quartz diorite, quartz
Ranges Suite	monzonite and hornblende diorite. Minor diorite and gabbro.
uTrKT upper	Phyllite, sandstone, minor greywacke and conglomerate. May include parts of McCarthy Fm.
Triassic to	
Cretaceous	
Tatamagouche	

Table of formations.

uTrM upper	Mudstone and shale, locally interbedded with buff-coloured limestone.
Triassic McCarthy	
Fm.	
uTrC upper Triassic	Conformably overlies the Nikolai Group, varying in thickness from zero to several hundred
Chitistone	metres.
	Argillaceous limestone and argillite; massive limestone, limestone breccia and well-bedded
	limestone, gypsum and anhydrite. (McCarthy, Chitistone and Nazina limestone)
uTrN upper Triassic	uTrN3 – thinly bedded grey limestone and argillite.
Nikolai formation	uTrN2 – dark green to maroon amygdaloidal basalt and basaltic andesite flows, locally
	pyroxene and plagioclase phyric. (Nicolai Greenstone)
	uTrN1 – light to dark green volcanic breccia, pillow lava and basal conglomerate.
LTrK late Triassic	Preferentially intrudes at or near the Hasen Creek-Station Creek contact.
Kluane Ultramafic	LTrK1 - peridotite, dunite and clinopyroxenite, layered intrusions, locally with gabbroic
Suite.	chilled margins.(Kluane-type mafic-Ultramafics Gabbro-Diabase Sills)
	LTrK2 - Maple Creek gabbro. Fine to coarse grained diabase and gabbro sills and dykes.
	Intrudes the Skolai Group and locally the Kluane ultramafic suite.
mTrH middle	Siltstone, mudstone and thinly bedded limestone. Difficult to distinguish from Hasen Creek
Triassic Hoge Creek	Fm.
CPH lower Permian	CPH1 – fine-grained clastic rocks. Lower part contains volcaniclastics, rare basalts, rare chert
Skolai Group -	beds and chert-pebble conglomerate.
Hasen Creek Fm.	CPHc – limestone, locally fossiliferous, massive to bedded.
CPS Mississippian	CPS1-undifferentiated Skolai Gp; includes Hasen and Station Creek formations
to Pennsylvanian	CPS2 - Dark green basalt flows, pillows, pillow breccia, local magnetite-rich jasper.
Skolai Group-	CPS3 – bedded to massive chert, tuff
Station Creek Fm.	CPS4 – interbedded volcanic breccia, volcaniclastics; minor basalt flow.
	CPS5 – laminated volcanic tuff and volcanoclastic siltstone.

Units and descriptions from the Yukon Geological Survey digital geology map (Open File 2016-1) with modifications from Hulbert, 1997.

5.2 Regional Mineralization

There are four main types of Ni-Cu-PGE mineralization in the Kluane Ultramafic Belt 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.

Two 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.

The most common sulphide minerals are pyrrhotite, pyrite, pentlandite and chalcopyrite; the common oxide minerals are magnetite and ilmenite. Figure 3 below illustrates a typical, simplified ultramafic sill.



Figure 3: Deposit model for the Kluane Belt (modified from Hulbert, 1997)

The best known deposit and the sole producer in the belt is Wellgreen Platinum's Wellgreen Deposit (Minfile 115G024). Located 15 km to the east of the Donjek River, the deposit completed the Preliminary Economic Assessment (PEA) stage in 2015. A measured and indicated resource contains 5.1 million ounces Pt+Pd (50/50) and 1.9 billion pounds Ni (330 Million tonnes @ 0.26% Ni, 0.24 g/t Pt and 0.24 g/t Pd). There is an inferred resource of 846 million tonnes of 0.24% Ni, 0.23 g/t Pt and 0.23 g/t Pd, containing 12.5 million ounces Pt and Pd and 4.4 billion pounds Ni. (www.wellgreenplatinum.com). At Wellgreen the platinum group metals combine with As, Sb, Te, Bi, Ni, S, Co and Fe to form minerals and alloys. Sperrylite (PtAs₂) and Sudburyite (PdSb) are two of the more abundant (Hulbert, 1997).

Geology Legend

Yukon Faults

- --- strike slip, dextral, approximate MID TO LATE MIOCENE
- thrust, , approximate
- -- thrust, , covered
- · unknown, , approximate
- unknown, , covered
- unknown, , defined
- -- unknown, , inferred

— Folds

Yukon Bedrock Geology

MW: WRANGELL SUITE: fine to medium grained, hornblende biotite granodiorite and porphyritic (K-feldspar) hornblende granodiorite; medium grained, uniform biotite diorite and pyroxene gabbro; subvolcanic hornblende biotite rhyolite, rhyodacite, dacite, and trachyte (Wrangell Suite)

MIOCENE TO PLIOCENE

NW1: WRANGELL LAVAS: rusty red-brown, phyric and non-phyric basaltic andesite flows (minor pillow lava), interbedded with felsic tuff, volcanic sandstone and conglomerate; acid pyroclastics related to intra-Wrangell intrusions; thin basaltic andesite and andesite flows (Wrangell Lavas)

PALEOCENE TO OLIGOCENE

OA: AMPHITHEATRE: yellow-buff to grey-buff sandstone, pebbly sandstone, polymictic conglomerate, sittstone, public of the point satisfactore, period satisf ; Kulthieth)

CRETACEOUS AND (?) OLDER

KK1: KK: KLUANE SCHIST: undivided

LATE TRIASSIC AND (?) OLDER

- LTrK2: MAPLE CREEK: gabbro
- LTrK1: KLUANE: mafic to ultramafic intrusions

UPPER TRIASSIC

uTrN2: NIKOLAI: basalt, andesite

- uTrN1: NIKOLAI: basal conglomerate
- uTrM: MC CARTHY
- uTrKT: TATAMAGOUCHE
- uTrC: CHITISTONE: thin interbedded light to dark grey argillaceous limestone and dark grey argillite; massive light grey limestone, limestone breccia and darker grey, well-bedded limestone; white to creamy-white gypsum and anhydrite (McCarthy, Chitistone and Nizina limestones)

PENNSYLVANIAN TO (?) LOWER PERMIAN

CPH2:SKOLAI/HASEN CREEK: carbonate

CPH1: SKOLAI/HASEN CREEK: siltstone, mudstone, sandstone

- CPS5: SKOLAI/STATION CREEK: volcanic breccia
- CPS1: SKOLAI: undivided Skolai Gp., Station Creek and Hasen Creek fms.

