INDEPENDENT TECHNICAL REPORT Updated Mineral Resource Estimate Ferguson Lake Project Nunavut, Canada NTS: 651/14-15

Prepared For CANADIAN NORTH RESOURCES INC



Prepared by

Elisabeth Ronacher, PhD, P.Geo. Ronacher McKenzie Geoscience Inc.

> Jamie Lavigne, P. Geo. Francis Minerals Ltd.



June 13, 2022



TABLE OF CONTENTS

1.0	SUMMARY	6
2.0	INTRODUCTION	8
2.1 2.2	TERMINOLOGY	10
2.3	RONACHER MCKENZIE GEOSCIENCE QUALIFICATIONS	
3.0	RELIANCE ON OTHER EXPERTS	
4.0	PROPERTY DESCRIPTION AND LOCATION	12
4.1	LOCATION	
4.2	PROPERTY DESCRIPTION AND OWNERSHIP	
4.3	PERMITS	16
5.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY	18
5.1	ACCESS AND FACILITIES	18
5.2	CLIMATE AND VEGETATION	20
5.3	PHYSIOGRAPHY	
5.4	INFRASTRUCTURE AND LOCAL RESOURCES	2 ⁻
6.0	HISTORY	2 [,]
6.1	EXPLORATION HISTORY	2 ⁻
6.2	2011 HISTORIC RESOURCE ESTIMATION	24
6.3	HISTORIC METALLURGICAL TESTING	25
7.0	GEOLOGICAL SETTING AND MINERALIZATION	28
7.1	REGIONAL GEOLOGY	28
7.2	LOCAL GEOLOGY	30
7.3	PROPERTY GEOLOGY	32
7.4	MINERALIZATION	35
8.0	DEPOSIT TYPES	35
9.0	EXPLORATION	36
9.1	2013 WORK PROGRAM	36
	9.1.1 Sampling of Historical Core	36
	9.1.2 Review of Ferguson Lake Deposit Model	36
9.2	2015 EXPLORATION PROGRAM	
	9.2.1 Reconnaissance Prospecting and Sampling Program	
	9.2.2 Ground Geophysical Surveys	
9.3	2018 EXPLORATION PROGRAM	
9.4	2021 EXPLORATION PROGRAM	43





10.0	DRILLING	44
11.0	SAMPLE PREPARATION, ANALYSES AND SECURITY	46
11.1	2013 SAMPLING PROGRAM	46
11.2	2015 EXPLORATION PROGRAM	46
11.3	2018 EXPLORATION PROGRAM	47
11.4	2021 RESAMPLING	48
11.5	2021 DRILLING PROGRAM	54
12.0	DATA VERIFICATION	55
12.1	INTRODUCTION	55
12.2	HISTORIC DATA VERIFICATION	56
12.3	HISTORIC DATA VERIFICATION BY CANADIAN NORTH	57
	12.3.1 2013 Work Program	57
	12.3.2 2021 Resampling Program	61
	12.3.3 2007 and 2008 Assay Data Re-Compilation	62
12.4	2021 SITE VISIT	63
13.0	MINERAL PROCESSING AND METALLURGICAL TESTING	69
14.0	MINERAL RESOURCE ESTIMATES	71
14.1	SUMMARY	71
14.2	DRILL HOLE DATABASE	72
	14.2.1 Sample and Assay Data	73
	14.2.2 Lithology	73
	14.2.3 Bulk Density Determinations	74
14.3	MINERAL RESOURCE MODELLING AND DOMAINS	74
	14.3.1 Assay Statistics	78
	14.3.2 Grade Capping	80
	14.3.3 Compositing and Composite Statistics	81
	14.3.4 Density	
	14.3.5 Variography	85
	14.3.6 Block Model	85
	14.3.7 Grade Interpolation	85
14.4	BLOCK MODEL CLASSIFICATION AND ECONOMIC EVALUATION	88
	14.4.1 Resource Classification	89
	14.4.2 Economic Evaluation	90
	14.4.3 Indicated Resource Validation	97
15.0	ADJACENT PROPERTIES	99
16.0	OTHER RELEVANT DATA AND INFORMATION	99
17 0	INTERPRETATIONS AND CONCLUSIONS	99





18.0	RECOMMENDATIONS	101
19.0	REFERENCES	103
20.0	STATEMENT OF AUTHORSHIP	107
	<u>Figures</u>	
Figure	4-1 Location of Ferguson Lake Property in Region of Kivalliq, Nunavut	13
Figure	4-2 Map showing the Ferguson Lake property mining leases	15
Figure	5-1 Location of the airstrip and new camp	19
Figure	5-2 Ferguson Lake camp, storage and equipment layout with airfield	20
Figure	6-1: Map showing the historic zone naming convention. The current naming convention is sho	wn on
Figure	14-1	23
Figure	7-1 Ferguson Lake regional geologic setting (Hanmer, et al., 2004)	29
Figure	7-2 Local geology of the Ferguson Lake area	31
Figure	7-3 Geological map of the property as mapped by Starfield	33
Figure	7-4 Ferguson Lake Area Geology (Martel and Sandeman, 2004)	34
	9-1 Central Zone and West Zone 3D View of Wire Frames, Drill Holes & Block Model Outline (Lo	
SE)		37
Figure	9-2 West and Central Zone plan View of Pd Blocks within the Block Model	40
Figure	9-3 2015 Geophysical Grid Location overlain on Ferguson Lake conductive zones from historic ai	rborne
VTEM s	survey	42
Figure	9-4 Geophysical Grid Location in UTM NAD 83 coordinates, Zone 14 overlain on Ferguson Lake N	/lineral
Leases	s in red.	43
Figure	10-1: Location of the 2021 drill holes.	45
Figure	11-1 Results of CRM OREAS 74a analysis for Ni	49
	11-2 Results of CRM OREAS 74a analysis for Cu.	
Figure	11-3 Results of CRM OREAS 74a analysis for Co.	50
	11-4 Results of CRM Oreas 13b for Ni.	
Figure	11-5 Results of CRM Oreas 13b for Co.	51
Figure	11-6 Results of CRM Oreas 13b for Cu.	52
	11-7 Results of CRM CFRM-100 analysis for Cu.	
Figure	11-8 Results of CRM CFRM-100 analysis for Ni	53
	11-9 Results of CRM CFRM-100 analysis for Co	
_	12-1: Comparison of the historic Pt assays with the 2013 check samples	
•	12-2: Comparison of the historic Pd assays with the 2013 check samples	
_	12-3: Comparison of the historic and check sample Pt assay data	
	12-4: Comparison of the historic and check sample Pt assay data	





Figure 12-6: Comparison of the Ni values of the historic and site visit samples	64
Figure 12-7: Comparison of the Co values of the historic and site visit samples	65
Figure 12-8: Comparison of the Pt values of the historic and site visit samples	65
Figure 12-9: Comparison of the Pd values of the historic and site visit samples	66
Figure 12-10 Photo of the coarse-grained gabbro that is the host of the mineralization	66
Figure 12-11 Photo of the hornblende-rich rock logged as hornblendite	67
Figure 12-12 Sheared, coarse-grained gabbro.	67
Figure 12-13 Photo of typical massive sulfide from drill core.	68
Figure 12-14 Photograph of stake indicating the collar location of drill hole FL08-382	69
Figure 14-1: Mineralization domains and drill holes.	76
Figure 14-2: Central Zone massive sulphide lenses.	77
Figure 14-3: Cross section of mineralized domain, Central Zone.	78
Figure 14-4: Histogram of samples (a) and composite (b) lengths	82
Figure 14-5: Ni grades of block model at 0 cutoff grade	87
Figure 14-6: Distribution of indicated and inferred resource blocks	89
Figure 14-7: Three separate pits resulting from Whittle™ pit optimization	91
Figure 14-8: Section illustrating UG resources.	93
Figure 14-9: NSF sensitivity curves for open pit resources	95
Figure 14-10: NSF sensitivity curves for underground resources	97
Figure 14-11: Ni % swath plot by section	98
Figure 14-12: Ni % swath plot by levels	98
Figure 14-13: Change of support check of indicated resource block model	99
<u>Tables</u>	
Table 1-1: Mineral resources Canadian North Resources, Ferguson Lake	7
Table 4-1 List of mining leases for Ferguson Lake Property, Kivalliq, Nunavut	14
Table 4-2: List of permits required to operate on the property	17
Table 6-1 History of Exploration at Ferguson Lake Property	22
Table 6-2: Historic resource, Ferguson Lake Property (Clow et al. 2011)	24
Table 9-1 Ferguson Lake deposit drilling sample data	38
Table 9-2 Ferguson Lake deposit drilling sample data	38
Table 9-3 Block model definitions	39
Table 9-4 Grade Estimation Parameters	40
Table 10-1: List of diamond drill holes completed by Canadian North in 2021	44
Table 11-1: List of CRMs inserted into the sample stream of the 2015 sampling program	47
Table 11-2: List of certified reference materials ("CRMs") inserted into the samples stream	of the 2021
resampling	49
Table 11-3: List of certified reference materials ("CRM") included in the samples stream of the	2021 drilling
program	5/





Table 12-1: Comparison of Inco and 2002 Starfield data	56
Table 12-2: Results of Scott Wilson RPA sampling.	57
Table 12-3 Comparative analytical results for Ferguson Lake drill core duplicates	58
Table 12-4: List of check samples collected during the site visit	63
Table 12-5: Locations of casings observed during the site visit	68
Table 14-1: Mineral Resources Canadian North Resources Ferguson Lake	71
Table 14-2: Drilling summary by year	72
Table 14-3: Sample summary by year	73
Table 14-4: Summary statistics of MS assay data	79
Table 14-5: Summary statistics of LSPGE assay data	80
Table 14-6: Summary of assay grade capping	81
Table 14-7: Summary statistics of MS composites.	83
Table 14-8: Summary statistics of LSPG composites	84
Table 14-9: Variogram model parameters	85
Table 14-10: Summary of grade interpolation strategy	86
Table 14-11: Block model grades.	87
Table 14-12: Average model and composite Pd grades	87
Table 14-13: Pit optimization parameters.	90
Table 14-14: Table of open pit resources.	91
Table 14-15: Table of underground resources.	93
Table 14-16: Table of open pit resources at various NSR cutoff values	94
Table 14-17: Table of underground resources at various NSR cutoff values	96
Table 18-1 Recommended 2022 exploration and development budget	102

APPENDICES

Appendix 1 – Certificates of Qualified Persons





1.0 SUMMARY

Canadian North Resources Inc. ("Canadian North") commissioned a resource estimate for its Ferguson Lake property, Nunavut.

The Ferguson Lake Property ("the Property") is located 250 km west of Rankin Inlet, Nunavut. The Property consists of ten contiguous mining leases fully owned by Canadian North and covering an area of 23,935 acres (9686 hectares). The property is accessed by air and an all-season camp is located on the Property.

Mineralization on the property was discovered by Canadian Nickel Company Ltd. ("Canico") in 1950. Since then, the Property has been explored by several companies, dominantly Starfield Resources Ltd. ("Starfield") from 1999 to 2013. In total, 621 diamond drill holes totaling ~191,000 m were drilled on the property by 2013. In addition, several geophysical surveys delineating mineralization were completed. Starfield also completed metallurgical testing, which resulted in a viable, preliminary flowsheet and a positive Preliminary Economic Assessment (Clow et al. 2011).

The Property is located in the Hearn domain of the Churchill Province of the Canadian Shield. The Hearn domain consists dominantly of Archean metavolcanic and metasedimentary rocks as well es gneisses; it is bounded in the northwest by the Snowbird Tectonic Zone ("STZ"). Ferguson Lake is located ~ 100 km east of the STZ. The Property is located within the Yathkyed greenstone belt, which consists of strongly deformed Archean rocks that are metamorphosed up to amphibolite facies and Proterozoic plutons and dykes. On the Property, gabbro occurs within an amphibolite—hornblende-biotite gneiss sequence. The hornblende-rich gabbro is the main host for the mineralization. A recumbent, double-plunging synform cut by faults and shear zones was interpreted to exist on the Property and to host mineralization.

The mineralization consists of massive to semi-massive nickel-copper sulphides containing cobalt and platinum group elements ("PGE") and is hosted by gabbro. Three mineralized zones, the East, Central and West Zones, were identified. Mineralization extends discontinuously over a strike length of more than 12 km and is between 10 and 600 m thick. In addition to the massive Ni-Cu sulphides, large volumes of disseminated sulphides with low Ni-Cu-Co contents but high PGE grades, in particular Pd, exist between 20 and 200 m below the massive horizon. This zone is named "low-sulphide PGE zone" ("LSPGE").

Canadian North completed a sampling program of historic drill core in 2013. At total of 86 samples were analyzed for Ni, Cu, Co and PGE; in addition, 250 kg of mineralized material stored on the property was sent for metallurgical testing. The assay results of the reanalyzed core were comparable with the original results.

In 2021, Canadian North completed another, more extensive resampling program of historic drill core. In total, 711 samples were collected and analyzed for Ni, Cu, Co, Pd, Pt and Au. The correlation between the historic and 2021 samples was good for Ni, Cu and Co and acceptable for Pd and Pt.





