2023 YMEP Target Evaluation Final Report

on the

Catalyst Project, Yukon

23-043

Kluane Region
NTS Map Sheets 115G/05, 06 & 11
Latitude 61.26° North by Longitude 139.36° West
Whitehorse Mining District

BC 229 - 480	*YE64829 - YE65080*	BC 1 - 34	*YE64601 - YE64634*
AR 1 - 9	*YD12517 - YD12525*	BC 57 - 68	*YE64657 - YE64668*
AR 61	*YC18892*	AR 1 - 77	*YE69001 – YE69077*
ARCH 38	*YD58910*	ARCH 39 – 40	*YD58913 - YD58914*
ARCH 1 - 37	*YE69501 – YE69537*	BV 1 – 7	*YF42494 – YF42500*
PRY 1 – 19	*YF90356 – YF90374*		

Prepared for:

Stillwater CRITICAL MINERALS

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December 2023
Period of Work: Aug 26th; Aug 31st to Sept 5th, 2023

TRUEPOINT EXPLORATION

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Summary

This report summarizes the YMEP-funded 2023 Target Evaluation program on the Arch, Catalyst North, Arch Island, Catalyst Dump and Corky claim blocks, which comprise part of the Catalyst Property. The terrain features broad valleys, rocky ridges and rounded upland areas incised by steep creek canyons approximately 40 km northwest of Burwash Landing, Yukon Territory. The Catalyst Project consists of 450 claims, covering 8,694 hectares of the Kluane Mountains in the Tatamagouche, Quill and Arch Creek drainages southeast of the Donjek River.

The 2023 exploration program was performed between August 31st and 6th, 2023, including prospecting, mapping, rock sampling and imagery drone survey for a total of 16 person-days (6 TPX senior geologist, 5 drone pilots, and 5 helicopter pilot). During the field season, a total of 37 outcrops, subcrops and grab samples were described at Corky, Arc, Arc Island, and Catalyst North claims. Seventeen rock samples were collected from several lithologies for geochemistry assays and carbon capture mineralization potential analyses.

TruePoint Exploration's Glayton Dias also spent 20 (twenty) person-days researching historic data and literature, compiling historic and recent data, and editing the district and local geology maps.

Drone North has completed four days of flying above parts of the Catalyst North, Arc and Corky claims, collecting high-detailed aerial photos, and generating Digital Surface Models (DTM's).

Before this year, Stillwater completed preliminary geological mapping, contour soil, MIG geochemical sampling, rock sampling, and geophysics survey to advance several targets with the property.

The Catalyst property is situated in a triangle bordered by the Shakwak Valley, Burwash Creek and the Donjek River, approximately 35 km northwest of Burwash Landing and ~15 km south of the Alaska Highway, 285 km from Whitehorse. The Catalyst Property covers rocky ridges and rounded upland areas of the Kluane Ranges and broad valleys of Upper Quill, Tatamagouche and Arch Creeks on NTS map sheets 115G/05, 06 & 11. The project centered around Nickel Creek, underlain by the Wellgreen deposit at ~61.26° north latitude by Longitude 139.36° west longitude. The Corky claim block straddles Tatamagouche Creek, and the Catalyst North block is centered around Quill Creek.

In the last decade, as we advance the understanding of climate change's causes and effects, new technologies have been developed to mitigate the influence of fossil fuels on the atmosphere. Carbon capture and mineralization (CCM) refers to a process that involves capturing carbon dioxide (CO2) emissions from industrial sources or directly from the atmosphere and converting or storing them in mineral form. This approach aims to mitigate the impact of greenhouse gas emissions on climate change by permanently removing CO2 from the atmosphere. Mafic rocks, rich in minerals like olivine and pyroxene, have been studied for their potential to contribute to carbon capture and mineralization. Due to having large bodies of mafic-ultramafic rocks, the Kluane Ultramafic Belt has one of the most prospective lands on Earth to develop this method in a large-scale operation.

The choice of minerals is crucial, and geological factors influence their reactivity with CO2. For instance, basaltic rocks are known for their potential to react with CO2 and form stable carbonates. With a huge land package covered by mafic-ultramafic rocks, Stillwater is well positioned ahead of the time for the upcoming global demand for potential carbon capture and mineralization host rocks.

The Kluane mafic/ultramafic Suite hosts many magmatic nickel (Ni) - copper (Cu) - platinum group element (PGE) ±gold (Au) occurrences from Northern British Columbia through Yukon and into Alaska. The Kluane Suite intrusions are sill-like bodies that preferentially intrude the country rock sequences at or near the contact between the Mississippian to Permian (Skolai Group) Hasen Creek Formation (sediments) and Station Creek Formation (volcanic rocks). Many of the ultramafic sills have marginal gabbro phases at their bases and upper contacts that appear to be preferentially mineralized. The Kluane Belt Ni-Cu-PGE occurrences are particularly enriched in the rarer platinum group elements osmium, iridium, ruthenium, and rhodium.

Each block comprising the Catalyst project is currently interpreted to have different styles of mineralization and, thus, potential mineral endowment. The work history on these areas of interest has seen varying levels of cursory exploration; however, the bulk of the exploration activities performed to date primarily occurred during the 1950s-1980s. Since this time, Nickel Creek has demonstrated the effectiveness of transient electromagnetic surveying and the validity of adequate project-scale geochemical sampling and mapping to create drill-confident targets. Among the critical minerals listed in the inventory are multiple minerals in the Kluane Ultramafic Belt, including nickel, platinum group metals, copper, cobalt, and gold.

The 2023 YMEP-funded Target Evaluation on the Catalyst project successfully accomplished the objectives set out in the application. These objectives included prospecting and mapping specific areas within the claims, following up on known high-grade samples, and using drone imagery of portions of the property. As a result of office work and previous field work, Stillwater perceived an opportunity to stake nineteen additional claims in the area, continuous with Corky and Catalyst North claim blocks. The Catalyst project could not have been advanced quickly without the support of the Yukon Government’s YMEP programs.

1 Introduction

This report summarizes the 2023 Target Evaluation program on the Catalyst Project claim blocks, which includes the Arch, Arch Island, Catalyst Dumb, Catalyst North, and Corky claims, during the period of September 1st and 5th, 2023. The property is adjacent and on trend with the main Nickel Shäw[1] deposit – one of the world's largest undeveloped PGE-Ni-Cu – now being advanced by Nickel Creek Platinum.

Cursory work completed in 2023 involved preliminary geological mapping, rock sampling focused on Ni-PGE-Cu mineralization and carbon capture mineralization, and aereo photography. Overall, all work on the targets in modern-day has been relatively limited, and more work is needed to advance these targets, which surround the Nickel Shäw deposit to potentially further resource potential.

1.1 Underlying Agreements & Land Tenure

The Catalyst Project has 100% of its claims owned under the names of Stillwater Critical Minerals Inc. *or* Group Ten Metals (now *Stillwater Critical Minerals Inc.*). ***Table 1.*** *Claim Status* tabulates the current land package and expiry dates; ***Figures 1-5*** illustrate project and claims location details.

Table 1 - Claim Status

Claim Name	Grant Number	No. of claims	Current Expiring date	Owner
AR 61	*YC18892*	1	2025-02-11	Group Ten Metals Inc. - 100%
AR 1 - 9	*YD12517 - YD12525*	9	2025-02-11	Group Ten Metals Inc. - 100%
ARCH 38	*YD58910*	1	2024-02-11	Group Ten Metals Inc. - 100%
ARCH 39 – 40	*YD58913 - YD58914*	2	2024-02-11	Group Ten Metals Inc. - 100%
BC 1 - 34	*YE64601 - YE64634*	34	2025-02-11	Group Ten Metals Inc. - 100%
BC 57 - 68	*YE64657 - YE64668*	12	2025-02-11	Group Ten Metals Inc. - 100%
BC 229 - 480	*YE64829 - YE65080*	252	2025-02-11	Group Ten Metals Inc. - 100%
AR 1 - 77	*YE69001 – YE69077*	77	2025-02-11	Group Ten Metals Inc. - 100%
ARCH 1 - 37	*YE69501 – YE69537*	37	2025-02-11	Group Ten Metals Inc. - 100%
BV 1 – 7	*YF42494 – YF42500*	7	2025-02-11	Group Ten Metals Inc. - 100%
PRY 1 – 19	*YF90356 – YF90374*	19	2024-09-05	Stillwater Critical Minerals - 100%

[1] Formerly the Wellgreen deposit.

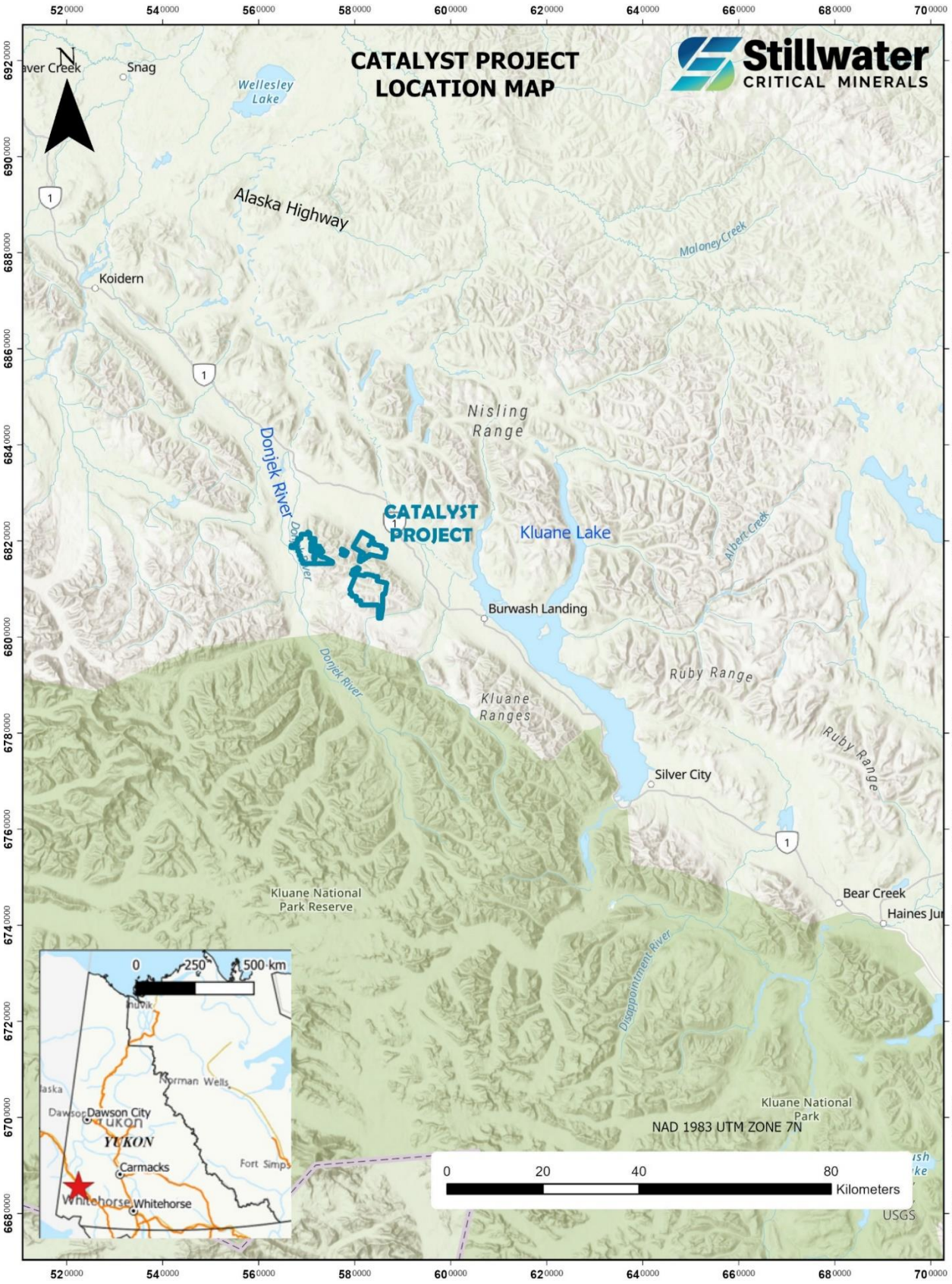

Figure 1: Catalyst Project location map.

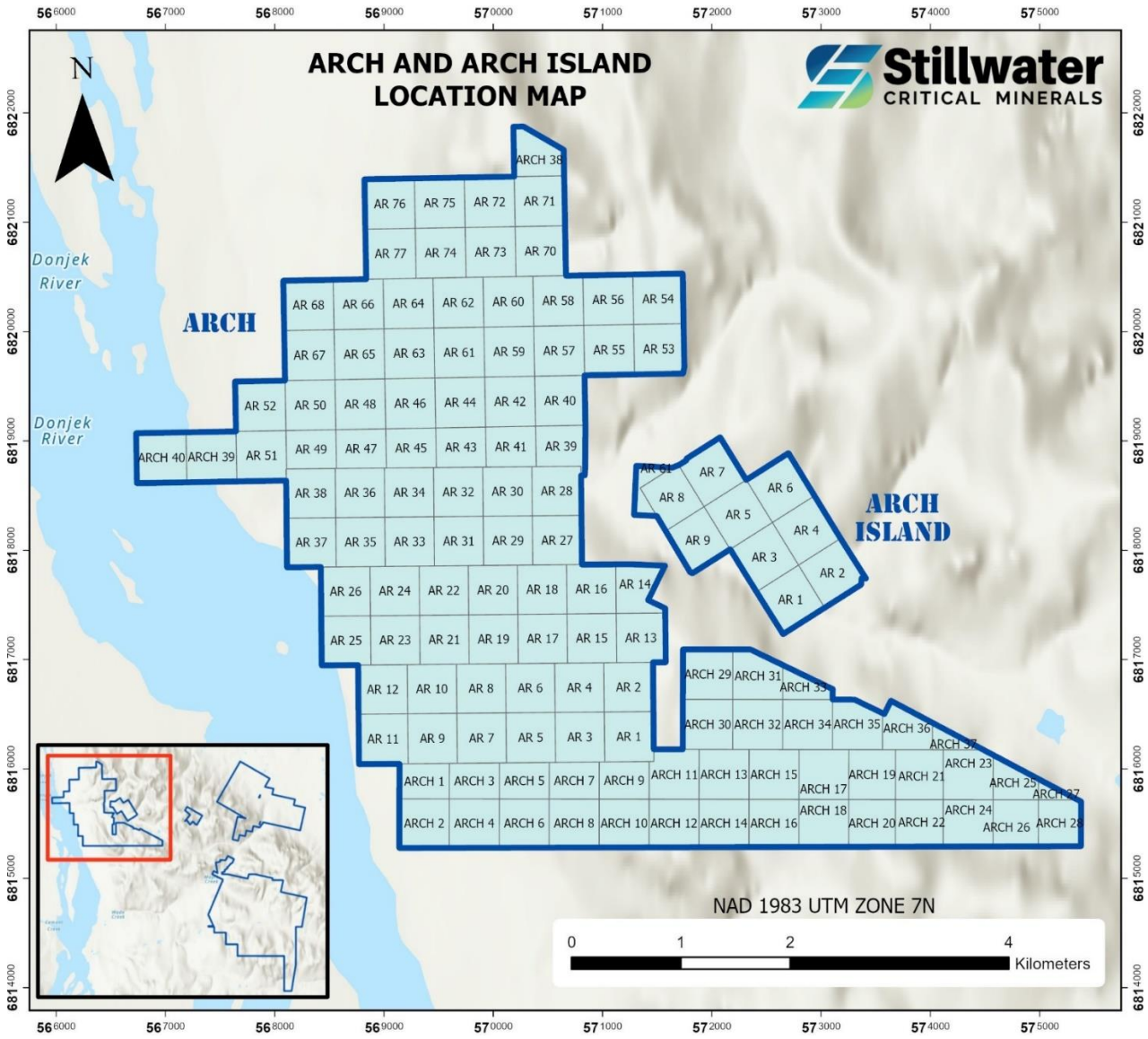

Figure 2 - Arch and Arch Island claim blocks and its respective claim labels.