DEVONIAN TO UPPER TRIASSIC AND (?) OLDER

DTrI2: ICEFIELD: white to creamy-white gypsum and anhydrite; thin-bedded to massive, light grey to dark bluish-grey limestone or marble; minor dark grey calcareous argillite, calcareous siltstone-sandstone; local buff-grey crinoidal limestone

DTrI3: ICEFIELD: dark green (locally purple), porphyritic (augite) and non-porphyritic basaltic to and esitic flows and pillow lava; local volcaniclastic sediments, agglomerate, breccia, cherty tuff, grey limestone or marble, gypsum and basic intrusions

SILURIAN AND DEVONIAN

SDB1: BULLION: massive to well-bedded light grey limestone or marble, thin-bedded dark grey limestone or marble; minor dark blue-grey calcareous argillite or phyllite (Bullion Creek Limestone)

LOWER ORDOVICIAN TO DEVONIAN AND (?) OLDER

ODG2: GOATHERD: dull rusty-buff or green-grey greywacke siltstone-sandstone, and argillite or phyllite; minor grit; rarer limestone, pebble conglomerate, conglomerate; locally includes quartzite

CAMBRIAN TO ORDOVICIAN AND (?) YOUNGER







5.3 Property Geology

On the Arch project, rocks of the Pennsylvanian to Lower Permian Skolai Group (Station Creek and Hasen Creek formations) make up the majority of bedrock. The Skolai rocks are locally intruded by ultramafic sills, close to the favourable unit contact, which host the target PGE-Ni-Cu mineralization. The second most common rock type is the overlying upper Triassic Nikolai formation. Younger Wrangell Lavas form mountains southwest of the project. All rocks have been folded into a series of anticlines and synclines along fold axis parallel to the dominant 290-310° trend and then folded again along NE axes. At lower elevations, all of the above units are locally overlain by Quaternary unconsolidated glacial, glaciofluvial and glaciolacustrine deposits (Q).

On the Arch claims east of the Donjek River, Skolai Group sediments outcrop at lower elevations on the south side of Arch Creek and extend northwards under the creek up to the height of land. Nikolai basalts form the top of ridges on both sides of the valley. Maple Creek gabbroic sills intrude Skolai Group rocks on both side of the Arch valley. Two Kluane ultramafic sills lie along the north side of Arch Creek close to the valley bottom. The sills are largely covered with overburden but have been traced by mapping, trenching and geophysics for 2 km. A fault or fold hinge trends northwest upstream of the fork in Serpentine Creek and the creek itself may follow a northeast trending fault.

The 13 Jek claims west of the Donjek River are underlain by Nikolai volcanic rocks and Station Creek formation volcanic breccia.

5.4 Property Mineralization

5.4.1 Arch Claims

The Musketeer minfile occurrence (115G026) on the Arch claims includes the both the Teck and Conwest showings. The recorded coordinates for the Musketeer occurrence are close to the location of the Conwest showing.

The Teck showing of Ni-Cu-PGE mineralization is located close to Serpentine Creek (local name), a tributary on the north side of Arch Creek. The showing was trenched in 2001 to expose Station Creek formation volcanics in contact with an ultramafic sill. The ultramafic sill continues north for 100m before disappearing under overburden. The actual contact between the volcaniclastics and ultramafic is obscured by strong calcite alteration and limonite staining that has destroyed original textures. Below the contact is a 2m wide pyritic fault zone within Station Creek formation (variably identified as a feldspar porphyry or a tuff) that runs 0.543 ppm PGE + Au, 1005 ppm Cu and 389 ppm Ni over 0.8m. The ultramafic sill above the contact grades from strongly calcite and limonite altered to a dark greenish-black, serpentinized, magnetic peridotite with up 2% disseminated pyrrhotite. In outcrop the unit is resistant with a greasy-looking surface and calcite coated slickensides. The best value in the ultramafic from limited sampling in 2013 was a strongly altered sample just above the contact that assayed 0.535 ppm PGE+Au, 1660 ppm Cu and 2130 ppm Ni.

The Conwest showing is located 1km north of the Teck showing on the western fork of Serpentine Creek. It consists of a 90m long pair of oxidized basal chilled olivine gabbros subparallel to a southeast

trending fault. In 2012, the gabbro was found to extend for a further 115m to the northwest. The gabbro is hosted in volcanics that have stockwork quartz and calcite stringer zones at the contact. Both the gabbro and the stockwork volcanics are mineralized with disseminated and interstitial pyrite, chalcopyrite and lesser pentlandite (up to 7% total). A chip sample taken in 2000 returned 2015 ppm Ni, 5448 ppm Cu and 154 ppb Au. No work was done on the Conwest since 2012 and it has not been tested by ground geophysical or geochemical surveys.

In 1988 a single drillhole (A88-01, dip -50, azimuth 020, depth 85.65m) targeting a strong magnetic high and coincident VLF-EM conductor was drilled into the sill on the eastern side of the Arch claims (claim AR 4), 1.8 km east of the Teck showing. The hole intersected 25m of strongly serpentinized ultramafic sill with a weighted average of 0.03% Cu, 0.22% Ni, 0.004 oz/t Pt (0.137 g/t)and 0.004 oz/t Pd (0.137 g/t). These values are similar to those in peridotites adjacent to the ore bodies at Wellgreen (Eaton, 1988).

Lack of outcrop has limited the number of rock samples collected on the Arch property. The most consistent sampling was in 2001 when Auterra trenched, then systematically mapped and chip sampled the Teck showing (Vanwermeskerken, 2001). The following table summarizes some of the better rock or core samples collected at the different showings and stratigraphic locations in the sill.

Showing	Stratigraphic position	PGE+Au (ppb)	Cu (%)	Ni (%)	description
DDH A88- 01 (east end)	Entire sill	274 (no Au recorded)	0.03	0.22	Strongly sheared and serpentinized, nearly 100% clay gouge. Millerite (NiS) on fractures.
Teck	Country rock above sill?	543	0.10	0.04	0.80 m wide pyritic shear zone in tuff.
Teck	Тор	535	0.17	0.21	Calcite and limonite altered ultramafic
Teck	Basal gabbro?	400*	?	?	Net-textured sulphides, chalcopyrite and pentlandite
Conwest	Basal gabbro?	154 (no Pd or Pt recorded)	0.54	0.20	Gabbro with clots of sulphides up to 10%. Pyrite, chalcopyrite, pyrrhotite, +/- pentlandite.

Table: Rock Sar	nples at different	t showings and	locations
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*(Pers. Comm. Tom Morgan). Tom collected a sample upstream from the Teck showing at the end of the ultramafic outcrop. Location and results to be confirmed.

Gossans associated with aeromagnetic highs and soil anomalies occur on the Arch claims in the canyons on the east side of the Donjek River and in 1988 a single line of soil samples south of the confluence of Arch Creek with the Donjek River returned anomalous Au, Pd and Pt.

5.4.2 Arch Creek Placer

Placer mining started on Arch Creek in 1904 and has continued intermittently since. Gold is the most commonly recovered metal, 70% of which consists of coarse grains and small nuggets, including a 3 ounce nugget recovered in 1905 from the lower canyon. Total reported production is 860 ounces of gold. The Yukon placer database records occasional grains and small rough nuggets of native silver and copper.

In 2004, M. Dulac ran bulk tests on lower Arch creek. He tested a tributary 2.3km upstream from the creek's confluence with the Donjek River and found flakes of gold. This unnamed steep, creek drains claims AR 32 and 43 which are on strike with the ultramafic sill that outcrops at the Teck Showing. While working on Arch Creek itself Dulac (2004) found a high number of copper nuggets in the proportion of 2.5 times the number of gold nuggets. He also found 10g of what he considered to be platinum nuggets.

5.4.3 Jek Claims

Claims on the west side of the Donjek River were first staked to cover aeromagnetic anomalies on trend with the Wellgreen Deposit. The Sexsmith minfile occurrence (115G033) is located on the east side of the claim block and north of Wolverine Creek. It is a Self-Potential anomaly that was drilled in 1953. No records are available from either the surveys or drilling, but three boxes of X-Ray (less than 1" in diameter) core remain on site. Chalcopyrite and malachite are present in the core and the host rocks are either siltstones or ultramafics.