In 2021, Canadian North also completed a small drilling program consisting of ten diamond drill holes totaling 2,397 m. Semi-massive and massive sulfide mineralization was intersected. Assay results were pending at the effective day of this report.

A personal inspection was completed by Elisabeth Ronacher, a Qualified Person for the purpose of this report, on July 8 and 9, 2021. Ms. Ronacher reviewed historic drill core, collected check samples and located historic collars on the property. The check samples compare reasonably well with the original values.

Canadian North completed metallurgical testing between 2013 and 2016. The purpose of the metallurgical work was to assess new approaches to processing, in particular to determine the recoverability of PGE. The testing resulted in an increase of Ni, Cu and Co recoveries to 94%, 99% and 91%, respectively, and in Pd and Pt recoveries of 77% and 50%, respectively.

The current mineral resource estimate is based exclusively on diamond drilling. The drill hole database includes 611 holes totaling 186,779 metres and 36,739 samples. Mineral Resources at Ferguson Lake are classified as Indicated and Inferred and can potentially be mined by both open pit and underground mining methods. The Mineral Resources for Ferguson Lake are summarized Table 1-1.

Table 1-1: Mineral resources Canadian North Resources, Ferguson Lake.

Indicated Resources									
Method Tonnes Co Cu Ni Pd Pt NSR									
	(Mt)	(%)	(%)	(%)	(gpt)	(gpt)	(\$US)		
Open Pit	22.4	0.07	0.84	0.60	1.37	0.23	255		
Underground	1.9	0.07	1.03	0.60	1.49	0.32	275		
Total	24.3	0.07	0.85	0.60	1.38	0.23	257		

Inferred Resources									
Method Tonnes Co Cu Ni Pd Pt NSR									
	(Mt)	(%)	(%)	(%)	(gpt)	(gpt)	(\$US)		
Open Pit	12.1	0.04	0.59	0.40	0.99	0.22	170		
Underground	35.1	0.07	1.02	0.57	1.54	0.26	269		
Total	47.2	0.06	0.91	0.53	1.40	0.25	244		

- CIM definitions (2014) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019) were followed for Mineral Resources.
- 2. Mineral Resources were estimated at NSR cutoff values of US\$49.70 for open pit and US\$94.50 for underground.
- 3. NSR values were calculated using long-term metal prices of US\$8.00/lb for Nickel, \$US3.30/lb for Copper, US\$20.60/lb of Cobalt, US\$900/oz Platinum, and US\$1,910/oz Palladium.
- 4. Metallurgical recoveries used in the NSR calculation were 91% for Nickel, 96% for Copper, 90% for Cobalt, 50% for Platinum and 81% for Palladium.
- 5. Open pit Mineral Resources are reported at a base case NSR value of US\$49.70 within a conceptual pit.
- 6. Underground Mineral Resources were estimated using a minimum true width of 2.5 metres and US\$94.50 NSR value.
- 7. The independent Qualified Person for the current Mineral Resource estimate is Mr. Jamie Lavigne, P. Geo.
- 8. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability.
- 9. All figures are rounded to reflect the relative accuracy of the estimate. Numbers may not add due to rounding





Based upon the exploration work completed to-date on the Property, including close examination of the deposit model of the Ferguson Lake mineralized zones, and the current resource estimate, it is concluded the West, Central and East mineralized zones remain open for expansion down-plunge to the west, along strike to the east under Ferguson Lake and down dip at multiple locations along its mineralized horizon. An exploration program consisting 15,000 m of diamond drilling in the East and West Zones is recommended. In addition, it is recommended to review historic geophysical data to help with further targeting. A drone magnetic survey in those areas that were not previously covered by magnetic surveys and LiDAR survey on the entire property are also recommended. The total anticipated cost of the recommended exploration is \$14,700,000.

2.0 Introduction

Canadian North Resources Inc. ("Canadian North") contracted Jamie Lavigne and Ronacher McKenzie Geoscience ("Ronacher McKenzie") to estimate a mineral resource of the Ni-Cu-Co-Pd-Pt Ferguson Lake Property (the "Property") and prepare an Independent Technical Report ("the report") according to the standards of the National Instrument 43-101 ("NI 43-101").

The purpose of the report is to support the resource estimate prepared by Francis Minerals Ltd. and to disclose information about Canadian North's resampling of historic core completed in 2021. The resource estimate is an update of a previous estimate (Clow et al., 2011); the current estimate includes very minor new drilling data (completed in 2011) but includes revised geological interpretation and updated metal recovery and price data.

The source of information and the data contained in this report is dominantly Canadian North Resources. In addition, data from the public domain, including the Geological Survey of Canada ("GSC") and the geological literature were used. Another source are previous independent technical reports on the deposit, including Nicholson et al. (2007), Clow et al. (2008), Clow et al. (2011) and Boyd (2021). The dates, titles and authors of all reports that were used as a source of information for this Report are listed in the "References" section of this Report. The dates and authors of these reports also appear in the text of this Report where relevant, indicating the extent of the reliance on these reports. The Qualified Persons (QPs) assumed that the reports and other data listed in the "References" section of this report are substantially accurate and complete.

Elisabeth Ronacher, P.Geo., visited the property from July 8-9, 2021. Ms. Ronacher reviewed historic drill core, collected drill core check samples and verified collar locations of historic drill holes.

2.1 Terminology

AEM: Airborne Electromagnetic Survey

Asl: above sea level

BHEM: Borehole Electromagnetic Survey

CIRNAC: Crown-Indigenous Relations and Northern Affairs Canada





DDH: Diamond Drill Hole

Ga: billion years

GEMS: Integrated geology, mineral deposit resource modeling, mine planning and production software

GSC: Geological Survey of Canada

ICP-AES: Inductively coupled plasma atomic emission spectroscopy; analytical technique for analyzing multielements

ICP-MS: Inductively coupled plasma mass spectrometry; analytical technique for analyzing multi-elements

KIA: Kivallig Inuit Association

KIM: Kimberlite Indicator Mineral

Mag: Magnetic (survey)

NSR: Net Smelter Return

NWB: Nunavut Water Board

Platsol: metallurgical technique. The objective of Platsol is to oxidize all sulphur and sulphide species to soluble sulphate (metal sulphates and sulphuric acid), while solubilising all PGEs at the same time.

QA / QC: Quality Assurance / Quality Control

QP: Qualified Person according to the definitions of the NI 43-101

PGM: Platinum Group Metals

Sedar: System for Electronic Document Analysis and Retrieval; mandatory document filing and retrieving system for companies trading on Canadian stock exchanges administered by the Canadian Securities Administrators.

TDEM: Time Domain Electromagnetic Survey

UTEM: University of Toronto Time Domain (ground) Electromagnetic Survey

VLF EM: Very Low Frequency (ground) Electromagnetic Survey

VMS: Volcanogenic Massive Sulphide Type Mineral Deposit





VTEM: Versatile Time Domain (airborne) Electromagnetic Survey

2.2 Units

The Metric System is the primary system of measure and length used in this Report and is generally expressed in kilometres (km), metres (m) and centimetres (cm); volume is expressed as cubic metres (m3), mass expressed as metric tonnes (t), area as hectares (ha), and gold and silver concentrations as grams per tonne (g/t). Conversions from the Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent documents now use the Metric System but older documents almost exclusively refer to the Imperial System. Metals and minerals acronyms in this report conform to mineral industry accepted usage and the reader is directed to www.maden.hacettepe.edu.tr/dmmrt/index.html for a glossary.

Conversion factors utilized in this report include:

- 1 troy ounce/ton = 34.285714 grams/tonne
- 1 gram/tonne = 0.029167 troy ounces/ton
- 1 troy ounce = 31.103477 grams
- 1 gram = 0.032151 troy ounces

The term gram/tonne or g/t is expressed as "gram per tonne" where 1 gram/tonne = 1 ppm (part per million) = 1000 ppb (part per billion). The mineral industry accepted terms Au g/t and g/t Au are substituted for "grams gold per metric tonne" or "g Au/t". Other abbreviations include ppb = parts per billion; ppm = parts per million; oz/t = troy ounce per short ton; Moz = million ounces; Mt = million tonne; t = tonne (1000 kilograms); SG = specific gravity; lb/t = pound/ton; and, st = short ton (2000 pounds).

Dollars are expressed in Canadian currency (CAD\$) unless otherwise noted. Zinc (Zn), copper (Cu) and lead (Pb) are reported in US\$ per pound (US\$/lb) or US\$ per metric tonne (US\$/l). Gold (Au) and silver (Ag) are stated in US\$ per troy ounce (US\$/oz). Where quoted, Universal Transverse Mercator (UTM) coordinates are provided in NAD83, Zone 14 North.

2.3 Ronacher McKenzie Geoscience Qualifications

Ronacher McKenzie Geoscience is an international consulting company with offices in Toronto and Sudbury, Ontario, Canada. Ronacher McKenzie's mission is to use intelligent geoscientific data integration to help mineral explorationists focus on what matters to them. We help a growing number of clients understand the factors that control the location of mineral deposits.

With a variety of professional experience, our team's services include:

• Data Integration, Analysis and Interpretation





- Geophysical Services
- Project Generation and Property Assessment
- Exploration Project Management
- Resource Estimation and Independent Technical Reporting
- Project Promotion
- Lands Management

Author and Qualified Person Elisabeth Ronacher, PhD, P.Geo. is responsible for all sections of the report except Section 12, for which Dr. Ronacher is jointly responsible for with co-author and Qualified Person, Jamie Lavigne and Section 14 for which Jamie Lavigne is solely responsible. Dr. Ronacher is co-founder of and Principal Geologist to Ronacher McKenzie Geoscience and a geologist in good standing of the Professional Geoscientists of Ontario (PGO #1476). Dr. Ronacher has worked as a geologist since 1997 with academia and industry on a variety of exploration properties such as Au, Cu, base-metal, Cu-Ni PGE and U. She has written numerous Independent Technical Reports (NI 43-101) on a variety of deposit types. Jamie Lavigne is a geologist in good standing with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists, (#L1244) and is a Qualified Person as defined in NI 43-101.

Certificates of Qualification are provided in Appendix 1.

3.0 Reliance on Other Experts

The authors relied on information provided by Canadian North Resources regarding land tenure and underlying agreements not in the public domain. The QPs reviewed the status of the leases that the property is comprised of on the Nunavut Map Viewer website (within the Crown Indigenous Relations and Northern Affairs website) on June 13, 2022. In addition, the title ownership as outlined in this Report was obtained from the Mining Recorder's Office for Nunavut. The QPs relied on Boyd (2021) and Canadian North Resources regarding the Purchase Agreement between the Company and Starfield Resources Inc. ("Starfield"), which is not in the public domain. Whereas publicly available information on title was reviewed for this report, this report does not constitute nor is it intended to represent a legal or any other opinion to title.





4.0 Property Description and Location

4.1 Location

The Ferguson Lake property is located in the Kivalliq region of southern Nunavut Territory some 250 km west of Rankin Inlet, Nunavut, and 170 km south-southwest of Baker Lake, Nunavut. Ferguson Lake, central to the property area, is midway between Yathkyed and Qamanirjuaq Lakes. The Property currently encompasses an area that measures approximately 16.5 km in the east-west direction and 5.5 km north-south. The Property is located approximately between Latitudes 62° 50' and 62°53' North and Longitudes 96°45' and 97° 04' West in NTS map-areas 65l/14-15. The centre of the property is approximately 605,000E and 6,972,100N (NAD 83, UTM Zone 14 N). The location of the Property is shown on Figure 4-1.

4.2 Property Description and Ownership

The Ferguson Lake Property consists of 10 contiguous mining leases comprising an area of 9.686 hectares (23,935 acres) owned 100% by Canadian North Resources (Table 4-1, Figure 4-2). Table 4-1 lists the annual rents for each lease. Legal access to the property is by air.

As shown in Table 4-1, the Property mining leases remain active until 2028 and have a total annual rent of \$23,935.00. The surface rights are held and managed by the Kivalliq Inuit Association; the leases overlap Inuit Owned Surface Rights parcels RI 24, RI 26 and RI 27.





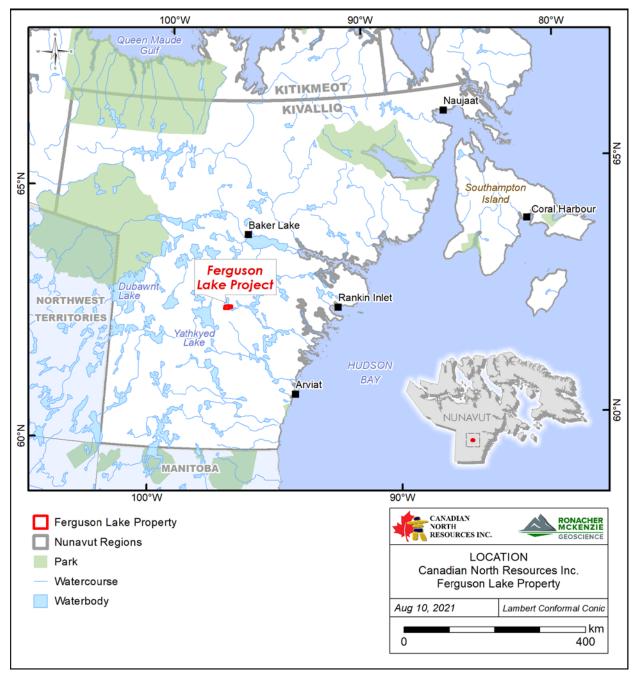


Figure 4-1 Location of Ferguson Lake Property in Region of Kivalliq, Nunavut.