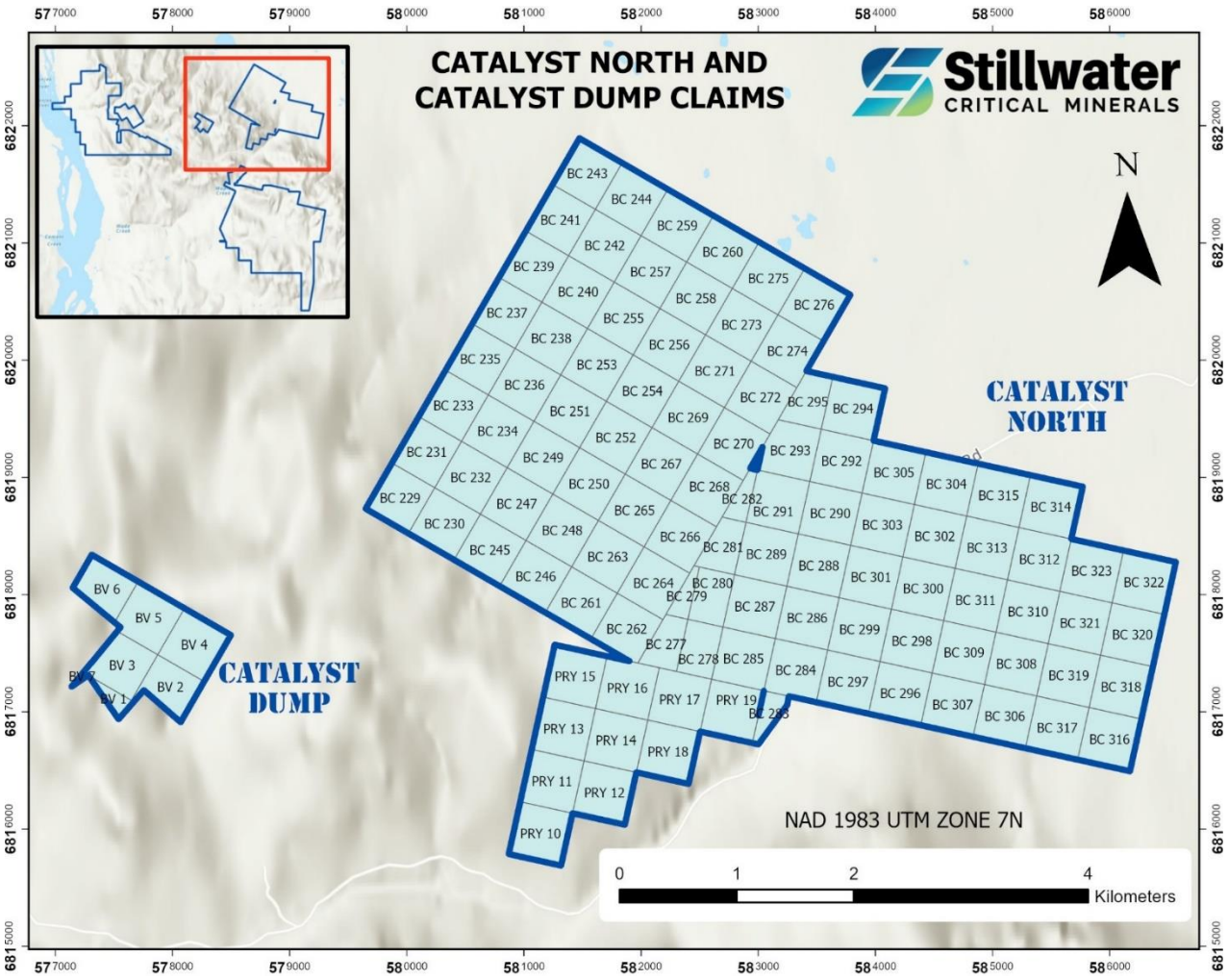

Figure 3 - Catalyst North and Catalyst Dump claim blocks.

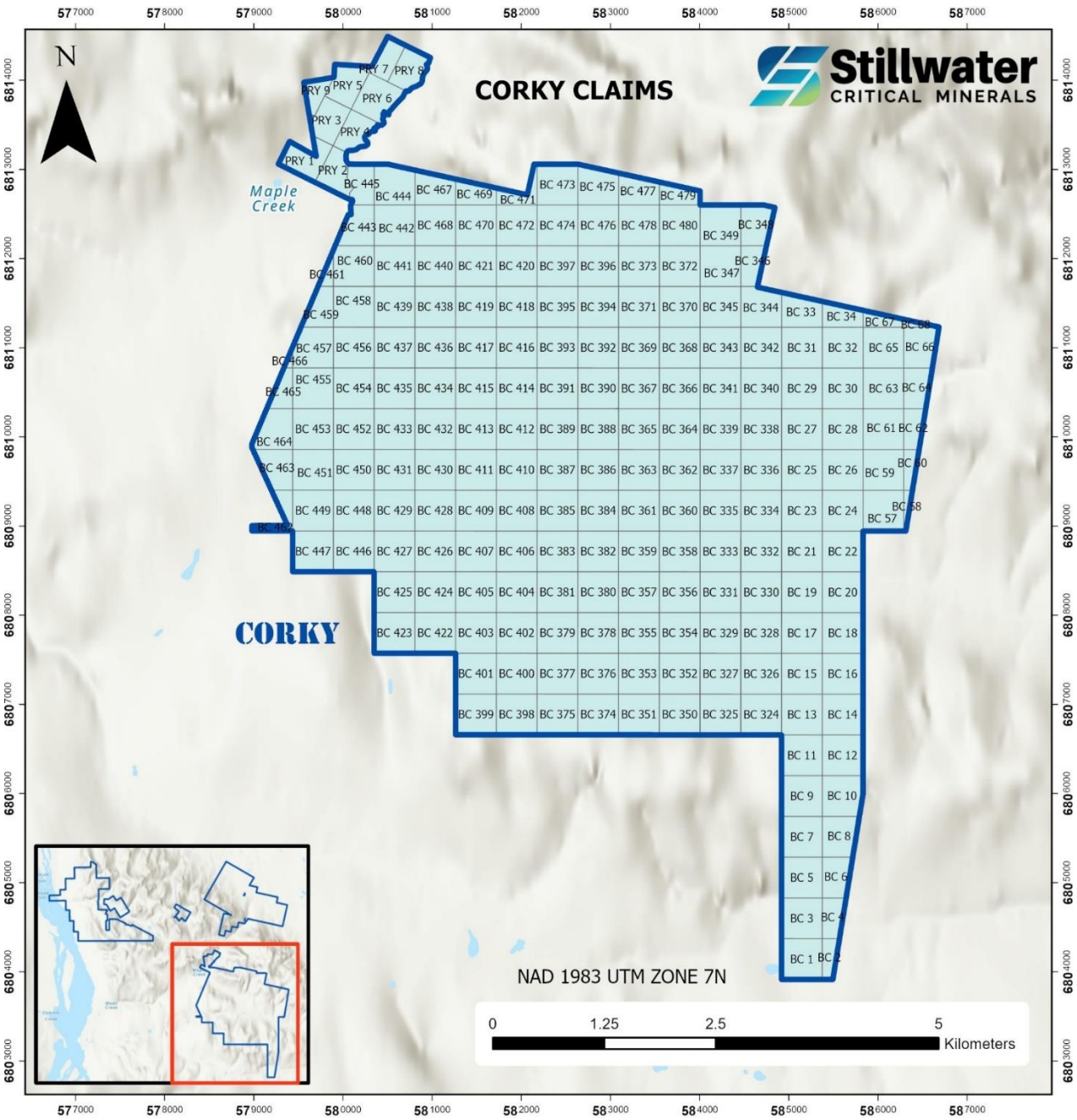

Figure 4 - Corky claim block.

1.2 Location & Access

The Catalyst Project is located in the Shakwak Valley ~35 km northwest of Burwash Landing and ~15 km south of the Alaska Highway, 285 km from Whitehorse. The Catalyst Property covers rocky ridges and rounded upland areas of the Kluane Ranges and broad valleys of Upper Quill, Tatamagouche and Arch Creeks on NTS map sheets 115G/05, 06 & 11. The project is centered around Nickel Creek, which is underlain by the Nickel Shäw deposit at ~61.26° north latitude by Longitude 139.36° west longitude (refer to ***Figure 1***). The Corky claim block straddles Tatamagouche Creek, the Catalyst North block is centered around Quill Creek and Arch Island is centered around Arch Creek.

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 impassable. 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 5 - Gravel road at Corky Claim Block.

1.3 Physiography & Climate

The project is situated 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 y.a.) 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.

Precipitous canyons along the tributaries of the Donjek River expose extensive rock faces and steep talus slopes. Forest cover on the property is light, with treeline at approximately 1200m 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.

The Donjek River area features a northern interior climate with long cold winters and low annual precipitation. The exploration season extends from early June until late September with occasional thunderstorms and a few intervals of warm dry conditions.

Figure 6 - Physiography of the area with elevated mountains and deep valleys. Moss covers most of the area.

2 Property History & Known Zones

The area around the Catalyst project has been explored periodically since the early 1950's with the discovery of the Nickel Shäw mineral deposit on upper Quill Creek (MINFILE 115G024) that initiated an exploration boom through the Kluane Ranges focused on rocks of the Kluane Ultramafic Belt. The Catalyst Project includes the Corky, Catalyst North and Arch Island, Arch and Catalyst 'Dump' claim blocks which surround the Nickel Shäw Deposit. All the claim blocks but Catalyst Dump were worked on during this program and are described individually in the following sections. An aerial reconnaissance was done at Catalyst Dump. ***Table 2*** summarizes the known work history on the Catalyst project, which is primarily comprised of very early-stage work; this information is primarily based on the YGS's MINFILE database (Deklerk and Traynor, 2008).

Table 2 - Property Historic work

Year	Work	Results
1952-54	Staked by Conwest Exploration Company Ltd. and Teck Exploration Company. Geological mapping, prospecting.	Two copper-nickel showing identified. Musketeer (now Teck) and Conwest showings (Walker, 1955 and Frohberg, 1953).
1953-1955	Geological mapping and an SP survey by Callinan Flin Flon Mining Ltd. uncovered a gabbro body northwest of Maple Creek (Davis, 1953 and Allan, 1955).	
1955	Ground EM and Magnetic surveys over the Teck and east of Conwest Showings by Teck along Arch Creek.	Linear magnetic anomaly over buried ultramafic sill (Clarke, 1956).
1965-66	P. Versluce & Assoc. located and staked a copper occurrence in Nikolai basalts on Ram Creek at the head of Upper Quill Creek. The	Mineralization consisted of chalcocite, bornite and chalcopyrite disseminated and in veinlets associated with chlorite and serpentine in sheared

Year	Work	Results
	prospect was explored by bulldozer trenching and diamond drilling by Newmont Mining Corp. in 1967.	or crumbled basalt (Campbell, W. 1981). Bulldozer trenching in 1967 exposed mineralization at "Showing 3" with copper values of 2.02% over 132 ft. and at "Showing 6" with copper values of 2.21% over 40 ft. (Assessment #013065, Newmont Mining Corp. & Quill Creek Mines Ltd). Two diamond drill holes (1967) intersected two mineralized zones, one averaging 0.3% Cu over 5.8m, and the other averaging 0.89% Cu over 2.4m (Campbell, 1981).
1967	Geological mapping, magnetometer and EM-16 surveys on Arch Creek by J.B. O'Neil and C. Gibbons.	Linear magnetic anomaly (Hilker, 1967).
1972	Geological mapping, geochemical sampling, magnetometer, and EM surveying by the Nickel Syndicate.	No results available. Strong magnetic high and several weak or broad conductors reported in Yukon MINFILE (Deklerk, 2009).
1986	Area was restaked and road building was carried out by Columbia Mining Ltd. (Deklerk, 2009).	
1986-88	Geochemical sampling in 1986 by Kluane Joint Venture on large grid extending along the north side of Arch Creek from the Wellgreen property to Serpentine Creek. Grid lines 100m apart with samples at 50m intervals. In 1987 magnetometer and VLE-EM surveys over same grid. One 85.6m drill hole in 1988 through Donjek sill.	Poor sampling conditions towards the west end of the grid (Serpentine Creek area) because of permafrost and deep overburden. Weak, spot anomalies in Pt, Pd, Cu, Ni and Au. EM conductors and linear magnetic features. Grid does not cover the Conwest or Teck Showing but does overlap part of the 2013 Arch grid. Weakly anomalous values from drillhole (Eaton, 1987).
1987	G. Mogensen completes bulldozer trenching in 1987 in conjunction with placer mining on Catalyst North ("Arby" showing).	Exposed propylitically altered mafic volcanic rocks of the Permo-Pennsylvanian Station Creek Formation; claims expanded following year to east and west.
1988	Ground magnetic survey and 30 soil samples close to mouth of Arch Creek by Lodestar.	Linear magnetic anomaly coincident with anomalous soils. Anomalous Pt, Pd and Au. 7 samples >20ppb Au, 7 samples >50 ppb Pt and 12 samples >20ppb Pd (Davidson, 1989).
2000	Geochemical sampling and trenching around Teck showing by Auterra Ventures Inc.	Detailed trench mapping and consistent sampling over the sill (Vanwermeskerken, 2001).
2001	Rock sampling and 11 km of magnetic and VLF EM surveys by around the Teck showing.	Anomalous magnetic linear 60m north of the Tech showing. VLF EM was less responsive and two weak axes appear to border the magnetic anomaly (Brickner, 2002).
2013	Compilation of previous work, chip sampling at Teck showing. Testing of different biogeochemical and geophysical surveys over a 4 line-km grid centered on the Teck showing. Work for Bill Harris and Tom Morgan. Claims were optioned to Ashburton Ventures (now Group Ten) late in the year.	The best chip samples were in altered ultramafic close to contact with Station Creek. Spruce bark samples performed the best of the 4 methods tested. Projected sill location was traced, and new anomalies were detected. ELF geophysical survey was better than the HLEM but needs further processing (James, 2014).
2016	Geophysical data compilation and interpretation by Walcott & Assoc. summarized in a Geophysical Interpretation Report (James, 2016).	

Year	Work	Results
2018	Longford Exploration Services collected a total of 167 soil samples on contour soil lines targeting favourable geology and airborne geophysical anomalies above Quill and Arch Creeks. Also initiated geological mapping, rock sampling (27 samples) and prospecting of the Arch, Upper Quill and Tatamagouche Creeks areas.	Uplands traverses highlight potential for substantial copper mineralization in the Nikolai basalts. On the Arch Creek block target areas "A & B" summarized by D. James (2016) remain valid, target area A is the intense magnetic anomaly evident on the airborne and surface magnetic maps outlining a peridotite sill covered in part by the Arch Island claims.
2019	Longford Exploration Services completed work on Arch and Corky properties. 100 soil samples on contour and grid lines were collected above Arch and Quill Creeks, targeting reprocessed aeromagnetic anomalies outlined in 2017-18. 17 rock samples were collected, including 14 samples from the Ram showing and newly discovered shear zone on Corky. 3 more rocks were collected during traversed in the Arch Creek area.	At the Ram showing historic results along with new rock sample assays indicate potential for substantial copper mineralization in sheared Nikolai basalts. The best assays from the historic Ram showing included 2.14% Cu from a 15m grab chip sample, and 2.29% Cu from a 5m grab chip sample. The Ram showing is contained within a mag low. A second zone of copper mineralization was located downstream of the Ram showing associated with calcite veining along a sheared contact between basalt and gabbro, proximal to a limestone unit, with two rock grab samples assaying 6.75% and 1.66% Cu. Samples demonstrate a 650 m strike-length so far. The structure appears as a magnetic low on the regional geophysics which extends for a total potential strike length of ~2.9 km. One traverse over the upper portion of Arch Creek canyon located an ultramafic sill in outcrop on the north rim of the canyon and a grab sample assayed 2365ppm nickel, 286 ppm copper and 113 ppb PGE+Au.
2020	In March 2020, Pioneer Aerial Surveys carried out a UAV-MAG survey consisting of 108.32-line kms over the Ram and newly discovered shear zone south of Ram, both in the north half of the Corky property.	The follow-up UAV-MAG survey outlined linear magnetic lows corresponding to higher grade copper samples collected in 2019. This feature may extend for up to 1.8km (Longford, 2020).
2020	Longford Exploration Services carried out a small program over the Arch and Catalyst North properties in August. On Arch, 1 test line consisting of 16 MMI samples were collected over a strong aeromagnetic anomaly in the north-central part of the property; 5 rock samples were collected during one traverse, also in the area of the strong mag signature; and 4 heavy mineral concentrate samples were collected including one in Upper Arch Creek, one in Lower Arch Creek, one below Arch Island claim block and one below the Wellgreen main ultramafic sill. Two days spent on Catalyst North included 1 line of 21 MMI samples testing effectiveness in a permafrost area underlain by the main aeromagnetic anomaly through the centre of the claim block. The	The MMI test line over the aeromagnetic mag anomaly in the north-central area of the Arch claims returned elevated response ratios for copper and nickel and unexpected strong response ratios for zinc. Indicator minerals from the heavy mineral concentrate (HMC) samples yielded 23 grains of VG from the sample taken in Upper Arch Creek above the canyon. Of the 23 grains of VG, 8 were classified as pristine, indicating possible close to source. The HMC sample from below the Arch Island claims yielded 8 VG grains of which 5 were classified as pristine and possible close to source. The mapping traverse on Arch was targeting the aeromagnetic anomaly that trends on to the Arch claim block, along strike of the ultramafic sill that outcrops further east on the Arch Island Claims. Mapping exposures along Quill Creek, adjacent to the road, in the vicinity of the linear airborne mag anomaly

Year	Work	Results
	second day included a mapping traverse along the Wellgreen road, collecting 3 rock samples.	returned one anomalous sample (2064248) assaying 996 ppb Au from a narrow shear zone in mafic volcanics of the Station Creek Formation. The mafic volcanic at this location was not magnetic, but the abundant red-brown fractures cutting the rock are moderately magnetic.
2021	Rodrigo Diaz of Global RSG prepared a study of Remote Spectral Geology Target Definition Generation Project – Ni-Cu-PGE Kluane District, covering Catalyst, Spy, Ultra & Ellen-Pacer Projects for Group 10 Metals. The focus of the study was for the definition-generation of zones of interest-targets with ranking and priority throughout the district and project areas.	The RSG Target Definition Generation Project is a detailed study of the Ni-Cu-PGE Kluane District. It includes: **1)** A structural interpretation of remote sensing lineaments where the interpreted NW, NE and NNW structures are consistent with the geophysical mega-lineaments. **2)** Generated images of spectral anomalies of the mineral alteration zones including Iron Oxides/Limonite-Goethite & Iron Oxides/Hematite would correspond partially to the oxidation of magnetite associated with the mineralized systems and the mafic-ultramafic intrusive bodies and related volcanics. The Undifferentiated Clay-Sericite would correspond to secondary/supergene clays. **3)** Zones of Interest-Targets: 133 for Ni-Cu-PGE, 12 for Porphyry Copper-Epithermal and 8 undifferentiated
2022	Group Ten Metals accomplished Mobile Ion Geochemistry soil sampling, prospecting, a ground magnetic, and a VLF-EM	The MIG soils sampling expanded the geochemical anomalies between known zones and beyond into new areas. The geophysics surveys were added to the existing layers of data over this project and generated new targets for future exploration.