5.5 Wellgreen Property Mineralization

5.5.1 Arch ultramafic sill

The Wellgreen Platinum property is adjacent to the Arch claims. Two km east of the Teck showing the Arch sill that has been well exposed by trenching and tested by drilling at 8 locations(Eaton 1988). The site is recorded as YGS minfile showing Airways 115G026. The Arch sill is 80-100m wide, strikes northwest and dips 50 degrees to the Southwest, the same attitude as the sill at the Teck Showing. The northern contact (upslope) is the base of the sill and hosts intermittent Ni-Cu massive sulphides in a basal gabbro. The gabbro grades into a weakly mineralized peridotite that is dark greenish-black, highly serpentinized and contains 2-5% disseminated pyrrhotite. At one of the basal showings there is a 3m wide, malachite-stained fracture zone in the adjacent tuff that may have been caused by remobilization of metals into the country rock (Hulbert, 1997). At the top of the sill (southern, downslope contact) only one showing has been found, a 1m wide pegmatitic gabbro with disseminated mineralization. Two drillholes tested the sill at the Airways Showing in 1987. A88-02 returned 0.15% Cu, 0.29% Ni, 0.41 g/t Pt and 0.44 g/t Pd over 46.18m in peridotite and gabbro with weakly disseminated sulphides. A88-03 has poor recovery in sheared peridotite with a 4.7m gabbro chill margin. The peridotite returned only weakly anomalous values but the gabbro returned 0.75% Cu, 1.44% Ni, 0.65 g/t Pt and 1.58 g/t Pd over 2.6m.

5.5.2 Wellgreen Resource - West Zone

Six kilometres southeast of the Teck Showing is the West Zone of the Wellgreen Resource. The following description is taken from McCraken, 2011 and Hulbert, 1997. Discovered in 1987, the West Zone is the on the edge of the complex where the sills finger out into the country rock. It extends for 600m and the sills are up to 100m wide with chilled gabbro on both contacts. The sills dip near vertical and change from southward dipping to northward dipping and overturned at the west end. Complexity is increased by northeast trending reverse faults with shallow westward dips that offset sills horizontally on the order of tens of metres. Sulphide mineralization is developed in gabbro and ultramafic as well as volcanic-associated sulphide mineralization in the country rock. Highest grades are found in the

ultramafic core and the marginal gabbro is weakly mineralized and devoid of massive sulphides. See figure 5, Property Geology, for location of the Wellgreen Resource.

6.0 Historical Work

The Arch claims have been worked on since 1952 when they were staked and explored as a possible extension to the Wellgreen deposit. Work by Conwest Exploration Company Ltd. and Teck Exploration Company Ltd. led to the discovery of the Conwest and Teck showings. The Arch claims on the east side of the Donjek River have received considerably more work than the Jek claims on the west side, although both were staked around the same time. Claims on the west side of the river were first staked in 1953 by Canalask Nickel Mines over three high, positive aeromagnetic anomalies.

6.1 Arch Claims

Year	Work	Results
1952-54	Staked by Conwest Exploration Company Ltd.	Two copper-nickel showing identified. Musketeer
	and Teck Exploration Company. Geological	(now Teck) and Conwest showings. (Walker, 1955
	mapping, prospecting.	and Frohberg, 1953)
1955	Ground EM and Magnetic surveys over the Teck	Linear magnetic anomaly over buried ultramafic sill.
	and east of Conwest Showings by Teck	(Clarke, 1956)
1967	Geological mapping, magnetometer and EM-16	Linear magnetic anomaly (Hilker, 1967)
	surveys by J.B. O'Neil and C. Gibbons.	
1972	Geological mapping, geochemical sampling,	No results available. Strong magnetic high and
	magnetometer and EM surveying by the Nickel	several weak or broad conductors reported in Yukon
	Syndicate	Minfile (<i>Deklerk, 2009</i>).
1986-88	Geochemical sampling in 1986 by Kluane Joint	Poor sampling conditions towards the west end of
	Venture on large grid extending along the north	the grid (Serpentine Creek area) because of
	side of Arch Creek from the Wellgreen property	permafrost and deep overburden. Weak, spot
	to Serpentine Creek. Grid lines 100m apart with	anomalies in Pt, Pd, Cu, Ni and Au.
	samples at 50m intervals. In 1987	EM conductors and linear magnetic features. Grid
	magnetometer and VLE-EM surveys over same	does not cover the Conwest or Teck Showing but
	grid.	does overlap part of the 2013 Arch grid.
	One 85.6m drill hole in 1988 through Donjek	Weakly anomalous values from drillhole. (<i>Eaton,</i>
	sill.	1987)
1988	Ground magnetic survey and 30 soil samples	Linear magnetic anomaly coincident with anomalous
	close to mouth of Arch Creek by Lodestar.	soils. Anomalous Pt, Pd and Au. 7 samples >20ppb
		Au, 7 samples >50 ppb Pt and 12 samples >20ppb
		Pd. (<i>Davidson, 1989</i>)
1987	Property examination and mapping by Dawson	Maple Creek gabbro and band of limestone mapped
	Eldorado Mines Inc.	(Hart and Doherty, 1987).
2000	Geochemical sampling and trenching around	Detailed trench mapping and consistent sampling
	Teck showing by Auterra Ventures Inc.	over the sill. (Vanwermeskerken, 2001
2001	Rock sampling and 11 km of magnetic and VLF	Anomalous magnetic linear 60m north of the Tech

Year	Work	Results
	EM surveys by around the Teck showing	showing. VLF EM was less responsive and two weak
		axes appear to border the magnetic anomaly.
		(Brickner, 2002)
2012	Short program of mapping, prospecting and	Anomalous Pb, Zn, Fe, Au and Cu (Pautler, 2012).
	sampling around the Conwest showing. 18 rock,	
	14 soil samples collected.	
2013	Compilation of previous work, chip sampling at	Best chip samples were in altered ultramafic close to
	Teck showing. Testing of different	contact with Station Creek. Spruce bark samples
	biogeochemical and geophysical surveys over a	performed the best of the 4 methods tested.
	4 line km grid centered on the Teck showing.	Projected sill location was traced and new anomalies
	Work for Bill Harris and Tom Morgan. Claims	were detected. ELF geophysical survey was better
	were optioned to Ashburton Ventures (now	than the HLEM but needs further processing.
	Group Ten) late in the year.	(James, 2014)

6.1.1 Geophysics

Magnetometer and EM geophysical surveys have been used over the area around the Teck showing to find buried ultramafic bodies. Both surveys are required because the Nikola volcanics can produce magnetic anomalies similar to those produced by ultramafics but are not conductors unless faulted.

Historic geophysics on the Arch claims has been dominated by VLF-EM surveys. Multiple surveys from 1955 to 2001 show linear conductors trending northwest across the area. The conductors are not continuous across the grid; they are interrupted and displaced with respect to each other. One of the displacements follows Serpentine Creek and may be represent a northeast fold axis or fault that has cracked and offset strata. Magnetic surveys also show distinctive linear magnetic feature trending across the area that are coincident with outcrops of the ultramafic sill at the Teck showing and in Arch creek canyon.

The northwest trending linear EM conductors could be sulphide layers in the ultramafic sill, unit contacts, faults or folds. They parallel the dominant structural trend and are coincident with linear magnetic highs, although they diverge away from the magnetic anomaly on the west side of Serpentine Creek.

6.2 Jek Claims

The current configuration of Jek claims is not covered by geophysical anomalies, but past work in the area is listed in the table below.