Table 4-1 List of mining leases for Ferguson Lake Property, Kivalliq, Nunavut.

Disposition No/Name	Area (acres)	Recording Date	Anniversary Date	Disposition Term End	Annual Renewals
4922	2,534.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,534.00
4923	2,695.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,695.00
4924	1,527.00	07-Sep-07	07-Sep-21	07-Sep-28	\$1,527.00
4925	2,640.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,640.00
4926	2,425.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,425.00
4927	1,732.00	07-Sep-07	07-Sep-21	07-Sep-28	\$1,732.00
4928	2,616.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,616.00
4929	2,401.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,401.00
4930	2,592.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,592.00
4931	2,773.00	07-Sep-07	07-Sep-21	07-Sep-28	\$2,773.00
10	23,935.00				\$23,935.00

Canadian North does not currently hold any mineral claims.

Mineral claims in Nunavut are valid for two years from the recording date and may be renewed for an additional year by completing representation (assessment) work in the amount of \$4.00/acre within the initial two-year period. Annual work in the amount of \$2.00/acre is required to renew the claims beyond the third year. After ten years the claims must be applied for mining lease which once accepted have an annual rent payable every anniversary date of \$1.00/acre, but can be held for 20 years, after which the lease must be applied for renewal.

The Nunavut claims management regulations were revised on January 30, 2021 allowing the acquisition of mineral claims online. Claims are staked and managed based upon four sided polygon cell units with an average size of 18 hectares. The annual work charges to maintain a claim in good standing have been revised per cell unit to as follows:

Year 1: \$45Year 2: \$90

• Year 3: \$90

• Year 4: \$90

• Year 5 to 7: \$135

Year 8 to 10: \$180Year 11 to 20: \$225Year 21 to 30: \$270





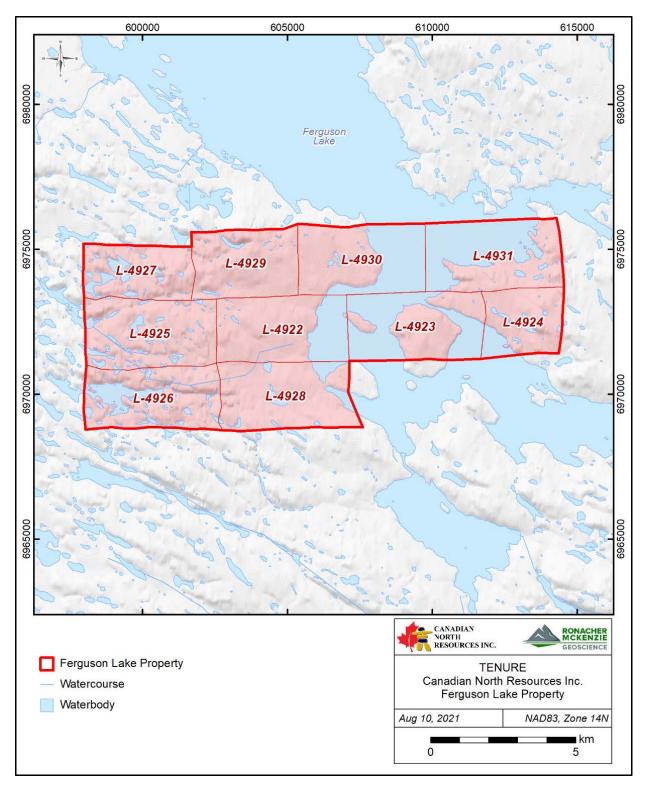


Figure 4-2 Map showing the Ferguson Lake property mining leases.





On April 8, 2013, a letter was sent by Duboff Edwards Haight & Schachter, legal counsel for the Kivalliq Inuit Association (KIA), to Pricewaterhouse Coopers Inc., Trustees in Bankruptcy for Starfield stating that Starfield is indebted to KIA for a total of approximately \$2,150,187.50. Based upon discussions with Kimberley Gilson of Duboff Edwards Haight & Schachter, and Luis Manzo and Stephen Hartman of KIA, it is concluded that this sum represented an estimate based predominantly on the cost for the dismantling, removal, clean-up and disposal of the Ferguson Lake Project exploration camp and site including the airstrip in the event the project becomes abandoned. Therefore, any purchaser who takes ownership of the Ferguson Lake Property and project does not carry this debt unless it takes the extraordinary subsequent action of abandoning the camp and site (Boyd 2013).

It is noted that inspections of the Ferguson Lake camp and area completed by the KIA and by the Water Use Inspector for CIRNAC during the summer of 2013 were largely positive in their findings and discussion.

Bearing in mind, the KIA's estimated cost for the dismantling, removal, clean-up and disposal of the Ferguson Lake Project exploration camp and site suggested in the aforementioned April 8th, 2013 letter; it is likely that the remediation deposit of \$240,000 for the camp, presently held by the KIA, may be raised in the future. During the summer of 2012, Starfield cleaned up all scrap material at the old camp site and removed surface soil material from the old camp area. The waste material was consolidated safely during the clean-up in preparation for removal and disposal overland by snow-cat train. KIA officials have positively acknowledged the remediation work completed at the old camp site, but have cautioned that they cannot sign off the outstanding commitments until their inspector can visit the site including the possible completion of analytical testing showing that the site has been adequately remediated.

During April 2020, four empty sealift containers and 120 barrels of fuel were hauled overland to the Ferguson Lake Camp from Baker Lake. The containers were to be filled with the waste materials to hauled back to Baker Lake the following winter and then transported by ship to the south to be disposed at an accredited site. The transport had to be postponed due to restrictions related to the Covid-19 pandemic. It is scheduled to be completed as soon as conditions allow.

Upon assuming ownership of the Ferguson Lake project in 2013, Canadian North Resources Inc. has undertaken consultation, meetings and discussions with the KIA, CIRNAC, and Hamlet Council for Rankin Inlet in both Rankin Inlet and Toronto.

The QPs are not aware of any royalties, back-in rights, payments, or agreements and other encumbrances to which the property is subject, other than the ones described above.

4.3 **Permits**

The ongoing management of the Ferguson Lake Property and Project holdings requires careful attention to the care of the environment, historical artifacts, and local community and socio-economic relationships. Several permits and licenses need to be kept in good standing in order to operate successfully. Canadian North Resources Inc. is a registered incorporated extra-territorial corporation with the Nunavut government





and holds a prospecting license in good standing with Crown Indigenous Relations and Northern Affairs Canada ("CIRNAC").

The Ferguson Lake Project does not yet hold any permits required to operate a mine. The primary area being explored on is situated on Inuit Owned Land (IOL) under the Nunavut Land Claim Agreement. As such, the negotiated Commercial Lease was entered into in 2009 with the Kivalliq Inuit Association ("KIA"). The purpose of the lease agreement was for access to the land as well as environmental protection and socio-economic considerations.

The Commercial, Land Use and Right of Way permits, enabling work, water use, and travel to be conducted over the mining leases, claims, and Prospecting Permit areas, are issued to the Canadian North Resources by the KIA, Nunavut Water Board ("NWB"), and by CIRNAC are listed in Table 4-2.

Table 4-2: List of permits required to operate on the property.

Permit Type	Permit Number	Expiry Date
Commercial License for Ferguson Lake Camp on Inuit Owned Lands issued by ${\rm KIA}$	KVCL305H27	July 22, 2027
Quarry License for Ferguson Lake Camp Airfield on Inuit Owned Lands issued by KIA	KVCA08Q17	September 11, 2023
Right of Way overland transport license over Inuit Owned Lands issued by KIA	KVRW06F09	October 17, 2023
Type "B" Water License issued by the NWB	2BE-FER1318 TYPE "B"	December 11, 2023
Right of Way overland transport license over Crown Lands issued by CIRNAC	N2013X0023	March 17, 2023
Prospecting license on Inuit Owned Land issued by KIA	KVL117B05	May 27, 2023*
Prospecting license on Crown Land issued by CIRNAC	13740	March 31, 2023

KIA: Kivallia Inuit Association

NWB: Nunavut Water Board

CIRNAC: Crown-Indigenous Relations and Northern Affairs Canada

The QPs are not aware of any environmental liabilities other than the ones mentioned in this report.

The QPs are not aware of any other significant factors or risks that may affect the access, title or the right or ability to perform work on the property.



^{*}This permit is in the process of being renewed as of the effective date of this report.



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Access and Facilities

The Property is accessed primarily by air from Rankin Inlet, Nunavut, or Churchill, Manitoba; both of these locations have scheduled commercial airline service to major urban centres such as Montreal or Winnipeg and offer a number of facilities. An 825 x 30 metre gravel airstrip located south-west of the Ferguson Lake 'New Camp' was constructed during 2008 and is capable of handling moderately sized wheel equipped aircraft including Twin Otter, Dash 8 and DHC-5 Buffalo sized aircraft. This airstrip replaces the 500m dirt strip located on the large island in the central area of Ferguson Lake that was used prior to 2008 to service the old camp. The layout of the new camp and infrastructure is shown in Figure 5-1 and Figure 5-2 and is situated on a low ridge of outcrop, sand and gravel at between 120 - 130 metres above sea level.

The camp consists of a series of buildings capable of providing housing and full room and board service for up to 55 persons and includes a generator and heating facilities for all-year operation. Support structures include heavy equipment workshops and housing for heavy equipment and carpentry, electrical equipment and various vehicles. Equipment at the camp includes Caterpillar D4 Dozer, Grader, Skid-Steer Loader, Caterpillar Excavator, Caterpillar Loader, Bombardier Snowcat, Bombardier Snow coach, two Caterpillar Dump Trucks, four 4x4 Quads, two GMC Crew Cab Pick-up Trucks, and seven snowmobiles. The camp, equipment, and airfield are insured for liability protection. Fuels barrels are stored within a lined berm at the camp and there is a separate storage area for bottles of propane.





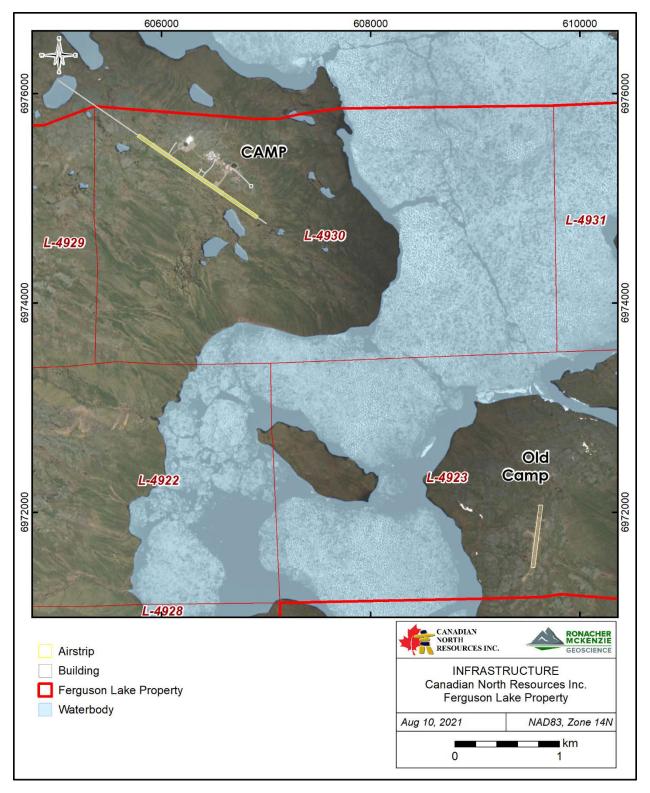


Figure 5-1 Location of the airstrip and new camp.







Figure 5-2 Ferguson Lake camp, storage and equipment layout with airfield.

5.2 Climate and Vegetation

The terrain is typical of the tundra barren grounds; the tree line is 150 km south of Ferguson Lake and vegetation consists principally of moss, lichen, dwarf birch and Labrador tea. Wildlife includes caribou, Arctic fox, muskox, arctic hare, siksik, wolf, wolverine, barren ground grizzly bear and various species of birds. Caribou migrate through the area in June and July. In order to reduce their disruption, the Nunavut government severely curtails diamond drilling on the Property from June 1 to July 15.

The project possesses subarctic climate characterized by long winters (October through April) with mean temperatures of -30° C; a short summer season with mean temperatures of 15° C that extends from July through mid-September. Mineral exploration work is most conveniently carried out during the summer months, and between March and May when geophysical surveys and diamond drilling can make use of ice-covered lakes. Nunavut permitting requirements stipulate the use of helicopters for drill moves during the non-winter months.