Figure 7 - Photo showing 1967 bulldozer trenches on the Ram showing, Upper Quill Creek.

2.1 Arch and Arch Island

The Arch Creek area has been explored since 1952 when claims were staked at the head of the creek as a possible extension to the Wellgreen deposit. Exploration in 1953 discovered copper nickel mineralization in an ultramafic sill and a series of samples taken along the hanging wall of the peridotite sill assayed 2.03% Ni & 1.79% Cu for a length of 38 ft. and an average width of 3.5 ft (Hilker, B., 1967). This occurrence is 2 km southeast of the Catalyst Arch Island block and 1967 geophysical surveys by Kluane Nickel Mines Ltd. extended the grid over the northeast corner of the Catalyst property. A prominent magnetic anomaly was identified which is also seen on the more recent YGS aeromagnetic map.

The Musketeer MINFILE occurrence (115G026) located between the Arch Island and the main Arch claim block located on claims held by Nickel Creek Platinum Corp., includes 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 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 (James, 2016). 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 (James, 2016).

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 gabbro 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 (James, 2016).

2.2 Corky

Historic occurrences in the Corky claim area include the Ram showing (MINFILE 115G021). In 1965-1966 P. Versluce & Assoc. located and staked a copper occurrence in Nikolai basalts on Ram Creek (MINFILE 115G021) at the head of Upper Quill Creek. The prospect was explored by bulldozer trenching and diamond drilling by Newmont Mining Corp. in 1967 (*Photo-plate 2.*, below). Mineralization is present as chalcocite, bornite and chalcopyrite disseminated and in veinlets associated with chlorite and serpentine in sheared or crumbled basalt (Campbell, W. 1981). Bulldozer trenching in 1967 exposed mineralization at 'Showing 3' with copper values of 2.02% over 132 ft. and at 'Showing 6' with copper values of 2.21% over 40 feet (Newmont Mining Corp., 1967). Two diamond drill holes (1967) intersected two mineralized zones, one averaging 0.3% Cu over 5.8m, and the other averaging 0.89% Cu over 2.4m (Campbell, 1981).

Preliminary geochemical sampling by Group Ten reported >5% Cu in grab rock samples at the Ram Showing and in 2019 a new showing was discovered a kilometer south which has reported up to 6.75% copper in-situ.

2.3 Catalyst North

Very little work has been completed on the Catalyst North block. The claims were originally staked as the Arby claims in 1986 by G. Mogensen, who performed bulldozer trenching in 1987 in conjunction with placer mining. In 1987, the claims were tied onto east and west and explored with cursory geochemical sampling. Bulldozer trenching exposed propylitically altered mafic volcanic rocks of the Permo-Pennsylvanian Station Creek Formation. Preliminary geochemical sampling by Group Ten has reported anomalous Cu, Ni and Au in soils and up to 1.9% Cu in rock samples.

Sampling from a mafic/ultramafic sill assayed 2.03% Ni & 1.79% Cu for a length of 38 ft. and an average width of 3.5 ft (Hilker, B., 1967). This occurrence is 2 km southeast of the Catalyst Arch Island block and 1967 geophysical surveys by Kluane Nickel Mines Ltd. extended the grid over the northeast corner of the Catalyst property. A prominent magnetic anomaly was identified which is also seen on the more recent YGS aeromagnetic map.

2.4 Catalyst Dump

No record of historic exploration has been found at Catalyst Dump to date.

3 Regional and Property Geology

3.1 Regional Geology and Tectonic Setting

The regional and property geology is summarized from the Arch Creek (Catalyst Property) assessment report by D. James, 2016 and from Metallogeny of the Kluane Ranges by R. Carne (2003). The property is located 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 (***Figure 8***). 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 glassy 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 270^{o} to 310^{o}. 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 kilometers. The Duke River Fault is also near vertical and joins the Denali Fault southwest of Haines Junction. Between the major faults small scale faults 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 oldest formation in the Skolai Group is the Station Creek volcanic and volcaniclastic rocks with increasing sedimentary content in the upper half (Carne, 2003). The Station Creek Formation includes shale siltstone, limestone, and argillite 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 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 sequence than the ultramafic sills and may be feeders to the Nikolai volcanics. Maple Creek gabbro can be distinguished from Kluane gabbro 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 likely sources of the Nikolai volcanics are magma chambers represented by the Kluane mafic/ultramafic sills and feeders represented by the Maple Creek Gabbro.

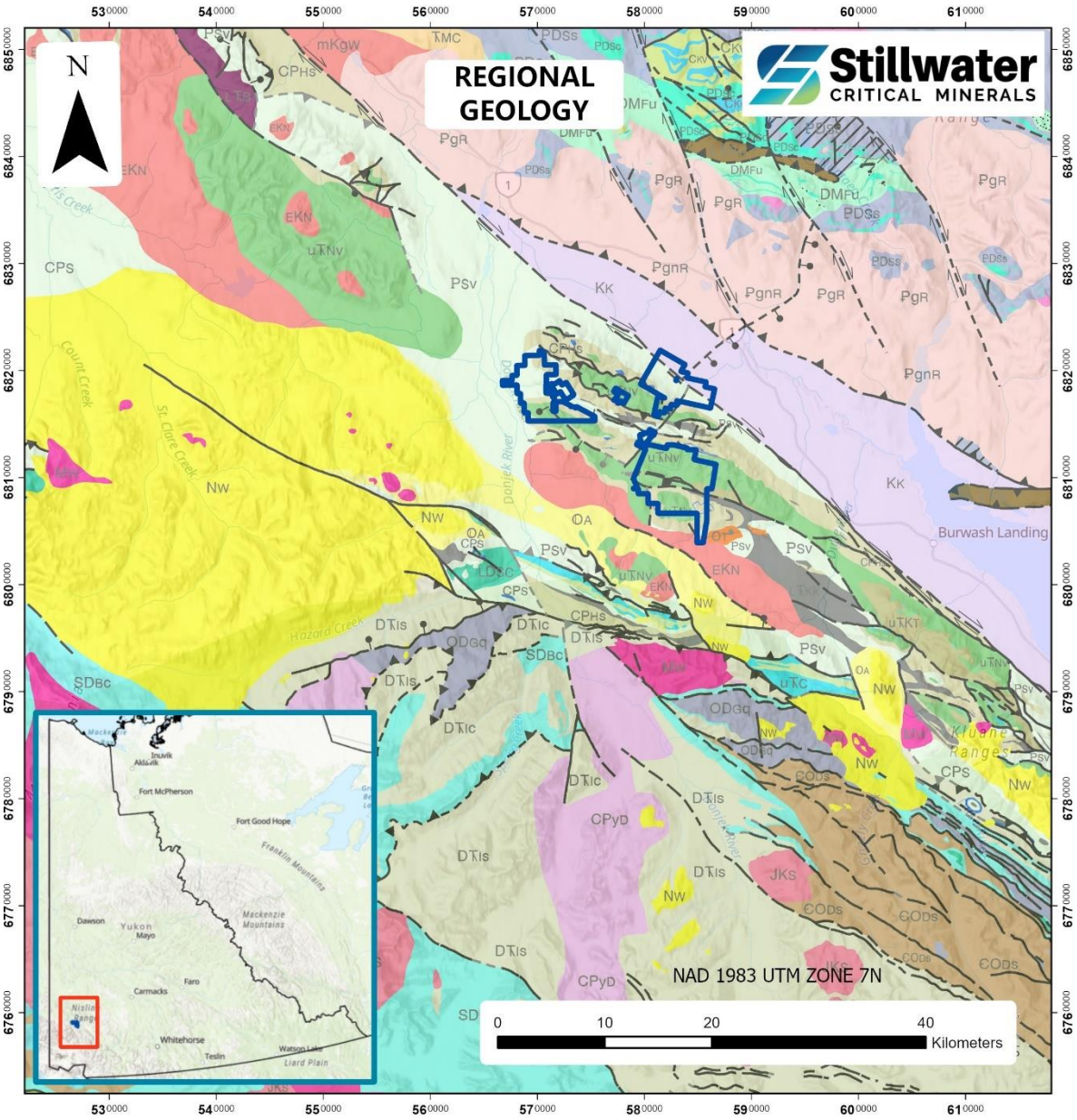

Figure 8 - Regional geology (after Gordey (2003) and Israel (2005)).

Rock units found in the project are described in the table of formations summarized in ***Table 3***.

Table 3 - Geological Formations in the region.

Period	Units
Q – Quaternary	Unconsolidated alluvium, colluvium and glacial deposits.
NW, Miocene to Pliocene Wrangell Lavas	NW1 - Extensive volcanic unit, volumetrically significant but not associated with mineralization. Occur on the southwest side of Wrangellia overlapping onto the Alexander Terrane. Abundant west of the Donjek River and typically form piles 400-1000m thick. Mafic to felsic volcanic rock with NW2 – volcanic conglomerate.

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

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

3.2 Property Geology

Prior to this program, no comprehensive property-scale mapping was available for the Catalyst Project. Preliminary mapping has been completed in recent years during prospecting traverses, but no compilations of previous works have been accomplished prior to this report. Several historic maps were downloaded from MINFILES and georeferenced, and information as waypoint descriptions, lithologies, and structures were digitized and used as reference in this report, along with Yukon Geology database, and district and regional scale historic works as Israel (2004), among others.

On the Catalyst Project, the oldest units are the Pennsylvanian-Permian Skolai Group consisting of Station Creek volcanics overlain by Hasen Creek sediments and Triassic Nikolai mafic volcanics. Intrusions of upper Triassic age include ultramafic-mafic sills and dykes of the Kluane mafic-ultramafic Suite mainly peridotite or gabbro and Triassic Maple Creek gabbro. The younger Kluane Range Intrusive Suite consists of granodiorite, diorite and quartz diorite sills, dykes, and plugs. The older units are folded in a series of anticlines and synclines along the folding axis at the dominant 270-310 deg. trend parallel to the Shawkat Valley. At lower elevations in the Tatamagouche and Quill Creek valleys the bedrock is locally overlain by Quaternary unconsolidated glacial, glacio-fluvial, and glacio-lacustrine deposits.

The oldest unit, the Station Creek Formation consists of augite basaltic and andesitic volcanic flows that are succeeded upwards by fine to medium grained tuff (Carne, 2003). Volcanic agglomerate and breccia are locally present and discontinuous beds of argillite and limestone occur throughout. The upper portion of the formation is transitional with overlying Hasen Creek Formation with the contact informally put at the cessation of pyroclastic deposition (Campbell, 1981). Sedimentary and volcanic textures suggest a restricted marine basin as the environment of deposition for the Station Creek Formation.

The Hasen Creek Formation consists of a fine grained clastic lower member composed of grey to black shale, cherty argillite, chert, and siltstone overlain by argillaceous limestone and massive buff-coloured bioclastic limestone containing narrow beds of reddish-brown conglomerate, greywacke and sandstone. Thin basaltic flows, breccia and tuff are locally present.

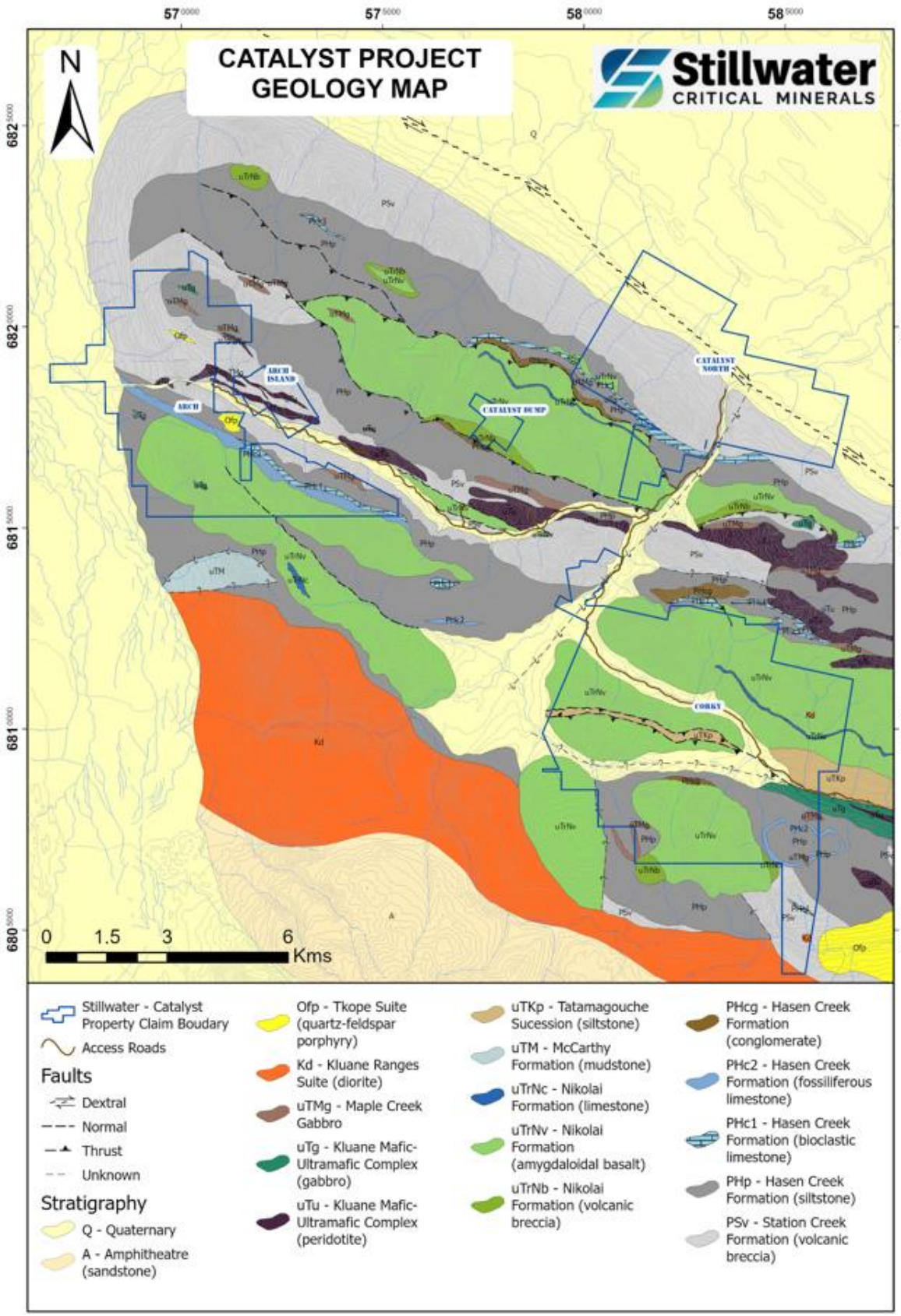

Figure 9 - Property geology.

The overlying Nikolai basalt flows can be divided into fine diabase-textured flows, porphyritic flows with or without amygdules, and very fine-grained amygdaloidal lava flows (Carne, 2003). Phenocrysts include plagioclase, augite, olivine, and hornblende in a groundmass of plagioclase, augite, magnetite, ilmenite and volcanic glass. In the upper Quill Creek area Nikolai basalt flows are dark green to reddish-purple, aphanitic to very fine grained and occasionally porphyritic with vesiculas and veinlets of chlorite, calcite and epidote (Campbell, 1981). Minor beds of chert, shale, argillite, and limestone of the Hasen Creek Formation are interbedded in the basalts.

Intrusive rocks consist of the Kluane Mafic/Ultramafic Suite, primarily sills of peridotite, gabbro, dunite and serpentinite exposed in outcrop along cliffs of the Arch Creek and Upper Quill Creek canyons. Gabbroic and diorite dikes were also seen in the placer cut and canyon walls along Arch and Quill Creeks, part of the Cretaceous Kluane Ranges Intrusive Suite that includes grey, medium to coarse grained, biotite hornblende granodiorite, quartz diorite, diorite and quartz monzonite.

4 Mineralization-Style & Deposit-Type

There are four main types of Ni-Cu-PGE mineralization in the Kluane Mafic/Ultramafic Belt found in all the mineralized sills from southeast Alaska to northern B.C. (from 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; and
4. Disseminated and lesser net textured or massive sulphides in the ultramafic core of each sill.