Year	Work	Results
1953	Staked by Canalask Nickel Mines over	Three high positive aeromagnetic anomalies staked.
	aeromagnetic anomalies. Ground magnetics	Self-potential anomaly was drilled. No report filed
	and self-potential surveys. Three shallow holes	and no results Three boxes of core remain on site.
	drilled on the Sexsmith occurrence.	
1988	Ground VLF-EM and magnetics surveys south of	NW trending conductor 1km long. Small grid,

Year	Work	Results
	Wolverine Creek for Harjay Exploration	conductor open on both ends.
1996	Airborne HEM and magnetic survey for	Geophysics delineated strong magnetic high, and
	Expatriate Resources. Mapping, prospecting	several conductors. Kluane ultramafic rocks found
	and soil and stream sampling	along Wolverine Creek. Later interpretation of
		airborne survey by Power (2000) found that the EM
		conductors and resistivity patterns were probably
		caused by surficial features within overburden
2004	Re-interpretation and inversions of the 1965	Magnetic highs could be caused by folded ultramafic
	GSC airborne magnetic data.	rocks

7.0 Recent Work

7.1 2012 Prospecting & Geochemistry

In 2012, 18 rock and 20 soil samples were collected around the Conwest showings. Helicopter reconnaissance flights were made over the west aspect slopes that rise up from the east side of the Donjek River valley. Gossanous outcrops pf pyritic quartz-sericite schist west of the Conwest showing were prospected and sampled (Pautler, 2012). Gossans were observed in a canyon along a southern tributary to Arch Creek (figure 10).

7.2 2013 Orientation Surveys

In 2013, Bill Harris tested different biogeochemical and geophysical surveys over a 4 line km grid (Arch grid) centered over the Teck Showing. The depth of overburden has been a deterrent to exploration in the area and the purpose of the program was to find cost-effective and non-intrusive methods that could be applied to further exploration on the Arch claims and to other areas with similar characteristics.

The biogeochemical methods tested were non-intrusive and although more expensive to analyze that regular soil samples, they were faster and cheaper to collect than soil samples, as well as being lighter in weight. Biogeochemical samples fared well in the difficult terrain and good quality samples were taken at all sites. Spruce bark samples were the preferred method and will be used in future surveys on overburden covered areas. There were four anomalous areas shown in the bark and humus surveys that are not related to the known location of the ultramafic sill.

Both the test HLEM and ELF surveys detected weak to moderate conductors over the Arch grid test area. The ELF system revealed better-resolved features compared to HLEM, although in the case of the latter, the extreme relief in the area may have limited the effectiveness of the method.

7.3 2013 Rock & Silt Samples

Rock and stream silt sampling were secondary activities in the 2013 program, undertaken after the biogeochemical sampling was finished. Rock sampling was concentrated on the Teck Showing and vicinity. Twenty one rock samples were collected, 12 from the Teck Showing and the remainder were outcrops in or close to Serpentine Creek.

Rock sampling returned similar values to those from the 2001 Auterra program in which the Teck Showing was trenched, mapped and systematically chip sampled. Samples M896826-27 of calcite altered ultramafic have similar values and are close to the location of a historic sample with 0.36 g/t PGE+Au, 1581 ppm Ni and 709 ppm Cu. Samples M896818-821 cover a previous sample also taken in 2001 of the pyritic shear zone which graded 0.096 ppm PGE+Au, 764 ppm Ni and 1116 ppm Cu. Overall the 2013 sampling returned higher PGE+ Au values but similar Ni and Cu values.

			Element or combination of elements (all values in ppm)								
SAMPLE		LENGTH									
#	ROCK TYPE	m	PGE+Au	Bi+Te	As	Ва	Со	Cr	Cu	Ni	Se
M896809	ULTRAMAFIC	0	0.103	0.133	0.81	19.3	133.00	375.00	381.00	1440.00	1.1
M896810	ULTRAMAFIC	0	0.117	0.148	2.46	55.8	124.50	395.00	324.00	2080.00	0.6
M896811	ANDESITE?	0	0.008	0.018	11.85	67.4	21.30	118.50	41.00	28.20	0.6
M896812	ULTRAMAFIC	0	0.070	0.065	0.53	66.2	117.00	335.00	104.00	1320.00	0.9
M896813	ULTRAMAFIC	0	0.102	0.134	0.46	55.8	127.00	365.00	344.00	1380.00	1.1
M896814	ANDESITE?	0	0.028	0.009	6.47	119.5	35.50	44.00	195.50	46.60	0.9
M896815	TUFF	0	0.002	0.118	48.00	48.9	24.10	31.40	40.80	46.00	0.4
M896816	TUFF	1.3	0.085	0.244	12.35	195.5	53.20	478.00	287.00	756.00	0.8
M896817	TUFF	0.8	0.070	0.253	82.10	732.0	59.40	788.00	313.00	649.00	0.6
M896818	TUFF	0.7	0.247	1.810	45.00	254.0	118.50	937.00	1290.00	1375.00	15.2
M896819	TUFF	0.5	0.082	0.434	38.80	343.0	73.30	688.00	496.00	762.00	0.9
M896820	TUFF	0.8	0.543	5.630	21.00	129.5	31.90	115.50	1005.00	389.00	23.2
M896821	TUFF	0.6	0.397	4.760	306.00	501.0	31.10	103.50	1080.00	673.00	22.5
M896822	TUFF	1.1	0.054	0.262	33.70	771.0	28.30	434.00	103.50	286.00	0.9
M896823	TUFF	1.9	0.001	0.031	2.62	577.0	1.74	3.33	5.96	5.47	0.1
M896824	TUFF	0	0.000	0.012	0.62	177.5	1.45	2.92	1.77	1.95	0.1
M896825	TUFF OR UM	1.8	0.168	0.288	6.44	441.0	104.00	637.00	586.00	1395.00	3.7
M896826	TUFF OR UM	1.5	0.202	0.174	6.00	39.9	102.50	629.00	508.00	1545.00	1.5
M896827	ULTRAMAFIC	0	0.535	0.564	15.40	49.9	154.50	554.00	1660.00	2130.00	3.3
M896828	TUFF OR UM	0	0.155	0.186	3.00	122.5	90.00	1040.00	451.00	1295.00	0.7
M896830	ARGILLITE	0	0.036	0.191	46.40	21.4	25.70	58.70	111.00	49.60	4.1

Table of 2013 rock samples

Seven stream samples and 3 silt samples were collected from streams. Streams that were sampled drained Arch claims and were largely out of the area disturbed by placer mining on Arch Creek and its tributaries.

Four samples from the 2013 program show anomalous values in a range of indicator elements associated with Ni-Cu-PGE mineralization in the Kluane ultramafic belt. In addition, creeks are good prospecting targets because the downcutting action exposes bedrock.

M896803 – this creek drains a large basin on the south side of Arch Creek, cutting through Hasen and Station Formation rocks and the fertile contact zone. The sample is low in PGE + Au but is high in indicator elements of Bi, Te, As, Sb and Se. M896805 – this creek drains the north side of Arch Creek below a mapped location of ultramafic rocks. Note that this site is close to the road and Arch Creek and could be contaminated with placer material. Continued sampling upstream would be out of the potentially contaminated area.

M89606 – this creek drains the north side of Arch Creek below the mapped locations of ultramafic rocks. Although close to the road, the sample site was raised above the road so there was less risk of sample contamination from recent fluvial sediments.

SILT1 - the creek is located on the east side of Serpentine Creek and drains mapped locations of ultramafic rocks. This creek should be traced upstream and checked carefully for outcrop.

			Element or combination of elements (all values in ppm)								
SAMPLE #	ТҮРЕ	PGE+Au	Bi+Te	As	Ва	Co	Cr	Cu	Ni	Sb	Se
	STREAM										
SSED1	SED	0.0194	0.112	17.75	146.5	24.3	102	106	96.5	1.215	1.5
	STREAM										
M896801	SED	0.0124	0.132	31.8	146.5	19.15	48.8	79.2	42.5	1.79	1.8
	STREAM										
M896802	SED	0.0058	0.096	24	206	23.7	76.1	62.2	49.1	1.015	1
	STREAM										
M896803	SED	0.0122	0.137	44	372	23.6	52.4	76.9	73.5	2.07	4.3
	STREAM										
M896804	SED	0.024	0.121	22.2	307	26.1	96.2	143.5	96.7	1.46	2.2
	STREAM										
M896805	SED	0.0282	0.13	21.9	136.5	26.9	116.5	93.3	149	1.28	1.1
	STREAM										
M896806	SED	0.021	0.172	44.9	371	29.5	76.9	113	93.6	3.3	4.9
SILT1	SILT	0.0358	0.087	17.95	112	24.9	107	85.5	130	1.125	0.8
M896807	SILT	0.018	0.093	14.15	97.1	21.1	88	72.1	92.7	0.971	0.9

Table 12: Summary of stream and silt sample results

8.0 2016 Program

Between August 10th and 17th, 2016, Peter E. Walcott & Associates Limited undertook a geophysical data review for over the Catalyst Property, located in the Kluane Lake Area, Yukon, for Group Ten Metals Inc. The geophysical maps and interpretations were then overlain with geological mapping; stream sediment sampling results and results from historic work to generate targets outside of known showings. The review covered other Group Ten claims outside of the Arch Project, but in this report the focus is on the Arch Project.

The study was focused on regional government data sets, along with other historic digital data found within the Yukon government assessment files in an effort to develop targets similar to that of the Wellgreen PGM Deposit. The compilation and data review is currently ongoing, thus only preliminary results and targets selections are presented here.

A copy of the geophysical report is included in appendix 2. See appendix 3 for cost statements.

8.1 Methodology

8.1.1 Datasets

Two regional government digital datasets were downloaded from the GSC DAP server using Geosoft Oasis Montaj. These consisted of a large regional survey block which provides 250 m line spacing though out the area of interest, and a smaller broader spaced Helitem block, which only partially covered the northwestern extent of the AR claim block.

In addition to the aforementioned data, a 2008 Fugro Dighem survey was also retrieved from the Yukon Government Assessment files. This data provided detailed magnetic and frequency domain EM coverage over the Wellgreen deposit and surrounding claim area, which also included part of the AR claims.

1:50,000 scale digital elevation model data was also downloaded from the NRCAN website, in order to derive a 3D elevation model of the area to aid with structural interpretation.

8.1.2 Processing

The respective databases were loaded into Geosoft Oasis Montaj where brief QCing of the data was undertaken.

Magnetics

The magnetic data from the regional coverage and 2008 Fugro survey was then gridded using a minimum curvature algorithm (Rangrid) with 35 and 15 meter cell sizes respectively.

The resulting grids were the subjected to a number of filtering methods; Reduction to the Pole, Calculated First Vertical Derivative, Gaussian High Pass Filter, and Tilt Derivative.

Within the resulting derivative grids, the regional data did show some herring bone effects.

9.0 Results

9.1 Geophysical Interpretation

The preliminary results of the ongoing interpretation of regional and historic airborne data sets collected over Group Ten Metals Inc. claims show a number of features of interest, some of which show excellent correlation with known ultramafic units. The images below illustrate in 2D and 3D the three targets generated by the geophysical interpretation. See the geophysical report in appendix 2 for more images and maps.

While numerous other features exist, further analysis of the results are still required, and are beyond the scope of preliminary targets identified below.

Using preliminary geophysical maps as a guide, geological information from historical and recent programs over the Arch claims was compiled in order to validate the geophysical targets (see figure 10).



Figure 6: YGS regional geology overlain on a digital terrain model with geophysical targets outlined in white circles. The Arch claims are in the upper left part of the photograph. The rock unit colours are the same as the geology legend.



Figure 7: Geophysical targets outlined in white circles. Underlying layer is regional magnetic contours of residual Total Magnetic Intensity (TMI).

9.1.1 Target Areas

Target Area A (AR Claims)

3D modelling produced an intense, strongly defined magnetic feature that fits with the known surface location of the ultramafic sill that stretches from the Teck Showing near Serpentine Creek 2 km to drillhole 88-01. In their interpretation Walcott & Associates used the regional YGS geology map which is too general to show small features such as this sill, but were able to resolve the sill in their interpretation.

Target Area B (AR Claims)

Target Area B is situated in the central portion of the main AR claim block. This target is at the convergence of multiple magnetic features. A limited response EM response can also be observed within the regional time domain EM (HeliTem) dataset.



Figure 8: Geophysical target areas A and B from a 3D model. Target A outlines the location of the 1988 drillhole on the Arch claims that intersected 25m of ultramafic sill. Target B is a new target that may be an extension of the known sill in target A.

Target Area C (AR Claims)

Target Area C is a discrete EM conductor located on the northeastern flank of a linear northwesterly trending magnetic feature. The southern extents of the conductor are unknown as the feature tracks out of the extents of the Helitem survey.



Figure 9: Geophysical target area C from a 3D model. Target C coincides with gossans, ultramafic outcrops and elevated soil samples.



10.0 Discussion & Recommendations

10.1 Discussion

The geophysical interpretation has highlighted targets that are supported by the available geological evidence compiled from historic programs and recent prospecting. Target Area A outlines the known extent of the ultramafic sill that outcrops at the Teck Showing and has been drilled at its eastern end. Target B is on trend and northwest of the same ultramafic sill and with topographic lineaments. At its southern end it is close to gossans in an Arch Creek tributary and a stream sediment sample with elevated Ni (108 ppm). Target C coincides with elevated PGE+Au, Ni and Cu values in a soil line on the Donjek flats south of Arch Creek. A small ground magnetic survey over the same area also produced a magnetic anomaly similar to that seen in the airborne geophysics.

There are two prospective areas that do not show up in the geophysics but for which geological evidence is promising. The first is the Conwest showing and its possible extensions to the northwest and southeast. Pautler (2012) found pyritic quartz-sericite schist which resembles volcanogenic massive sulphide style mineralization along a fault running 330° from the Conwest and there is also a topographic lineament running at 300° on strike with the Conwest gabbro that should be prospected as a possible extension of the Conwest.

The second area is the lower elevations on the south side of Arch Creek valley. The fertile contact area between the Hasen Creek and Station Creek formations runs through this area. Some mapping was done by Teck Exploration (Frohberg, 1953) and Dawson Eldorado Mines (Hart and Doherty 1988) which located a Maple Creek gabbro. The first vertical derivative of the magnetic survey shows linear bodies in this area, one is close to the mapped location of the Maple Creek gabbro. The airborne EM survey did not cover this area, so magnetic targets could not be refined by conductivity.

10.2 Geophysical Recommendations

The following recommendations are taken from the geophysical report in appendix 2.

- 5. A number of EM responses noted in the data should also be ground truth to attempt to locate their causative sources.
- 6. While the regional datasets do aid with the identification of target areas, detailed airborne magnetics and electromagnetics should be employed to follow-up select targets and to select new ones.
- 7. Ground geophysical methods, focusing on magnetic and induced polarization techniques, should be further employed to improve targeting.
- 8. A comprehensive compilation of historic data, partially done in this review, should be undertaken and merged with the resulting products from the above.

10.3 Recommendations

10.3.1 General

- 3. Investigate the use of the coplanar in-phase 900Hz product in future EM surveys over PGE-Ni-Cu projects in the Kluane Ultramafic Belt. The data for this product is collected during airborne EM surveys and can be collected during ground HLEM surveys, although it can be affected by noise, an issue in steep terrain. Coplanar in-phase has been used by Walcott & Associates recently to explore for ultramafics in Alaska. Is used to define intense magnetic bodies and has been used to estimate magnetite percentages.
- 4. Continue with the geophysical interpretation work started in this report. Focus on the less defined areas such as the Conwest showing and the south side of the Arch Creek valley.

10.3.2 Arch Claims - Teck & Conwest Showings

- 5. Prospect north of the Teck Showing to find the base of the ultramafic sill. North of the Teck showing the land rises steeply and outcrop should be close to the surface. Hand trench or use a small portable excavator to expose and sample new outcrop and trace the basal contact to the northwest and southeast.
- 6. Starting at the Teck showing, trace and expose the top contact of the sill to the northwest and southeast.
- 7. Prospect the area between the top of the 2013 grid and the Conwest showing in the vicinity of the west fork of Serpentine Creek.
- 8. Prospect west of the Conwest Showing to trace the base of the sill. Prospect north of the Conwest showing to find the middle and top of the sill.

10.3.3 Arch Claims - Outside of known showings

- 3. Prospect and take geochemical samples (stream, soil, rock, etc.) the creek valleys and uplands in Target Areas B and C. Creek valleys will be best approached from the Donjek River flats while uplands from the east side or by helicopter.
- 4. Follow up anomalous stream sediment samples and prospect creeks for outcrops in Target Area A and on the south side of the Arch Creek valley.

10.3.4 Jek Claims

There are no specific recommendations for the Jek claims at this time. The remaining blocks are too small for a worthwhile program. If the claims are to be kept in good standing then a minimum amount of work will be required.

11.0 References

Brickner, R.D. (2002): Geological and geochemical report on the AR 1-61 mineral claims, Report for Auterra Ventures Inc., Yukon Ministry of Energy Mines and Resources, assessment report 094396.

Chung, L.E. (1997): Airborne geophysical survey on the Donjek Project Areas; submitted by Expatriate Resources Ltd, Yukon Ministry of Energy Mines and Resources, assessment report 093662.

Clark, A.R. (1956): Report of work on Ohm and Musketeer claims., Arch Creek, Yukon; submitted by Teck Exploration Company Ltd., Yukon Ministry of Energy Mines and Resources, assessment report 017513.

Davidson, G.S. (1988a): Assessment Report on the SF 1-32 mineral claims; submitted by Harjay Exploration Ltd., Yukon Ministry of Energy Mines and Resources, assessment report 092578.

Davidson, G.S. (1988b): Assessment Report on the Missy 1-+28 Mineral Claims; submitted by Lodestar Explorations Inc., Yukon Ministry of Energy Mines and Resources, assessment report 092575.

Davidson, G.S. (1989): Assessment Report on the Missy 1-28 Mineral Claims; submitted by Lodestar Explorations Inc., Yukon Ministry of Energy Mines and Resources, assessment report 092744.

Dulac, M. (2004): Summary/Technical Report on Bulk testing through trenching with heavy equipment on Arch Creek and tributaries; Yukon Ministry of Energy, Mines and Resources, YMET/YMIP report 04-035.

Duncan R.A. and Tucker, T.L.(2002a): 2001 Assessment report on the Wolv 2,4,6,8,10,12,14,16,27 and 28; submitted by Expatriate Resources Ltd., Yukon Ministry of Energy Mines and Resources, assessment report 094253.

Duncan R.A. and Tucker, T.L. (2002b): 2001 Assessment report on the Don 1-6, 11-19, 29-34; submitted by Expatriate Resources Ltd., Yukon Ministry of Energy Mines and Resources, assessment report 094250.

Eaton, W.D. (1988): Summary report on 1988 exploration Arch Property (Barny, Mus, Amp and Eugene claims); submitted by Pak-Man Resources Inc, Rockridge Mining Corporation and Kluane Joint Venture, Yukon Ministry of energy Mines and Resources, assessment report 092645 and YMIP report 88-014.

Gronsdahl, S. and Jackson, P. (2012): Wellgreen Soil Sampling Program (NKL-12540-YT) August 22, 2012; unpublished memorandum, Prophecy Platinum Ltd., 7 pages.

Hulbert, L.J. (1997): Geology and metallogeny of the Kluane mafic-ultramafic belt, Yukon territory, Canada: Eastern Wrangellia – a new Ni-Cu-PGE metallogenic terrane; Natural Resources Canada, Geological Survey of Canada, bulletin 506, 265 pages.

Israel, S. (2004): Geology of southwestern Yukon; Yukon Ministry of Energy Mines and Resources, Open file 2004-16, 1:250,000 scale.

Israel, S. and Van Zeyl, D.P.(2004): Preliminary geological map of the Quill Creek map area, (parts of NTS 115G/5, 6 and 12), southwest Yukon; Yukon Ministry of Energy Mines and Resources, Open File 2004-20, 1:50,000 scale.

James, D. (2014): Donjek-Arch Project Geochemical, Geophysical and Geological Assessment Report; submitted by Bill Harris, Yukon Ministry of Energy Mines and Resources, assessment report #

LeBarge, W.P. (1996): Placer deposits of the Yukon: overview and potential for new discoveries, In: LeBarge W.P. (ed.), 1996. Yukon Quaternary Geology Volume 1, Exploration and Geological Services Division, Northern Affairs Program, Yukon Region, p. 1-12.

McCraken, T. (2011): Technical report on the Wellgreen Ni-Cu-Pt-Pd Project, Yukon Canada; submitted by Prophecy Resource Corp. and Pacific Coast Nickel Corp., Wellgreen Platinum Ltd.

Pautler, J.P. (2012): Geological and geochemical assessment report on the Donjek Project; submitted by Bill Harris, Yukon Ministry of Energy Mines and Resources, assessment report 096045.

Pautler, J.P. (2013a): Geological and geochemical assessment report on the Arch Project; submitted by B. Harris and T. Morgan, Yukon Ministry of Energy Mines and Resources, assessment report 096166.

Pautler, J.P. (2013b): Geological and geochemical assessment report on the Donjek Project; submitted by B. Harris, Yukon Ministry of Energy Mines and Resources, assessment report number not yet assigned.

Power, M. (2000): An interpretation of geophysical data from the Donjek Properties, Kluane area, Yukon Territory; unpublished company report, Expatriate Resources Ltd.

Power, M. (2004): Midnight Mines Ltd. Inversion of aeromagnetic data in the area of the Wolv & Don properties, Donjek River area, Yukon Territory; submitted by Midnight Mines Ltd., Yukon Ministry of Energy Mines and Resources, assessment report 094466.

Smith, C.A.S., Meikle, J.C., and Roots, C.F. (editors). (2004): Ecoregions of the Yukon Territory: Biophysical properties of Yukon landscapes; Agriculture and Agri-Food Canada, PARC Technical Bulletin No. 04-01, Summerland, British Columbia, 313 p.

Vanwermeskerken, M.T. (2001): Geological and geochemical report on the AR 1-61 mineral claims; submitted by Auterra Ventures Inc., Yukon Ministry of Energy Mines and Resources, assessment report 094217.

Walker, A.J. (1955): Report of work on Donjek and Musketeer claims, Arch Creek, Yukon; submitted by Teck Exploration Company Ltd., Yukon Ministry of Energy Mines and Resources, assessment report 017459.

Yukon Placer Database. (2007): Stream Report for Arch Creek; Yukon Geological Survey; MS Access Runtime database.

Appendix 1 Claim List

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Arch Whitehorse Quartz AR 020 YE69020 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 021 YE69021 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 022 YE69022 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 022 YE69022 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 023 YE69023 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 024 YE69024 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 021 YE69021 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 022 YE69022 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 023 YE69023 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 024 YE69024 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 024 YE69024 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 022 YE69022 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 023 YE69023 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 024 YE69024 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 023 YE69023 Group 10 18-Aug-16 Tom Morgan 100 115G05 Arch Whitehorse Quartz AR 024 YE69024 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 024 YE69024 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 025 YE69025 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 026 YE69026 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 027 YE69027 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 028 YE69028 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 029 YE69029 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 030 YE69030 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 031 YE69031 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 032 YE69032 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 033 YE69033 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 034 YE69034 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 035 YE69035 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 036 YE69036 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 037 YE69037 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz AR 038 YE69038 Group 10 18-Aug-16 Tom Morgan 100 115G05
Arch Whitehorse Quartz Arch 001 YE69501 Group 10 18-Aug-16 Bill Harris 100 115G05
Arch Whitehorse Quartz Arch 002 YE69502 Group 10 18-Aug-16 Bill Harris 100 115G05
Arch Whitehorse Quartz Arch 003 YE69503 Group 10 18-Aug-16 Bill Harris 100 115G05
Arch Whitehorse Quartz Arch 004 YE69504 Group 10 18-Aug-16 Bill Harris 100 115G05
Arch Whitehorse Quartz Arch 005 YE69505 Group 10 18-Aug-16 Bill Harris 100 115G05
Arch Whitehorse Quartz Arch 006 YE69506 Group 10 18-Aug-16 Bill Harris 100 115G05

Property	Mining Distr Claim Type	Claim Name	Grant No.	Responsibility	Expiry Date Claim Owner	% Owned	Map Sheet
Arch	Whitehorse Quartz	Arch 007	YE69507	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 008	YE69508	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 009	YE69509	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 010	YE69510	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 011	YE69511	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 012	YE69512	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 013	YE69513	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 014	YE69514	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 015	YE69515	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 016	YE69516	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 017	YE69517	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 018	YE69518	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 019	YE69519	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 020	YE69520	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 021	YE69521	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 022	YE69522	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 023	YE69523	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 024	YE69524	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 025	YE69525	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 026	YE69526	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 027	YE69527	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 028	YE69528	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 029	YE69529	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 030	YE69530	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 031	YE69531	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 032	YE69532	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 033	YE69533	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 034	YE69534	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 035	YE69535	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 036	YE69536	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	Arch 037	YE69537	Group 10	18-Aug-16 Bill Harris	100	115G05
Arch	Whitehorse Quartz	JEK 044	YE69244	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	Whitehorse Quartz	JEK 051	YE69251	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	Whitehorse Quartz	JEK 053	YE69253	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	Whitehorse Quartz	JEK 055	YE69255	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	Whitehorse Quartz	JEK 116	YE69316	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	Whitehorse Quartz	JEK 118	YE69318	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	Whitehorse Quartz	JEK 120	YE69320	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	whitehorse Quartz	JEK 122	YE69322	Group 10	18-Aug-16 Bill Harris	100	115G12
Arch	whitehorse Quartz	JEK 123	1E69323	Group 10	18-Aug-16 Bill Harris	100	115612
Arch	Whiteborse Quartz	JEK 124	1E09324	Group 10	18-Aug-16 Bill Harris	100	115612
Arch	Whitehorse Quartz	JEK 125	VE60325	Group 10	18-Aug-16 Bill Harris	100	115612
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Property	Mining Distr	Claim Type	Claim Name	Grant No.	Responsibility	Expiry Date	Claim Owner	% Owned	Map Sheet
Arch	Whitehorse	Quartz	JEK 128	YE69328	Group 10	18-Aug-16	Bill Harris	100	115G12
Arch	Whitehorse	Quartz	JEK 130	YE69330	Group 10	18-Aug-16	Bill Harris	100	115G12
Arch	Whitehorse	Quartz	AR 039	YE69039	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 040	YE69040	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 041	YE69041	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 042	YE69042	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 043	YE69043	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 044	YE69044	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 045	YE69045	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 046	YE69046	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 047	YE69047	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 048	YE69048	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 049	YE69049	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 050	YE69050	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 051	YE69051	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 052	YE69052	Group 10	22-Aug-16	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 053	YE69053	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 054	YE69054	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 055	YE69055	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 056	YE69056	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 057	YE69057	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 058	YE69058	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 059	YE69059	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 060	YE69060	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 061	YE69061	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 062	YE69062	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 063	YE69063	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 064	YE69064	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 065	YE69065	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 066	YE69066	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 067	YE69067	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 068	YE69068	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 070	YE69070	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 071	YE69071	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 072	YE69072	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 073	YE69073	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 074	YE69074	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 075	YE69075	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 076	YE69076	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	AR 077	YE69077	Group 10	22-Aug-16	Tom Morgan	100	115G12
Arch	Whitehorse	Quartz	Arch 039	YD58913	Group 10	24-Aug-16	Bill Harris	100	115G12
Arch	Whitehorse	Quartz	Arch 040	YD58914	Group 10	24-Aug-16	Bill Harris	100	115G12
Arch	Whitehorse	Quartz	AR 001	YD12517	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 002	YD12518	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 003	YD12519	Group 10	22-Jun-17	Tom Morgan	100	115G05

Property	Mining Distr	Claim Type	Claim Name	Grant No.	Responsibility	Expiry Date	Claim Owner	% Owned	Map Sheet
Arch	Whitehorse	Quartz	AR 004	YD12520	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 005	YD12521	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 006	YD12522	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 007	YD12523	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 008	YD12524	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 009	YD12525	Group 10	22-Jun-17	Tom Morgan	100	115G05
Arch	Whitehorse	Quartz	AR 061	YC18892	Group 10	20-Sep-17	Tom Morgan	100	115G05

Appendix 2Geophysical Interpretation Report

INTRODUCTION

Between August 10th and 17th, 2016, Peter E. Walcott & Associates Limited undertook a geophysical data review for over the Catalyst Property, located in the Kluane Lake Area, Yukon, for Group Ten Metals Inc.

The study was focused on regional government data sets, along with other historic digital data found within the Yukon government assessment files in an effort to develop targets similar to that of the Wellgreen PGM Deposit.

The compilation and data review is currently ongoing, thus only preliminary results and targets selections are presented here.

DATASETS, PROCESSING, FILTERING AND INVERSION

Datasets

Two regional government digital datasets were downloaded from the GSC DAP server using Geosoft Oasis Montaj. These consisted of a large regional survey block which provides 250 m line spacing though out the area of interest, and a smaller broader spaced Helitem block, which only partially covered the northwestern extent of the AR claim block.

In addition to the aforementioned data, a 2008 Fugro Dighem survey was also retrieved from the Yukon Assessment files. This data provided detailed magnetic and frequency domain EM coverage over the Wellgreen deposit and surrounding claim area, which also included part of the AR claims.

50,000 digital elevation model data was also downloaded from the NRCAN website, in order to derive a 3D elevation model of the area to aid with structural interpretation.

Processing

The respective databases with loaded in Geosoft Oasis Montaj where brief QCing of the data was undertaken.

Magnetics

The magnetic data from the regional coverage and 2008 Fugro survey was then gridded using a minimum curvature algorithm (Rangrid) with 35 and 15 meter cell sizes respectively.

The resulting grids were the subjected to a number of filtering methods; Reduction to the Pole, Calculated First Vertical Derivative, Gaussian High Pass Filter, and Tilt Derivative.

Within the resulting derivative grids, the regional data did show some herring bone effects.

DATASETS, PROCESSING, FILTERING AND INVERSION cont'd.

Electromagnetics

The electromagnetic datasets were comprised of two different types of EM data. The regional Kluane West data set was carried out in the time domain utilizing a Fugro Helitem system, whereas the 2008 survey utilized a frequency domain Fugro Dighem system.

The profile data of the respective components and datasets were reviewed onscreen in a profile form.

In the case of the time domain survey, the off time arrays for the X and Z components of the survey were compared and conductor axes noted. Previously calculated Taus were then gridded using a 50 m cell size, and compared with the magnetic response.

On the frequency domain survey, the respective in-phase and quadrature components were reviewed. The EM responses over the known ultramafic bodies due magnetic polarization currents were notable negative in the lower frequencies in-phase components. Thus windowing values below -5 ppm on the gridded 900 Hz coplanar in-phase component proved useful in highlighting areas of potential interest.

Inversion

A number of 2D and 3D magnetic inversions were undertaken on the respective magnetic datasets.

A regional inversion was carried out using both Geosoft Voxi along with UBC-GIF Mag3DInv inversion codes.

Both meshes were created using a 50 meter cell size, incorporating both topographic relief and relative sensor position. Two regional models were carried out utilizing the Kluane West data sets on the northern and southern claim blocks respectively.

In additional to the regional models, a detailed model using a 25 meter cell size was also undertaken over the AR block, where the Fugro data coverage permitted.

The results from the above models were then incorporated into Geosoft and Encom Profile Analysis for viewing.

Plate modelling was also undertaken using Electromagnetic Imaging Technology Maxwell software on a discrete conductor, noted on the northwestern corner of the property, observed within the time domain survey.

DISCUSSION OF RESULTS

The preliminary results of the ongoing interpretation of regional and historic airborne data sets collected over Group Ten Metals Inc. claims show a number of features of interest, some of which show excellent correlation with known ultramafic units.

While numerous other features exist, further analysis of the results are still required, and are beyond the scope of preliminary targets identified below.



Catalyst Group Regional Geology See Appendix for full map.



Catalyst Group Regional Regional Magnetics See Appendix for full map.

Target Area A (AR Claims) – A intense mag feature can be observed over the AR claim block. This feature is directly on trend with the Wellgreen deposit, some 6 kilometers to the east southeast, and is seen within the 3D magnetic model illustrated below.



Target Area A

3D Magnetic Susceptibility Model (> 0.04)



Target Area A 3D Magnetic Susceptibility Model (> 0.04) Overlaid with Negative In-Phase Response

A distinct negative in-phase response can also be observed on a number of flight lines in the south eastern portion of the claim block. While the intensity is significantly weaker than the Wellgreen deposit this feature does warrant follow-up. The negative in-phase response on the lower frequencies shows a good correlation to known ultramafic bodies within the historic survey area.

Target Area B (AR Claims) is situated in the central portion of the main AR claim block. This target is the on the convergence of multiple magnetic features. A limited response EM response can also be observed within the regional time domain EM (HeliTem) dataset.



Target Area B

3D Magnetic Susceptibility Model (> 0.04)

Target Area C (AR Claims) is a discrete EM conductor located on the northeastern flank of a linear northwesterly trending magnetic feature. The southern extents of the conductor are unknown as the feature tracks out of the extents of the Helitem survey.



Target Area C 3D Magnetic Susceptibility Model With Helitem Conductor



HeliTem Profile with Mag – Line 31455 Kluane West Block 3

(Z,X, TMI)

Target Area D (BC Claims) is situated on the northwestern extend of the BC claim block. The anomaly is truncated in the west by a large north-northeasterly trending structure, which also marks the eastern terminus of the magnetic feature associated with the Wellgreen deposit.



Target Area D 3D Magnetic Susceptibility Model

Target Areas E & F are two discrete anomalies located in northeastern corner of the BC block. The anomalies are potentially the same feature bisected and offset by a northerly trending structure.



Target Area E

3D Magnetic Susceptibility Model

SUMMARY, CONCLUSIONS & RECOMMENDATIONS.

The results of the compilation while not exhaustive due the preliminary nature of the interpretation do however show a number of features of potential interest.

Along with discrete features, a number of structures can also be readily observed within both the magnetics and topographic datasets.

A number of EM responses noted in the data should also be ground truth to attempt to locate their causative sources.

While the regional datasets do aid with the identification of target areas, detailed airborne magnetics and electromagnetics should be employed to follow-up select targets and to select new ones.

Ground geophysical methods, focusing on magnetic and induced polarization techniques, should be further employed to improve targeting.

A comprehensive compilation of historic data, partially done in this review, should be undertaken and merged with the resulting products from the above.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LTD.

Alexander Walcott, B.Sc. Geophysicist

Peter E. Walcott, P.Eng. Geophysicist

Coquitlam, B.C. August 2016

Appendix 3 Work Summary & Cost Statements



Geophysical Services

INVOICE

GST #104 159 298



NO. 5395

Date: August 17th, 2016

Net 10 Days

TO: GROUP TEN METALS INC.. 1450 – 789 West Pender St., Vancouver, B.C. V6C 1H2

Re: Catalyst Project, Yukon

-

1.	Geophysical Processing, Interpretation & Reporting		\$6,500.00
		GST	
			\$6,825.00

Please note interest will be charged at the rate of 1 1/2% per month on all overdue accounts.

605 RUTLAND COURT ¥ COQUITLAM ¥ BRITISH COLUMBIA ¥ CANADA ¥ V3J 3T8 ¥ TEL: (604) 939-0383 ¥ FAX (604) 939-3381

Appendix 4 Statement of Qualifications

I, Deborah Ann Rachel James, do hereby certify that:

- 1) I, Deborah Ann Rachel James of 11-3194 Gibbins Road, Duncan, British Columbia am selfemployed as a consultant geologist and have authored the geological part of this report.
- 2) I am a graduate of the University of British Columbia with a B.Sc. degree in Geological Sciences
- 3) I am a geologist with more than twelve years of experience in the Canadian Cordillera and ten years of experience in Yukon.
- 4) I am registered as a professional geoscientist with the Association of Professional Engineers and Geoscientists of B.C. #094996.
- 5) I have no direct or indirect interest in the Arch Project, which is the subject of this report.

DATED at Duncan, British Columbia, this 30th day of August, 2016

lefens

Debbie James Suite 11, 3194 Gibbins Road Duncan, BC, V9L 1G8