5.3 Physiography

The Yathkyed - Ferguson - Kaminuriak Lakes area is one of low relief, featuring numerous smaller lakes and a few large river systems, notably Kazan and Ferguson Rivers. Yathkyed and Ferguson Lakes are 141 and 114 metres above sea level respectively, and maximum elevations in the general area range from 200 to 275 metres. Elevations within the current Property area average less than 200 metres and range from slightly less than 100 metres at the Property's eastern boundary to 290 metres north of Yathkyed Lake. The orientation of Ferguson Lake and a number of smaller lakes reflects the dominant south-easterly glacial direction. Bedrock is fairly well exposed on numerous low hills and ridges; in lower areas bedrock may be obscured by between 6 and 25 metres of glacial debris, mainly till.

5.4 Infrastructure and Local Resources

Some supplies and services are available in Nunavut communities, Rankin Inlet (250 km east of the Property) and Baker Lake (170 km north of the property), both of which service mining operations built and operated by Agnico Eagle Mines Limited. The staging points for some programs have been Churchill, Manitoba, 510 air kilometres southeast of Ferguson Lake, and Yellowknife, Northwest Territories, 900 air kilometres west of the project. These communities, with larger populations, are accessible by highway or rail, have scheduled commercial airline services and are major regional supply centers. In previous programs supplies, equipment and fuel involved freighting by larger aircraft to an airstrip established on Ferguson Lake or transported to the Property by winter snow cat train from Baker Lake or Rankin Inlet in Nunavut.

Communications in this remote area are made possible by satellite, which provides for telephone, fax and high-speed internet connections.

Water is readily available from local lakes. Power is provided by diesel generators.

The sufficiency of surface rights for mining operations, the availability of mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach areas and processing plant sites is not relevant to the project at this stage.

6.0 HISTORY

6.1 Exploration History

The Ferguson Lake Deposit was originally discovered in 1950 by Canico (predecessor exploration arm of Inco Inc.) and has been intermittently explored by a variety of operators dominated by Starfield Resources Ltd. ("Starfield") from 1999 to 2013. A complete discussion of the previous work on the property and project to 2011 prior to Canadian North purchasing the property in 2013 is described in detail in the Preliminary Economic Assessment (PEA) of the Ferguson Lake Project completed by Roscoe Postle Associates Inc. (RPA) on behalf of Starfield in November, 2011 (Clow et al. 2011). In total, approximately 191,000 metres of drilling in 621 holes





were completed on the present property of which 26,400 metres in 173 holes were by Canico. The remainder were drilled by Starfield. Table 6-1 outlines the history of exploration on the Property, which is amended and updated from Irwin (2010).

In this section, the historic zone nomenclature is used to be consistent with historic documents (Figure 6-1). The historic West Zone is renamed Central Zone in this report as it forms the central part of the mineralization. The historic West Extension Zone is called West Zone in this report. The current zones are shown in Figure 14-1.

Table 6-1 History of Exploration at Ferguson Lake Property

YEAR	COMPANY	EXPLORATION	RESULTS
1950- 1955	Canadian Nickel Company Ltd. (Canico) [exploration arm of Inco]	Discovery of copper-nickel mineralization. Construction of 90-person camp, airborne and surface geophysics, geological mapping, 26,400m drilled. 10-ton bulk sample extracted for mill testing. Initial inhouse estimate of tonnage and grade completed.	Discovery of East Zone, West Zone, and Central Zone.
1957	Canadian Nickel Co. Ltd. (Canico)	Original concession taken to mining lease	Development of program assessed
1980	Esso Minerals Canada	Optioned property from Inco Extracted 9 ton bulk sample	Tested sulphur content for metallurgical application for uranium mineralization being investigated in District of Keewatin; the results were inconclusive
1986	Homestake Mineral Development Company	Reconnaissance geological mapping, collection of 339 rock and 266 soil samples from known East/West Zones	Full results available in DIAND Assessment Report by G.H. Cameron
1998	Ferguson Lake Syndicate	Field program; prospecting along East/West Zone and several other mineralized zones	New targets discovered
1999	Starfield Resources Inc.	Established 170km surveyed grid, airborne and surface geophysical survey, detailed geological mapping, prospecting, surface sampling, preliminary baseline studies, and 3,981m drilled (19 holes)	Defining of East/West Zones
2000	Starfield Resources Inc.	Geophysical surveys, drill-testing six mineralized zones 15,600m (49 holes)	Positive results from other mineralized zones
2001	Starfield Resources Inc.	Drilling 21,046m (37 holes) Interpretation of UTEM data, prospecting and rock sampling	Program designed to confirm and expand results from 2000; intersected massive sulfide
2002	Starfield Resources Inc.	Drilling of West Zone and its western extension	Better definition of sulphide zone
2003	Starfield Resources Inc.	Drilling of 2,667m (9 holes), geophysical survey, geological mapping by GSC (GSC Open file 4623)	Successfully tested both massive sulphide lenses and low-sulphide Pt/Pd horizons
2004	Starfield Resources Inc.	Diamond drilling, plus various geophysical surveys; helicopter - borne VTEM electromagnetic/magnetic and SQUID geophysical surveys	Definition of near surface sulphide mineralization in West Zone
2005	Starfield Resources Inc.	Drilling on three sections to fill in gaps in data, geophysical surveys, regional rock and soil sampling	Drill-holes drilled to further define foot- wall PGE mineralization; mineralization intersected





YEAR	COMPANY	EXPLORATION	RESULTS
2006	Starfield Resources Inc.	Drilling of 24,330m (110 holes) West Zone and East Zone II, regional till sampling	Detailed infill drilling of two main zones. Estimate of tonnage and grade completed by Carter (2006)
2007	Starfield Resources Inc.	Drilling of 5,836m (19 holes), prospecting, rock sampling on east side of Ferguson Lake, claim staking	Drill testing of low-sulphide PGM mineralization in West Zone. Estimate of tonnage and grade reported in Nicholson (2007).
2008	Starfield Resources Inc.	Drilling of 19,589m (51 holes), mostly on West Zone, exploration drilling on North Zone, Grizzly, and southern "Y" Lake, prospecting, rock sampling, till sample processing and claim staking	Discovery of diamond in till sample and gold grains in three samples, drill testing of three new zones
2009	Starfield Resources Inc./ Thanda Resources	Detailed helicopter - borne DIGHEM EM and magnetic survey over Y Lake trend. Drilling of 407 metres (1 hole) in Y Lake trend, JV partner Thanda Resources drilled 7 holes for diamond exploration	Drill test of DIGHEM conductor and magnetic anomalies with limited success
2010	Starfield Resources Inc.	Drilling of 1,126 metres (6 holes), 2 in South Discovery Zone of Cu-Ni-Co- PGM trend and 4 in Y Lake trend, prospecting in Y-trend	Drilling in Y Lake trend intersects sulphide bearing iron formation with anomalous Zn and Cu, prospecting identified Au and As showings.
2011	Starfield Resources Inc.	Completion of PEA on project, Drilling of 1,866 metres (3 holes) within main deposit and southwest of the West Zone	Drilling intersected mineralized zones as discussed in text.
2012	Starfield Resources Inc.	No exploration completed	Camp area maintenance and remediation of old island camp area.

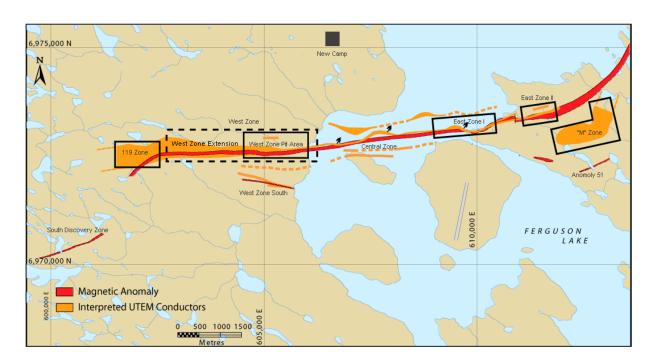


Figure 6-1: Map showing the historic zone naming convention. The current naming convention is shown on Figure 14-1.





Under the ownership of Starfield the Ferguson Lake Project underwent a series of permitting activities, social and community consultations, and environmental and archeological studies which are discussed in the RPA PEA report (Clow et al., 2011).

6.2 **2011** Historic Resource Estimation

The RPA PEA (Clow et al. 2011) completed on behalf of Starfield describes and discusses the exploration work, mineral processing and metallurgical testing, mining plan and mineral resource estimations completed from 1999 to 2011 for the Ferguson Lake Project. The proposed metallurgical process outlined in the report envisioned the implementation of a concentrator producing a bulk sulphide concentrate at the mine site to remove gangue minerals from the massive sulphide mineralization, a 250 km concentrate slurry pipeline between the mine and the hydrometallurgical plant, and a hydrometallurgical plant located in Arviat on the Hudson Bay coast to oxidize the sulphide material and separately extract the Ni, Cu, Co, Fe and S then returning the S to the site to be recycled (and possibly utilized by uranium mining development in the region). A scoping level economic evaluation of the project was presented, but it is noted that the economic parameters and analysis presented in the PEA are now considered to be out of date.

The project has undergone a series of resource estimations (Carter 2006, Nicholson 2007, Clow et al. 2008 and Chin 2009). The most recent mineral resources estimate reported by Starfield was a part of the RPA PEA, which was effective November 30, 2011. This estimate is listed in Table 6-2, however, it is now outdated, considered no longer a Mineral Resource under National Instrument 43-101 and treated as a historic resource.

Table 6-2: Historic resource, Ferguson Lake Property (Clow et al. 2011)

INDICATED RESOURCES *

ZONE	Tonnes	Ni	Cu	Co	Pt	Pd	Fe	S
	(Mt)	(%)	(%)	(%)	(g/t)	(g/t)	(%)	(%)
Main West Pit	1.1	0.63	0.97	0.07	0.22	1.54	36.34	19.95
Main West UG	14.7	0.65	0.99	0.08	0.25	1.55	36.16	20.97
Total Indicated Resources	15.8	0.65	0.99	0.07	0.25	1.55	38.04	20.90

INFERRED RESOURCES *

ZONE	Tonnes (Mt)	Ni	Cu	Co	Pt	Pd	Fe	S
		(%)	(%)	(%)	(g/t)	(g/t)	(%)	(%)
Main West Pit	0.2	0.57	0.90	0.07	0.17	1.40	33.96	18.40
Main West UG	5.9	0.59	0.82	0.07	0.20	1.34	36.15	19.59
West Zone Ext.	14.7	0.71	1.23	0.08	0.31	1.88	41.63	23.14
East Zone	9.4	0.65	0.76	NE	NE	NE	38.41	21.16
Total Inferred Resources	30.2	0.67	1.00	0.05	0.19	1.18	39.49	21.79

Notes:

^{5.} Platinum, palladium and cobalt were not estimated for the East Zone as the East Zone contains a higher proportion of historical Inco holes for which cobalt or individual platinum or palladium grades have not been determined.



^{1.} CIM definitions were followed for Mineral Resources.

^{2.} Mineral Resources were estimated at NSR cutoff values of Canadian \$53 per tonne and Canadian \$97 per tonne for open pit and underground, respectively.

^{3.} Mineral Resources were estimated using average long-term metal prices of US\$9.00, US\$3.15, and US\$17.00 per pound of nickel, copper, and cobalt, respectively, a US\$/C\$ exchange rate of 1.00, and a royalty of 2% NSR.

^{4.} Metallurgical recoveries were assumed to be 91% for nickel, 96% for copper, and 90% for cobalt.



* These are historical estimates provided for information only, originally filed on SEDAR but are now outdated, no longer relevant and not to be relied upon. A significant re-evaluation at today's gold prices and economic conditions would have to be completed to upgrade this historic estimate as current mineral resources. The QPs have not done sufficient work to classify the historic estimate as current. Canadian North is not treating this resource estimate as current. A current estimate is presented in 14.0 Mineral Resource Estimates.

It is noted that for the East Zone in Table 6-2, there were insufficient historic analyses of Co, Pd and Pt completed to estimate their grades, hence, there are none stated for that zone. This resulted in a lower average grade for Co, Pd and Pt in the table since these East Zone grades were stated as zero when calculating the overall grades.

The original wireframe model was constructed generally based upon greater than 50% sulphides in the rock encompassing the massive sulphide body but not the footwall or enveloping low sulphide mineralized material. An additional three holes drilled by Starfield totaling 1,866 m was completed in the deposits area in 2011 for which results underwent independent QA/QC (quality assurance/quality control) review and reporting in the RPA PEA report (Clow et al.), but these were not included into this estimate. This is significant because results reported from two of the drill holes were up to 7.5 metres from 111.5 to 119 m depth grading 1.95% Cu, 0.66% Ni, 1.77g/t Pd, 0.4g/t Pt and 0.08% Co for hole FL11-430, and 6.0 metres from 1118.7 to 1124.7 m grading 1.33% Cu, 0.73% Ni, 1.86 g/t Pd, 0.11 g/t Pt and 0.04% Co for hole FL11-432. The latter hole extended the strike length of the West Extension Zone a further approximate 250 metres to the west.

In summary, the RPA PEA reported the scoping level economic feasibility of the Ferguson Lake Project based upon the recovery of Ni, Co, Co, Fe and S but excluded the extraction, recovery and economic contribution of Pd and Pt in its analysis.

There has been no production on the Property.

6.3 Historic Metallurgical Testing

A detailed outline and discussion of the metallurgical testing history for the Ferguson Lake mineralized material can be found in the RPA PEA and is repeated in summary in this report. Metallurgical testing that was carried out for Starfield from 2001 to 2008 by Kingston Process Metallurgy, SGS Lakefield, and NeoFerric generated a predominantly hydrometallurgical flowsheet on which to assess the economic viability of the project at the scoping level.

Early work on the primary leach circuit focused on demonstrating the technical viability of carrying out a relatively low temperature hydrolytic precipitation of iron as hematite and/or magnetite, in the absence of any base addition, with the accompanying recovery of strong HCl. Early testing also included the evaluation of grinding, flotation, and mineralogical characterization on sulphide mineralized drill hole composites plus some Platsol testing on generated products. In terms of later work, in 2010 bulk sample massive sulphide mineralization was gathered by Starfield from the surface of the Ferguson Lake West Zone (now called Central





Zone) using an excavator and five tonnes of the material was shipped to the SGS Mineral Services Lakefield ("SGS") metallurgical laboratory primarily for pilot and bench metallurgical testing.

Additional test-work was completed in 2009 at McGill University and in 2010/2011 at SGS in Lakefield, Ontario to assess oxidation and hydrolysis. During 2011, a flotation test program was carried out to assess if the Ferguson Lake ore was amenable to upgrading by means of flotation prior to further treatment at the hydrometallurgical process plant. A series of bench scale flotation tests established that it was possible to recover essentially all the sulphide minerals into a single bulk sulphide concentrate while also rejecting about 80% of the gangue minerals.

Two major continuous leaching campaigns were successfully carried out in a continuous mini-pilot plant at SGS Lakefield. The iron oxidation and hydrolysis steps were also tested in continuous mini-plant campaigns at SGS Lakefield. There was sufficient laboratory work carried out to enable definition, at the conceptual level, a technically viable preliminary flowsheet. The major unit operations (primary leach, secondary leach, ferrous iron oxidation and hydrolysis) were tested in continuous mode at SGS, thereby demonstrating the technical competence of these unit operations.

The process oxidation and hydrolysis steps for the iron sulphides, however, were reported as novel and are not commercially proven unit operations. Fundamental measurements of heat capacity, thermal conductivity, viscosity, and other properties will be required in order to determine the necessary heat transfer coefficients to size heat transfer surfaces, or preferably, direct measurements of heat transfer at a larger scale than has been completed thus far.

In addition, the materials of construction of a process plant will require further study and development, particularly for the heat transfer surfaces. The fluids under consideration are aggressive and materials normally used for heat exchange surfaces, e.g. steel, would be dissolved. SGS completed preliminary corrosion testing, and it appears that higher grades of titanium may be suitable for the oxidation stage, and tantalum may be required for the hydrolysis stage. It is expected that verification in this area will require substantial work.

The process has evolved from the results of metallurgical test work completed over the past decade. As experimental data became available it was incorporated into a process model that was used to develop the operating and capital cost estimates used in this and the preceding evaluations of the process. These economic estimates are now, however, considered to be outdated.

The most recent embodiment of the process model reported in the PEA that overall metal extractions of 91% for nickel, 96% for copper, and 90% for cobalt were achievable using the proposed process.

The process was stated to have the potential to generate stable, non-toxic tailings, and most importantly, recover a sufficient quantity of the intrinsic energy in the ore to make itself sustaining in energy usage. It was suggested that there may be no need to import fuel oil for generating power on-site, which would otherwise be necessary in such a remote location. The excess energy recovered from the process was potentially





sufficient to operate the hydrometallurgical process plant, as well as the mine, concentrator, and concentrate pipeline pump stations.

There are a number of uncertainties in the process flowsheet, where it was necessary to make assumptions. The most important of these are the iron and sulphur contents of the ore, and its accompanying mineralogy, and secondly, the lack of fundamental data in the scientific literature to enable a rigorous energy balance to be carried out.

No account was undertaken of the precious metals content of the ore, since no process for their recovery were properly evaluated although it was suggested by personal communications with former Starfield employees that their recovery was mandated, even as a relatively low-grade concentrate, since it comprised a significant potential revenue stream even while Starfield operated the Property.

It was suggested in the PEA there was potential to process low-base metals, high-PGE mineralized material although low-base metals-content material would not provide the energy advantages of the massive sulphide material. There was believed value in recovering PGEs from both low-base metal material and from the secondary leach residue generated at the end of the hydrometallurgical circuit.

In summary, the Starfield proposed process flowsheet in the RPA PEA was based on the following step by step operations:

- The run of mine ("ROM") ore will be crushed and processed in the on-site concentrator and the
 concentrate will then be transported by pipeline to the hydrometallurgical processing facility
 located near Arviat. The concentrate slurry will be dewatered and filtered ahead of the process
 plant.
- Primary leaching of the sulphide concentrate will be carried out with hydrochloric acid (HCl) at a temperature of approximately 115°C, producing a ferrous chloride (FeCl₂) solution, hydrogen sulphide (H₂S) off-gas, and a residue containing virtually the base metals.
- The hydrogen sulphide (H₂S) off-gas from the primary leach will be cooled to condense most of the water and any residual HCl, prior to burning in air to generate high-strength sulphur dioxide (SO₂), which will be sent to an acid plant to produce 93% sulphuric acid. This will permit the recovery of a substantial amount of the intrinsic energy in the ore as high-pressure steam, for use both directly in the flowsheet and also for electric power generation.
- The solids from the primary leach will be treated in a secondary leach with oxygen at about five atmospheres, under conditions that dissolve the nickel, copper and cobalt while initially dissolving but then re-precipitating the iron as goethite. The sulphide sulphur in the primary leach residue will be converted to elemental sulphur.
- The slurry from the secondary leach will be filtered, the filtrate proceeding to further processing and the filter cake contacted with recycled strong hydrochloric acid to re-dissolve the goethite. The resulting slurry will be filtered, and the filter cake washed with water. The washed filter cake will leave the process as a residue containing the precious metals. The filtrate, a concentrated solution of ferric chloride, will be sent to the oxidation/hydrolysis section of the process.





- The ferrous chloride (FeCl₂) solution will be combined with other recycled streams containing iron chloride, concentrated by evaporation, then oxidized with oxygen to initially precipitate one-third of the iron as hematite, and generate a ferric chloride (FeCl₃) solution.
- The slurry from the oxidation step will be subjected to a hydrolysis step, in which it is heated and most of the ferric chloride is converted to hematite and gaseous hydrochloric acid (about 35% HCl). The acid will be recycled.
- The slurry from the hydrolysis step will be filtered hot in a specialized filter and the filtrate is returned to either the oxidation step or the beginning of the hydrolysis step to control the solids content of the slurry in the hydrolysis step.
- The hot filter cake from the hydrolysis step will be quenched and diluted with recycled solutions from downstream in the circuit. The resulting slurry will be filtered, and the filter cake washed with water. The washed filter cake will leave the process as a by-product hematite. The filtrate will be recycled to the evaporation step ahead of the oxidation stage.
- Zinc will be removed from the filtrate from the secondary leach by ion exchange (IX), after which copper and cobalt recovery from the secondary leach solution will occur through anionic solvent extraction ("SX"). A second stage of SX will then separate the copper from the cobalt, and each metal will be recovered using SX and electrowin from a sulphate medium to generate LME-grade metal.
- Nickel will then be recovered by conventional sulphate SX, and electrowin to produce LME-grade
 metal. The raffinate from the nickel SX step will be combined with the strip solution from the zinc
 ion exchange step and evaporated at reduced pressure the steam produced being condensed
 and the condensate recycled, and the final concentrated chloride brine being contacted with
 concentrated sulphuric acid, generating hydrochloric acid that will be recycled and a sulphate
 effluent that will leave the process.

Starfield did not propose any formal methodologies for the extraction and recovery of palladium and platinum.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Ferguson Lake property lies within the western Churchill Province, an Archean craton that has been divided by previous workers into the lithologically distinct Rae and Hearne domains by the northeast trending Snowbird Tectonic Zone (Figure 7-1)

More precisely the Ferguson Lake Project is located 100 km east of the Snowbird Tectonic Zone, within the north-western part of the Hearne domain, which is bounded by northeast trending, regional shear zones, including the Tulemalu Fault Zone (part of the Snowbird Tectonic Zone) on the north and by the north-eastern extension of the Tyrrell Shear Zone on the southeast. The Hearne domain is principally made up of Archean metavolcanic and metasedimentary rocks and an aerially extensive gneissic terrane derived from both





Archean supracrustal and plutonic rocks that have been intruded by early Proterozoic plutonic rocks (Miller, 2005b).

The Western Churchill Province, because of its diverse geological environments which span a 1.5 billion years interval, is host to a variety of mineral deposit types (Miller, 2005b). Known mineral deposits, prospects and occurrences include mafic - ultramafic-related magmatic nickel-copper-cobalt-PGE massive sulphides, orogenic (mesothermal) lode gold, volcanic hosted massive sulphides, syngenetic and epigenetic uranium deposits and prospects, quartz-carbonate veins containing precious metals and diamonds associated with Phanerozoic kimberlite intrusions.

Regional mineral exploration efforts in the area of the project have been directed to orogenic gold, iron formation-hosted gold, volcanic hosted massive sulphides in both the Yathkyed and Ennadai -Kaminak - Rankin greenstone belts, as well as for diamonds over a much broader area.

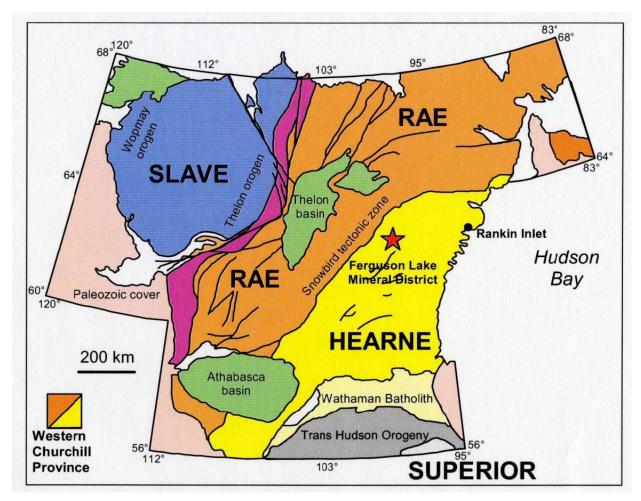


Figure 7-1 Ferguson Lake regional geologic setting (Hanmer, et al., 2004).





7.2 Local Geology

The Ferguson Lake area overlies the most northerly extension of the northeast-trending Yathkyed greenstone belt (Martel and Sandeman, 2004), which consists of strongly deformed, Archean gneissic supracrustal and intrusive rocks that have been raised to upper amphibolite facies and variably deformed Proterozoic plutons and dykes (Figure 7-2). Although protoliths of the older supracrustal rocks are comparatively rare, where seen, they consist principally of mafic metavolcanics with cherty iron formations and lesser intermediate to felsic metavolcanics and clastic metasedimentary rocks.

The widespread Archean gneissic rocks are intruded by Archean granodiorites, quartz monzonites, and a variety of mafic intrusions including diorites and gabbros. Late Archean intrusions include the east- to northeast-trending Kazan Dykes (Eade, 1986) which consist of variably metamorphosed gabbros and hornblendites.

Early Proterozoic (Tulemalu Dykes - Eade, 1986) gabbros and slightly younger diabase dykes cut all older rocks, as do late Proterozoic syenites and lamprophyres. The Martell Syenite (Bell, 1971; Eade, 1986), which is an example of this intrusive activity forms a large (13 x 5 km) pluton centered on Uligattilik Hill. This intrusive is located several kilometres east of the Ferguson Lake Property and is reflected by a positive magnetic anomaly on published airborne magnetic survey results for map-area 65l. As described by Bell (1971), this pluton consists of massive, uniform, biotite-pyroxene-amphibole syenite in which apatite is a common accessory mineral. It is thought that biotite-rich mafic dykes, prevalent within the Property area, may be related to this intrusive event.





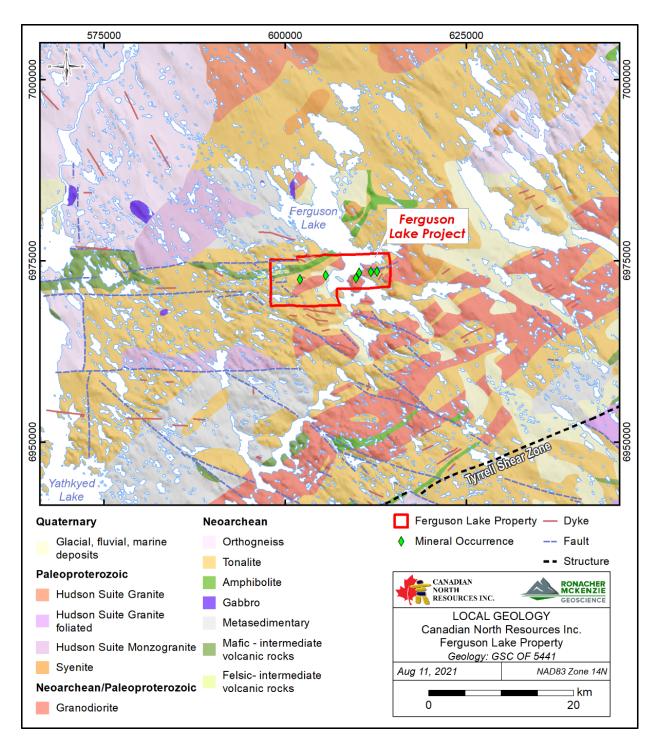


Figure 7-2 Local geology of the Ferguson Lake area.





7.3 **Property Geology**

Within the Ferguson Lake Property pronounced layering in the supracrustal rocks trends east-northeast to northeast and dips moderately to steeply north (Figure 7-3). Medium to coarse-grained, massive to weakly foliated gabbros, containing +60% hornblende, and termed hornblendites in earlier reports, mainly occur within, and are conformable with, the layering in amphibolite-hornblende-biotite gneiss sequences. Petrographic studies suggest that these hornblende-rich gabbros, which are the principal host rocks for base metal sulphides and platinum group elements, may be metamorphic products of original tholeiitic mafic or ultramafic (pyroxenite-peridotite) intrusions. The foregoing lithologic units, including the host gabbros, are cut by younger (mid-Proterozoic) gabbros and diabases and by late Proterozoic syenites, quartz-feldspar porphyries and fine-grained, locally biotite-rich mafic dykes. Three generations of deformation are recognized and Martel and Sandeman (2004) report an early phase foliation in the host hornblendite unit and suggest that it and the contained sulphide mineralization were subjected to two subsequent phases of folding with the first of these represented by the numerous northeast-southwest structures shown on Figure 7-4. Therefore, mineralization at Ferguson Lake is inferred to be of Archean age.

The structural mapping program, conducted by Henderson (1999) in the areas of the two principal mineralized zones, East and Central Zones, indicated that most of the lithologic units, including the granitic intrusive rocks but excluding younger gabbros, diabase and mafic dykes and syenite plutons, were subjected to high grade metamorphism and deformation. Intricate folding of the gneissic rocks and the hornblendites (gabbros) has produced antiform and synform structures which are particularly evident in the area east of Ferguson Lake. The East and West mineralized zones were interpreted as being within the south limb of a recumbent, double-plunging synform or "canoe-shaped" structure modified by numerous faults and shear zones which offset the various lithologic units.

Miller (2005a) suggests that the host gabbroic units in both the East and West sulphide zones at Ferguson Lake are a component of metamorphosed compositional layering. This compositional layering in the East Zone is represented by mesocratic through leucocratic gabbro and into anorthosite, which is commonly garnet bearing. In the Central Zone, compositional layering ranges from pyroxenite through mesocratic and leucocratic gabbro. Miller further suggests that the original magma underwent fractional crystallization within several chambers to form layered mafic and ultramafic rocks and proposes that the Ferguson Lake Intrusion might best be termed the Ferguson Lake Intrusive Complex ("FLIC"). Miller also indicates that the host rocks and contained mineralization are of Archean age but correctly points out that there are no geochronological dates to substantiate this hypothesis.

The main gabbro (or hornblendite) unit, which is host to all of the known sulphide zones including East, Central (lake) and West Zones, exhibits a fair degree of continuity and predictability over an east-west strike length of more than 12 km is of interest. This linear feature, which significantly trends only slightly north of east as opposed to the dominant northeast structural trend of the surrounding area suggests that the host intrusion





post-dates the earliest, most intense, phase of Archean deformation and metamorphism that is evident in the surrounding gneissic rocks.

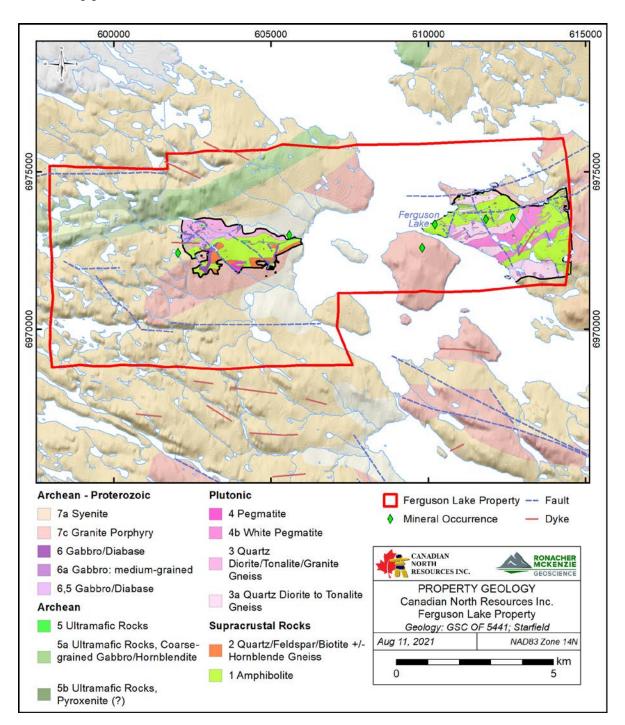


Figure 7-3 Geological map of the property as mapped by Starfield.





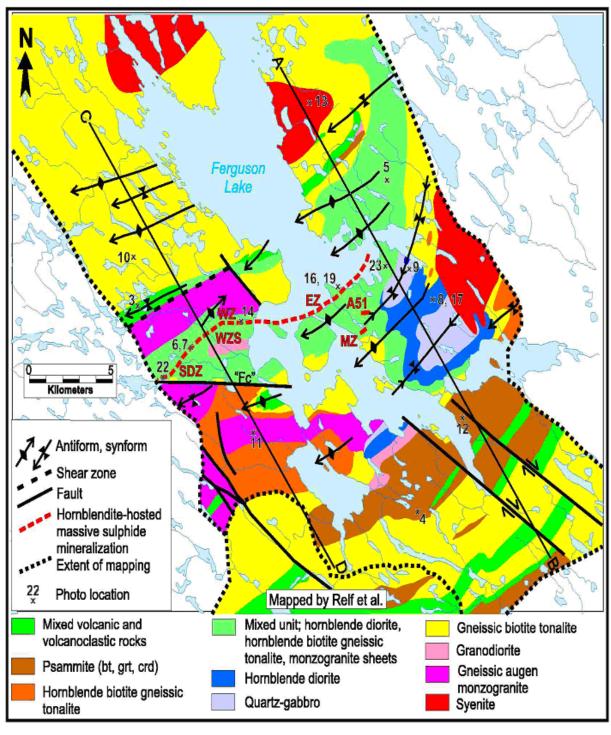


Figure 7-4 Ferguson Lake Area Geology (Martel and Sandeman, 2004).





7.4 Mineralization

The main gabbro unit, which is host to all of the known sulphide zones including East, Central and West (Figure 14-1), exhibits a fair degree of continuity and predictability over an east-west strike length of more than 12 km is of interest. This linear feature, which significantly trends only slightly north of east as opposed to the dominant northeast structural trend of the surrounding area suggests that the host intrusion post-dates the earliest, most intense, phase of Archean deformation and metamorphism that is evident in the surrounding gneissic rocks.

The various mineral zones identified to date in that part of the Property bordering Ferguson Lake consist of magmatic nickel-copper sulphides, which also contain cobalt and platinum group metals (PGM) values. As noted, these zones are spatially related to mafic (and ultramafic) intrusions which are principally in the form of fine- to coarse-grained gabbro which include hornblendites. Three of the mineral zones (East, Central (lake) and West) are at least spatially related to the same gabbro unit which is between 10 and 600 metres thick and has been traced by intermittent exposures and by diamond drilling over a strike length of more than 12 km, east and west of Ferguson Lake. This and the other gabbro units hosting multiple mineral zones dip moderately to steeply north and are generally conformable with enclosing hornblende-rich gneisses.

In addition to the massive Ni-Cu sulphides, significant volumes of disseminated sulphides exist between 20 and 200 m below the massive horizon. This mineralization is characterized by a low-sulphide style that comprises disseminated, interstitial, and vari-textured sulphides and millimeter- to centimeter thick veins hosted by metagabbro. The mineralization is characterized by elevated to locally high Pd and Pt assay grades accompanied by low to very low Ni, Cu, and Co assay grades. In general, Pd grade is greater than Pt grade in the LSPGE zone. This zone is named "low-sulphide PGE zone" ("LSPGE").

8.0 DEPOSIT TYPES

The nature of the Ferguson Lake deposits, as currently understood, appear to conform with Eckstrand (1996) subtype 27.1d - "other tholeilitic intrusion-hosted nickel-copper" deposits which are described as being associated with mafic and ultramafic phases of differentiated intrusions. Sulphide minerals present in this deposit subtype include abundant pyrrhotite with subordinate pentlandite, chalcopyrite and pyrite which are present as massive lenses, sulphide matrix breccias, net-textured fracture fillings and as disseminations. Nickel to copper ratios range from 3:1 to less than 1:1 (Eckstrand, 1996).





9.0 EXPLORATION

9.1 2013 Work Program

9.1.1 Sampling of Historical Core

During the summer of 2013, the Ferguson Lake Camp was opened by Canadian North Resources Inc. with the major purpose completing a technical evaluation of the project. In addition, maintenance and repair work was undertaken on camp buildings and facilities, mechanical equipment, vehicles and airfield.

A field examination and review was conducted of the Starfield historical core stored at the camp and at the old camp area, situated on an island in Ferguson Lake 4 km to the southeast of the current camp. A total of 86 drill core samples were collected from 18 holes made up of 77 samples for Ni, Cu, Co, Pd and Pt analysis and nine samples for whole rock analysis. Focus was on identifying drill intersections of low-sulphide, high PGE mineralization for complete precious and multi-element assay and on locating probable peridotite rocks for whole rock geochemistry, which may serve as vectors to favourable host rocks of high-grade mineralization. The half core that remained in the core box from Starfield's sampling was cut in half and a quarter core samples was put in plastic sample bags together with pre-numbered sample tags. The samples were collected in rice bags and transported to SGS Lakefield.

Approximately 250 kilograms of the massive sulphide bulk sample mineralization stored on-site in an enclosed dark building was picked and packed into buckets to be shipped to Toronto for metallurgical testing. The material was gathered by Starfield from the surface of the Ferguson Lake Central Zone using an excavator in 2010. In this program, the rejects from the aforementioned 77 core samples of low sulphide mineralization are also available for testing at SGS Lakefield. The sample material removed and shipped for metallurgical testing during this program is about 400 kg (see 13.0 Mineral Processing and Metallurgical Testing).

Analytical results indicate that the predominantly low sulphide core samples averaged 0.07% Ni, 0.07% Cu, 0.01% Co, 1.42 g/t Pd and 1.20 g/t Pt with values ranging from below detection to up to 0.59% Ni, 1.0% Cu, 0.06% Co, 6.68 g/t Pd and 10.5 g/t Pt in massive sulphide material (Boyd, 2021). Gold values were nearly always <20 ppb. The results were compared with those equivalent samples possessing Pt and Pd historic partial analyses as discussed in Section 12.0.

9.1.2 Review of Ferguson Lake Deposit Model

Previous and recent exploration work completed on the Ferguson Lake Project since 2002 defined mineralized zones within the project area.

In 2013, Canadian North reviewed the mineralized zones and the resource estimate. All drilling completed by Starfield, which had undergone QA/QC review by Roscoe Postle Associates reported by Clow et al. (2011), was incorporated into a new three-dimensional, geological deposit model. The review was completed by Jason Baker P.Eng. of Caracle Creek International Consulting Inc. using the GEMS V6.5 resource modeling software





and was a re-examination of the reported historic resource for the Central and West Zone of the deposit applying five main differences as follows (Boyd, 2013):

- Wireframes were constructed using a Pd + Pt cut-off grade 1.0 g/t instead of a cut-off based upon NSR of Ni, Cu and Co (but not Pd and Pt) as discussed in Section 6 (See Figure 9-1).
- A minimum mining width of 3 metres instead of 2.5 metres
- Incorporation into the model of the 2011 drilling results completed by Starfield
- The addition of footwall zones of low-sulphide PGM rich mineralization based upon the Pd + Pt cut-off.
- The East Zone was not included in this evaluation due to the lack of Pd and Pt analyses in that
 portion of the deposit. It is noted that based upon its similar mineralization to the Central Zone
 and supported by drilling completed by Starfield, the East Zone is considered to possess similar
 Pd and Pt grades.

Based upon this review, the GEMS model of the Central and West Zones is shown in Figure 9-1.

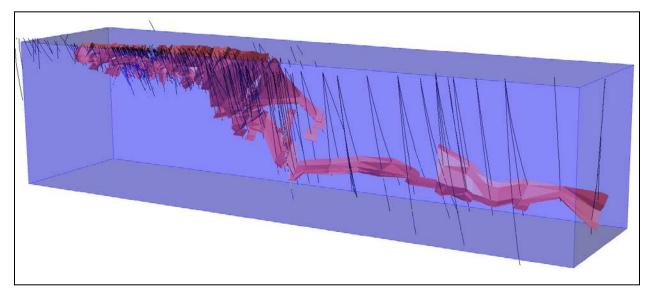


Figure 9-1 Central Zone and West Zone 3D View of Wire Frames, Drill Holes & Block Model Outline (Looking SE)

Historic diamond drilling has demonstrated that massive, semi-massive and disseminated sulphide intersections of variable widths extend on the Property over a strike length of approximately 15 kilometres. For the purposes of this evaluation, the Property was divided into a series of lenses plus separate footwall low-sulphide zones. This review for the Ferguson Lake Project was completed exclusively based on diamond drill hole data. No systematic excavations or surface sampling were completed that contribute to the database.

A total of 608 drill holes in the Ferguson Lake database were put into the new model, which includes those drilled by Inco during the 1950s and those drilled by Starfield from the period 1999 to 2011. The number of drill holes and total metres drilled, by drill campaign, are presented in Table 9-1. The vast majority of the 2007 and





2008 drilling was confined to the Central Zone where most of the Starfield 2011 historic estimate was completed.

Table 9-1 Ferguson Lake deposit drilling sample data.

Year	Company	No. of Holes	Metres
1953	Inco	173	26,385
1999	Starfield	19	3,923
2000	Starfield	48	15,533
2001	Starfield	38	21,500
2002	Starfield	53	24,957
2003	Starfield	9	2,721
2004	Starfield	55	23,018
2005	Starfield	29	16,973
2006	Starfield	116	24,951
2007	Starfield	19	6,139
2008	Starfield	49	18,813
2011	Starfield	3	1,866
Total		611	186,779

A total of 36,739 samples, which make up the Ferguson Lake database, were used in the review. The high sulphide drill core samples collected by Starfield were analyzed for Ni, Cu, Co, Pt, and Pd; however, some low sulphide drill core samples, collected by Starfield were analyzed only for Pt and Pd. Some of these samples which reported good Pt and Pd values were re-analyzed including Ni, Cu and Co values as discussed in section 9.1.1. The Inco samples were generally only analyzed for Ni and Cu. The total number of samples and metres of core analyzed by year is presented in Table 9-2.

Table 9-2 Ferguson Lake deposit drilling sample data.

Year	Company	No. of Samples	Total Metres of Sampling
1953-54	Inco	2,350	3,277
1999	Starfield	912	680
2000	Starfield	2,351	2,172
2001	Starfield	1,868	1,792
2002	Starfield	3,396	3,602
2003	Starfield	1,107	1,415
2004	Starfield	4,746	6,075
2005	Starfield	2,099	2,504
2006	Starfield	5,927	5,897
2007	Starfield	2,713	3,764
2008	Starfield	9,088	12,681
2011	Starfield	182	254
Total		36,739	44,113





Drill core logging by both Inco and Starfield included the identification of rock types which was put into the Ferguson Lake GEMS database. This included the major distinctions between the host intrusion, surrounding country rocks, and massive sulphides. Differences in rock type coding between closely spaced holes, particularly those from different drill campaigns, suggest difficulties identifying major rock types consistently, perhaps due to variability in metamorphism within the mineralized zones. Moreover, the absence of recognizable marker horizons has made correlations difficult. The best marker horizon identified to date is the upper gabbro contact with a thick sequence of amphibolites. This contact appears to be sub-parallel to the mineralized horizons and provides the best available guide as to the overall orientation of mineralization.

The Ferguson Lake deposit database contains 1,442 specific gravity (SG) measurements from drill campaigns between 2002--2006. In 2006, specific gravity was reported to have been determined on 1,342 drill core samples during the course of sample processing for base and precious metal analyses. The SG was determined using the water immersion method. Based upon the RPA PEA (Clow et al. 2011), the SG data in comparison to the analytical results showed good correlation between SG and nickel grades for both high and low sulphide samples.

The linear regressions used for the results reported in the RPA PEA were as follows:

- SG = 1.1712 * Ni + 2.8968 for the low-sulphide gabbro-hosted mineralization, and
- SG = 1.3638 * Ni + 2.9435 for the massive sulphide mineralization.

For the purposes of this review the more conservative low sulphide gabbro-hosted linear regression was chosen to estimate individual block density based upon the Ni grade.

The drill hole data were imported into the GEMS software package for the purposes of geological modeling. Imported data included drill hole collar locations, down-hole surveys, rock type, and sample data including sample identification and analytical data for Ni, Cu, Co, Pd and Pt.

The block model definitions used are shown in Table 9-3. The three-dimension block model is represented by "X", "Y" and "Z" coordinates. Positive rotation is clockwise about any axis. Based on the anticipated mining methods, the size of the mineralized domain and the drill hole spacing, Caracle Creek chose a block size of $5m \times 5m \times 5m$. Figure 9-1 shows the outline of the block model definitions for the Central and West Zone and Figure 9-2 shows the grade (Pd) of the populated blocks.

Table 9-3 Block model definitions

	Y (m)	X (m)	Z (m)
Origin Coordinates (m)	19550	5575	200
Block Size	5	5	5
Rotation	0	0	0
Number of Blocks	1050	240	265





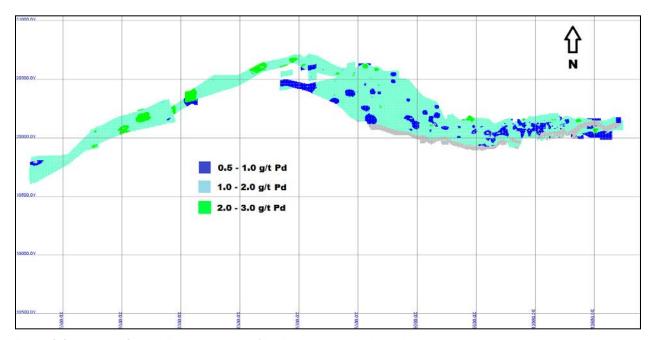


Figure 9-2 West and Central Zone plan View of Pd Blocks within the Block Model

Grade estimation for the review was based on Inverse Distance methodology using one pass. Table 9-4 summarizes the parameters used in the grade estimation.

Table 9-4 Grade Estimation Parameters

	Pass 1
Method of Interpolation	Inverse Distance
Search Radius	300m X 300m X 300m
Search Type	Spherical
Min # of Samples	1
Max # of Samples	30

The estimation parameters were interpolated through some Ni, Cu and Co intervals for which no Pd and Pt analyses had been completed. Caracle Creek in their review did not evaluate the spatial distribution of grade using variograms. The raw assay data was viewed in three dimensions as a starting point to help determine grade continuity directions.

Boyd (2021) examined the methodology and the updated calculated tonnage and grade generated from this review and concluded that this estimate was not consistent with the requirements of NI 43-101 and the definitions set out by the CIM Definition Standards for Mineral Resources and Mineral Reserves adopted by the CIM Council in 2010, therefore these numbers are not provided in this Technical Report.

However, in the opinion of Boyd (2021), the deposit review demonstrated that the use of a Pt + Pd cutoff grade successfully resulted in the creation of a coherent contiguous wireframe model around the mineralized zones





which included enveloping lower sulphide contents resulting in an overall thicker and less variably shaped mineralized bodies. It is concluded that the use of such a cut-off is appropriate for any future resource estimation.

Review of the model confirmed considerable additional drilling is required and recommended to determine the full extents of the mineralization at the Ferguson Lake Project.

9.2 **2015** Exploration Program

The purpose of the 2015 Ferguson Lake exploration program was to conduct ground follow-up on potentially metalliferous and/or diamondiferous target areas both within and outside CNRI's current mineral rights holdings at the time. The program consisted of helicopter supported surface reconnaissance prospecting, rock chip and till sampling and ground geophysical surveys performed by Canadian North Resources Inc. Near all of the exploration work was completed outside the present Property boundaries, thus it is not considered material. The program was completed from July 26–August 16, 2015 during which the Ferguson Lake Camp was re-opened to maintain the facilities and equipment and support the exploration work.

9.2.1 Reconnaissance Prospecting and Sampling Program

During this work program a total 23 predominantly regional mineralized geochemical/geophysical targets areas were chosen, examined and assessed by the geological teams on the ground. Some targets were indicated to potentially host more than one mineralization type. Thirteen of these targets hosted historical Cu-Ni (+-PGE) mineral occurrences and eight recorded known Au occurrences. Eleven were selected airborne electromagnetic conductors of unknown cause.

The geophysical targets were chosen from airborne surveys results from the Starfield Resources exploration programs completed in 2005 and 2009 some of which had been previously recommended but remained under-explored or in some cases never followed up on the ground. Rock grab and chip samples were taken by the field crews at attractive exposures of ultramafic, gabbro or strongly hydrothermally altered rocks, and /or rocks hosting significant sulphides, and/or iron oxide gossans from either outcrop or sub-crop. During the exploration program approximately 269 surface rock samples from outcrop or sub-crop for litho-geochemical analysis were obtained by the geological teams.

The most significant analytical results were found to return values of up to 14,300 ppm Cu, 2,490 ppm Ni, 539 ppb Pd, and 220 ppb Pt hosted in highly weathered serpentinite and clay rocks consisting of 10-30% iron oxides, pyrrhotite and chalcopyrite mineralization. Other results of interest are scattered Cu, Ni and Pd anomalous values which are found extend easterly along strike across the eastern arm of Ferguson Lake. The samples were obtained from gossanous gabbro outcrop containing variable disseminated pyrrhotite (5-20%) and lesser chalcopyrite. A parallel east-west trending gabbro - amphibolite sequence deposit is located 3 kilometres south of Ferguson lake deposit was examined and prospected. The sampling of sub-crop gossans returned values of up to 5,160 ppm Cu, 580 ppb Pt and 317 ppb Pd.





In addition, five areas exhibiting attractive clusters of anomalous magnetic signatures identified from the airborne surveys combined with potentially favourable previous exploration results were examined and sampled on the ground for diamond potential. Thirteen 25-30 kg till samples were gathered at four of the target areas and sent for Kimberlite Indicator Mineral analyses. No significant results were reported.

9.2.2 Ground Geophysical Surveys

During the field program a 27 line-km ground magnetic and VLF survey was completed over the eastern end of Ferguson Lake approximately two kilometres along strike east northeast from the eastern end of the Ni-Cu-PGE mineralized zones as shown in Figure 9-3. The figure shows the grid location with respect to the distribution of the interpreted conductor anomalies from the helicopter-borne VTEM electromagnetic and magnetic survey flown over the Property in 2004 and the locations of the West and East zones mineralized bodies.

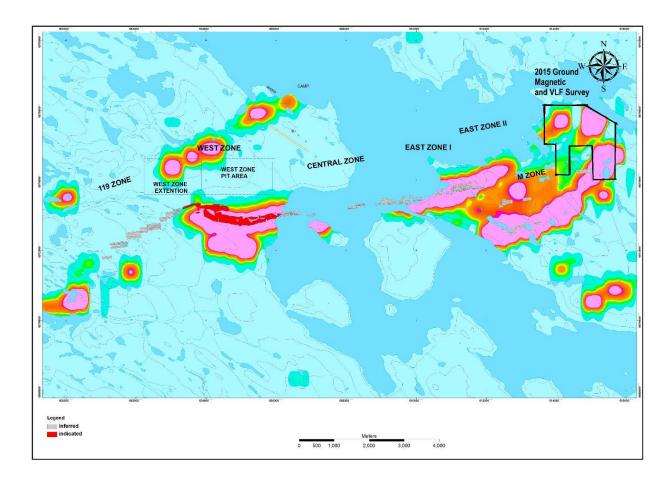


Figure 9-3 2015 Geophysical Grid Location overlain on Ferguson Lake conductive zones from historic airborne VTEM survey.





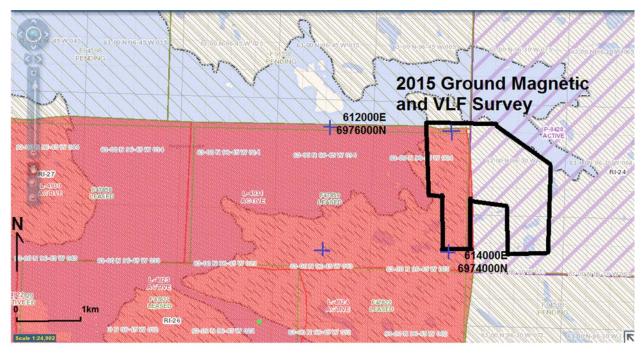


Figure 9-4 Geophysical Grid Location in UTM NAD 83 coordinates, Zone 14 overlain on Ferguson Lake Mineral Leases in red.

The ground geophysical grid overlapped on Mining Lease F47859 as shown on Figure 9-4 and covered an area which had never been ground surveyed with its southern and eastern boundaries adjacent to the farthest east extent of previous ground surveys completed by Starfield Resources in 2002 and 2003. The data was plotted using UTM calculated from the raw GPS data using NAD83 and Zone 14. Most of the survey area falls outside of the current claim holdings.

9.3 **2018** Exploration Program

For the 2018 program, a helicopter supported follow-up surface rock geochemistry sampling program collecting 55 grab and chip samples was completed for the Property and surrounding area. Nearly all the samples were obtained from outside the present Property boundaries thus this work is not considered material. The results were generally low with highest value from a grab sample reported of 2400 ppm Cu, 1750 ppm Ni, 290 ppm Co, 0.89 ppm Pd and 0.33 ppm Pt.

9.4 **2021 Exploration Program**

Canadian North completed a resampling program in June and July 2021. Parts of 30 drill holes completed in 2002, 2004, 2006, 2007 and 2008 were reviewed and sampled. The purpose of the sampling program was to verify the original assay results and to sample mineralized drill core that not previously been sampled. A total of 790 samples were collected, including 39 certified reference materials and 40 blanks.





Drill core was retrieved from the core storage area on site. Half of the drill core was available for previously sampled core. The remaining half core was cut in half again and the quarter core was sampled. For previously unsampled intervals where full core was available, the core was cut in half and half core was sampled.

Drill core samples were put in plastic bags with pre-numbered sample tags. The bags were collected in rice bags and flown to ALS Laboratories in Ranking Inlet, Nunavut.

10.0 DRILLING

In 2021, Canadian North completed a diamond drilling program from August 10 to September 10. Nine holes totaling 2,397 m were drilled (Table 10-1, Figure 10-1). The purpose of the drilling was to test and extent the Central Zone mineralization to the west, towards the surface and at depth.

Drilling was completed by 518 Drilling Inc. The drill rig was moved by helicopter. The drill core was logged at Canadian North's logging facility at the Ferguson Lake camp. Certain intervals were selected for sampling; core from these intervals was cut in half using a core saw. One half of the core was put in plastic sample bags together with pre-numbered sample tags. A rigorous quality control program was implemented where a certified reference materials, blanks and core duplicates were included in the sample stream.

The bags with the individual samples were collected in rice bags and flown to ALS Laboratories in Ranking Inlet, Nunavut.

Table 10-1: List of diamond drill holes completed by Canadian North in 2021.

Hole number	Easting	Northing	Elevation (m)	Depth (m)	Azimuth (°)	Dip (°)
FL21-441	604090	6973010	140	228	180	-60
FL21-440	604090	6973010	140	255	180	-60
FL21-439	604200	6973010	132	300	180	-60
FL21-438	604320	6973010	127	240	180	-60
FL21-437	604570	6973010	126	246	180	-60
FL21-436	604450	6973010	126	264	180	-60
FL21-435	605040	6972850	126	189	180	-60
FL21-434	605040	6972900	121	225	180	-60
FL21-433	605450	6973100	115	450	180	-55

A total of 1110 drill core samples were collected from the nine drill holes. The sample lengths do not represent the true thickness of the mineralization.

The mineralization occurs as a series near continuous, sulphide-bearing lenses which make up an open horizon extending over a length of greater than 12 km occurring from the surface to dipping and plunging to





depths of greater than 1,100 metres, and comprising of "pinch and swell" variable thicknesses of <1 to up to 30 metres.

Assay results were not available on the effective date of this report. However, massive, semi-massive, stringer and disseminated mineralization of the Central Zone was intersected in all nine drill holes. The thickness of the intersected zones varies from <5 m to 20 m. The orientation of the mineralization is consistent with the trend of the previously defined mineralization.

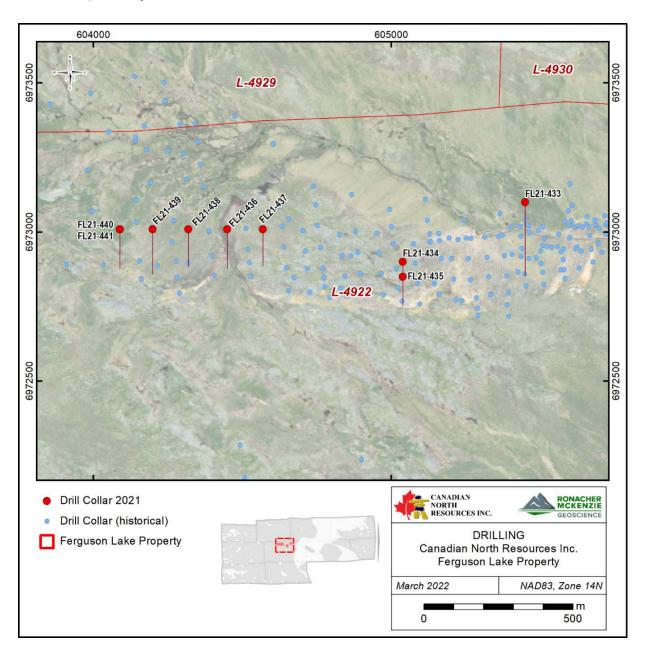


Figure 10-1: Location of the 2021 drill holes.





In March 2022, Canadian North started another drilling program, which is ongoing as of the effective date of this report. No assay results are available as of the effective date of this report.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Prior to purchase by CNRI, the Property was materially explored by two previous companies Canico from 1950 to 1956 and Starfield from 1999 to 2012. There is no information available on sample handling or QA/QC in general with respect to the Canico exploration of the Property. The QA/QC program carried out by Starfield on the Ferguson Lake Property is reported in detail by Clow et al. (2011).

11.1 **2013 Sampling Program**

During the CNRI 2013 historical drill core sampling program, a batch of samples of 0.5 - 1.5 m in length were chosen of sawed sections from historic core stored at the Ferguson Lake camp. The samples were placed in tie-locked poly-ethylene bags then into rice bags. The rice bags were shipped to Rankin Inlet by helicopter under the supervision of CNRI staff geologist, Tyler Power, P.Geo. The sample bags were then shipped by air cargo directly to the CNRI office in Toronto, Ontario from where they were forwarded unopened by courier to the SGS Mineral Services analytical facility in Lakefield, Ontario.

A total of 86 drill core samples from the 2013 program were analyzed at the accredited (ISO 9001 and ISO/IEC 17025) SGS laboratories in Lakefield and Vancouver ("SGS"). The samples were prepared by coarse crush to 6 mm then split using a riffle splitter with 250 gram split pulverized to 200 mesh (75um). Seventy-seven samples were analysed for Au, Pt and Pd by fire assay with ICP finish and multi-element 4-acid digestion with ICP-AES analysis for 33 element including Ni, Cu and Co. If Ni, Cu or Co were greater than 1.0% then these elements were re-analyzed by sodium peroxide fusion with ICP-AES analysis. Nine samples were analyzed by whole rock methodology using borate fusion and x-ray florescence. A pulp duplicate was selected for every ten samples and sent for check analysis using similar methodology at the accredited (ISO/IEC 17025) ALS Minerals geochemistry facility in North Vancouver, British Columbia. Canadian North is independent of SGS.

No CRMs or blanks were inserted into the sample stream.

The sample preparation, security and analytical procedures were adequate for the purpose of the 2013 program.

11.2 **2015** Exploration Program

In total 278 rock and control samples were shipped by bonded carrier in secured sample bags to SGS Laboratories, Burnaby in British Columbia for Au plus multiple element analyses. Sample processing entailed crushing the <3 kg samples to 90% passing 2mm, split 1,000 gram then pulverize to 85% passing 75 microns. A 30 gram aliquot of pulverized material was fire assayed for gold (1-10,000 ppb), platinum (10-10,000 ppb) and





palladium (1-10,000 ppb) with ICP-AES finish. Samples also underwent sodium peroxide fusion with ICP-MS analysis for 33 elements with over range Ni, Cu, Pb, Zn (>50,000 ppm) and Ag (>200 ppm) undergoing assay. Ni-Cu-PGE and/or gold standards plus silica sand blanks were inserted with every batch of approximately 40 samples sent for analysis.

CRMs and blanks were inserted into the samples stream (Table 11-1). A total of four blanks, 2 OREAS 206 standards and 3 OREAS 13b standards were included. All blanks and OREAS 206 standards passed. The OREAS 13b standards also passed for Cu and Ni. Two OREAS 13b fell slightly outside ±3 standard deviations for Pd and one OREAS 13b for Au. However, the results are acceptable for the purpose of the 2015 sampling program.

Table 11-1: List of CRMs inserted into the sample stream of the 2015 sampling program.

CRM Name	Au (ppm)	Pt (ppb)	Pd (ppb)	Cu (ppm)	Co (ppm)	Ni (ppm)
OREAS 13b	211	197	131	2327	75	2247
OREAS 206	2.197					

In addition, thirteen 25 -30 kg till samples, each packed in a sealed five-gallon plastic bucket, were shipped by bonded carrier for Kimberlite Indicator Mineral (KIM) analyses which was conducted at the SGS Laboratories in Lakefield, Ontario and Brazil. Canadian North is independent of SGS.

The Oreas 206 Au standard reports a certified fire assay value of 2.197 ppm with 95% confidence (2 standard deviations) limits of 2.165 to 2.229 ppm. Two inserted Oreas 206 standard returned values of 2,070 and 2,180 ppb Au and are thus within the range of accepted values.

The Oreas 13b standard reports certified values for multiple elements (Table 11-1). Three Oreas 13b standards were inserted. The Oreas 13b standards also passed for Cu and Ni. Two Oreas 13b fell slightly outside ± 3 standard deviations for Pd and one OREAS 13b for Au. However, the results are acceptable for the purpose of the 2015 sampling program. SGS used in-house standards for the analyses which passed adequately for these batches.

The sample preparation, security and analytical procedures were adequate for the purpose of the 2015 program.

11.3 **2018** Exploration Program

In total, 58 rock and control samples were shipped in one batch by bonded carrier in secured sample bags to AGAT Laboratories, Mississauga ("AGAT"), Ontario for gold, palladium, platinum and multi-element analyses. Sample processing entailed crushing the <5kg samples to 90% passing 2mm, split 250 gram then pulverize to 85% passing 75 microns. A 50 gram aliquot of pulverized material was fire assayed for gold (0.001-10 ppm), platinum (0.005-10 ppm) and palladium (0.001-10 ppm) with ICP finish using method code 202-555. Samples





also underwent 4-acid digestion with ICP-OES finish for 44 elements. A coarse quartz blank, OREAS 206 gold standard, and a CF Reference Materials CFRM – 100 low-grade Sudbury Ni-Cu-PGE sulphide standard was inserted with the submitted batch.

AGAT is ISO/IEC 17025:2017 accredited for certain analyses, including multi-element analysis by 4-acid digestion and ICP-OES finish. Canadian North is independent of AGAT.

The CRFM – 100 standard that was inserted into the sample stream reported certified fire assay values of 0.1666 ppm for Au with 95% confidence (2 standard deviations) limits of 0.1512 to 0.1820 ppm; plus 4-acid digestion certified values of 0.3494% Cu with 95% confidence limits of 0.3230 to 0.3758%; 0.2985% Ni with 95% confidence limits of 0.2681 to 0.3289%; and 0.0184% Co with 95% confidence limits of 0.0162 to 0.0206%. The standard returned a value of 0.186 ppm Au, 3,560 ppm Cu, 2,890 ppm Ni and 186 ppm Co, and thus all values are acceptable.

The Oreas 206 Au standard reports a certified fire assay value of 2.197 ppm Au with 95% confidence limits of 2.165 to 2.229 ppm. The insertion of the standard returned a value of 2.32 ppm Au. The CRFM standard analyzed within the certified value limits for Cu, Ni and Co but was marginally higher than the 95% confidence limit for Au. The Oreas 206 standard analysis was also marginally higher than the 95% confidence limit for Au. The analyzed quartz blank reported <0.001 g/t for Au, 2.2 ppm for Cu, 4 ppm for Ni and 1.7 ppm Co. The results are considered reasonable for reconnaissance exploration stage samples. AGAT used in-house standards which passed adequately for this batch.

The sample preparation, security and analytical procedures were adequate for the purpose of the 2018 program.

11.4 **2021** Resampling

The drill core was cut using a core saw. Most of the sampled drill core had already been samples and only half of the core remained in the box. The half core was cut into two quarters and one quarter was submitted for assaying. Some core intervals had not been sampled previously. In this case, the full core was cut into two halves and one have was submitted for assaying.

Certified reference materials ("CRMs") and blanks were included in the sample stream during sampling in the core logging facility (Table 11-2). OREAS 13b and OREAS 74a were purchased from Ore Research & Exploration Pty Ltd. CFRM-100 was stored at the Ferguson Lake core logging facility and likely purchased by the previous owners from CF Reference Materials of Sudbury, Ontario. No CRM certificate was found for this CRM. In total, 39 CRMs and 40 blanks were inserted.

The samples were put into plastic bags with pre-numbered sample tags. The samples were flown to ALS Laboratories ("ALS") in Ranking Inlet by helicopter and accompanied by company personnel. The samples were prepared at ALS's preparation laboratory in Ranking Inlet and pulps were shipped to ALS Vancouver for analysis. ALS is ISO/IEC 17025 accredited for certain analyses. