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Report on June 2020 Field Sampling Program

Completed by

North American Nickel Inc.

Quetico West Claim Block Property

Immediately south of Hutchinson Township, Ontario
Thunder Bay Mining District
NTS 52B11L, K and L, and 52B14D, C and B
Longitude 91°19'10" W
Latitude 48°44'47" N

Prepared by: Gerry Katchen and Sharon Taylor
Date: June 6, 2021

EXECUTIVE SUMMARY

The Quetico West Project is comprised of 175 claims, occurring within the Quetico Sub-province in the vicinity of the regional scale dextral transcurrent Quetico Fault. The claims were acquired to follow-up on prospective magnetic anomalies potentially mapping ~2690Ma late-Archean aged ultramafic/mafic intrusions, known as 'Quetico Intrusions', that are host to Ni-Cu-Co-precious metal sulphides.

The Quetico West claim block is located approximately 15 km east of the Town of Atikokan.

Interest was drawn towards the Quetico ultramafic/mafic intrusions in 1999 when a significant Cu-Ni-PGE intersection was made by Starcore Resources/ProAm exploration on their Samuels Lake Property, located approximately 38km southwest of Atikokan. Starcore/ProAm intercepted 0.64% Ni; 0.82% Cu; 0.18ppm Au; 0.24ppm Pd and 0.35ppm Pt over 45.74m (Tueman, D.L. Hood, W.C., 1999). Teck Exploration later intercepted 0.85% Cu and 0.39% Ni over 14.3m (SL-08-13) in a joint venture on the Samuels Lake Intrusion (Leclair, 2009).

In June 2020, a field program of prospecting and sampling was undertaken on the Quetico West claim block to search for mineralization related to Quetico intrusions. Eight targets comprising magnetic responses were investigated. Five anomalies remain unexplained and weakly mineralized magnetic pyroxenite was identified at two target locations and weakly magnetic gabbro was located at another site.

The exploration program highlights include two weakly mineralized pyroxenite samples that returned elevated Au+Pt+Pd values giving their respective sulphide percentage.

Future exploration will focus on this intrusion and other magnetic anomalies that were not prospected in 2020.

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ABBREVIATIONS

Expl	Exploration
Plugger	Plugger Drill
NAG	Magnetic
VLF	Very Low Frequency
QAQC	Quality Assurance Quality Control
Exp	Exploration
Au	Gold
Pt	Platinum
Pd	Palladium
Cu	Copper
Ni	Nickel
Co	Cobalt
S	Sulphur
Pb	Lead
Zn	Zinc
Ag	Silver
qtz	Quartz
MgO_FOS	Magnesium Oxide Free of Sulphur
Ni*	Silicate Nickel
MMI	Mobile Metal Ions
Grd	Ground
Surf	Surface
Anom	Anomalous
Dept	Department
NAN	North American Nickel
BHEM	Borehole ElectroMagnetics
VTEM	Airborne Variable Time Domain ElectroMagnetics
LGI	Lightfoot GeoScience Inc
NAN	North American Nickel
%	Percent
PGE	Platinum Group Elements
PGM	Platinum Group Metals (Pt, Pd, Au)
PPM	Parts Per Million
MNDM	Ministry of Northern Development and Mines
CFRM	Certified Reference Materials
MRD	Miscellaneous Release of Data
MDI	Mineral

1.0 INTRODUCTION

In April and May of 2018, North American Nickel staked a total of 809 claim cells spanning the Atikokan-Thunder Bay area following nickel sulphide project generation and compilation work (Figure 1). The Quetico West block, comprised of 175 contiguous unpatented mining claims, lies within the Quetico Sub-province corridor, and was acquired to follow-up on prospective magnetic anomalies potentially mapping intrusions related to the ~2.7Ga late-Archean Quetico Intrusions potentially mineralized with Ni-Cu-Co-precious metal sulphides.

In June 2020, a field program of prospecting and sampling was undertaken on the Quetico West claims to search for mineralization related to Archean intrusions. Eight targets comprising, magnetic responses, prospective geology and geochemical anomalies, were examined.

This report discusses the results of the field rock sampling and reconnaissance prospecting program completed by North American Nickel over the period of June 4-8, 2020.

2.0 Location and Access

The Quetico West Claim Block Property area is situated approximately 15 km east of the Town of Atikokan. The project area partially lies within the surveyed Hutchinson Township, with the rest of the claim block lying within un-surveyed area within the Thunder Bay Mining Division in Northwestern Ontario.

Access to the targets was made via the Trans-Canada Highway, Nickleby Lake Road, Sapawe Upsala Road (Hwy 623) and by walking along the railway line (Figure 2).

Location : Centre of claim block at approximately Longitude 91°19'10" W, Latitude 48°44'47" N
UTM NAD83 Zone 15N 623539mE, 5400762mN

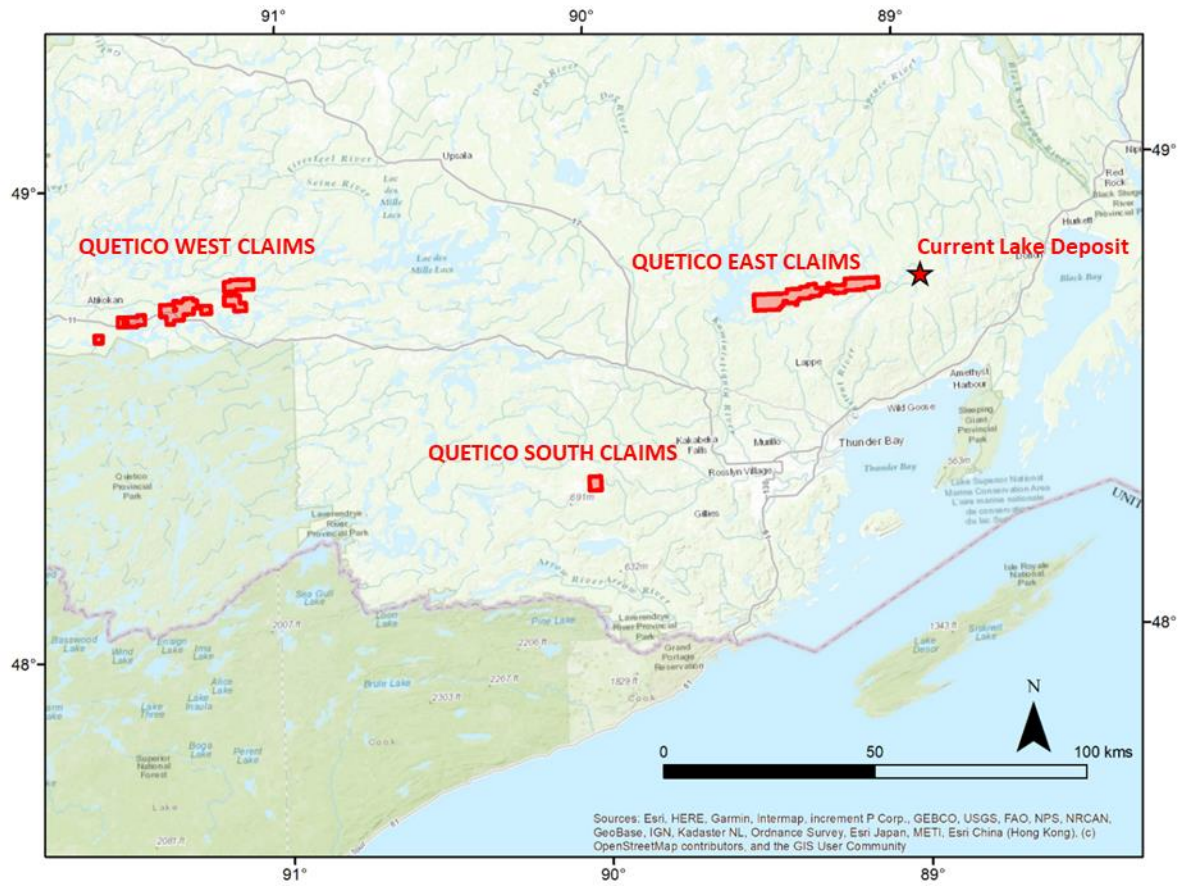


Figure 1: Location map of the Quetico West, East and South Claim Blocks.

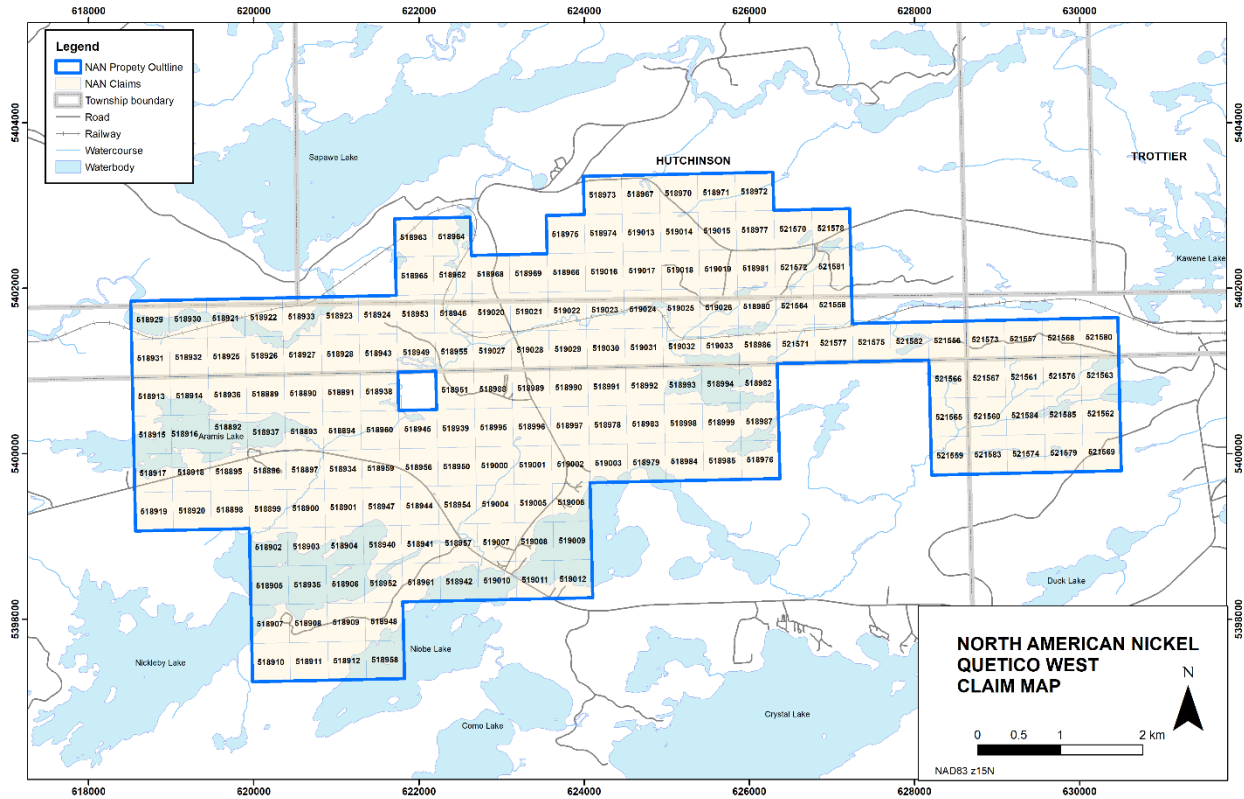


Figure 2: Quetico West Claim Block property location map.

3.0 Property Description

The West Quetico Claim Block is one of four individual blocks of claims occurring in the West Quetico area. The 2020 work program occurs solely on this block, which covers 3,733 hectares and is comprised of 175 contiguous unpatented mining cell claims located partially within and immediately south of Hutchinson Township within the Thunder Bay Mining Division in Northwestern Ontario.

The Property claim block consists of claims 518889 to 519033 inclusive, staked on April 26, 2018 and 521556 to 521585 inclusive, staked on May 17, 2018. A claim list is below in Table 1 and a full claim listing and map is included in Appendix 1.

TENURE_NUM	ANNIVERSARY	TENURE_NUM	ANNIVERSARY	TENURE_NUM	ANNIVERSARY	TENURE_NUM	ANNIVERSARY
518889	2021-04-26	518933	2021-04-26	518977	2021-04-26	519021	2021-04-26
518890	2021-04-26	518934	2021-04-26	518978	2021-04-26	519022	2021-04-26
518891	2021-04-26	518935	2021-04-26	518979	2021-04-26	519023	2021-04-26
518892	2021-04-26	518936	2021-04-26	518980	2021-04-26	519024	2021-04-26
518893	2021-04-26	518937	2021-04-26	518981	2021-04-26	519025	2021-04-26
518894	2021-04-26	518938	2021-04-26	518982	2021-04-26	519026	2021-04-26
518895	2021-04-26	518939	2021-04-26	518983	2021-04-26	519027	2021-04-26
518896	2021-04-26	518940	2021-04-26	518984	2021-04-26	519028	2021-04-26
518897	2021-04-26	518941	2021-04-26	518985	2021-04-26	519029	2021-04-26
518898	2021-04-26	518942	2021-04-26	518986	2021-04-26	519030	2021-04-26
518899	2021-04-26	518943	2021-04-26	518987	2021-04-26	519031	2021-04-26
518900	2021-04-26	518944	2021-04-26	518988	2021-04-26	519032	2021-04-26
518901	2021-04-26	518945	2021-04-26	518989	2021-04-26	519033	2021-04-26
518902	2021-04-26	518946	2021-04-26	518990	2021-04-26	521556	2021-05-17
518903	2021-04-26	518947	2021-04-26	518991	2021-04-26	521557	2021-05-17
518904	2021-04-26	518948	2021-04-26	518992	2021-04-26	521558	2021-05-17
518905	2021-04-26	518949	2021-04-26	518993	2021-04-26	521559	2021-05-17
518906	2021-04-26	518950	2021-04-26	518994	2021-04-26	521560	2021-05-17
518907	2021-04-26	518951	2021-04-26	518995	2021-04-26	521561	2021-05-17
518908	2021-04-26	518952	2021-04-26	518996	2021-04-26	521562	2021-05-17
518909	2021-04-26	518953	2021-04-26	518997	2021-04-26	521563	2021-05-17
518910	2021-04-26	518954	2021-04-26	518998	2021-04-26	521564	2021-05-17
518911	2021-04-26	518955	2021-04-26	518999	2021-04-26	521565	2021-05-17
518912	2021-04-26	518956	2021-04-26	519000	2021-04-26	521566	2021-05-17
518913	2021-04-26	518957	2021-04-26	519001	2021-04-26	521567	2021-05-17
518914	2021-04-26	518958	2021-04-26	519002	2021-04-26	521568	2021-05-17
518915	2021-04-26	518959	2021-04-26	519003	2021-04-26	521569	2021-05-17
518916	2021-04-26	518960	2021-04-26	519004	2021-04-26	521570	2021-05-17
518917	2021-04-26	518961	2021-04-26	519005	2021-04-26	521571	2021-05-17
518918	2021-04-26	518962	2021-04-26	519006	2021-04-26	521572	2021-05-17
518919	2021-04-26	518963	2021-04-26	519007	2021-04-26	521573	2021-05-17
518920	2021-04-26	518964	2021-04-26	519008	2021-04-26	521574	2021-05-17
518921	2021-04-26	518965	2021-04-26	519009	2021-04-26	521575	2021-05-17
518922	2021-04-26	518966	2021-04-26	519010	2021-04-26	521576	2021-05-17
518923	2021-04-26	518967	2021-04-26	519011	2021-04-26	521577	2021-05-17
518924	2021-04-26	518968	2021-04-26	519012	2021-04-26	521578	2021-05-17
518925	2021-04-26	518969	2021-04-26	519013	2021-04-26	521579	2021-05-17
518926	2021-04-26	518970	2021-04-26	519014	2021-04-26	521580	2021-05-17
518927	2021-04-26	518971	2021-04-26	519015	2021-04-26	521581	2021-05-17
518928	2021-04-26	518972	2021-04-26	519016	2021-04-26	521582	2021-05-17
518929	2021-04-26	518973	2021-04-26	519017	2021-04-26	521583	2021-05-17
518930	2021-04-26	518974	2021-04-26	519018	2021-04-26	521584	2021-05-17
518931	2021-04-26	518975	2021-04-26	519019	2021-04-26	521585	2021-05-17
518932	2021-04-26	518976	2021-04-26	519020	2021-04-26		

Table 1: List of Claims Quetico West Project

4.0 Previous work

A comprehensive on-line search of previous work filed with the Ontario MNM was completed and is summarized below (Table 2). There is little historic work completed on these claims.

Table 2. Historical Work on Quetico West Project

YEAR	COMPANY	TOWNSHIP/GENERAL LOCATION	ASSESSMENT ID	DESCRIPTION OF WORK
1976	Albert Carruthers	Pickerel Lake Map Sheet (North Part)	42A12NE0645	Drilling (3 holes)
1979	G. Wilson and H. Blair	Pickerel Lake Map Sheet (North Part)	Unknown noted in OFR5539	Trenching and sampling
1990	Mingold Resources	Thunder Bay and Kenora Mining Divisions	52F04NE9650	Very large regional till sampling program, samples 1km spacing

In 1976, Albert Carruthers drilled three holes for a total of 381 feet. There is also reference to trenches on the drill logs, but there are no details of the trenching in the file. The first hole collared into a massive sulphide boulder and entered overburden at 4 feet. The second hole intersected gabbro throughout its entire 200 foot length. A third hole intersected quartz-mica schists throughout the hole, with minor greywacke at surface and a narrow (2.2 feet) interval of diorite. It is believed that this work was carried out at target W5.

This mineral occurrence is called the Carruthers showing in the MDI file (#MDI52B11NW00002), and is the same mineral occurrence as the Wilson Occurrence described in OFR5539 (occurrence 125). This file describes trenching and sampling by G. Wilson and H. Blair in 1979.

In 1990, Mingold Resources carried out a large regional scale bulk till sampling program focused on gold exploration. In the area of the NAN's west claim block, samples were collected at 1km intervals along the Trans-Canada Highway, HWY 11.

5.0 2020 NAN Work

5.1 Work Program

During the period June 4-8 of 2020, a program of prospecting and field rock sampling was undertaken to assess the potential of Ni-Cu-Co-PGM sulphide mineralization on the Quetico West claims. The field program was designed to evaluate the underlying geology of the target areas to establish whether the rock types and mineralization had characteristics which would make the area a suitable target for further Ni-Cu-Co-PGM exploration. Eight target areas, all comprised magnetic anomalies, were selected for investigation (Figure 3).

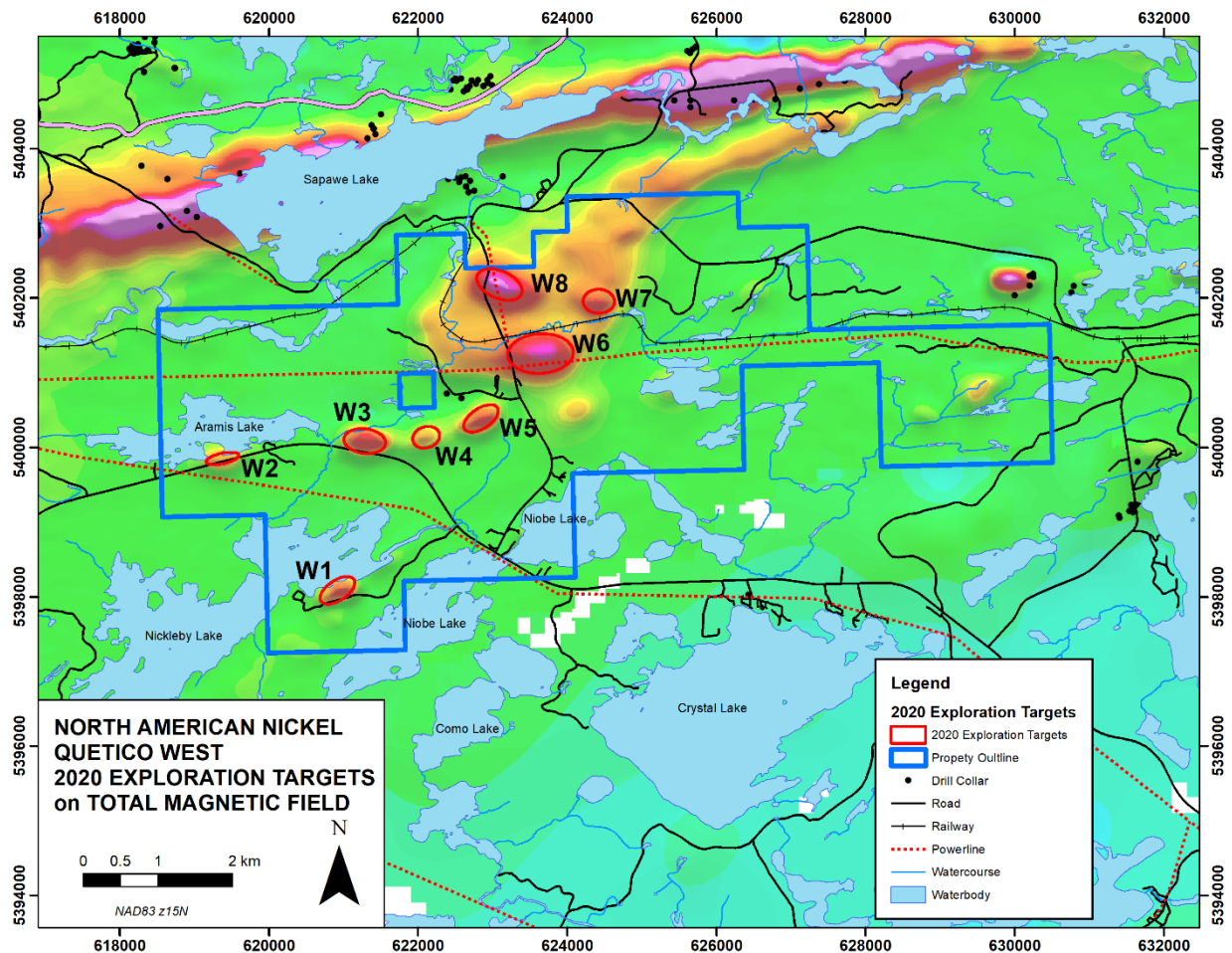


Figure 3: Quetico West Claim Block target location map.

Fifteen (15) representative rocks samples were collected, of which one (D15370) was sent to ALS Labs for assaying and five (5) (D15353 – D15357) for whole rock analysis (WRA). A total of two (2) QAQC certified reference materials ‘CRM’ /blanks were submitted with the rock samples. Two samples were selected for petrography work and sent to Vancouver Petrographics.

5.2 2020 Personnel

Sharon Taylor (Chief Geophysicist) North American Nickel

Quetico West Days Worked: 10 billable days through April 1 2020 to Feb 16, 2021

Qualifications: M.Sc., P.Geo

Project Quetico West

Date From	Date To	Days	GrassRoots Activity
03/04/2020	05/04/2020	3	Quetico West Project Plan
05/06/2020	08/06/2020	3	Quetico West Coordinate and Review
01/08/2020	02/08/2020	2	Quetico West Analyze Results
15/02/2021	16/02/2021	2	Quetico West Assessment Report Writing and Filing
Total		10	DAYS

Jim Sparling (Project Manager) North American Nickel

Quetico West Days Worked: 8 billable days through April 1 2020 to Feb 16, 2021

Qualifications: P.Geol, MBA

Project Quetico West

Date From	Date To	Days	GrassRoots Activity
03/04/2020	05/04/2020	3	Quetico West Project Plan
05/06/2020	08/06/2020	3	Quetico West Coordinate and Review
01/08/2020	02/08/2020	2	Quetico West Analyze Results
Total		8	DAYS

Gerry Katchen (Consulting Geologist) North American Nickel (GrassRoots Prospecting)

Quetico West Days Worked: 2 billable days through Feb 10 to Feb 16, 2021

Qualifications: B.Sc. Geology, P.Geol,

Project

Quetico West

Activity

Assessment Report Writing

Cecil Johnson (Highly Experienced GrassRoots Prospector), Contracted to North American Nickel

Days Worked: 6.5 billable days, June 4 – 8, 2020 and portions of June 18, 26 and 30

Walter McGregor (GrassRoots Prospector), Contracted to North American Nickel

Days Worked: 5.5 billable days, June 4 – 8, 2020

6.0 GENERAL GEOLOGY

6.1 Regional Geology

The regional geology of North American Nickel's 'Quetico West Claims' project area lies within the southern Superior Province of the Canadian Precambrian Shield, within the Quetico Subprovince and mainly south of the Quetico Fault Zone.

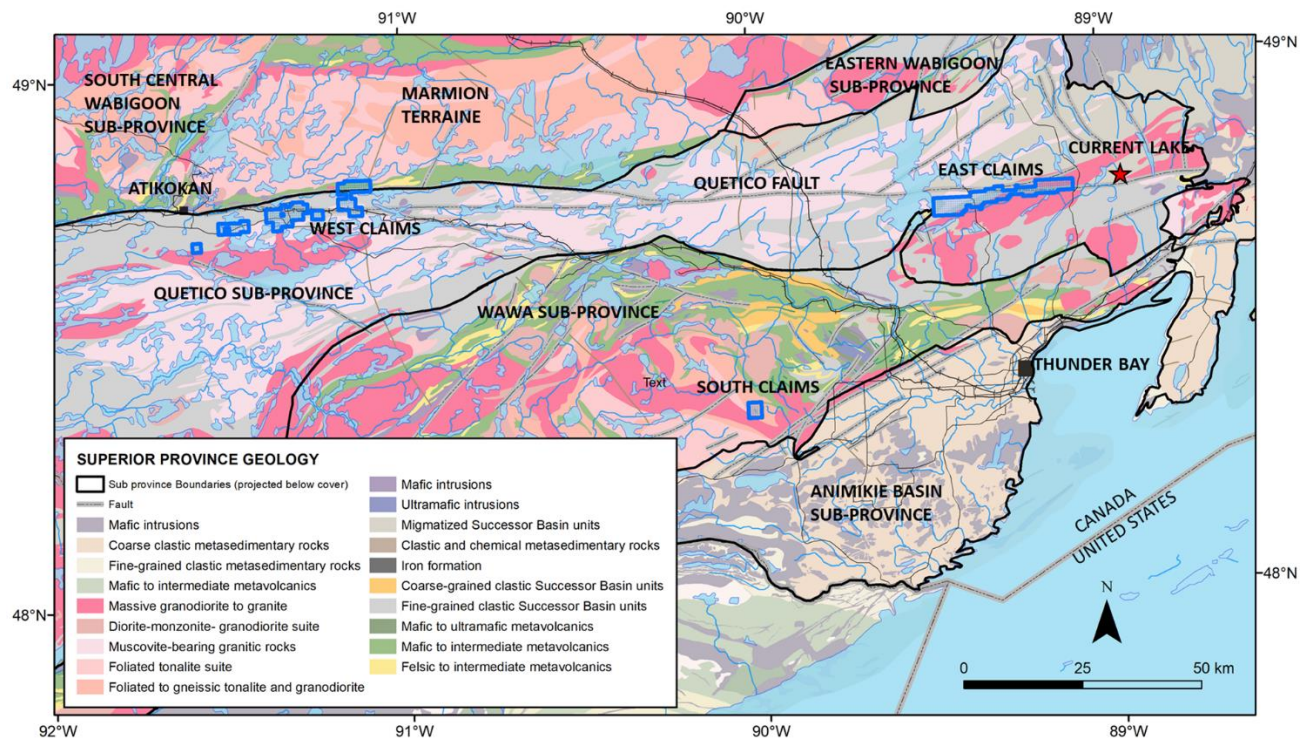


Figure 4: North American Nickel Inc. Quetico Project Geology (MRD 129).

The Quetico Metasedimentary assemblage is bounded to the south by the Wawa Subprovince, which is typified by metavolcanic and metasedimentary sequences of rocks and to the North lies the Wabigoon subprovince, typified by volcanoplutonic rock domains with metasedimentary rocks See Figure 4.

The Quetico Subprovince is approximately 70km wide, trends for approximately 1000km and is dominated by metamorphosed greywackes and siltstones considered to have deposited with in an accretionary prism on the southern margin of the Wabigoon arc before the collision of the Wawa arc from the South (Williams, 1991; Valli et al., 2004). Four deformation events are recognized in the area. D1 included soft sediment deformation, minor isoclinal folding, and development of a planar fabric parallel to the original bedding (S1) shortly after sedimentation (Williams, 1991; Valli et al., 2004; Pettigrew et al. 2006). D2 was mainly dextral strike slip shearing accompanied by folding and development of regional axial planar fabrics

(S2). D3 was also transpressive, and produced upright, open to tight folding. This transpressive deformation most likely occurred during the oblique accretion of the Wawa belt to the Wabigoon subprovince to the north (Williams, 1991; Valli et al., 2004). The subsequent D4 was local, forming minor shear zones cutting fabrics developed earlier.

According to Williams (1991), intrusive rocks that are known to occur within the Quetico Subprovince:

- Early Mafic-Ultramafic Intrusions known as “Quetico Intrusions”
- Foliated tonalite and diorite with ages of 2688-2687 Ma (Davis et al., 1990)
- Syenitic rocks intruded approximately 2690+/-1 Ma (Hattori and Percival, 1999)
- Voluminous, peraluminous granitic rocks with an age of 2670-2653 Ma (Percival and Sullivan, 1988).

The Quetico mafic and ultramafic intrusions within the Quetico Subprovince range in size from 3-5 m thick dykes, of limited extent, to a small, roughly elliptical stock 3300 m in length and up to 1800 m in width (MacTavish., 1999). Larger intrusions show evidence of zonation of lithologies with ultramafic cores surrounded by discontinuous gabbroic and/or rarer diorite rims. Irregular zones of copper-nickel sulphides and associated, highly variable PGE mineralization are present within some of the intrusions.

The NAN ‘West Claims’ field program occurs in an area east of the known Fire Lake Dykes, and west of the Kawene, Eva Lake and Kawene Lake intrusions.

6.2 Property Geology

Outcrop is generally sparse on the NAN Quetico West Claims Property and property scale geology relies on geophysical interpretation where there is no exposure. The NAN ‘West Claim’ block area lies approximately 15 kms east of Atikokan, Ontario in a straight line, or about 20 kms using highways 11B south to the Trans Canada Hwy and then east to the claim block boundary. NAN had originally staked 4 small claim blocks east of Atikokan but only 1 of 4 blocks was visited by the NAN prospecting team. The claim block reviewed lies approximately 2–3 kms south of the E-W trending Quetico fault, south of Sapawe Lake and NNW of Crystal Lake. The block encompasses three-quarters of the eastern portion of Aramis Lake, the north-east portion of Nickleby Lake and a small northern portion of Niobe Lake. Within this area the rocks are primarily composed of metasedimentary rocks consisting of wacke and phyllite with smaller portions of muscovite-bearing granitic rock, see Figure 5.

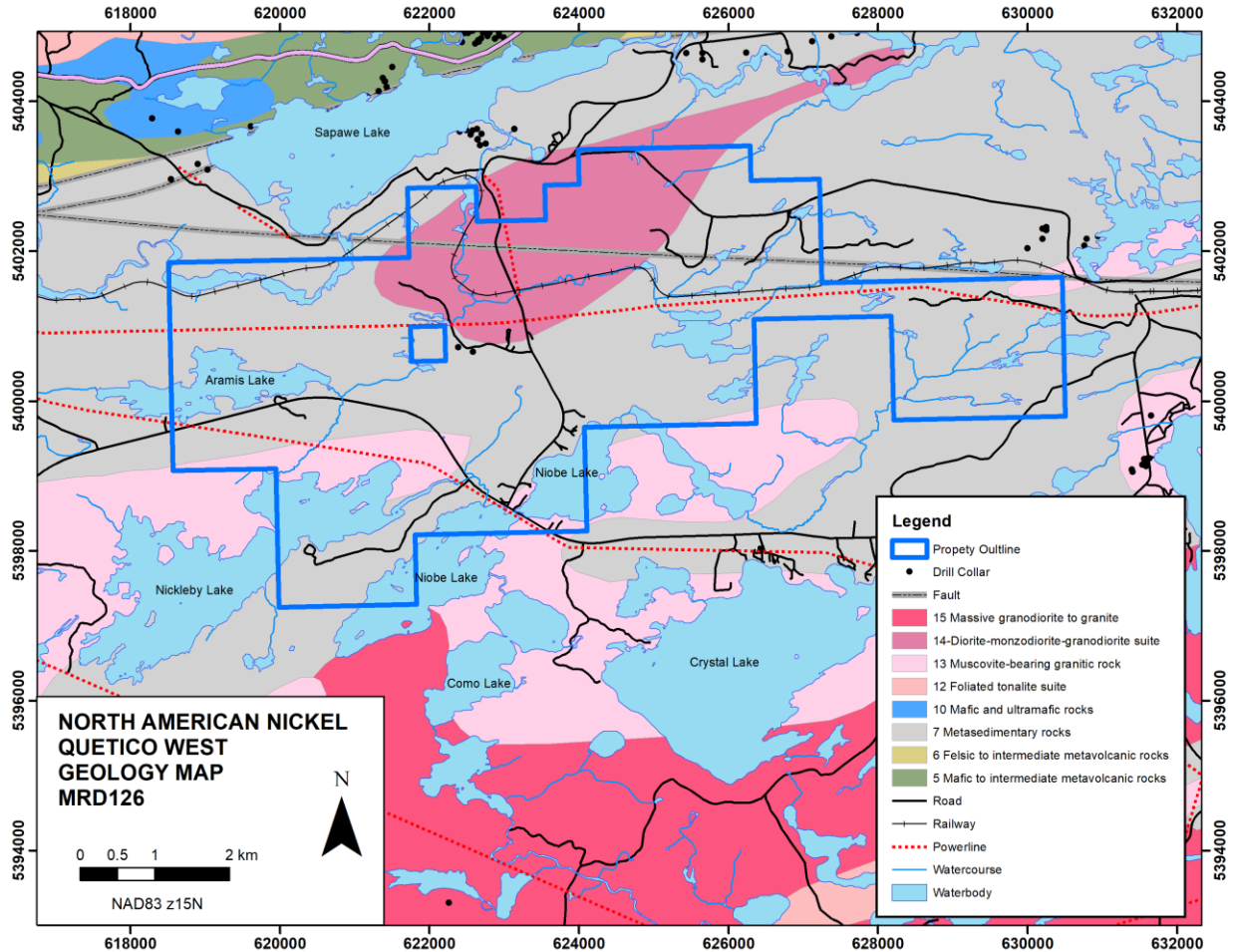


Figure 5: Property Geology from MRD 126

The north central portion of the claim block is composed primarily of a large tear dropped shaped tongue of massive granodiorite and granite.

7.0 RESULTS OF 2020 WORK

7.1 Prospecting Program

During the period June 4-8 of 2020, a program of prospecting and field rock sampling was undertaken to assess the potential of Ni-Cu-Co-PGM sulphide mineralization on the Quetico West claims. The purpose of the field program was to search for mineralized Quetico mafic/ultramafic intrusions. In total, eight magnetic targets were evaluated. Figure 6 shows the targets on an image of total magnetic field with the highlights of the results. A detailed map of the field program results is included in Appendix 2.

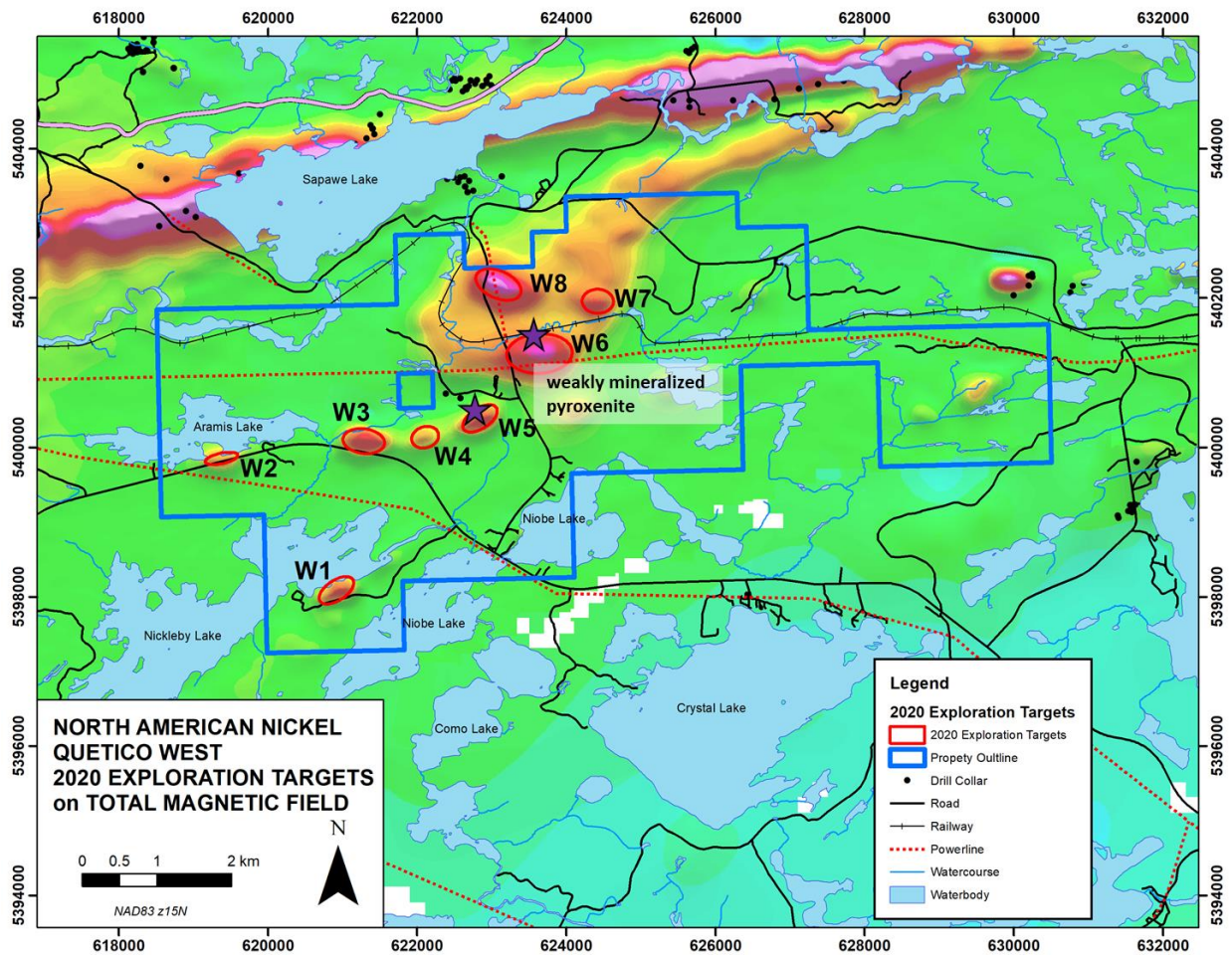


Figure 6: Quetico West Claim Block 2020 Exploration Targets.

Table 3 shows the results of the work program.

Table 3. Quetico West Project 2020 Field Program Results

TARGET ID	TARGET DESCRIPTION	LITHOLOGIES	SAMPLES	RESULTS
W1 June 5	Unexplained magnetic anomaly	Pegmatite dyke on road, not at target area		Entirely overburden covered, magnetic anomaly not explained
W2 June 5	Unexplained magnetic anomaly	Metasediments intruded by pegmatites		Magnetic anomaly not explained
W3 June 5	Unexplained magnetic anomaly	Metasediments at road en route to target area		Swampy and wet, magnetic anomaly unexplained
W4 June 6	Unexplained magnetic anomaly	Metasediments and pegmatites		Magnetic anomaly unexplained
W5 June 6	Unexplained magnetic anomaly	pyroxenite	D15353 D15354 D15355 D15356 D15370	Numerous pyroxenite outcrops. D15354 & 355 were highlights of the program (see below).
W6 June 8	Unexplained magnetic anomaly	Pyroxenite, granodiorite,	D15357	magnetic pyroxenite
W7 June 8	Unexplained magnetic anomaly	Gabbro, granite, granodiorite		Gabbro is weakly magnetic
W8 June 8	Unexplained magnetic anomaly	Granodiorite, weakly magnetic		Magnetic anomaly possibly explained by magnetic granodiorite

During the traversing of the eight (8) target areas, fifteen (15) representative grab samples were taken. These fifteen (15) representative grab samples were field described as follows; metasediments, granite, granodiorite, diabase, pyroxenite and gabbro. Six (6) were submitted for analysis (D15353-57 inclusive and D15370); one (1) for assaying and five (5) for WRA. Way Points and sample locations were recorded using handheld Garmin GPS. A list of the observed lithology with locations can be found in Appendix 3.

7.2 Sampling Program

Upon completion of the 2020 field program, the rock samples collected from the Quetico West Claims property were taken by the NAN prospecting team to North American Nickel's core logging facility in Sudbury and catalogued. Peter Lightfoot, NAN Consulting Chief Geologist, reviewed the samples and chose samples to be submitted for assay and WRA. Cecil Johnson, Contract Prospector to NAN, prepared the samples and delivered them to the ALS Global preparation lab in Sudbury, Ontario for sample preparation. Samples submitted for analysis were generally 0.75 to 1.5 kg, small representative samples were retained for reference purposes. Sample pulps were sent by air courier to the ALS Global laboratory in Vancouver, BC, Canada.

Blank samples and commercially prepared and certified Ni sulphide analytical control standards with a range of grades were inserted in every batch of 20 samples or a minimum of one per sample batch. In the batch sent for assay purposes, two QAQC were inserted that were sourced from CF Reference Materials Inc. Dowling, Ontario. Sample D15375 was a certified 'blank' CFRM-900 and sample D15376 was a 'high-grade' nickel sulphide standard. Both QAQC standards passed within certified specifications.

A standard rock package for processing was used (PREP-31). The entire rock sample was crushed to better than 70% passing -2mm. Riffle Split off 250g and pulverize split to better than 85% passing 75 microns.

Analysis of the one rock sample was by the following:

- PGM-ICP23: Pt, Pd and Au by fire assay and ICP-AES (Inductively Coupled Plasma Atomic Emission Spectroscopy) finish. 30g nominal sample weight
- ME-ICP81: Fused bead, four-acid digestion and ICP-MS (Inductively Coupled Plasma Mass Spectrometry) for Ni, Cu and Co analysis
 - 16 elements, custom reporting for elements Al₂O₃, As, CaO, Co, Cr₂O₃, Cu, Fe₂O₃, K₂O, MgO, MnO, Ni, Pb, S, SiO₂, TiO₂, Zn

The five (5) rock samples submitted for Whole Rock Analysis was by the following:

- PGM-ICP23: Pt, Pd and Au by fire assay and ICP-AES finish. 30g nominal sample weight
- ME-MS81d: Combination of Rare Earth & Trace Elements from method ME-MS81, plus whole rock package by method ME-ICP06. ME-ICP06 is an analysis by fused bead, four-acid digestion and ICP-AES LOI by furnace or TGA
 - Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Yb, Zr
- ME-4ACD81: Four acid digestion and ICP-AES
 - Ag, As, Cd, Co, Cu, Li, Mo, Ni, Pb, Sc, Tl, Zn
- S-IR08: Total Sulphur (IR Spectroscopy) by Leco Furnace
 - S, Completed only on 2 samples (D15354; D15355)

7.3 Prospecting and Geochemical Results

Eight target areas were prospected on the Quetico West claims during the 2020 field program. Ultramafic rocks, described as pyroxenite, outcrop at targets W5 and W6. Gabbro was observed at target W7.

W5 was selected as an unexplained magnetic anomaly 'high' along a trend of relatively small, yet possibly related East-West trend of elevated magnetic highs named as target areas W2, W3, W4 and W5. Numerous small pyroxenite outcrops were observed and noted to consist of coarse grained pyroxenite. One outcrop was approximately 30-40 m across and contained up to 2-3 mm blebs of 2-3% sulphides (Cpy and Po), along with 3-5% magnetite. Sulphide burns were noticeable. This larger outcrop was the only one observed to contain sulphides, although, the area was generally mossy with spongy spruce bush and outcrop was not able to be located along this trend. These intrusions may be separated from a larger intrusion to the west/east by a keel structure which is a classic target for magmatic sulphide exploration.

The Albert Carruthers Ni-Cu mineral occurrence with trenches and 3 shallow drillholes is supposedly located NW of this target, but it is more likely that the mineral occurrence is located near W5 because the field crew located pits near W5.

W6 is a magnetic target located within a larger tadpole shaped magnetic anomaly. A Pyroxenite outcrop was found to be present within a large weakly magnetic granodiorite body.

W7 was investigated and a 10 x 5 m outcrop of light blue to black medium grained gabbro was located. The gabbro is weakly magnetic.

Five samples were sent for analyses with one sample sent for whole rock purposes. Results of the analysis demonstrate modest Cu, Pt and Pd enrichment correlating to higher MgO concentrations.

All assayed samples returned MgO values from 11.85% to 23.6%, with Cr values varying from 370ppm to 2750ppm. Highlights of the West prospecting program are two samples from the 'W5' target area.

- Sample D15354: 20.1% MgO; 3110ppm Cu; 1110ppm Ni; 0.48% S; 0.165ppm Pt; 0.176ppm Pd; 0.159ppm Au
- Sample D15355: 20.7% MgO; 2450ppm Cu; 1200ppm Ni; 0.55% S; 0.135ppm Pt; 0.162ppm Pd; 0.142ppm Au

The assay certificates can be found in Appendix 4.

7.4 Petrographic Study

Two (2) samples (D15353 and D15354) were submitted to Vancouver Petrographics Ltd. (VanPetro), 8080 Glover Road, Langley, BC for petrographic analysis by thin section and polished section. Samples D15353 and D15354 were analyzed by both thin section and polished section and lie within Target W5.

A brief description of the petrographic analysis is as follows in Table 4, for further results please see Appendix 5.

Sample #	NAN Field Personnel Field Rock Description	VanPetro Thin Section Interpretation	VanPetro Polished Section Interpretation
D15353	Pyroxenite	This probably represents strongly tremolite-actinolite-minor biotite-carbonate-sphene-trace quartz altered, relict ultramafic rock originally composed mainly of clinopyroxene and accessory biotite-apatite.	Chalcopyrite occurs as loose clusters up to 1.5 mm across of sub/anhedra mainly <0.25 mm, intergrown/closely associated with interstitial biotite/phlogopite and traces of secondary quartz (subhedra to 0.2 mm). It is not clear whether the chalcopyrite represents relict magmatic sulfides or was introduced later during alteration to tremolite-carbonate.
D15354	Pyroxenite	Appears to represent strongly tremolite-carbonate-magnetite ±chlorite altered, probable former peridotite (possibly with original late-magmatic hornblende?).	Possibly relict, primary magnetite is distinguished by coarser grain size (subhedra to 0.4 mm) and it is commonly closely associated (or in part replaced by?) the sulfides with a disseminated to loose "net" texture. Sulfides include chalcopyrite (aggregates to 1.5 mm of sub- to anhedra <0.5 mm) and pyrrhotite (partly skeletal subhedra to ~1 mm) plus local minor probable pentlandite (subhedra <0.15 mm). Chalcopyrite is partly oxidized to limonite at margins, and pyrrhotite to lamellar/"bird's-eye" textured intergrowths of secondary pyrite/marcasite.

Table 4. Brief description of the petrographic analysis of 2 samples submitted to Vancouver Petrographics.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

On the Quetico West block, a total of eight magnetic anomalies were investigated. Five anomalies remain unexplained and weakly mineralized magnetic pyroxenite was identified at two target locations and weakly magnetic gabbro was located at another site. The projects highlights included two weakly mineralized pyroxenite samples associated from the W5 magnetic anomaly returned elevated Au+Pt+Pd values giving their respective sulphide percentage.

The W5 target is one of several interesting magnetic highs trending in an east west manner. Further follow-up along this trend to evaluate these magnetic highs would be a logical next step.

8.2 Recommendations

The results of the 2020 field program resulted in the discovery of weakly mineralized pyroxenite outcrop. Future exploration will focus on additional exploration of the sampled intrusions and other magnetic targets that were not prospected in 2020.

An airborne drone magnetic survey to further define the magnetic survey is proposed, along with ground IP or ground EM to move any favourable targets to the drilling stage.

9.0 REFERENCES

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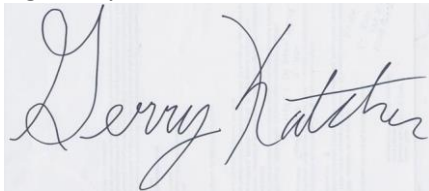
Valli, F., Guillot, S., Hattori, K.H., 2004. Source and tectonometamorphic evolution of mafic and pelitic metasedimentary rocks from the central Quetico metasedimentary belt, Archean Superior Province of Canada. Precambrian Res. 132, 155–177.

10.0 STATEMENT OF QUALIFICATIONS

I, Gerry Katchen, of the city of Thunder Bay, in the province of Ontario, do hereby certify that:

1. I have worked as a geologist for a total of 22 years.
2. I graduated with a degree of B.Sc. (4 year Spec.) in Geology from Brandon University of Brandon Manitoba, in 1999.
3. I am currently professionally registered in Ontario to practise as a Geologist. PGO # 1322
4. I have been and, currently am, a contractor of North American Nickel since January 2021.
5. I am responsible for the statements made within this assessment report.

Signed By:

A handwritten signature in black ink on a light blue background. The signature reads "Gerry Katchen" in a cursive script.

Gerry Katchen, P. Geo #1322 (PGO)

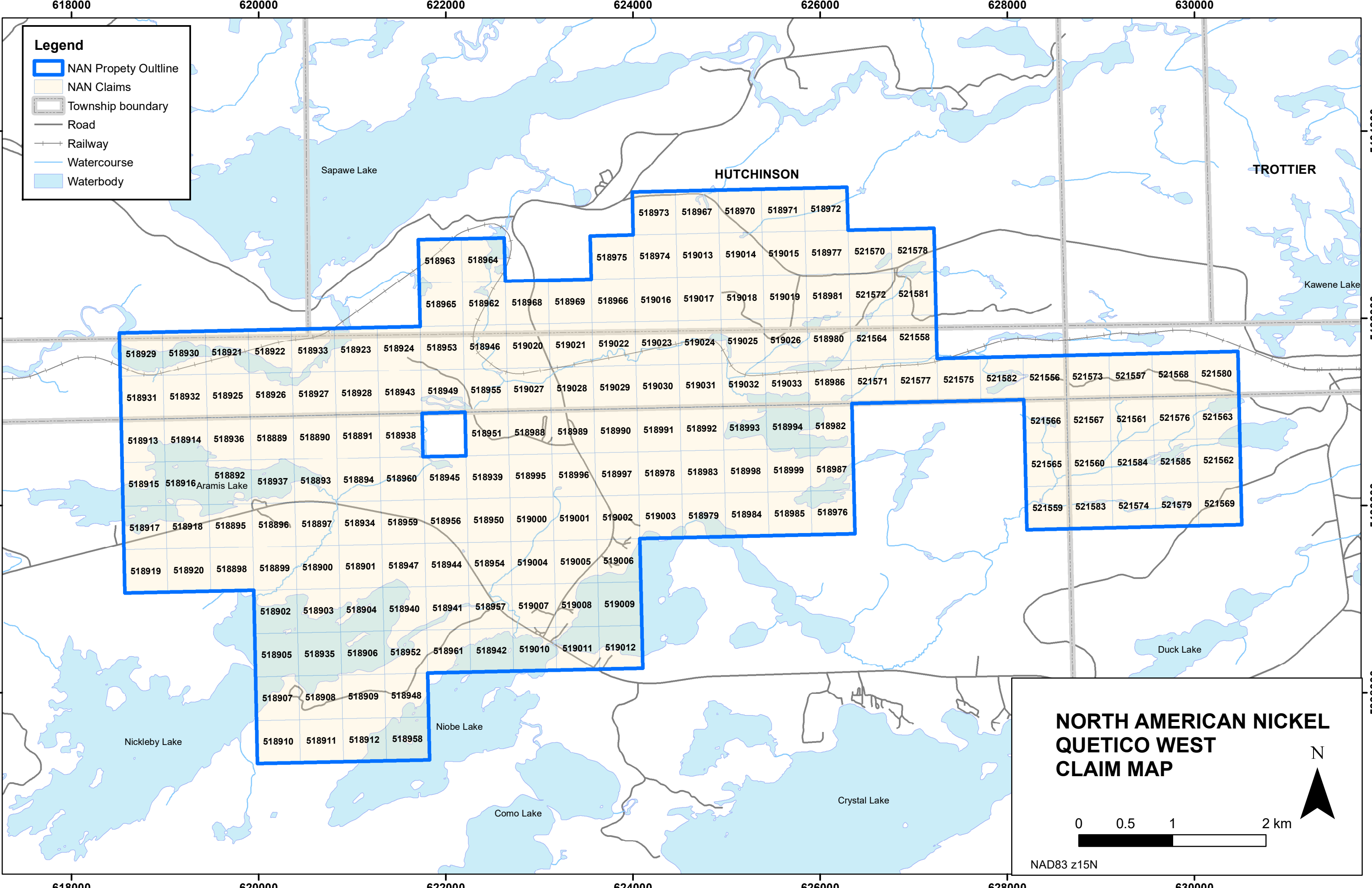
I, Sharon Taylor, of the city of Bathurst, in the province of New Brunswick, do hereby certify that:

1. I have worked as a geoscientist for a total of 32 years.
2. I graduated with a degree of B.Sc. in Geology, Math and Physics from Mount Allison University of Sackville, New Brunswick, in 1982 and an M. Sc. in Geoscience from Queen's University in 1985.
3. I am currently professionally registered in Ontario to practise as a Geoscientist. PGO # 0626.
4. I have been an employee or a consultant to North American Nickel since July 2014.
5. I am responsible for the statements made within this assessment report.

Signed By:



Sharon Taylor, P. Geo #0626 (PGO)



Legend

- NAN Propety Outline
- NAN Claims
- Township boundary
- Road
- Railway
- Watercourse
- Waterbody

**NORTH AMERICAN NICKEL
QUETICO WEST
CLAIM MAP**

0 0.5 1 2 km

N

NAD83 z15N

HUTCHINSON

TROTTIER

Sapawe Lake

Kawene Lake

Aramis Lake

Duck Lake

Niobe Lake

Crystal Lake

Nickleby Lake

Como Lake

518929 518930 518921 518922 518933 518923 518924 518953 518946 519020 519021 519022 519023 519024 519025 519026 518980 521564 521558

518931 518932 518925 518926 518927 518928 518943 518949 518955 519027 519028 519029 519030 519031 519032 519033 518986 521571 521577 521575 521582 521556 521573 521557 521568 521580

518913 518914 518936 518889 518890 518891 518938 518951 518988 518989 518990 518991 518992 518993 518994 518982

518915 518916 518892 518937 518893 518894 518960 518945 518939 518995 518996 518997 518978 518983 518998 518999 518987

518917 518918 518895 518896 518897 518934 518959 518956 518950 519000 519001 519002 519003 518979 518984 518985 518976

518919 518920 518898 518899 518900 518901 518947 518944 518954 519004 519005 519006

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518905 518935 518906 518952 518961 518942 519010 519011 519012

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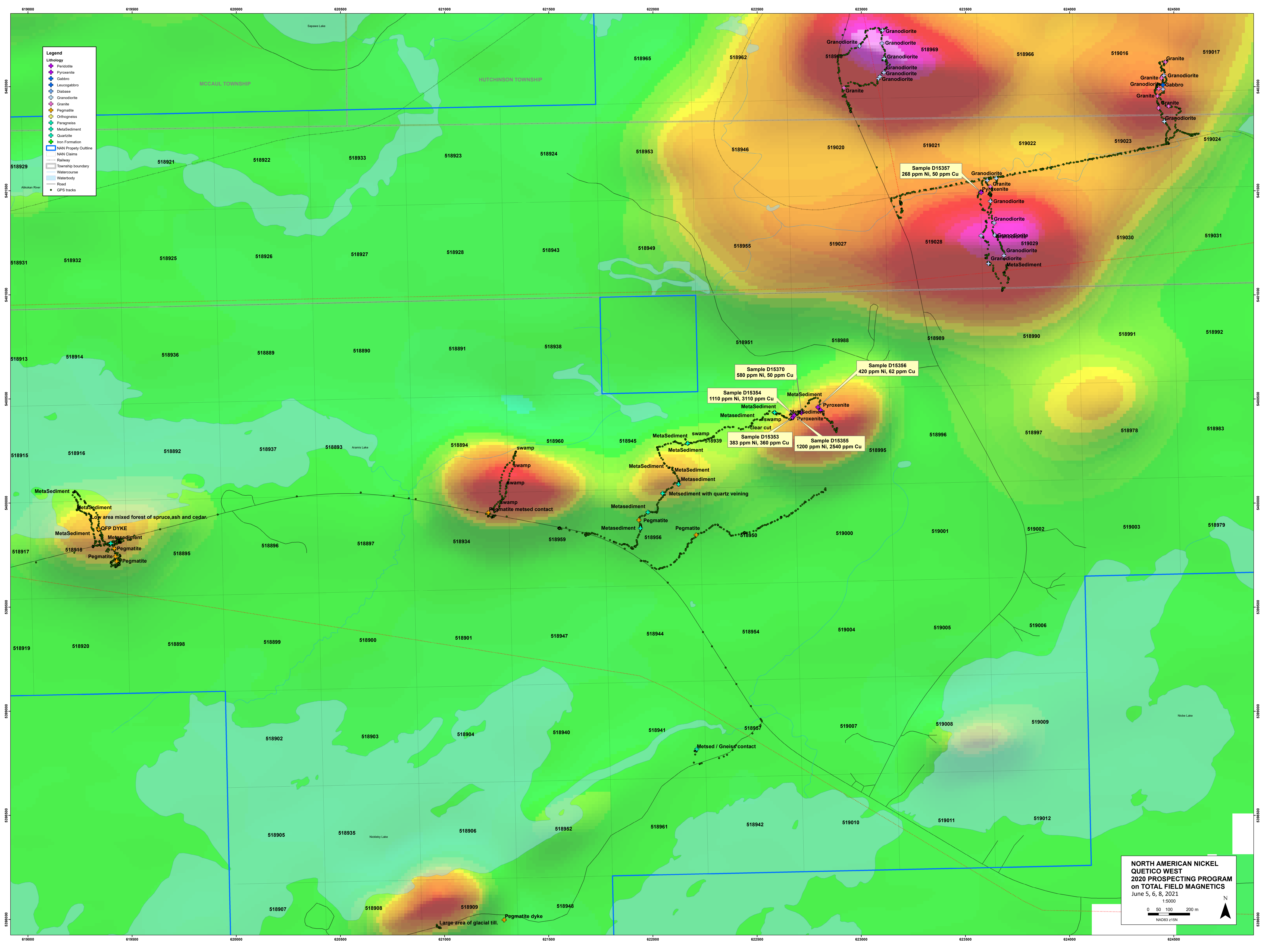
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518965 518962 518968 518969 518966 519016 519017 519018 519019 518981 521572 521581

521566 521567 521561 521576 521563

521565 521560 521584 521585 521562

521559 521583 521574 521579 521569



- Legend**
- Lithology
 - Peridotite
 - Pyroxenite
 - Gabbro
 - Leucogabbro
 - Diabase
 - Granodiorite
 - Granite
 - Pegmatite
 - Orthogneiss
 - Paragneiss
 - MetaSediment
 - Quartzite
 - Iron Formation
 - NAN Property Outline
 - NAN Claims
 - Railway
 - Township boundary
 - Watercourse
 - Waterbody
 - Road
 - GPS tracks

Sample D15357
268 ppm Ni, 50 ppm Cu

Sample D15370
580 ppm Ni, 50 ppm Cu

Sample D15356
420 ppm Ni, 62 ppm Cu

Sample D15354
1110 ppm Ni, 3110 ppm Cu

Sample D15353
383 ppm Ni, 360 ppm Cu

Sample D15355
1200 ppm Ni, 2540 ppm Cu

**NORTH AMERICAN NICKEL
QUETICO WEST
2020 PROSPECTING PROGRAM
on TOTAL FIELD MAGNETICS**
June 5, 6, 8, 2021
1:5000
0 50 100 200 m
NAD83 215N

Sample_ID	ASSAY#	WR#	PTS#	REP SAMPLE	UTM_E	UTM_N	Elevation	Lith_Code	Lithology	Mineralogy
WP 0001	N/A	N/A	N/A		619300	5399915	442	N/A	N/A	N/A
WP 0002	N/A	N/A	N/A		619248	5399978	449	N/A	N/A	N/A
WP 0003	N/A	N/A	N/A		619340	5399874	435	I1P	QFP DYKE	N/A
WP 0004	N/A	N/A	N/A		621210	5399953	435	I1g	Pegmatite metsed contact	N/A
WP 0005	N/A	N/A	N/A		621263	5399987	442	N/A	N/A	N/A
WP 0006	N/A	N/A	N/A		621296	5400081	439	N/A	N/A	N/A
WP 0007	N/A	N/A	N/A		621326	5400164	439	N/A	N/A	N/A
WP 0008	N/A	N/A	N/A		621343	5400248	438	N/A	N/A	N/A
WP 0009	N/A	N/A	N/A		620965	5397967	439	N/A	N/A	N/A
WP 0010	N/A	N/A	N/A		621286	5397998	442	I1g	Pegmatite dyke	N/A
WP 0011	N/A	N/A	N/A		622211	5398818	432		Metsed Gneiss contact	N/A
WP 0012	N/A	N/A	N/A	REP 0012	621940	5399879	436		Metsed	N/A
WP 0013	N/A	N/A	N/A	REP 0013	621976	5399956	438		Metsed	N/A
WP 0014	N/A	N/A	N/A		622047	5400046	438		Metsed with QTV	N/A
WP 0015	N/A	N/A	N/A	REP 0015	622123	5400090	442		Metsed	N/A
WP 0016	N/A	N/A	N/A		622078	5400169	435	N/A	N/A	N/A
WP 0017	N/A	N/A	N/A		622024	5400255	436	N/A	N/A	N/A
WP 0018	N/A	N/A	N/A		622167	5400286	434		Metsed/Gneiss	N/A
WP 0019	N/A	N/A	N/A	REP 0019	622584	5400434	436		Metsed	N/A
WP 0021	N/A	N/A	N/A		622773	5400503	444	N/A	N/A	N/A
WP 0022	N/A	N/A	N/A	REP 0022	624455	5401832	442	I1C	Granodiorite	N/A
WP 0023	N/A	N/A	N/A		624448	5402008	477	I3A	Gabbro	Px 20%, AMPH 30%, QTZ 25%, Bio 5%, Plag 20%
WP 0024	N/A	N/A	N/A		624460	5402181	481	I1b	Granite	QTZ 30%, AMPH 20%, PLAG 30%, PX 10%, BIO-MUSC 10%
WP 0025	N/A	N/A	N/A	REP 0025	623648	5401560	463	I1C	Granodiorite	Px 40%, AMPH 20%, QTZ 20, plag 20%
WP 0026	N/A	N/A	N/A		623641	5401287	468	I1C	Granodiorite	Px 40%, AMPH 20%, QTZ 20, plag 20%
WP 0027	N/A	N/A	N/A		623090	5402047	490	I1C	Granodiorite	Px 40%, AMPH 20%, QTZ 20, plag 20%
WP 0028	N/A	N/A	N/A	REP 0028	623110	5402134	490	I1C	Granodiorite	Px 40%, AMPH 20%, QTZ 20, plag 20%
D15351	N/A	N/A	N/A	REP D15351	619398	5399806	444	SM	Metsed	QTZ 30%, Amph 40%, Bio- Musc 20% plag 10%
D15352	N/A	N/A	N/A	REP D15352	619426	5399721	455	I1g	Pegmatite	QTZ 35%, Albite 35%, Bio-musc 30%
D15353	D15353	D15353	D15353	REP D15353	622671	5400411	447	I4B	Pyroxenite	Px 60%, AMPH 15%, QTZ 15%, BIO 5%, Olivine 5%
D15354	D15354	D15354	D15354	REP D15354	622678	5400421	443	I4B	Pyroxenite	Px 60%, AMPH 15%, QTZ 15%, BIO 5%, Olivine 5%
D15355	D15355	D15355	N/A	REP D15355	622678	5400421	443	I4B	Pyroxenite	Px 60%, AMPH 15%, QTZ 15%, BIO 5%, Olivine 5%

Sample_ID	ASSAY#	WR#	PTS#	REP SAMPLE	UTM_E	UTM_N	Elevation	Lith_Code	Lithology	Mineralogy
D15356	D15356	D15356	N/A	REP D15356	622792	5400460	445	I4B	Pyroxenite	Px 60%, AMPH 15%, QTZ 15%, BIO 5%, Olivine 5%
D15357	D15357	N/A	N/A	REP D15357	623576	5401491	485	I4B	Pyroxenite	Px 60%, AMPH 15%, QTZ 15%, BIO 5%, Olivine 5%
D15370	D15370	N/A	N/A	REP D15370	622713	5400433	448	I4B	Pyroxenite	Px 60%, AMPH 15%, QTZ 15%, BIO 5%, Olivine 5%

Sample_ID	Description
WP 0001	OVB, NO OC. Low area mixed forest of spruce,ash and cedar.
WP 0002	OVB, NO OC. Top of hill. Mixed forest of spruce,ash and birch. 20 meters west to OC of metsed.
WP 0003	0.5 Meter Quartz feldspar porphyry dyke cutting metseds. Dip 065, strike 095E
WP 0004	pegmatite dyke cutting metasediment. Next to HWY. Peg dyke vertical dip, strike 082,
WP 0005	OVB swamp no OC,
WP 0006	OVB swamp no OC,
WP 0007	OVB swamp no OC,
WP 0008	OVB swamp no OC,
WP 0009	targets W1-01 to W1-03 are on private property going north to lake. Large area of glacial till. No OC
WP 0010	OC 5x10 Meter of pegmatite dyke
WP 0011	gravel pit area, metsed gneiss contact with small shear zone. Shear zone dip 070, strike 235
WP 0012	OC 10x15 of metsed.
WP 0013	OC 5X10 M of a light grey medium to fine grain metasediment.
WP 0014	OC 20X 30 M of a light blue to grey fine to medium grain metsed,with a small 2-3 cm QTV cutting the metasediment,QTV dip 075 strike 090. Top of hill exposure
WP 0015	OC 15 x 20 M of a light blue to grey fine to medium grain metsed.Top of hill exposure
WP 0016	OVB with metsed in area. 30 meters to east
WP 0017	OVB, 30 meters north metsed OC
WP 0018	OC 20 x 10 meters of metsed/gneiss with 40 cm peg dyke. Top of hill exposure
WP 0019	OC 10 x 5M of light blue to grey medium to fine grain slightly sheared metsed. Edge of swamp exposure
WP 0021	OVB no OC
WP 0022	OC 20 X 30M of a medium to coarse grained grandio
WP 0023	OC 10 X5M small pod of light blue to black meduim grained gabbro.
WP 0024	OC 10 X 10M of a medium to coarse grained granite to grandio.Top of hill exposure
WP 0025	oc 40x50M of a black to pink med grained grandio.
WP 0026	oc 10X15M of a light pink to black med to coarse grained grandio.
WP 0027	oc 10X5M grandio with trace magnetite
WP 0028	oc 10X15M of a light pink to black medium grained grandio.
D15351	oc 25x10M of a light blue grey medium to fine grain Metased. Limonite and Jarosite stained on fractures. Slightly sheared. Dip 76, strike 085E
D15352	oc 1x1M, pegmatite cutting metased. White to pink coarse to very grained peg dyke. Dip 075, strike 75E. Several peg dykes in area. No Spodumene or other lithium minerals.
D15353	OC 20x20M of a coarse to pegmatitic textured dark blue to black massive Pyroxenite. Magnetite bearing.
D15354	OC 20x20M of a medium grained blue to dark grey massive Pyroxenite. Magnetite bearing. 10 meters east of sample D15353. sample has small disseminated blebs (1-2mm) of Cp and Po.
D15355	OC 20x20M of a medium grained blue to dark grey massive Pyroxenite. Magnetite bearing. 10 meters east of sample D15353. sample has small disseminated blebs (1-2mm) of Cp and Po.

Sample_ID	Description
D15356	OC 10x15M of a coarse grained, blue to black green pyroxenite. Old small trench 3x3M. Plugger blast hole noted. No gossan and only trace sulfide observed. Magnetite bearing.
D15357	OC 3x5M, dark blue to black green medium grained pyroxenite.
D15370	OC 20 X 30M of a dark blue to black coarse grained massive inequigranular pyroxenite. Next to old road power line access.

Sample_ID	Magnetism	Mineralization	Alteration	Sampler	Condition	Samp_Type	Samp_Reason	Samp_Date
WP 0001	N/A	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0002	N/A	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0003	NIL	NIL	NIL	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0004	NIL	NIL	NIL	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0005		N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0006		N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0007	N/A	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0008	N/A	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0009	N/A	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0010	NIL	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	05/06/2020
WP 0011	NIL	N/A	Mod	CJ	N/A	N/A	N/A	05/06/2020
WP 0012	NIL	N/A	Mod	CJ	Weathered and oxidized	Grab	ground truth mag targets	06/06/2020
WP 0013	NIL	NIL	Mod to weak	CJ	Weathered and oxidized	Grab	ground truth mag targets	06/06/2020
WP 0014	NIL	NIL	Mod	CJ	N/A	N/A	ground truth mag targets	06/06/2020
WP 0015		N/A	Weak	CJ	Fresh	Grab	ground truth mag targets	06/06/2020
WP 0016	N/A	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	06/06/2020
WP 0017	NIL	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	06/06/2020
WP 0018	NIL	N/A	Mod	CJ	N/A	N/A	ground truth mag targets	06/06/2020
WP 0019	NIL	Trace py	Weak	CJ	Fresh	Grab	ground truth mag targets	06/06/2020
WP 0021	N/A	N/A	N/A	CJ	N/A	N/A	ground truth mag targets	06/06/2020
WP 0022	NIL	NIL	N/A	CJ	Fresh	Grab	ground truth mag targets	08/06/2020
WP 0023	Weak	Trace PY	Weak	CJ	Fresh	Grab	ground truth mag targets	08/06/2020
WP 0024	NIL	NIL	N/A	CJ	N/A	N/A	ground truth mag targets	08/06/2020
WP 0025	Weak	Nil	Weak	CJ	Fresh	Grab	ground truth mag targets	08/06/2020
WP 0026	NIL	NIL	Weak	CJ	N/A	N/A	ground truth mag targets	08/06/2020
WP 0027	Weak	trace magnetite	Weak	CJ	N/A	N/A	ground truth mag targets	08/06/2020
WP 0028	Weak	Nil	Weak	CJ	Fresh	Grab	ground truth mag targets	08/06/2020
D15351	NIL	NIL	Weak	CJ	weathered and oxidized	Grab	ground truth mag targets	05/06/2020
D15352	NIL	NIL	N/A	CJ	Fresh	Grab	ground truth mag targets	05/06/2020
D15353	Weak	Py tr-1%, Cp tr-1%, Po trace	Weak	CJ	Fresh	Grab	ground truth mag targets	06/06/2020
D15354	Weak	Cp 1-2%, Po 1-2%	Weak	CJ	Fresh	Grab	ground truth mag targets	06/06/2020
D15355	Weak	Cp 1-2%, Po 1-2%	Weak	CJ	Fresh	Grab	ground truth mag targets	06/06/2020

Sample_ID	Magnetism	Mineralization	Alteration	Sampler	Condition	Samp_Type	Samp_Reason	Samp_Date
D15356	moderate	Tr-cp-py	Weak	CJ	Fresh	Grab	ground truth mag targets	06/06/2020
D15357	moderate	Magnetite 2-3%	Weak	CJ	Fresh	Grab	ground truth mag targets	08/06/2020
D15370	Mod-Strong	Trace py and 3-5% magnetite	Weak	CJ	Fresh	Grab	ground truth mag targets	06/06/2020

Sample_ID	Target	Project	Map Datum	Foliage
WP 0001	w2-02	Quetico West	WGS 84	
WP 0002	W2-01	Quetico West	WGS 84	
WP 0003	N/A	Quetico West	WGS 84	
WP 0004	N/A	Quetico West	WGS 84	
WP 0005	W3-04	Quetico West	WGS 84	spruce,Tamarack,birch,lab tea and mixed grasses
WP 0006	W3-03	Quetico West	WGS 84	spruce swamp
WP 0007	W3-02	Quetico West	WGS 84	spruce swamp
WP 0008	W3-01	Quetico West	WGS 84	thick tag alders, low swamp area
WP 0009	W1-03	Quetico West	WGS 84	mixed forest of spruce,birch and pine.
WP 0010	N/A	Quetico West	WGS 84	mixed forest of spruce,birch and pine.
WP 0011	N/A	Quetico West	WGS 84	mixed forest of spruce,birch and pine.
WP 0012	N/A	Quetico West	WGS 84	N/A
WP 0013	N/A	Quetico West	WGS 84	mixed forest,poplar,birch and maple
WP 0014	N/A	Quetico West	WGS 84	mixed forest of balsam, spruce,birch,moss covered floor, top of hill exposure.
WP 0015	N/A	Quetico West	WGS 84	mixed forest of spruce,balsam,poplar and birch
WP 0016	W4-02	Quetico West	WGS 84	N/A
WP 0017	W4-01	Quetico West	WGS 84	mature fores of spruce, birch and poplar
WP 0018	N/A	Quetico West	WGS 84	mixed forest,spruce,cedar,birch
WP 0019	N/A	Quetico West	WGS 84	mixed forest,cedar,balsam,poplar.Edge of swamp.
WP 0021	W5-01	Quetico West	WGS 84	mixed forest
WP 0022	W7-031	Quetico West	WGS 84	Mixed forest. Poplar,birch,
WP 0023	W7-02	Quetico West	WGS 84	Thick bush,poplar,birch,balsam and mixed brush
WP 0024	W7-01	Quetico West	WGS 84	mixed forest
WP 0025	N/A	Quetico West	WGS 84	mixed forest of spruce, poplar and birch
WP 0026	W6-03	Quetico West	WGS 84	mixed forest of spruce, poplar and birch
WP 0027	N/A	Quetico West	WGS 84	mixed forest of spruce, poplar and birch
WP 0028	N/A	Quetico West	WGS 84	mixed forest of spruce, poplar and birch
D15351	W2-03	Quetico West	WGS 84	mixed forest of mature jackpine, spruce and Birch
D15352	W2-04	Quetico West	WGS 84	mixed forest of mature jackpine, spruce and Birch
D15353	100M west	Quetico West	WGS 84	mixed forest of mature jackpine, spruce and Birch
D15354	100M west	Quetico West	WGS 84	mixed brush, Poplar, birch and spruce.
D15355	100M west	Quetico West	WGS 84	mixed brush, Poplar, birch and spruce.

Sample_ID	Target	Project	Map Datum	Foliage
D15356	W5-01	Quetico West	WGS 84	mixed brush, Poplar, birch and spruce.
D15357	W6-01	Quetico West	WGS 84	Mature forest of spruce, birch, jackpine and poplar.
D15370	N/A	Quetico West	WGS 84	mixed brush,



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CERTIFICATE SD20148372

This report is for 19 Rock samples submitted to our lab in Sudbury, ON, Canada on 14-JUL-2020.
 The following have access to data associated with this certificate:

PETER LIGHTFOOT	JIM SPARLING	SHARON TAYLOR
-----------------	--------------	---------------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-21	Crush entire sample
LOG-24	Pulp Login - Rcd w/o Barcode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES

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

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

Signature: 
 Saa Traxler, General Manager, North Vancouver



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CERTIFICATE OF ANALYSIS SD20148372

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg	CRU-QC Pass2mm %	PUL-QC Pass75um %	PGM-ICP23 Au ppm	PGM-ICP23 Pt ppm	PGM-ICP23 Pd ppm	ME-ICP81 Al2O3 %	ME-ICP81 As %	ME-ICP81 CaO %	ME-ICP81 Co %	ME-ICP81 Cr2O3 %	ME-ICP81 Cu %	ME-ICP81 Fe2O3 %	ME-ICP81 K2O %	ME-ICP81 MgO %
		0.02	0.01	0.01	0.001	0.005	0.001	0.01	0.01	0.05	0.002	0.01	0.002	0.05	0.1	0.01
D15370		0.78			0.002	0.012	0.012	2.70	0.01	11.90	0.008	0.34	0.005	10.80	0.1	23.6
D15375		0.07			<0.001	<0.005	0.001	3.08	0.01	0.17	<0.002	0.01	0.002	1.42	0.6	0.11
D15376		0.07			0.150	0.888	0.934	7.26	0.01	4.31	0.058	0.02	1.735	41.2	0.7	3.50

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CERTIFICATE OF ANALYSIS SD20148372

Sample Description	Method Analyte Units LOD	ME-ICP81 MnO %	ME-ICP81 Ni %	ME-ICP81 Pb %	ME-ICP81 S %	ME-ICP81 SiO2 %	ME-ICP81 TiO2 %	ME-ICP81 Zn %
		0.01	0.002	0.01	0.01	0.2	0.01	0.002
D15370		0.17	0.058	<0.01	0.03	44.7	0.21	0.005
D15375		0.01	<0.002	<0.01	0.02	96.9	0.09	<0.002
D15376		0.11	2.55	<0.01	14.75	28.9	0.45	0.020

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CERTIFICATE OF ANALYSIS SD20148372

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.		
	CRU-21	CRU-31	CRU-QC
	LOG-24	PUL-31	PUL-QC
	WEI-21		
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	ME-ICP81	PGM-ICP23	



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CERTIFICATE SD20172830

Project: LN_EC Batch 20-004-Whole Rock

This report is for 4 Rock samples submitted to our lab in Sudbury, ON, Canada on 12-AUG-2020.

The following have access to data associated with this certificate:

PETER LIGHTFOOT

JIM SPARLING

SHARON TAYLOR

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
S-IR08	Total Sulphur (IR Spectroscopy)	LECO

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

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

Signature:

Saa Traxler, General Manager, North Vancouver



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Project: LN_EC Batch 20-004-Whole Rock

CERTIFICATE OF ANALYSIS SD20172830

Sample Description	Method Analyte Units LOD	S-IR08 S % 0.01
D15354		0.48
D15355		0.55
[REDACTED]		
[REDACTED]		



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Project: LN_EC Batch 20-004-Whole Rock

CERTIFICATE OF ANALYSIS SD20172830

CERTIFICATE COMMENTS	
Applies to Method:	<p style="text-align: center;">LABORATORY ADDRESSES</p> <p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. FND-02 S-IR08</p>



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CERTIFICATE SD20148359

Project: LN_EC Batch 20-004-Whole Rock

This report is for 7 Rock samples submitted to our lab in Sudbury, ON, Canada on 14-JUL-2020.

The following have access to data associated with this certificate:

PETER LIGHTFOOT	JIM SPARLING	SHARON TAYLOR
-----------------	--------------	---------------

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

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81	Lithium Borate Fusion ICP-MS	ICP-MS
TOT-ICP06	Total Calculation for ICP06	
ME-4ACD81	Base Metals by 4-acid dig.	ICP-AES
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
ME-ICP06	Whole Rock Package - ICP-AES	ICP-AES
OA-GRA05	Loss on Ignition at 1000C	WST-SEQ

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

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Signature: 
 Saa Traxler, General Manager, North Vancouver



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Project: LN_EC Batch 20-004-Whole Rock

CERTIFICATE OF ANALYSIS SD20148359

Sample Description	Method Analyte Units LOD	WEI-21	CRU-QC	PUL-QC	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	
		Recvd Wt. kg	Pass2mm %	Pass75um %	Ba ppm	Ce ppm	Cr ppm	Cs ppm	Dy ppm	Er ppm	Eu ppm	Ga ppm	Gd ppm	Hf ppm	Ho ppm	La ppm
		0.02	0.01	0.01	0.5	0.1	10	0.01	0.05	0.03	0.02	0.1	0.05	0.1	0.01	0.1
D15353		1.22	82.0	96.7	304	32.2	1430	40.4	2.18	1.09	1.16	9.5	3.41	1.2	0.44	11.3
D15354		0.84		95.8	46.3	14.0	2730	1.99	1.31	0.69	0.71	4.5	1.91	0.5	0.20	5.1
D15355		0.79			23.4	16.3	2750	0.54	1.32	0.63	0.66	4.1	2.29	0.5	0.19	6.1
D15356		0.94			32.1	18.3	2220	2.68	1.37	0.62	0.65	5.7	2.02	0.8	0.25	7.5
D15357		1.31			1550	400	370	3.36	8.31	3.11	6.78	22.3	19.05	6.1	1.34	154.5

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Project: LN_EC Batch 20-004-Whole Rock

CERTIFICATE OF ANALYSIS SD20148359

Sample Description	Method Analyte Units LOD	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	
		Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Th ppm	Tm ppm	U ppm	V ppm	W ppm
		0.01	0.1	0.1	0.02	0.2	0.03	1	0.1	0.1	0.01	0.05	0.01	0.05	5	1
D15353		0.16	2.1	22.7	5.04	63.7	5.14	1	273	0.3	0.45	1.03	0.15	0.32	183	2
D15354		0.08	0.6	11.6	2.25	4.8	2.58	<1	165.5	0.2	0.23	0.47	0.06	0.14	106	1
D15355		0.07	0.5	13.3	2.57	2.0	2.92	<1	118.5	0.2	0.24	0.37	0.07	0.09	100	1
D15356		0.07	1.1	11.9	2.56	4.0	2.67	<1	222	0.2	0.24	0.74	0.08	0.17	113	2
D15357		0.30	15.4	209	50.5	91.6	34.2	2	1535	0.8	1.83	11.35	0.39	2.51	290	2

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CERTIFICATE OF ANALYSIS SD20148359

Sample Description	Method Analyte Units LOD	ME-MS81	ME-MS81	ME-MS81	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06
		Y ppm	Yb ppm	Zr ppm	SiO2 %	Al2O3 %	Fe2O3 %	CaO %	MgO %	Na2O %	K2O %	Cr2O3 %	TiO2 %	MnO %	P2O5 %
		0.1	0.03	2	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	0.01	0.01	0.01
D15353		11.1	1.09	45	48.7	6.84	8.82	14.05	16.60	1.05	1.20	0.201	0.46	0.15	0.27
D15354		5.4	0.42	15	46.4	3.25	9.42	14.15	20.1	0.51	0.17	0.374	0.23	0.15	0.06
D15355		5.4	0.46	14	45.3	2.90	9.97	14.20	20.7	0.42	0.10	0.374	0.23	0.15	0.05
D15356		6.2	0.65	28	47.2	4.65	10.45	13.55	21.0	0.50	0.15	0.295	0.24	0.17	0.10
D15357		34.6	2.31	217	39.8	12.25	14.80	11.50	11.85	1.52	2.95	0.052	1.76	0.18	1.80



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CERTIFICATE OF ANALYSIS SD20148359

Sample Description	Method Analyte Units LOD	ME-ICP06	OA-GRA05	TOT-ICP06	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	
		BaO	LOI	Total	Ag	As	Cd	Co	Cu	Li	Mo	Ni	Pb	Sc	Tl	Zn
		%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	0.01	0.01	0.5	5	0.5	1	1	10	1	1	2	1	10	2
D15353		0.03	3.23	101.62	<0.5	<5	<0.5	62	360	80	<1	383	4	51	10	56
D15354		<0.01	4.11	98.93	3.0	<5	0.8	82	3110	10	1	1110	4	42	<10	60
D15355		<0.01	4.82	99.22	2.1	<5	0.5	90	2540	<10	<1	1200	4	42	10	56
D15356		<0.01	2.91	101.24	<0.5	<5	<0.5	74	62	40	<1	420	3	40	10	67
D15357		0.17	1.51	100.32	<0.5	7	<0.5	58	50	30	1	268	10	29	10	161

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Project: LN_EC Batch 20-004-Whole Rock

CERTIFICATE OF ANALYSIS SD20148359

Sample Description	Method Analyte Units LOD	PGM-ICP23	PGM-ICP23	PGM-ICP23
		Au ppm	Pt ppm	Pd ppm
		0.001	0.005	0.001
D15353		0.008	0.054	0.078
D15354		0.159	0.165	0.176
D15355		0.142	0.135	0.162
D15356		0.001	0.041	0.034
D15357		0.005	<0.005	0.005

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Project: LN_EC Batch 20-004-Whole Rock

CERTIFICATE OF ANALYSIS SD20148359

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.			
	CRU-21	CRU-31	CRU-QC	LOG-22
	PUL-31	PUL-QC	SPL-21	WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	ME-4ACD81	ME-ICP06	ME-MS81	OA-GRA05
	PGM-ICP23	TOT-ICP06		

RUSH PETROGRAPHIC REPORT ON 3 SAMPLES

Report for: James Sparling, P.Geol. MBA, Project Manager,
North American Nickel Inc.
2500-666 Burrard Street,
Vancouver, B.C. V6C 2X8 (604) 770-4334

Invoice 200187

July 16, 2020.

SUMMARY: These three samples appear to represent serpentinized olivine/clinopyroxene peridotite (accessory biotite, magnetite, local apatite, minor sulfides) probably to possibly variably tremolite-actinolite (relict late-magmatic hornblende?)-carbonate-magnetite, trace chlorite-sphene-quartz altered in the latter two cases. Sub-feldspathic nature is indicated in the first sample by the presence of <10% interstitial plagioclase. Sulfides including chalcopyrite, pyrrhotite and probable minor pentlandite may be largely magmatic, disseminated to weakly net texture in primary origin, in part after magnetite or remobilized (and/or partly introduced?) during alteration; they are slightly oxidized to limonite and traces of secondary pyrite/marcasite. Capsule descriptions are as follows:

D15367: sub-feldspathic (<10% plagioclase) peridotite near the boundary with pyroxenite, with accessory biotite and opaques (partly secondary magnetite associated with the serpentinization, which affects the olivine much more than the clinopyroxene).

D15354: appears to represent strongly tremolite-carbonate-magnetite \pm chlorite altered, probable former peridotite (possibly with original late-magmatic hornblende?). Accessory pyrrhotite-chalcopyrite-trace pentlandite are disseminated to weakly net-textured, may partly replace primary magnetite, and are slightly oxidized to pyrite/marcasite and limonite.

D15353: probably represents strongly tremolite-actinolite-minor biotite-carbonate-sphene-trace quartz altered, relict ultramafic rock originally composed mainly of clinopyroxene and accessory biotite-apatite, with very minor chalcopyrite of uncertain origin.

Detailed petrographic descriptions and photomicrographs are appended (by email attachment). If you have any questions regarding the petrography, please do not hesitate to contact me.

Craig H.B. Leitch, Ph.D., P. Eng. (250) 538-1900 dromore61@gmail.com
124 Vesuvius Bay Road, Salt Spring Island, B.C. Canada V8K 1K3

D15367: SUB-FELDSPATHIC (<10% PLAGIOCLASE) PERIDOTITE NEAR THE BOUNDARY WITH PYROXENITE, WITH ACCESSORY BIOTITE AND OPAQUES (PARTLY SECONDARY MAGNETITE ASSOCIATED WITH THE SERPENTINIZATION, WHICH AFFECTS THE OLIVINE MUCH MORE THAN THE CLINOPYROXENE)

Hand specimen shows cut slab of weakly foliated, dark grey-green, probably ultramafic rock with scattered biotite flakes exposed on the cut surface. The rock is strongly magnetic, shows no reaction to cold dilute HCl, and no stain for K-feldspar (but minor interstitial white etch for plagioclase) in the etched offcut. Modal mineralogy (regular thin section only) is approximately:

Clinopyroxene (augite?), only rarely serpentine altered along fractures	45%
Serpentine (various shades of green, mainly after olivine)	25%
Olivine (partly serpentinized)	20%
Plagioclase (interstitial; fractured)	5%
Biotite	3%
Opaque (likely mainly magnetite, partly secondary?)	2%

This sample consists mainly of roughly equal proportions of clinopyroxene and (partly relict, serpentinized) olivine, with minor interstitial plagioclase and biotite, accessory opaque (likely mainly magnetite although chromite is also possible; magnetite may be partly secondary since it occurs along hairline fractures with the serpentine). The weakly foliated nature of the sample is due to sub-parallel fracturing along which most of the serpentinization is controlled.

Clinopyroxene forms rounded sub- to anhedral crystals up to about 3.5 mm, with large extinction angle and very pale colour (that helps to distinguish it from olivine) and readily determinable positive 2V near 60°, suggestive of augite (?). It is generally relatively unaltered compared to olivine (only slightly altered to serpentine and accessory opaques, likely secondary magnetite, along the sub-parallel network of fractures that are mostly <0.1 mm thick, and filled with serpentine as flakes that may be optically continuous for up to 1.5 mm along the fracture, with pale yellowish to greenish pleochroism distinct from serpentine replacing olivine, which tends to more bright green pleochroism. The clinopyroxene rarely contains inclusions of possible relict orthopyroxene (ragged, irregular sub/anhedra <0.5 mm, pale brownish-greenish colour but no pleochroism, very low birefringence, length-slow, nearly parallel extinction).

Olivine forms rounded sub- to rarely euhedral crystals mostly <2.5 mm, distinguished by clear character from pyroxene which has very similar birefringence, and by more common/abundant alteration to serpentine along closely-spaced sub-parallel fractures grading to complete replacement of the entire crystal in places. The olivine shows 2V near 90°, so that sign is not determinable, but is thus quite different from the pyroxene. Serpentine forms subhedral flakes mainly <0.5 mm with pale green or yellowish green to bright green pleochroism, commonly either oriented along the fractures (which may be up to 1.5 mm thick where they coalesce) or more random/radial in character where they pseudomorph a former olivine site.

Plagioclase forms irregular sub/anhedra mainly <1 mm, with boundaries controlled by adjacent mafic mineral outlines and only local, poorly defined polysynthetic twinning preserved. The composition is thus not determinable, but likely calcic; alteration is slight.

Biotite occurs as ragged, subhedral flakes mainly <1.5 mm in diameter with bright red-brown pleochroism, interstitial to all minerals or as local inclusions within clinopyroxene.

Opaques are either sub/anhedra mainly <0.25 mm (possibly primary, magnetite and/or chromite?) or much finer-grained, distributed along the serpentine fractures as elongate aggregates <50 µm thick.

In summary, this is sub-feldspathic (<10% plagioclase) peridotite near the boundary with pyroxenite, with accessory biotite and opaques (partly secondary magnetite associated with the serpentinization, which affects the olivine much more than the clinopyroxene).

D15354: STRONGLY TREMOLITE-CARBONATE-MAGNETITE \pm CHLORITE ALTERED, PROBABLE FORMER PERIDOTITE (POSSIBLY WITH ORIGINAL LATE-MAGMATIC HORNBLLENDE?). ACCESSORY PYRRHOTITE-CHALCOPYRITE-TRACE PENTLANDITE ARE DISSEMINATED TO WEAKLY NET-TEXTURED, MAY PARTLY REPLACE PRIMARY MAGNETITE, AND ARE SLIGHTLY OXIDIZED TO PYRITE/MARCASITE AND LIMONITE

Hand specimen shows medium-grained, blackish-green, altered-looking possibly originally ultramafic rock, with scattered sulfides (chalcopyrite, pyrrhotite?) exposed on the cut surface. The rock is distinctly magnetic, shows local rapid reaction to cold dilute HCl, and no stain for K-feldspar or white etch for plagioclase in the etched offcut. Modal mineralogy in polished thin section is approximately:

Secondary amphibole (mainly Mg-rich, tremolite?)	70%
(mainly relict hornblende?)	10%
Carbonate (mainly calcite?)	10%
Relict biotite (partly chloritized, with trace inclusions of ilmenite?)	5%
Magnetite (partly secondary?)	2%
Chalcopyrite (slightly oxidized to limonite)	1-2%
Pyrrhotite (slightly oxidized to secondary pyrite/marcasite, limonite)	1%
Pentlandite (intergrown with pyrrhotite, chalcopyrite)	<1%
Limonite (after sulfides)	<1%

This sample consists mainly of secondary minerals (amphibole, likely tremolite-actinolite, the latter apparently after relict hornblende?, carbonate) with minor relict, partly chloritized biotite and accessory magnetite and sulfides, the latter slightly oxidized to traces of limonite.

Amphibole typically occurs as randomly oriented, closely packed, irregular anhedral to locally subhedral crystals to about 1.5 mm, or as finer-grained, fibrous masses. There are essentially two types of amphibole: mainly colourless, probably tremolite, the Mg-rich end member, which either rims cores of green amphibole, or pseudomorphs some original mineral, with accompanying very fine secondary magnetite, suggestive of former olivine (?). The variably green pleochroic amphibole cores, mainly subhedral and <1 mm in size, are suggestive of relict hornblende or actinolitic hornblende (possibly late-magmatic and after former pyroxene?). The distinctly secondary colourless tremolitic amphibole could be after both olivine (notably in relics with rounded to subhedral outlines up to 2 mm characterized by concentric zonally-arranged minute secondary magnetite inclusions mainly <25 μ m) or pyroxene (where secondary magnetite inclusions are more linearly arranged). It is difficult to distinguish what the original proportions of possible olivine to pyroxene were, but at a guess, they may have been roughly equal (?).

Carbonate occurs as irregular interstitial aggregates to ~2 mm of rounded sub/anhedra mainly <0.35 mm that may be mostly calcite and minor dolomite (with stronger change of relief on rotation).

Relict biotite forms ragged, irregular to locally subhedral flakes mostly <1 mm in diameter, with very pale brownish to pale greenish pleochroism (but mainly normal, moderate to high birefringence), suggestive of incipient chloritization, locally associated with sulfides. The biotite locally appears to have partly replaced the margins of amphibole, but otherwise the distribution is similar to that of biotite in D15367, suggesting that this sample may be an altered version of the other.

Possibly relict, primary magnetite is distinguished by coarser grain size (subhedra to 0.4 mm) and it is commonly closely associated (or in part replaced by?) the sulfides with a disseminated to loose "net" texture. Sulfides include chalcopyrite (aggregates to 1.5 mm of sub- to anhedra <0.5 mm) and pyrrhotite (partly skeletal subhedra to ~1 mm) plus local minor probable pentlandite (subhedra <0.15 mm). Chalcopyrite is partly oxidized to limonite at margins, and pyrrhotite to lamellar/"bird's-eye" textured intergrowths of secondary pyrite/marcasite.

In summary, this appears to represent strongly tremolite-carbonate-magnetite \pm chlorite altered, probable former peridotite (possibly with original late-magmatic hornblende?). Accessory pyrrhotite-chalcopyrite-trace pentlandite are disseminated to weakly net-textured, may partly replace primary magnetite, and are slightly oxidized to pyrite/marcasite and limonite.

D15353: PROBABLY REPRESENTS STRONGLY TREMOLITE-ACTINOLITE-MINOR BIOTITE-CARBONATE-SPHENE-TRACE QUARTZ ALTERED, RELICT ULTRAMAFIC ROCK ORIGINALLY COMPOSED MAINLY OF CLINOPYROXENE AND ACCESSORY BIOTITE-APATITE, WITH VERY MINOR CHALCOPYRITE OF UNCERTAIN ORIGIN

Hand specimen shows medium/coarse-grained, blackish-green, altered-looking possibly originally ultramafic rock, with trace sulfides. The rock is not magnetic, shows local rapid reaction to cold dilute HCl, and no stain for K-feldspar or white etch for plagioclase in the etched offcut. Modal mineralogy in polished thin section is approximately:

Secondary amphibole (mainly relict hornblende, actinolite?)	50%
(mainly Mg-rich, tremolite?)	20%
Relict clinopyroxene (altered to amphibole, minor biotite)	15%
Biotite (very pale brown, could be phlogopite?)	10%
Carbonate (mainly calcite?)	3%
Apatite (primary accessory?)	1-2%
Sphene (after ilmeno-magnetite?)	<1%
Chalcopyrite (finely disseminated)	<1%
Quartz (secondary, associated with chalcopyrite)	<<1%

This sample consists mainly of secondary amphibole(s), either greenish (after relict clinopyroxene) or colourless (mantling, replacing, interstitial), pale brown biotite/phlogopite, accessory carbonate, apatite and traces of sphene and chalcopyrite (the latter associated with trace secondary quartz). Evidence for former olivine is lacking, suggestive of possible pyroxenite (?).

Cores of relict pyroxene have subhedral outlines that are optically continuous for up to about 4 mm, with almost no colour and large extinction angle indicative of clinopyroxene (augite?). They are extensively replaced, in parallel position, by the green or brownish-green amphibole, which forms subhedra of similar size. Pleochroism and relatively large (up to 24°) extinction angle suggest this amphibole is late magmatic hornblende, grading at margins or locally to paler green, actinolitic hornblende or actinolite of finer grain size, and then mantled in place by secondary, almost colourless amphibole with smaller extinction angle (16°, suggestive of tremolite?) commonly in parallel position on the earlier amphibole(s). Accessory sphene forming sub/euhedra <0.2 mm is likely after former primary ilmeno-magnetite (?).

Biotite/phlogopite is pale reddish brown to locally very pale brown, forming ragged, irregular shaped sub- to anhedral flakes mostly <1.2 mm in diameter with random orientations, apparently partly replacing, included within or interstitial to the amphibole/relict pyroxene. Thus it is not obvious if the biotite is partly primary and partly secondary. Interstitial biotite occurrences are locally associated with the very minor sulfides present in the sample.

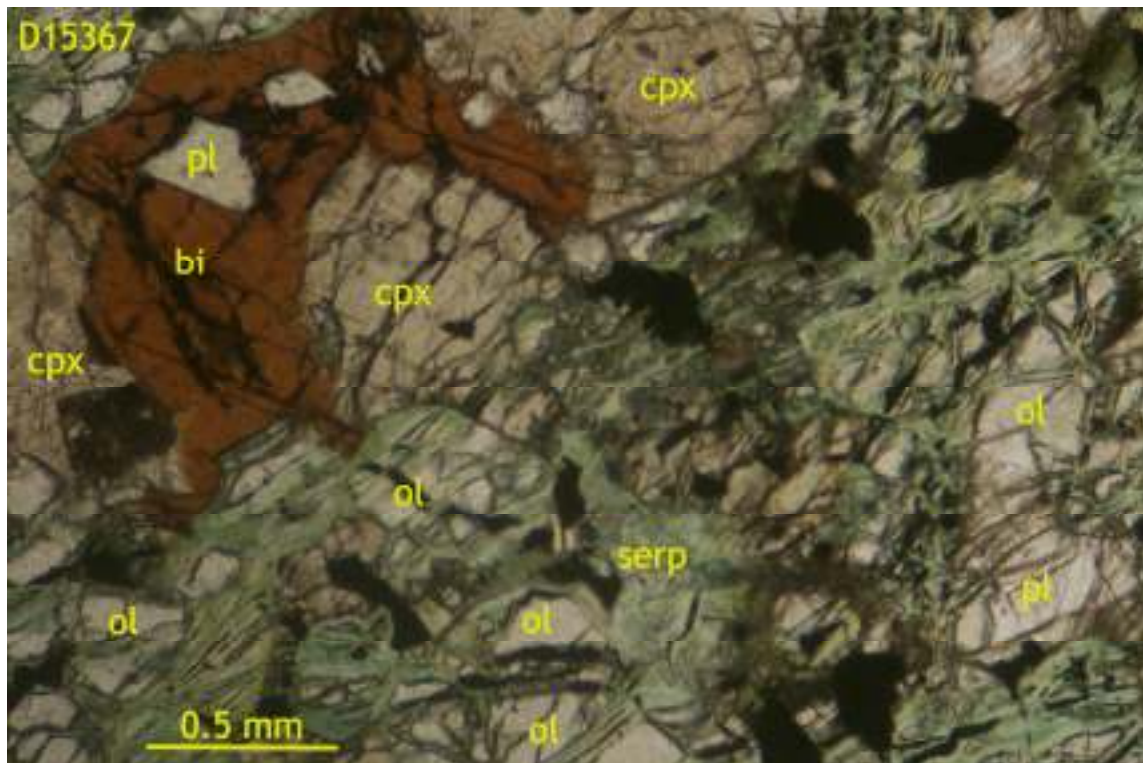
Carbonate (likely mainly calcite?) occurs as sub- to anhedral crystals <2 mm in size, in irregular aggregates to 4 mm interstitial to amphibole, associated with unusually abundant apatite as barrel-shaped, rounded stubby prisms up to 1.5 mm long (likely primary accessory in origin)

Chalcopyrite occurs as loose clusters up to 1.5 mm across of sub/anhedra mainly <0.25 mm, intergrown/closely associated with interstitial biotite/phlogopite and traces of secondary quartz (subhedra to 0.2 mm). It is not clear whether the chalcopyrite represents relict magmatic sulfides or was introduced later during alteration to tremolite-carbonate.

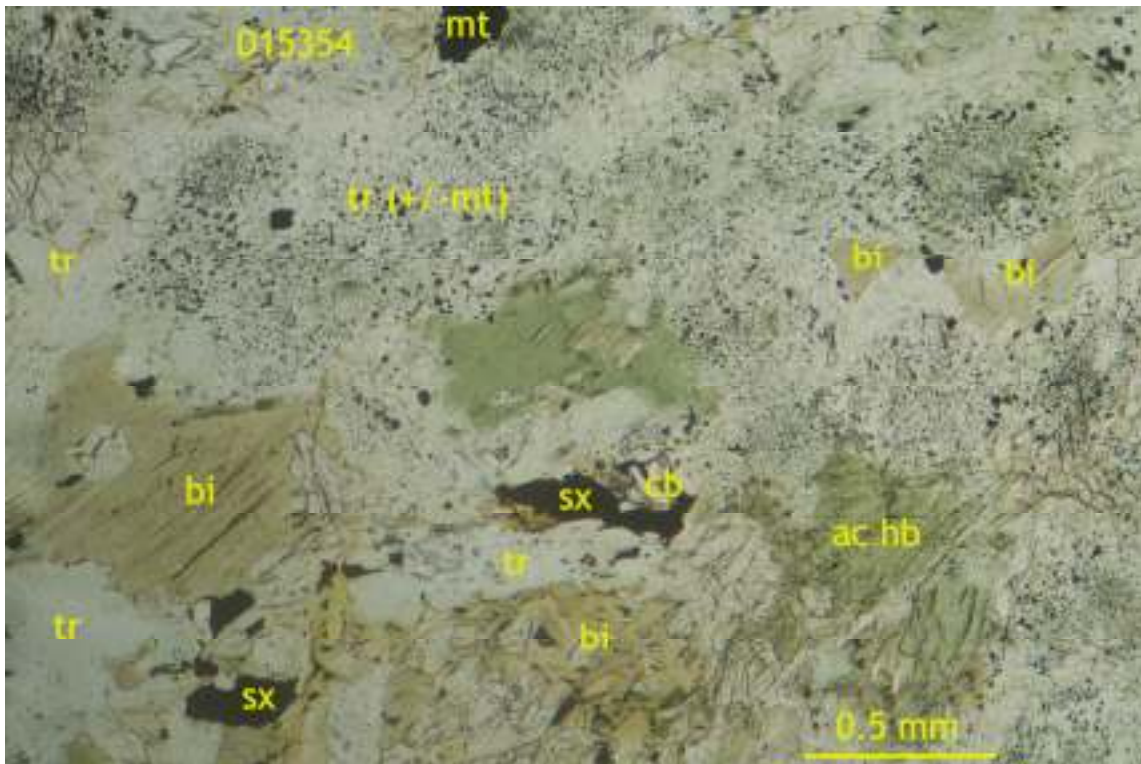
In summary, this probably represents strongly tremolite-actinolite-minor biotite-carbonate-sphene-trace quartz altered, relict ultramafic rock originally composed mainly of clinopyroxene and accessory biotite-apatite, with very minor chalcopyrite of uncertain origin.



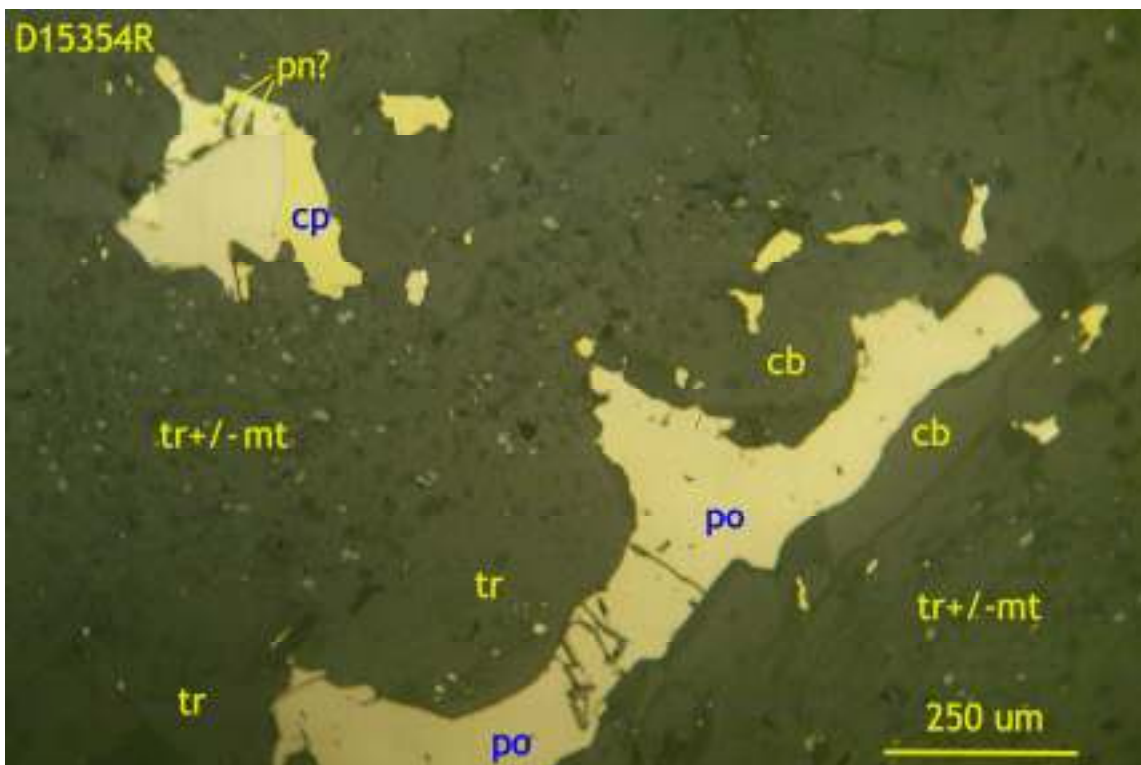
Overview of thin sections and offcuts (blue semi-circles mark photomicrograph locations).



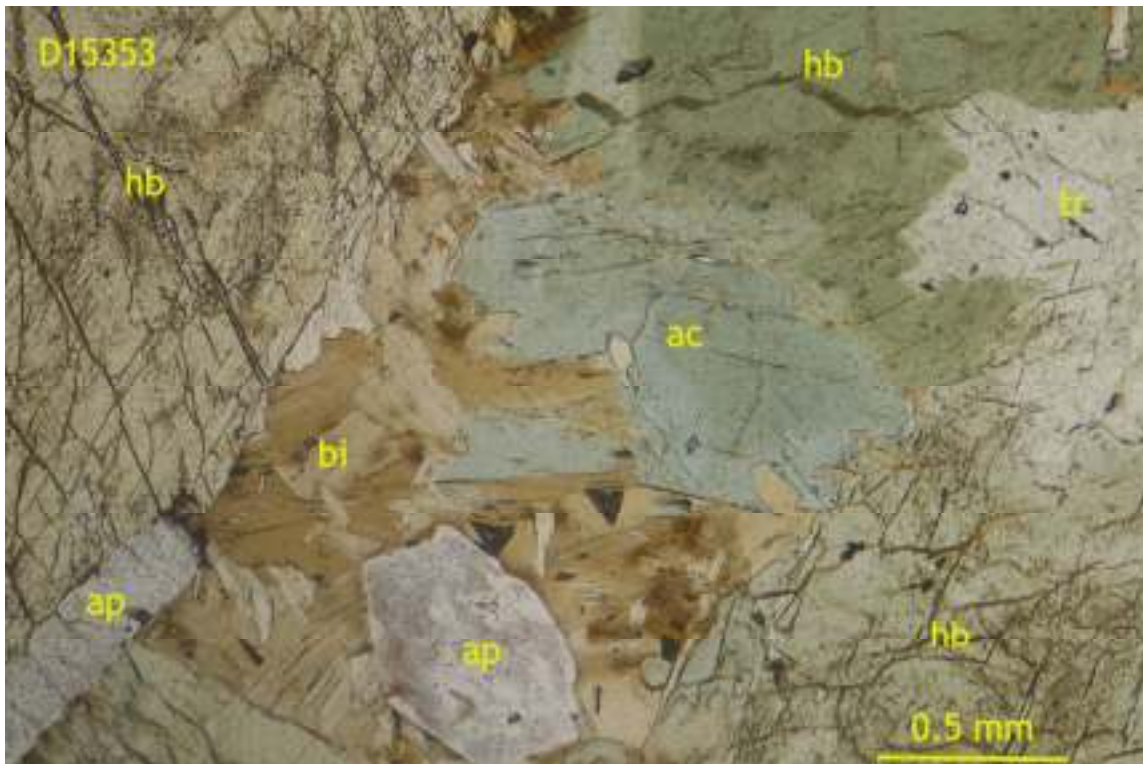
D15367: relict peridotite/pyroxenite composed of clinopyroxene (cpx, with inclusions of red-brown biotite, bi) that is less serpentinized than olivine (ol) along the swarm of sub-parallel fractures, some of which contain fine opaque, probable secondary magnetite (coarser opaques may be primary magnetite/chromite?) Local plagioclase (pl) is interstitial. Transmitted plane light, field of view ~3 mm wide.



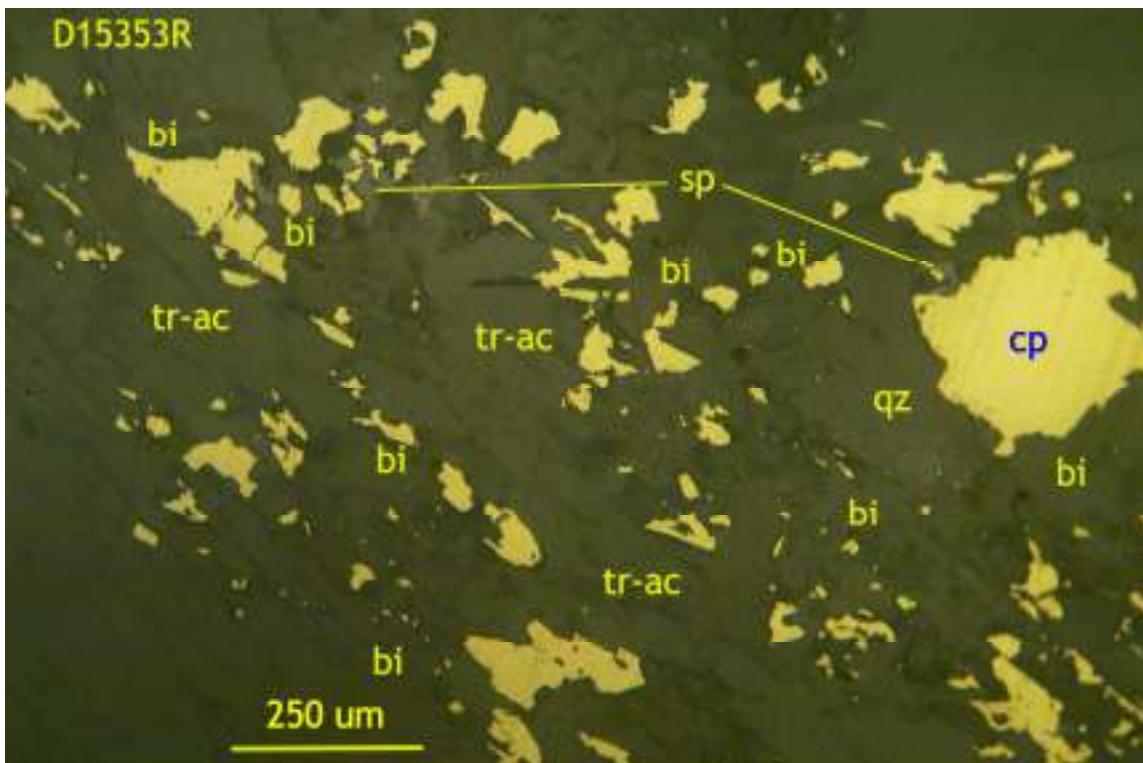
D15354: relict ultramafic (?) strongly altered to colourless tremolite (tr, partly with abundant minute inclusions of secondary magnetite suggestive of former olivine?) or mantling relict cores of pale green actinolitic hornblende (after pyroxene?), minor relict biotite (bi, partly chloritized) and carbonate (cb) in part associated with interstitial sulfides or magnetite (sx, mt; both opaque). Transmitted plane light, field of view ~3 mm wide.



D15354R: detailed view of sulfides to show chalcopyrite (cp) and pyrrhotite (po) intergrown with minor probable pentlandite (pn?), closely associated with carbonate (cb) and tremolite (note minute secondary magnetite inclusions suggestive of former olivine sites?). Reflected light, uncrossed polars, field of view ~1.5 mm wide.



D15353: amphibole-rich rock (mainly hornblende or actinolitic hornblende, hb, after relict clinopyroxene, further altered to pale greenish actinolite, ac, or colourless tremolite, tr), minor very pale brown interstitial biotite (bi), accessory apatite (ap). Transmitted plane light, field of view ~3 mm wide.



D15353R: detailed view of very minor, local chalcopyrite (cp) interstitial to hornblende after clinopyroxene, closely associated with secondary tremolite-actinolite (tr-ac), biotite (bi) and trace secondary quartz (qz) and sphene (sp). Reflected light, uncrossed polars, field of view ~1.5 mm wide.

Quetico West										
Expenditure										
Total (Pre Tax) =		\$19,195.00								
Activity	Dates Worked Completed	Compiled Cost (Pre Tax)	# of Units (Cells)	Unit		Cost Per Unit		Total	Cell Claims Work completed on	Comments
2020 Prospecting Program Food/Groceries	03/06/2020; 03/07/2020	\$267.26	21	Summary	@	\$13	=	\$267	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518968	Split evenly per cell \$267.26/21cells = \$13/cell
2020 Prospecting Vehicle Rental/Leases	03/06/2020; 03/07/2020	\$352.58	21	Summary	@	\$17	=	\$353	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518968	Split evenly per cell \$352.58/21cells = \$17/cell
2020 Prospecting Accomodations	03/06/2020; 03/07/2020	\$516.00	21	Summary	@	\$25	=	\$516	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518968	Split evenly per cell \$516/21cells = \$25/cell
2020 Prospecting Fuel/Gasoline	03/06/2020; 03/07/2020	\$165.45	21	Summary	@	\$8	=	\$165	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518968	Split evenly per cell \$165.45/21cells = \$8/cell
2020 Prospecting Petrographics	03/06/2020; 03/07/2020	\$914.91	21	Summary	@	\$44	=	\$915	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518968	Split evenly per cell \$914.91/21cells = \$44/cell
2020 Prospecting Contract Labour	03/06/2020; 03/07/2020	\$3,592.31	21	Summary	@	\$171	=	\$3,592	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518968	Split evenly per cell \$3592.31/21cells = \$171/cell
2020 Prospecting Consulting Labour	03/06/2020; 03/07/2020	\$0.00	21	Summary	@	\$0	=	\$0	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518968	Split evenly per cell \$0.00/21cells = \$0/cell
2020 Prospecting NAN Labour	03/06/2020; 03/07/2020	\$12,338.46	21	Summary	@	\$588	=	\$12,338	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518969	Split evenly per cell \$12338.46/21cells = \$588/cell
2020 Prospecting Field Supplies	03/06/2020; 03/07/2020	\$34.55	21	Summary	@	\$2	=	\$35	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518970	Split evenly per cell \$34.55/21cells = \$2/cell
2020 Prospecting Equipment Rentals	03/06/2020; 03/07/2020	\$392.31	21	Summary	@	\$19	=	\$392	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518971	Split evenly per cell \$392.31/21cells = \$19/cell
2020 Prospecting Assaying	03/06/2020; 03/07/2020	\$621.20	21	Summary	@	\$30	=	\$621	518909; 518941; 518916; 518918; 518894; 518960; 518934; 518956; 518945; 518939; 518950; 518995; 519000; 518990; 519029; 519028; 519022; 519023; 519016; 518969; 518972	Split evenly per cell \$621.20/21cells = \$30/cell
Total								\$19,195		