The ultramafic sills preferentially intruded along the contact between the Station creek and overlying Hasen Creek formations of the Skolai Group. The most common sulphide minerals are pyrrhotite, pyrite, pentlandite and chalcopyrite; the common oxide minerals are magnetite and ilmenite. ***Figures 10 and 11*** illustrate a typical, simplified mafic/ ultramafic sill with associated mineralization. The best-known deposit and the sole producer in the belt is Nickel Creek Platinum's Nickel Shäw Deposit (MINFILE 115G024). Here, the platinum group metals combine with As, Sb, Te, Bi, Ni, S, Co and Fe to form minerals and alloys. Sperrylite ($PtAs_2$) and Sudburyite (PdSb) are two of the more abundant minerals (Hulbert, 1997). The Nickel Shaw deposit contains 1.8 billion pounds of nickel, 1.1 billion pounds of copper, 5.7 million ounces of platinum group metals ("PGM's") and 107 million pounds of cobalt in the measured and indicated categories (www.nickelcreekplatinum.com/Home/default.aspx, viewed Feb 6, 2023).

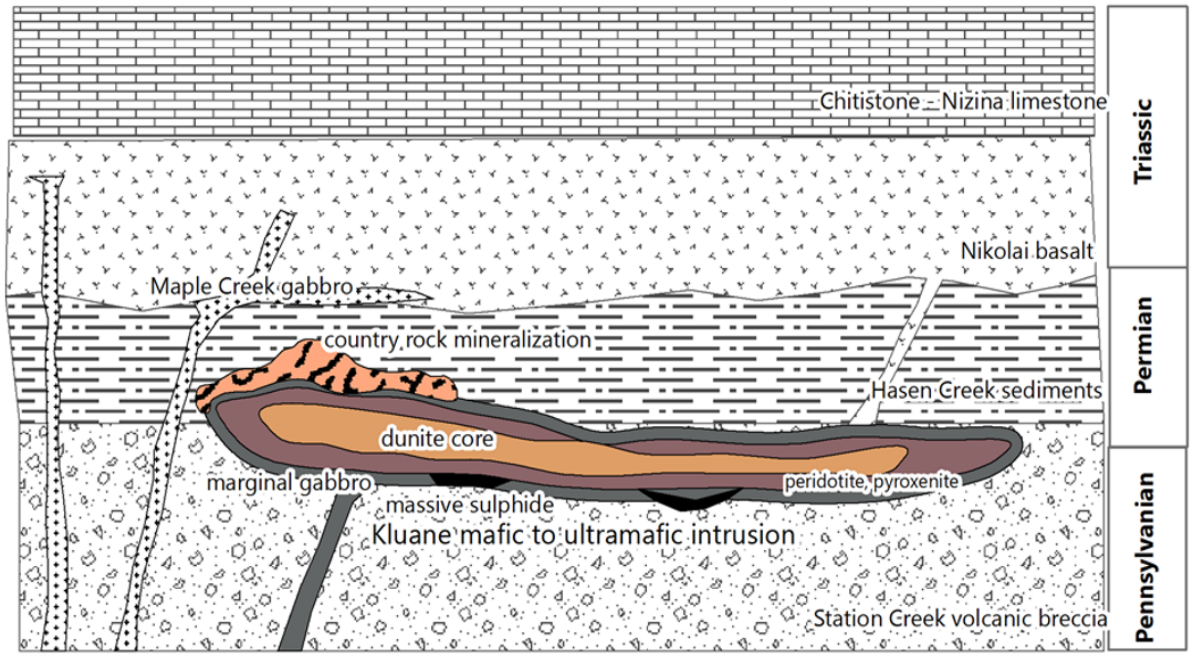

Figure 10 - Deposit model for the Kluane Belt (modified from Hulbert, 1997).

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

(1) Skarn ores developed in Permian carbonates;
(2) Ni-rich ores within the footwall in the White River sill;

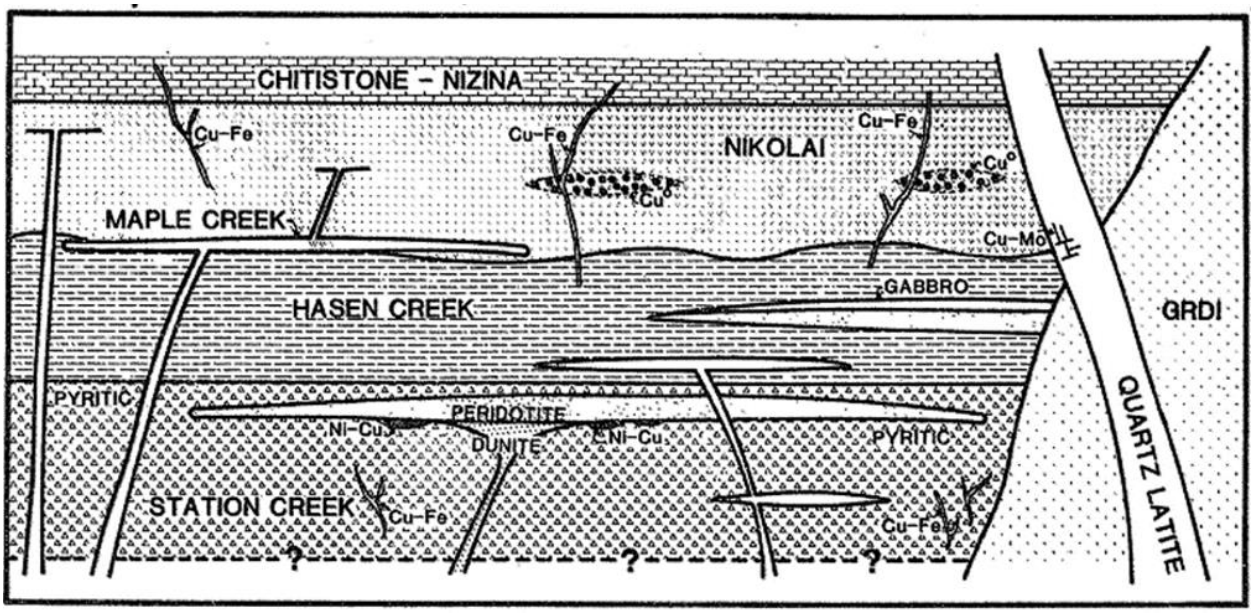

Figure 11 - Mineralization and Stratigraphy in the Kluane Ranges (Campbell 1981).

(3) Cu-rich mineralization in shear zones and deformed intervals of Nikolai basalt, including the Ram showing; and
(4) Cyprus type volcanogenic massive sulphide (VMS) mineralization in mafic volcanic rocks.

4.2 Property Mineralization

In the Arch Creek area sills of the Kluane Mafic/Ultramafic Suite have the potential to host Cu-Ni-PGE mineralization. The Airways sill 1.4km southeast of the Catalyst Arch Island claim block, was sampled with significant Cu-Ni mineralization reported in the history section. The aeromagnetic anomaly outlining the Airways sill continues northwest across the Arch claim block.

Copper occurrences in the district occur in Nikolai basalt and/or Maple Creek Gabbro including five types of mineralization documented on the Catalyst properties:

(1) dispersed chalcocite in amygdules;
(2) native copper as disseminated flecks and fibres in massive basalt;
(3) native copper, chalcocite, and malachite with minor bornite, cuprite, chalcopyrite, azurite associated with quartz, calcite and epidote veining and alteration in shear zones and amygdaloidal basalt; and
(4) chalcocite in either fine grained sooty form or as veinlets with minor bornite and chalcopyrite associated with chlorite and serpentine in sheared or crumbled basalt (Campbell, W., 1981). Type 4 mineralization is exposed in bulldozer trenches at the Ram Creek showing;
(5) skarn associated with the intrusion of the Maple Creek Gabbro into calcareous sediments of the Hansen Creek Formation (see Figure 12).

Figure 12 - Skarn sample from Skarn Showing, at Catalyst North, grading 2.2% Cu.

5 Carbon Capture Mineralization

Carbon capture and mineralization (CCM) is a process that involves capturing carbon dioxide (CO2) emissions from industrial sources and/or atmosphere, dissolving it in water and injecting into the subsurface where it reacts with favorable rock formations to form solid carbonate minerals via natural processes in about 2 years (accordingly to *Carbfix* website). This approach is considered a form of carbon capture and storage (CCS) but with an emphasis on transforming the captured CO2 into solid minerals.

Carbonated water is acidic, reacting with rocks underground and releasing available cations such as calcium, magnesium, and iron into the water stream. Over time, these elements combine with the dissolved CO2 and form carbonates filling up the empty space (pores) within the rocks. The carbonates are stable for thousands of years and can thus be considered permanently stored. Recently research determined that at least 95% of the injected CO2 mineralizes within two years, much faster than previously thought.

The injected carbonated water is denser than the surrounding water in the geological formation and therefore has the tendency to sink after it has been injected. This differs from more conventional methods of carbon capture and storage, which depend on cap rock to prevent possible leakage of gaseous CO2 injected into deep formations. Young mafic/ultramafic rocks are highly fractured and porous such that water seeps easily through the interconnected cracks and empty spaces underground.

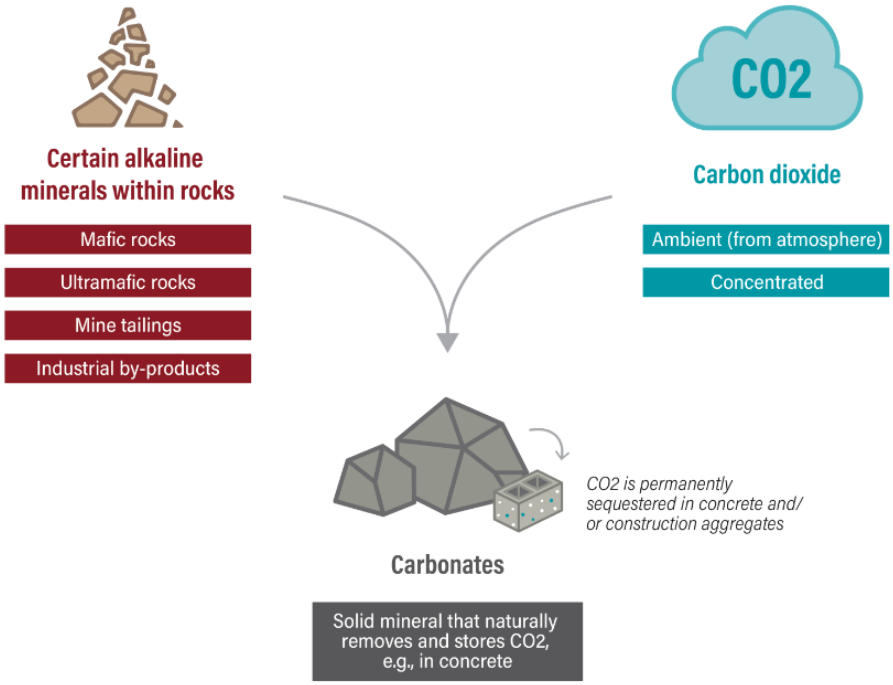

Figure 13 - Carbon mineralization reaction. Source: World Resources Institute website.

Basaltic rocks are highly reactive and contain the elements needed for permanently immobilizing CO2 through the formation of carbonate minerals. They are often fractured and porous, containing storage space for mineralized CO2. The pore space, chemical composition, and wide distribution of basalts makes it the perfect candidate to develop the carbon mineralization process. However, other reactive rocks such as andesites, peridotites, breccias and sedimentary formations containing calcium, magnesium and iron rich silicate minerals could also be suitable.

One advantage of carbon capture and mineralization is that it offers a potentially permanent and secure method for storing captured CO2. Unlike other storage methods that involve injecting CO2 into underground reservoirs, mineralization converts the CO2 into a solid form, reducing the risk of leakage.

Kluane Belt is known for its ultramafic rocks, which primarily consist of peridotite and basalts. This makes the Kluane Belt one the most potential ground on Earth for carbon mineralization in ultramafic rocks.

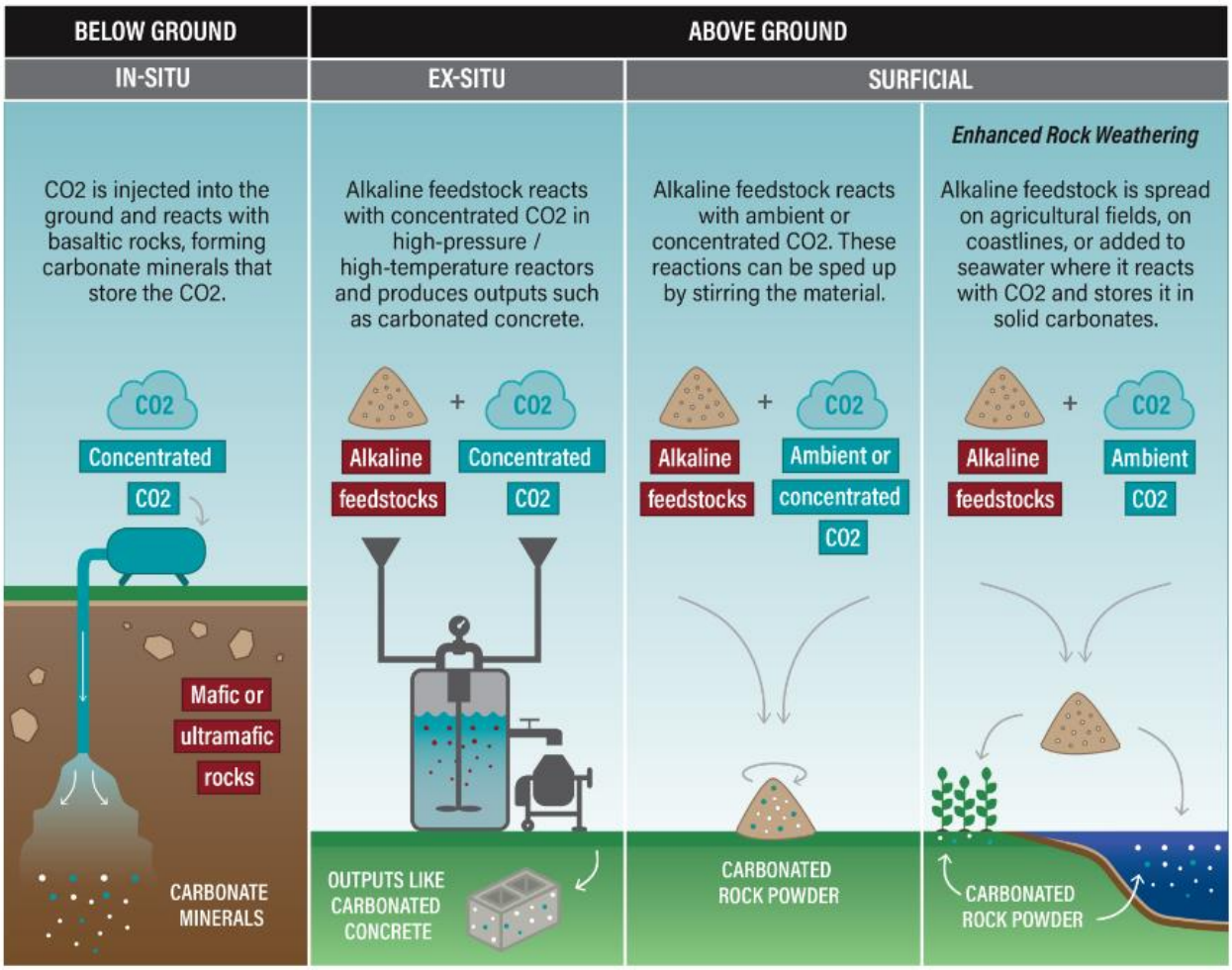

Figure 14 - Types of carbon mineralization approaches. Source: World Resources Institute website.

6 2023 YMEP-Funded Work Program

The 2023 exploration program at the Catalyst Project was completed between September 1st and 5th, 2023. The program consisted of groundtruthing, rock sampling and geochemistry analyses, UAV photogrammetry survey, creation of the first property-scale geological map and claim staking. A total of $87,072.91 was spent over the duration of the work program, with ***$80,953.31*** **eligible for YMEP reimbursement**.

The crew stayed at the Talbot Arm Motel in Destruction Bay for the duration of the project, driving to the Destruction Bay airport for helicopter access to site. Because of this, there was no field camp. In summary, the exploration program consisted of:

- Mapping and prospecting Corky, Catalyst North and Arch;

- Rock sample collection and analyses focusing on metals on Corky, Catalyst North and Arch;
- Rock sample collection and analyses focusing on carbon capture mineralization on Corky, Catalyst North, Arch and Arch Island (pending);
- Drono photo survey at Catalyst North, Arch and Arch Island.

6.1 UAV Photogrammetry Survey

Drone North executed a UAV photogrammetry survey with the objective to acquire high resolution aero photography datasets across selected areas of the Catalyst Project to support mapping and prospecting on the project. The areas of interest were Arch Island and the central-east part of Arch claims, besides central-west of Catalyst North.

Data products generated from the 2023 UAV surveys include (a) 2.28 – 2.5 cm resolution colour orthomosaic imagery in ECW formats and (b) Digital Surface Models in GEOTIFF format. Ground control point data was acquired at the time of UAV surveying and are also provided in *Bennett (2023)*.

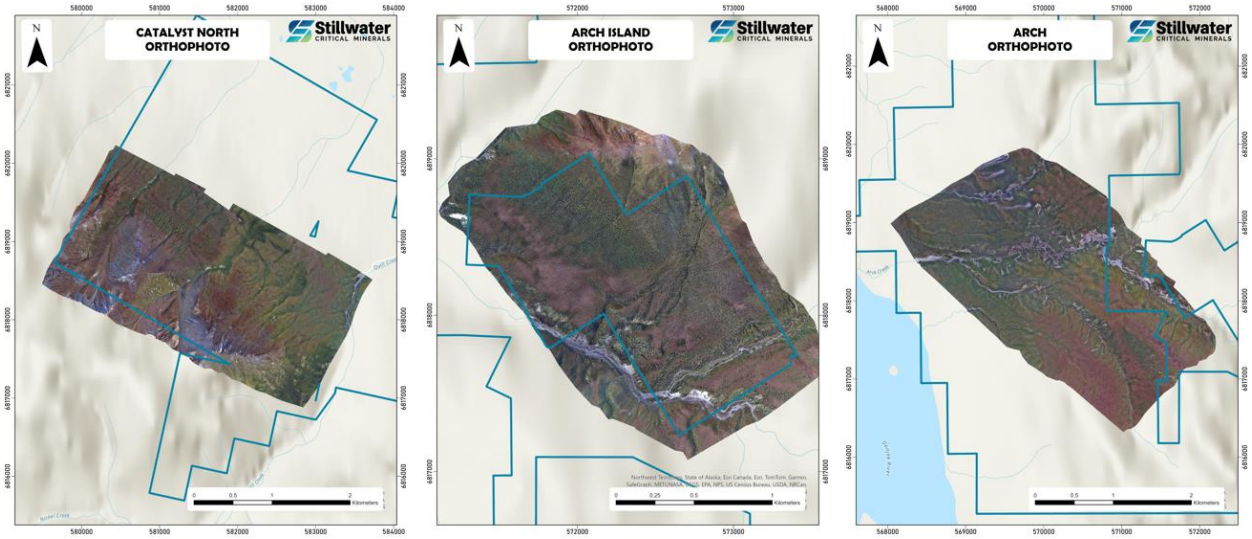

Figure 15 - Orthomosaic imagery of the 3 areas of interest.

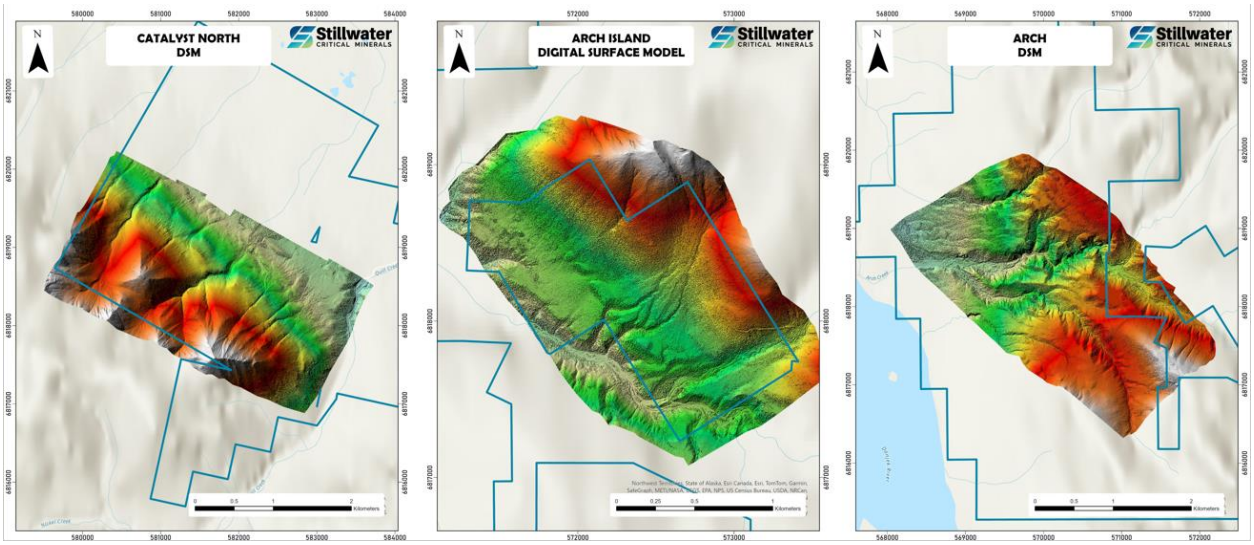

Figure 16 - Digital Elevation Model generated by Drone North.

6.2 Geological Mapping and Prospecting

A total of 37 outcrops, subcrops and floats were described along the 5 days of field work on Corky, Catalyst North, Arch and in the Teck showing (beside Arch Island). The transverses were planned to visit places of historic high-grade samples, follow-up with geologic questions, and map the potential for carbon capture mineralization. The field crew was mobilized and had the support of a helicopter all day long.

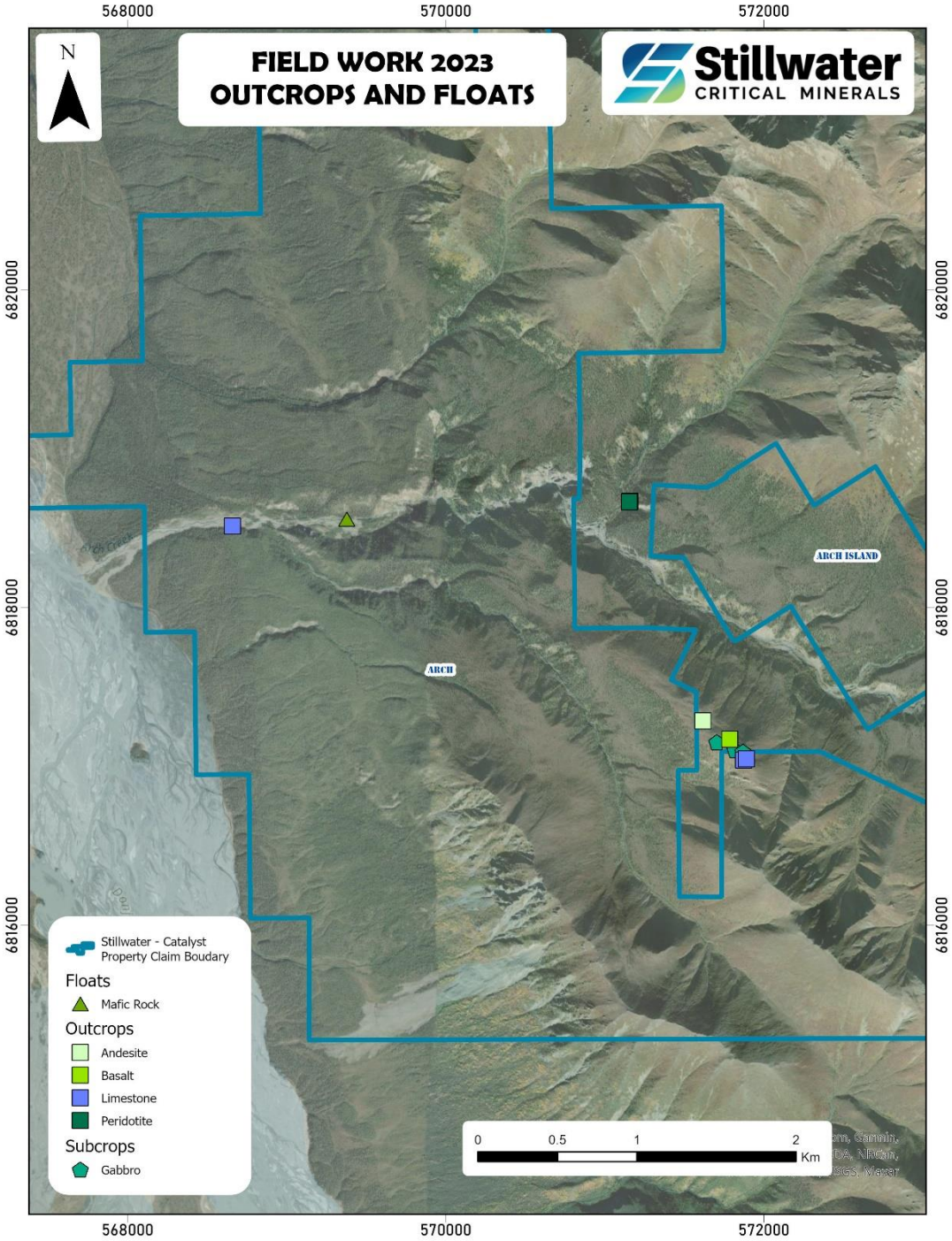

Figure 17 - Outcrops and floats described during the field work at Arch and Arch Island.

At Arch claim block, in a transverse along the crest of a hill running approximately N45W, a succession of volcanic rocks as gabbros and andesites was found sitting on top of limestone rocks. The volcanics rocks are massive, coarse grained, dark green color, with pervasive carbonate alteration. Calcite-siderite veinlets are a common feature. Those rocks are being interpreted as pertinent of the Station Creek Formation. Sitting a few meters southeast of the mafic rock outcrops, limestone outcrops were found showing a massive, dark gray to blue rock, containing 5-7% calcite veins.

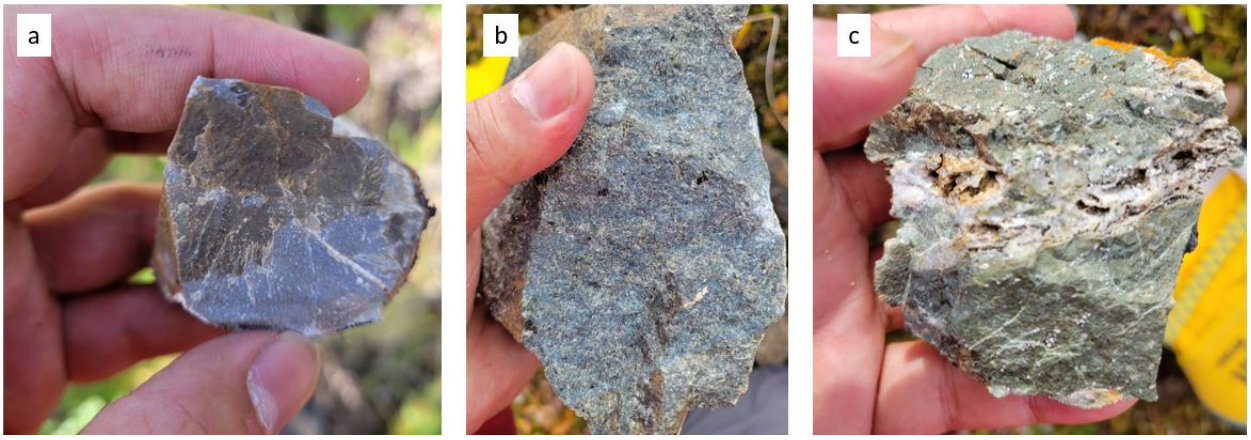

Figure 18 - (a) limestone; (b) basalt and (c) andesite from the central-east part of Arch claim block.

Along the Arch Creek near the junction of the Donjek River was found a Hansen Creek Formation limestone outcrop containing Pennsylvanian-aged fossils. Above this massive, dark grey fossiliferous layer, a 2 meters-wide shear zone runs N40E, dipping 58SW. It is characterized by medium brecciation intensity, and post-formation of botryoidal calcite.

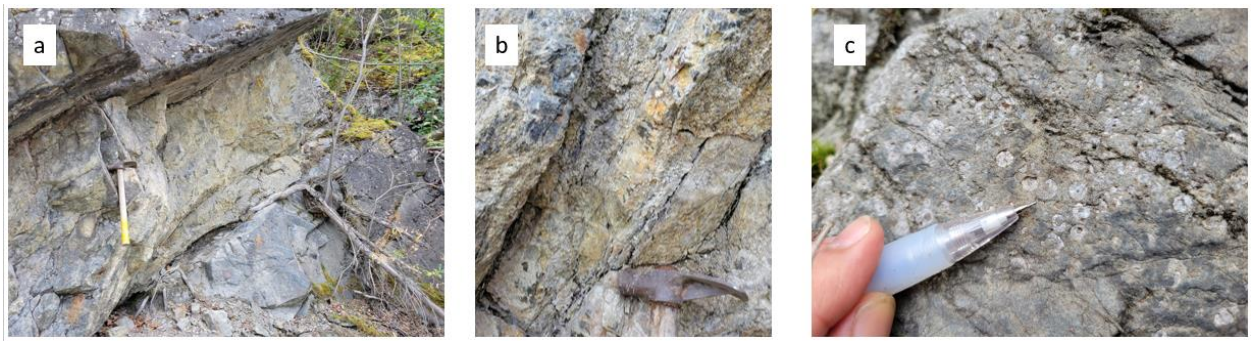

Figure 19 - (a) Hansen Creek Formation limestone outcrop; (b) 2 meters-wide shear zone; and (c) cm-scale fossils from Arch Creek.

The mapping in the Arch Island claim block was done by helicopter. The canyons within the property were flown above in search of mafic-ultramafic rock outcrops, mainly following the trend of the Teck Showing. No unreported mafic-ultramafic were identified during this campaign.

The Catalyst Dump claim block was surveyed from above using the helicopter as well, not being possible to land at the property at the time. The flying over was conducted in the attempt to cross over the stratigraphy, and it confirmed the property is covered by basalts/andesites, and other volcanic rocks in the southern part.

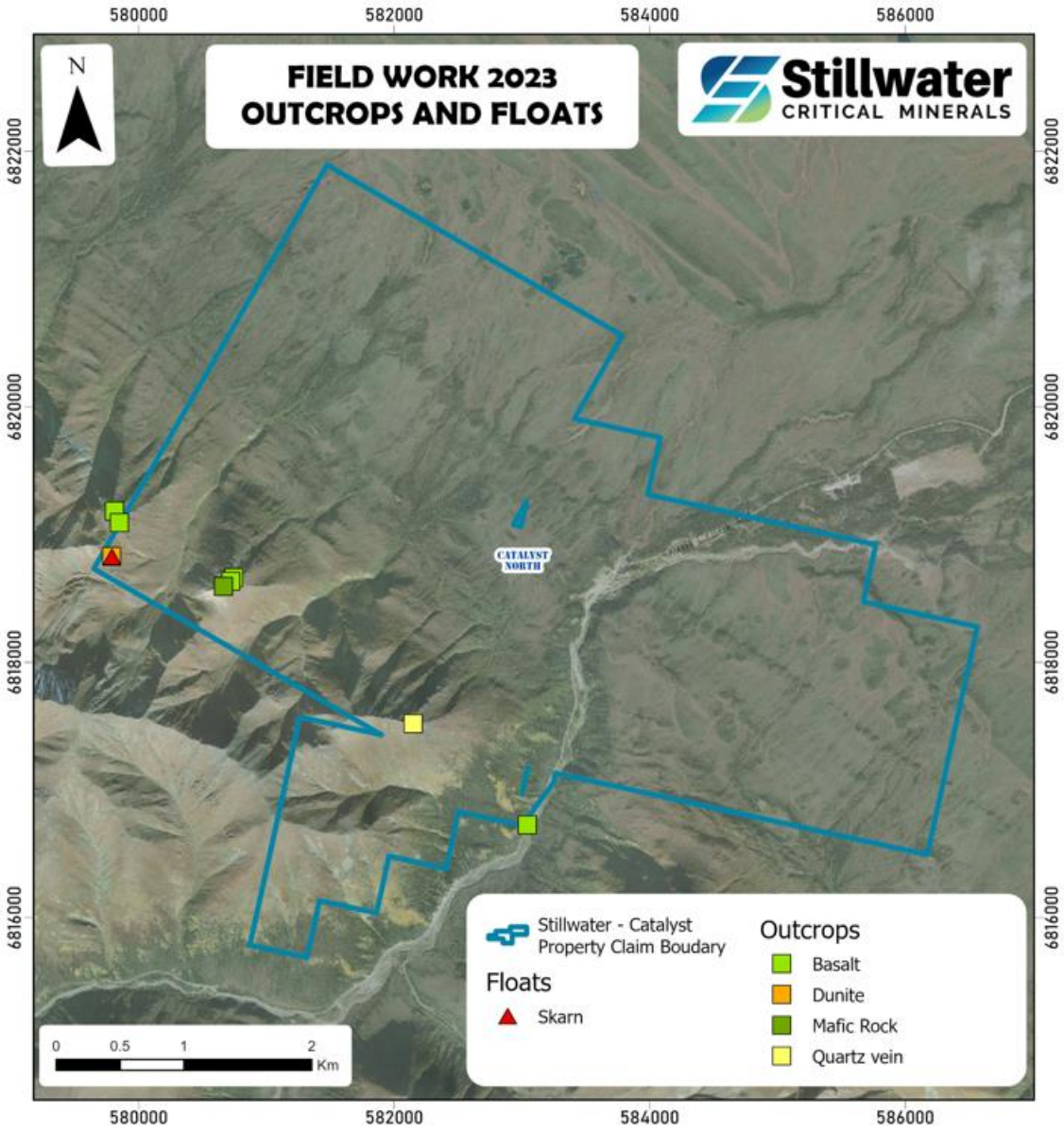

Figure 20 – Outcrops and floats described at the Catalyst North claim block.

In the Catalyst North claim block, the focus was the mapping of contacts on the west and central part of the land package. Several outcrops of basalt and a possible dunite outcrop were found in the west part of the area, advancing the current knowledge of the local geology.

An angular, 10-cm wide, skarn float was collected near the mafic-ultramafic outcrop, named in this report and maps as "*Skarn Showing*". This sample is composed of malachite, with leached milky quartz, and dark brown-orange color, very fine grain mineral. Leached carbonates represent approximately 5-7% of the rock, forming botryoidal calcite.

A quartz vein containing trace pyrite, and trace possible jarosite was collected near the central part of the claim. This vein cuts the amygdaloidal basalt almost vertically.

The road which cuts the claim block from north to south has several outcrops, which were described in previous mapping and prospecting campaigns.

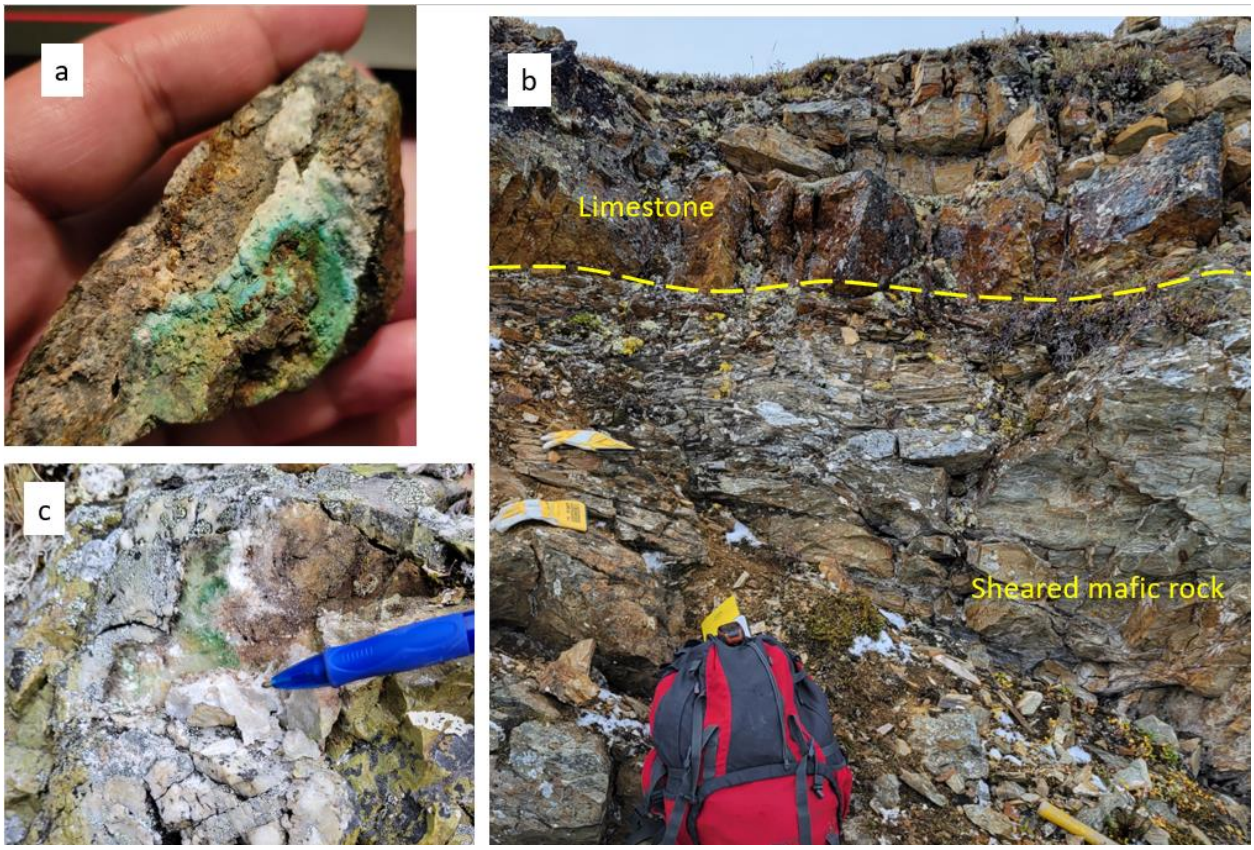

Figure 21 - Rocks and outcrops of Catalyst North claim block: a) skarn float running 2.2% Cu, from "Skarn Showing"; b) sheared basalt sitting below the limestone. c)quartz vein intruding amygdaloidal basalt.

The Corky claim block was visited by helicopters, but also can accessed by road. In the north part of the claim block, the works were concentrated south of the Ram showing, attempting to identify the extension of the mineralized showing. The local geology is dominated by vesicular basalts, dark grey-greenish color, very fine grain sized. Vesicules are 1-3mm size, irregular shapes, filled with calcite, epidotes, and amphiboles.

In the south side of the claim, a succession of volcanic breccia and volcanic tuffs from Station Creek Formation are in contact with a Pennsylvania/Permian limestone from Hasen Creek Formation.

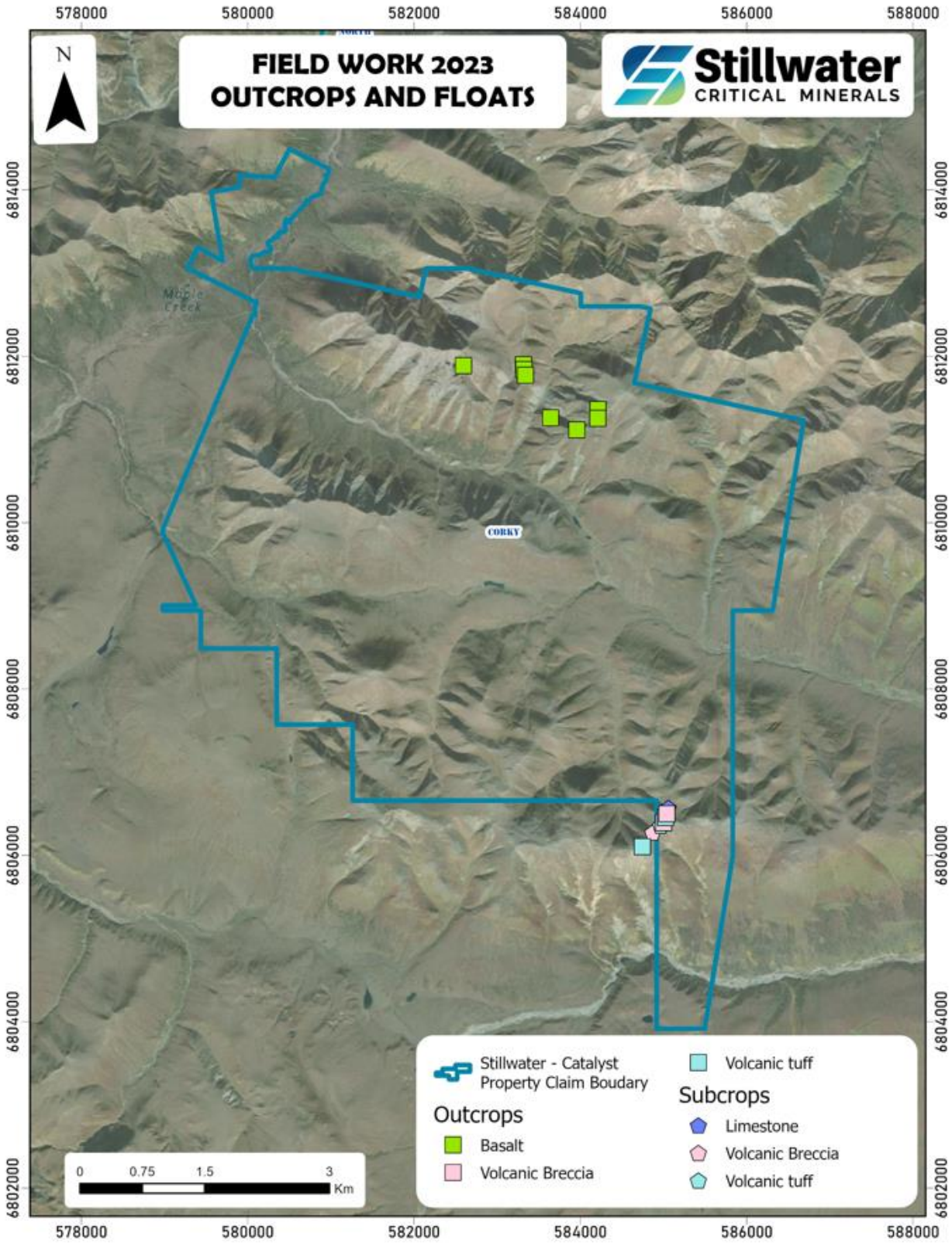

Figure 22 - Outcrops location at Corky Property.

Figure 23 - The north part of Corky is dominated by amygdaloidal basalts (a and b) and locally other mafic rocks as gabbro's (c).

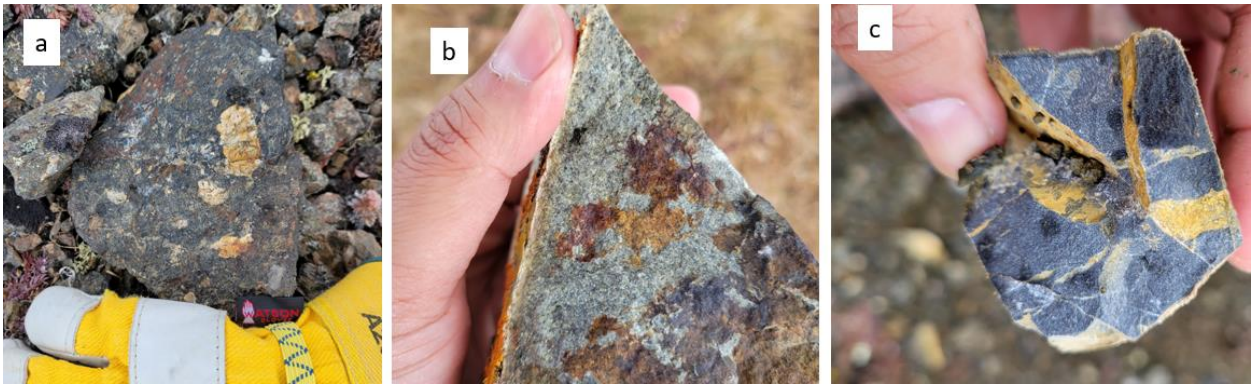

Figure 24 - Rocks from the south part of Corky: (a) volcanic breccia; (b) volcanic breccia; (c) limestone.

6.3 Rock Sampling – Geochemical Analysis

A total of 6 rock samples were collected for geochemical analysis during prospecting from the 2023 field season. All 6 were sent to Bureau Veritas in Whitehorse for geochemical processing and analysis, these results are compiled in ***Appendix II.*** Multiple analysis packages were used to evaluate precious metal concentrations. Sample preparation included crushing and splitting, then pulverizing 250g of rock to 200 mesh. Splits of 0.5g were digested using aqua regia, and then analyzed for 34 elements with ICP-ES. Lead collection fire assay fusion was used on 30g of split sample, this was done to analyze Au, Pt, and Pd with ICP-ES. Overweight Cu was prepared with an acid digestion 1g/100ml, then analyzed using Atomic Absorption Spectroscopy (AAS).

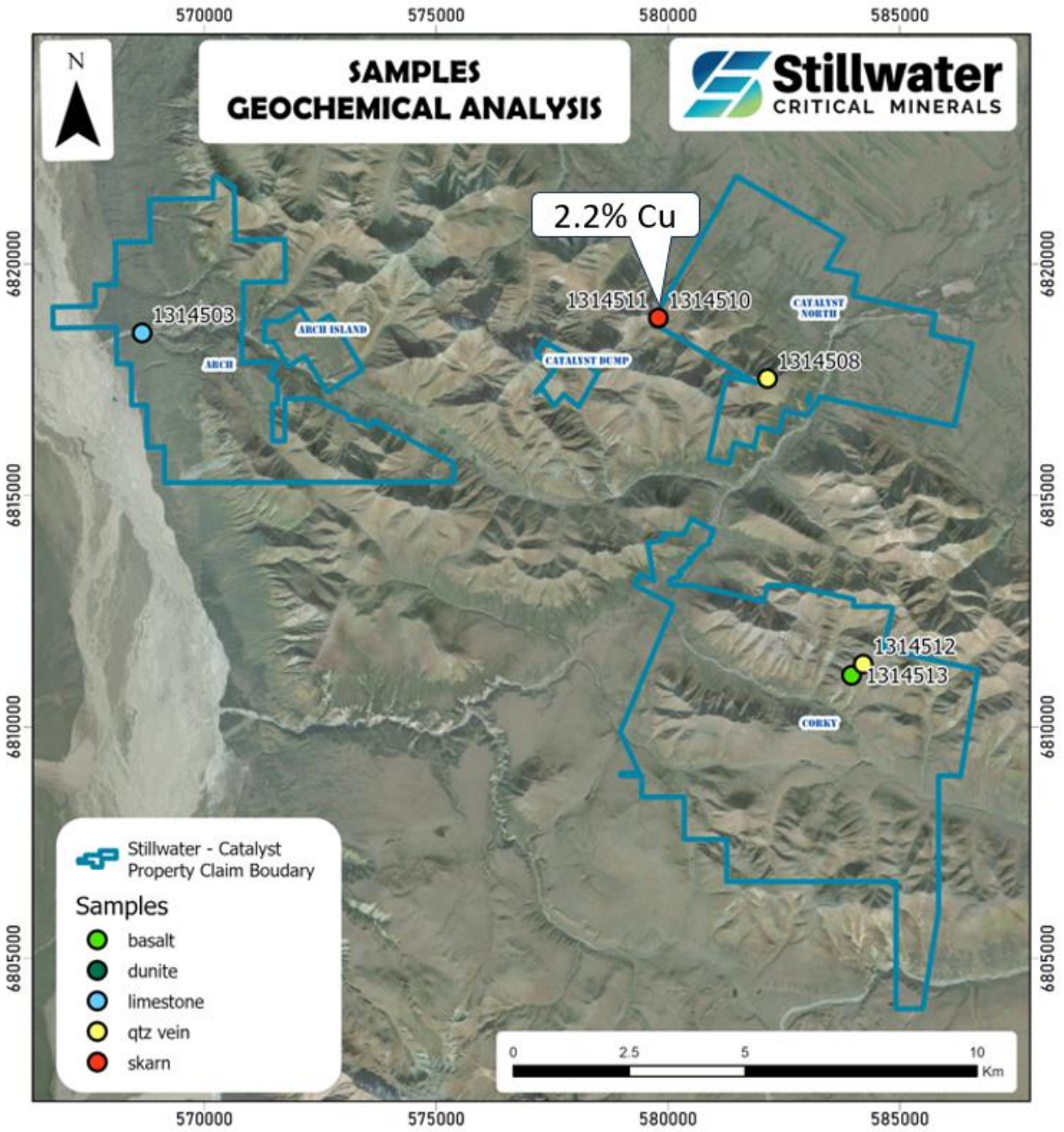

Figure 25 - Location of the samples assayed.

Table 4 - Geochemical analyses of the 2023 rock samples, highlighting Au, Ag, Cu, Ni, Sr, V and Zn results.

sample	easting	northing	rock	Au (ppm)	Ag (g/t)	Cu (ppm)	Ni (ppm)	Sr (ppm)	V (ppm)	Zn (ppm)
1314503	568658	6818512	limestone	0.002	0.3	10	19	82	78	48
1314508	582149	6817519	qtz vein	0.005	0.3	52	3	43	9	3
1314510	579788	6818829	basalt	0.005	2.3	113	44	58	223	72
1314511	579790	6818835	skarn	0.033	4.3	21970	41	23	111	38
1314512	584212	6811361	qtz vein	0.005	0.3	86	39	144	218	22
1314513	583957	6811116	basalt	0.005	0.3	81	26	37	182	68

6.4 Rock Sampling – Carbon Capture Mineralization focus

Prospecting during the 2023 field season was focused also on examining outcrops of rock with potential for carbon capture mineralization. A total of nine rocks, from amygdaloidal basalt to peridotite and dunites were collected at Arch, Arch Island, Catalyst North, and Corky. The rocks will be tested for mineralogy analyses, chemical composition, porosity and permeability, carbonate content, acid reactivity tests, thermogravimetric analyses, and its potential for CO_2 absorption. The samples are stored in Whitehorse and will be shipped to Vancouver for analyses. The specific laboratory and analyses methods are yet to be decided.

6.5 Claim Staking

As a result of the 2023 field season and office work, Stillwater pursuit to stake nineteen additional claims into its Catalyst North and Corky claim blocks. They were staked due to their potential for mafic-ultramafic rocks, Ni and PGE mineralization and carbon capture mineralization.

A total of 208.9 hectares were added to the Catalyst North property, distributed in 10 claims of the same size and area in the south part of the claim block. At Corky, 9 new claims were staked in the northwest part of the claim block, adding 126.1 hectares of ground to the Corky property (***Figure 26***).

Composed by 450 claims, the Catalyst Project covers a total of 8,693.55 hectares, distributed on Arch (2,254.24 ha), Arch Island (190.68 ha), Catalyst Dump (99.26 ha), Catalyst North (2,082.05 ha) and Corky (4,067.33 ha).

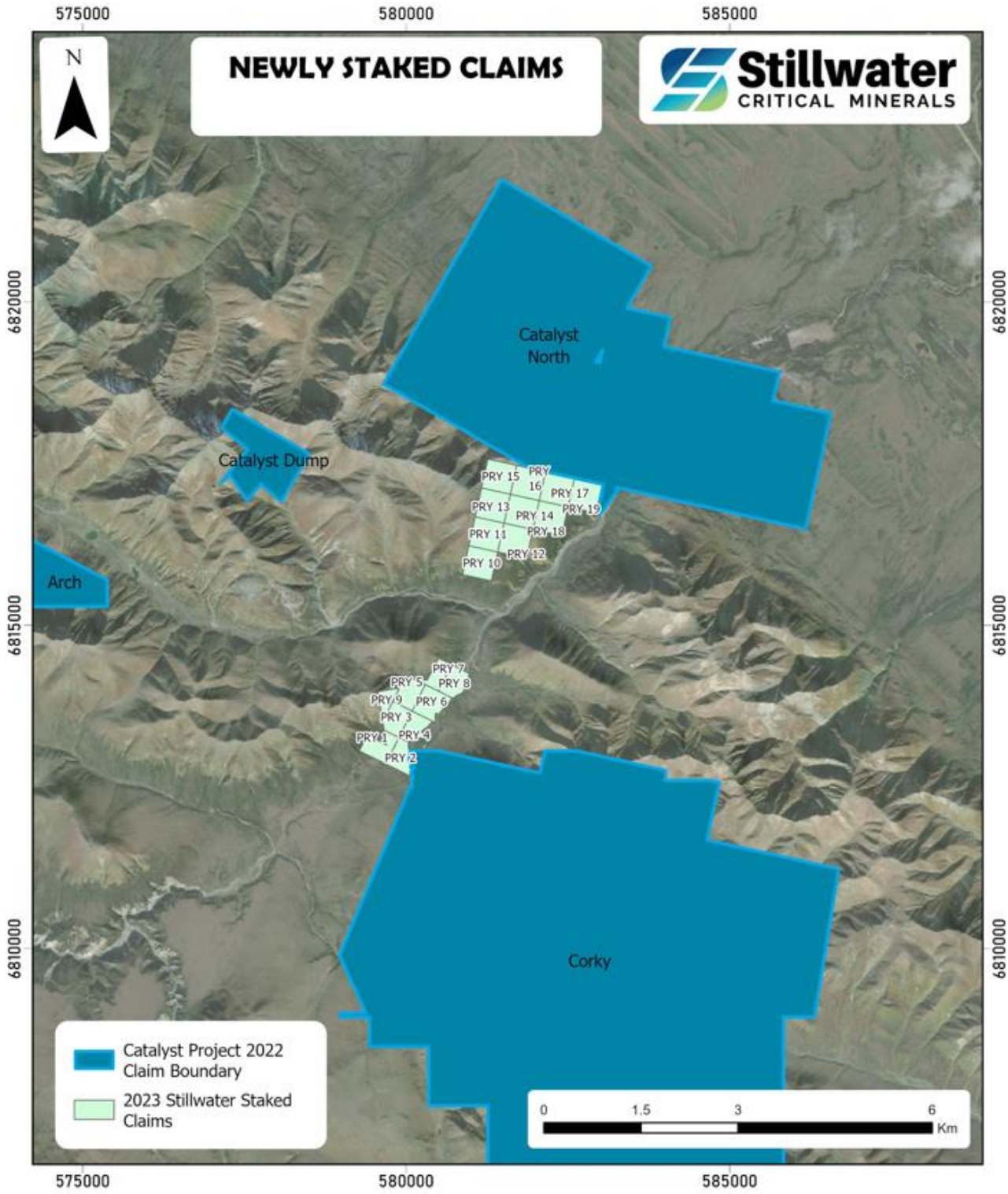

Figure 26 - Location of the new staked claims at Corky and Catalyst North.

6.6 Property Geological Maps

The first property-scale geological map has been completed on the Catalyst Project claim blocks were accomplished with the support of the Yukon Government's YMEP programs. It a compilation based on Israel (2004), Hulbert (1997) and the current database from the Yukon Geological Survey (YGS) (*can be downloaded at: "https://mapservices.gov.yk.ca/GeoYukon/"*), and historical and 2023 mapping campaigns at the property.

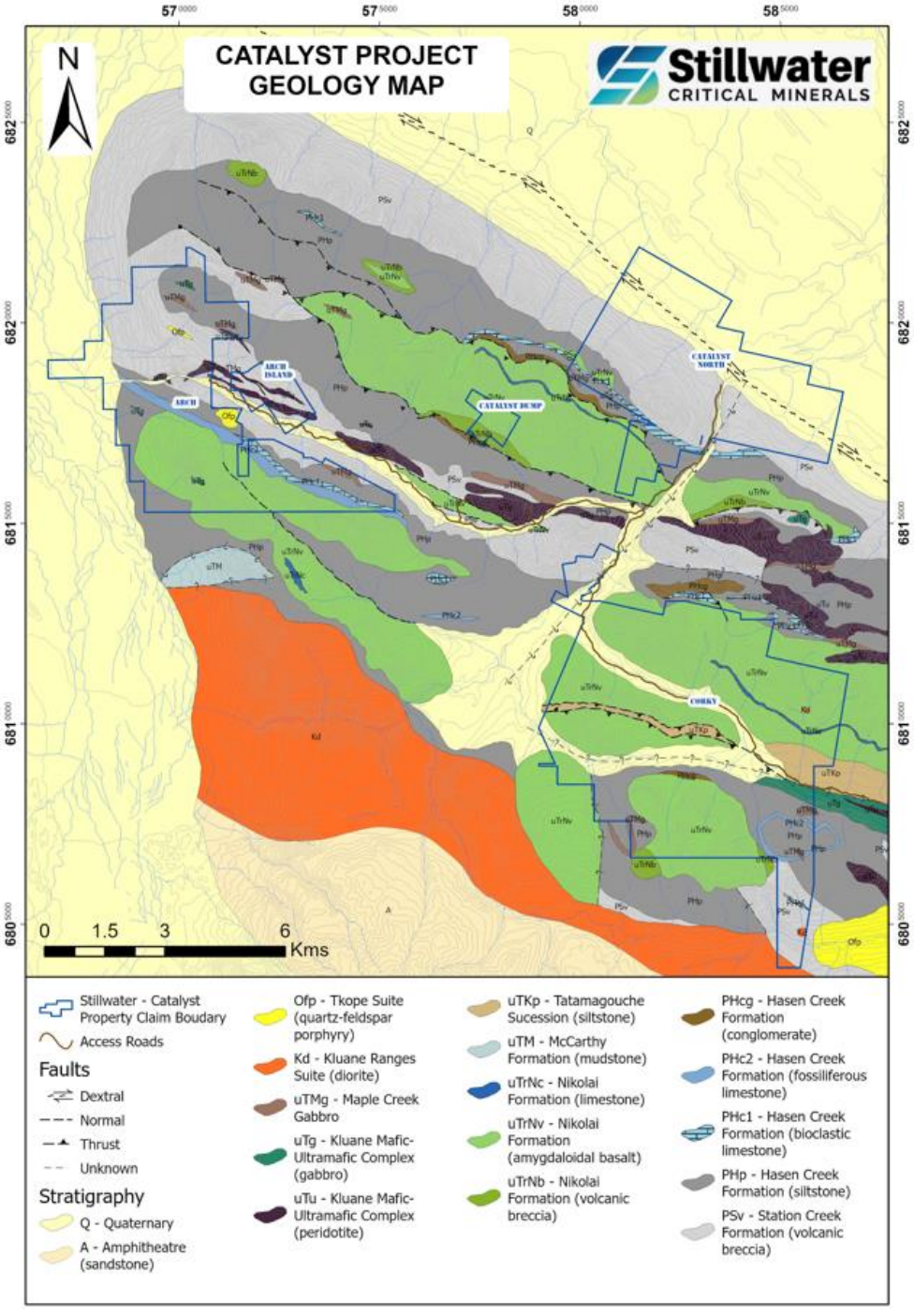

Figure 27 - District geology map.

The Arch and Arch Island claim blocks are covered in majority by volcaniclastics and sedimentary rocks of the Station Creek Formation, intruded by discontinuous peridotites, dunites, basalts and gabbros of the Kluane Mafic-Ultramafic Complex and Maple Creek Gabbro. Minor quartz-feldspar porphyry intrusion occurs in the central part of the Arch claims.

The south part of the claim is dominated by amygdules basalts and andesites of the Nikolai Formation, in contact with limestone from Hansen Creek Formation on north and Hansen Creek Formation sediments at south.

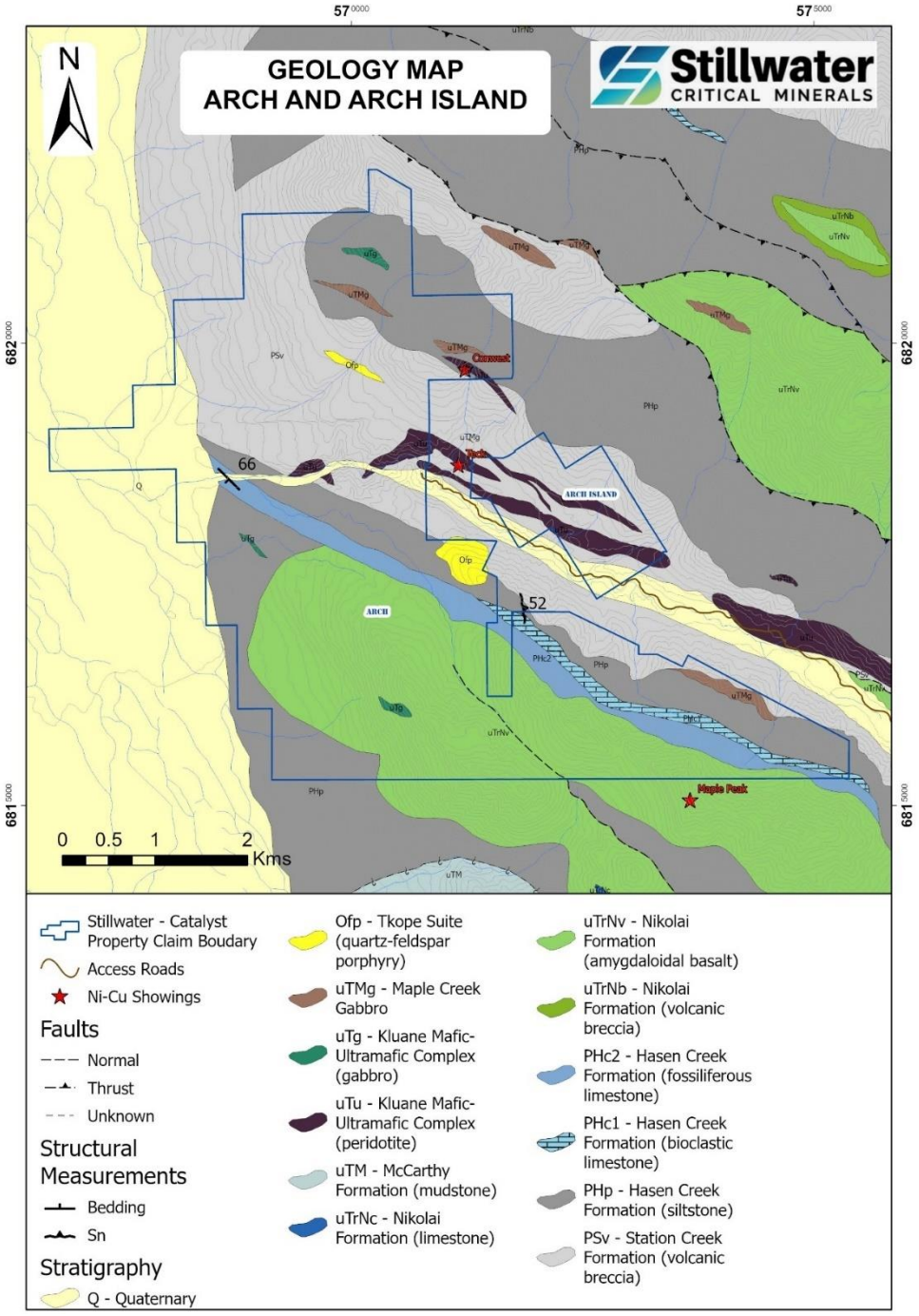

Figure 28 - Arch and Arch Island geology map.

Catalyst North claim block has 2 domains. The north part of the claim has significantly lower altitude, covered by volcaniclastics rocks of the Station Creek Formation and by Quaternary unconsolidated sediments. The south part of claim is mountainous and covered by basalts and andesites of the Nikolai Formation and sediments of the Hansen Creek Formation, intruded by Maple Creek Gabbro. Those intrusions have great potential to host skarn deposits.

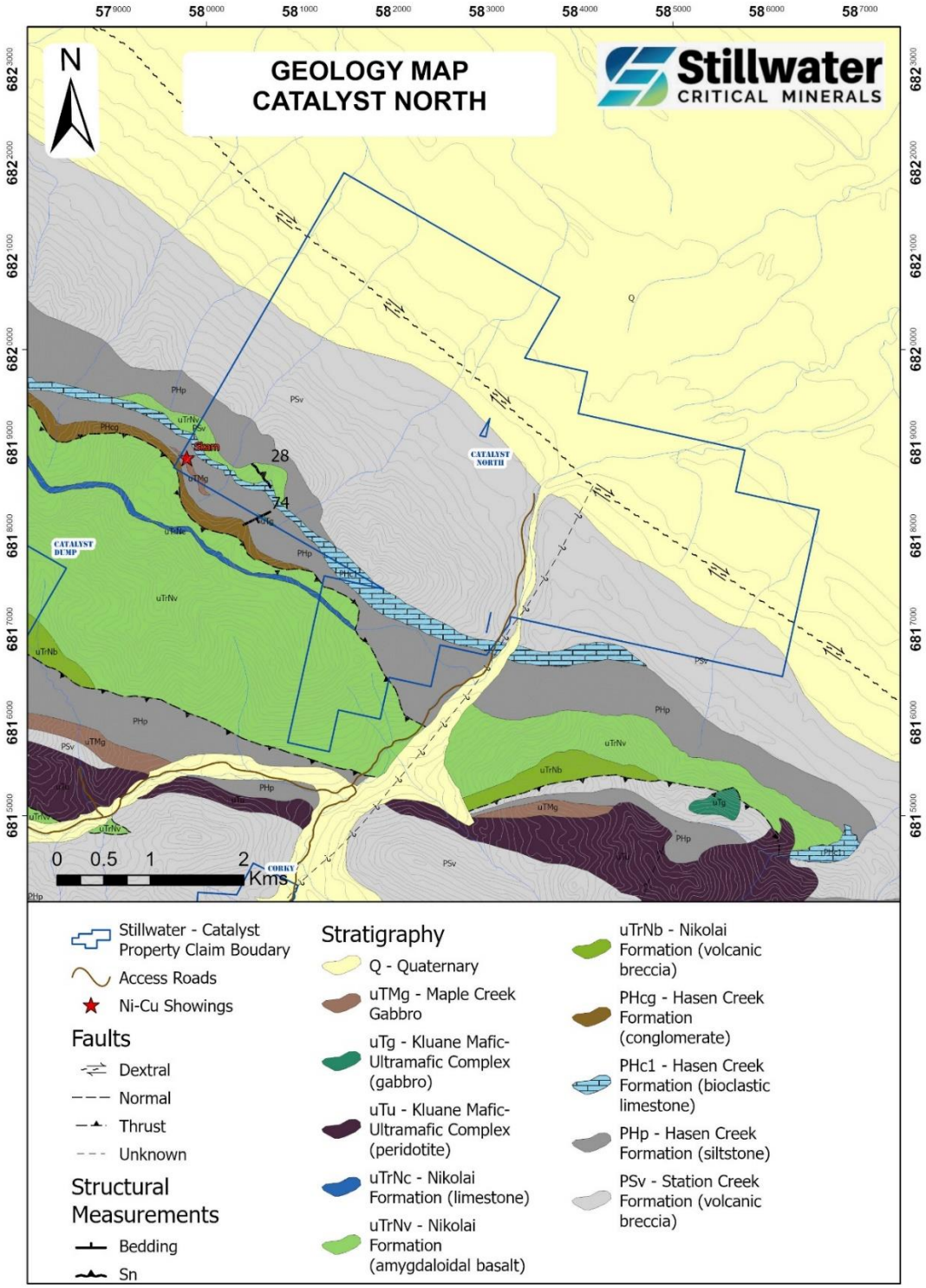

Figure 29 - Catalyst North geology map.

The north part of Corky is dominated by amygdaloidal basalt from the Nikolai Formation, intercalated with a limestone layer of the same formation. The contact in between those rocks can host skarn deposits. Nikolai Formation basalts also occur in the south part, in contact with sediments of the Hansen Creek Formation. Mafic-ultramafic rocks from the Kluane Complex are sitting in the east part of the claim, in faulty contact with the Tatamagouche Sucession.

The south part of the claim is covered in majority by volcanic rocks of the Station Creek Formation. Local Maple Creek Gabbros intrude the sequence. A limestone layer from the Hansen Creek Formation outcrops in the east border of the claim.

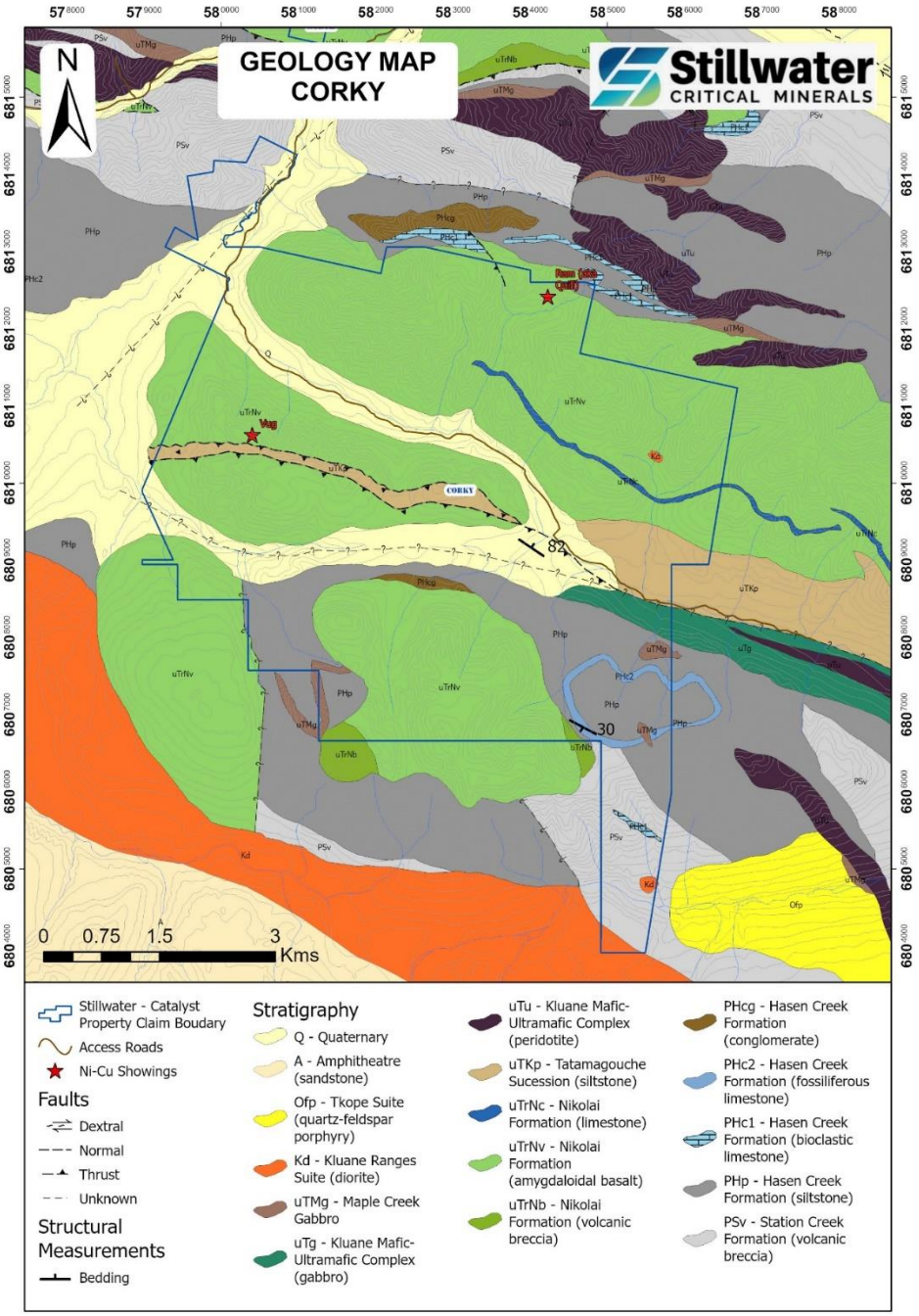

Figure 30 - Corky geology map.

The Catalyst Dump claim is covered by amygdaloidal basalts and andesites of the Nikolai Formation, in contact with Upper Triassic volcanic breccias from the same formation. A thrust fold puts the Hansen Creek Formation, Pennsylvanian/Permian aged, in contact with the Nikolai Formation in the south of the claim block.

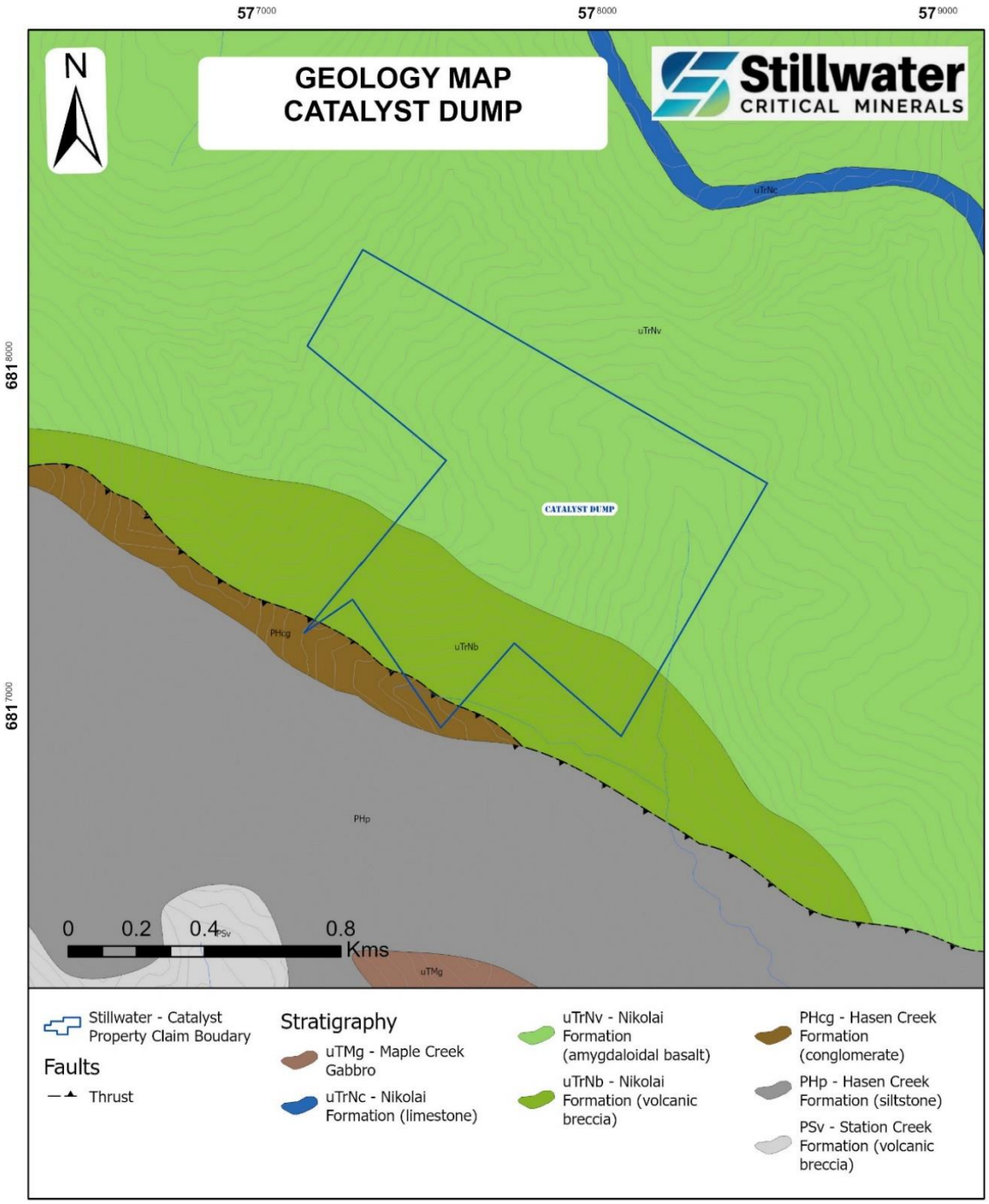

Figure 31 - Catalyst dump geology map.

7 Conclusions

The 2023 YMEP-funded Target Evaluation on the Catalyst project was successful in accomplishing the objectives set out in the application. These objectives included: advance of the current geology knowledge through mapping; target generation and advancing based on prospecting; high-detailed UAV photogrammetry; analyses for potential of carbon capture mineralization; local geology map and claim staking. The Catalyst project could not have been advanced in such a short time without the support of the Yukon Government's YMEP programs.

7.1 Recommendations for Future Work

The Catalyst property remains prospective and is overdue for systematic exploration work. Some grassroots work is recommended to fill in information gaps before planning a drill program. Geophysics survey and geochemical soil and rock sampling is suggested in the ground.

Due to the enormous potential for carbon capture mineralization at the Kluane mafic-ultramafic Belt, more work is needed to advance the understanding of how the project may benefit the most from this technique.

7.1.1 Corky

Soil sampling:

- Follow-up with additional lines and/or grids around higher grading rock samples or soil samples collected during the 2022 field season.
- continue soil sampling along ridges and expanding from areas of interest.

Geophysics:

- Compile and integrate the different scales (regional, property scale and local grids) and types of geophysics available then use the data to produce pseudo sections and an interpretation of the work.
- Detailed ground and drone surveys over target areas (Ram and Vug Showings).

Mapping:

- Some sections of creeks have excellent outcrop exposure, and detailed mapping of the area may help connect/group mineralized samples.
- The Ram trenches/Quill Showing should be investigated and systematic chip samples should be collected in the trenches. The trenches may need to be deepened and then reclaimed following this work.

7.1.2 Catalyst North:

Soil sampling:

- Soil sample grid to help locate the contact between the Skolai Group formations.
- Soil sample grid near the "Skarn Showing".

Geophysics:

- Research, compile and integrate the different scales (regional and property) and types of geophysics available including publicly available work done on the Nickel Shäw deposit. Assessment reports indicate that there have been no property scale geophysics surveys on the Catalyst North property.
- Detailed drone surveys over target areas (Skarn Showings) and its extension.

Mapping:

- Some sections of creeks have excellent outcrop exposure, and detailed mapping of the area may help connect/group mineralized samples and locate the fertile contact between the Hasen Creek and Station Creek formation and Hasen Creek limestone bodies which are known to host skarns.

7.1.3 Catalyst Dump:

Soil sampling:

- Initial soil grid, 100 x 200m to delimitated possible soil anomalies.

Mapping:

- Despite being snow-covered most of the year, some outcrops can be mapped during the summer. Locating the contact between the volcanic breccia and amygdaloidal basalt (Nikolai Formation) can bring fertile information for future exploration programs.

7.1.4 Arch:

Soil sampling:

- Soil sample grid to help locate the contact of the Kluane mafic-ultramafic Complex.
- Soil sampling on soil anomalies located on the claims above the Donjek River and Arch Creek.

Geophysics:

- Proceed with ground geophysics over the known mafic-ultramafic bodies and their possible extension. Geophysics is the best non-intrusive tool to see through ground cover on the upland areas. Ground magnetic and VLF-EM surveys are fast, relatively cheap, and effective. Areas of complexity around magnetic anomalies are targets at the Wellgreen property. VLF-EM surveys can be easily done at the same time as magnetic surveys.

Mapping:

- Continue mapping and sampling of the uplands focusing on gossan zones, aeromagnetic anomalies and areas of previous results.
- More mapping/prospecting should be completed on the southeast part of the claim, for potential skarn deposits.
- 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.
- Continue mapping and sampling mafic-ultramafic rocks for potential carbon capture mineralization.

7.1.5 Arch Island:

Soil sampling:

- Soil sample grid to help locate the contact of the Kluane mafic-ultramafic Complex.

Geophysics:

- Proceed with ground geophysics over the known mafic-ultramafic bodies and their possible extension. Geophysics is the best non-intrusive tool to see through ground cover on the upland areas.

Mapping:

- Continue mapping and sampling of the uplands focusing on gossan zones, aeromagnetic anomalies, and areas of previous results.
- 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 outcrops and trace the lower contact to the northwest and southeast.
- Continue mapping and sampling mafic-ultramafic rocks for potential carbon capture mineralization.

8 Bibliography

Aurora Geosciences, 2017. Open File 2017-36, Re-processing of airborne magnetic data for NTS 115G. Campbell, S.W. (1981): Geology and Genesis of Copper Deposits and associated Host Rocks in and near the Quill Creek Area, UBC Thesis.

Bennett, V., 2023. UAV Photogrammetry Survey Report, Catalyst Project, Stillwater Critical Minerals, 2023.

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

Cukor, V., 1970. Preliminary evaluation report on the Arch Creek area for Kluane Nickel Mines Ltd. by H. Sevensma Consultants Ltd.

Davidson, G.S., 1988. 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., 2018. Prospecting, Geological and Geochemical Survey Report on the Tobi Property for Group Ten Metals Inc., 2017 field program.

Davidson, G.S., 2019. Prospecting, Geological and Geochemical Survey Report on the Arch & Corky Properties for Group Ten Metals Inc., 2018 field program.

Davidson, G.S., 2019. Prospecting, Geological and Geochemical Survey Report on the Catalyst North Property for Group Ten Metals Inc., 2018 field program.

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.

“How it works?” *Carbfix*, carbfix.com/how-it-works.

Hilker, R.G., 1967. Geological mapping, magnetometer and electromagnetic survey, Arch Creek area, Kluane Mountains.

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, Yukon assessment report.

James, D.,2016. Donjek-Arch Project Geophysical Interpretation Assessment Report; for Group Ten Metals Inc., Yukon Ministry of Energy Mines and Resources, Yukon assessment report.

Lewis, L.L. and Relf, C., 2021. Yukon critical minerals inventory 2021. Yukon Geological Survey, Miscellaneous Report 23, 84 p.

Mann, A. W., Birrell, R. D., Mann, A. T., Humphreys, D. B., & Perdrix, J. L. (1998). Application of the mobile metal ion technique to routine geochemical exploration. *Journal of Geochemical Exploration*, *61*(1-3), 87-102.

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.

Newmont Mining Corp., 1967. Assessment Report #013065, map titled Outcrop Geology Ram Creek Area Quill Creek Copper Mines Ltd.

Pautler, J.M., 2012. Geological and geochemical assessment report on the AR Project. Report for Tom Morgan. Yukon assessment report.

Pautler, J.M., 2013. Geological and geochemical assessment report on the Donjek Project, Yukon Territory. Report for Bill Harris. Yukon assessment report.

Pautler, J.M., 2013. Geological and geochemical assessment report on the Arch Project, Yukon Territory. Report for Bill Harris and Tom Morgan. Yukon assessment report.

Pautler, J.M., 2017. Geophysical and Geochemical Report on the Tobi Project. Report for 41376 Yukon Inc.

Pautler, J.M., 2017. YMEP proposal for a target evaluation program on the Tobi Project. Report for 41376 Yukon Inc.

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

Riedl, Danielle, et al. “5 Things to Know About Carbon Mineralization As a Carbon Removal Strategy.” *World Resources Institute*, 22 June 2023, wri.org/insights/carbon-mineralization-carbon-removal.

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

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.

Walcott, P.E., 2016. Review of geophysical data on the Catalyst property for Group Ten Metals Inc.

9 Statement of Qualifications

I, Glayton Dias, of the City of Chilliwack, in the Province of British Columbia, HEREBY CERTIFY:

1. That I am a geologist, and I worked on the property during the fall of 2023.

2. I am a graduate of the Federal University of Ouro Preto (Brazil) (B.Sc. Geological Engineering, 2010).

3. I have worked in the field of mineral exploration in Canada (BC) since 2019 and full-time in Yukon Territory since 2022.

4. That I am an employee of TruePoint Exploration (2023-2023). TruePoint Exploration is the exploration arm for Stillwater Critical Minerals to which I have been employed since 2023.

5. I consent to the use of this report by Stillwater Critical Minerals. for such assessment and/or regulatory and financing purposes deemed necessary.

Dated at Chilliwack, British Columbia this 28th day of January 2024.

Glayton Jose Andrade Dias, B.Sc.
TruePoint Exploration
228-46150 Thomas Road,
Chilliwack, BC, V2R 6B3

Appendix I. Statement of Expenditures and YMEP Expenditures Form

See digital files

Appendix II. Outcrops, subcrops and floats descriptions and results

See digital files

Appendix III. UAV Photogrammetry Survey

See digital files include report.

Appendix III. Geology maps

See digital files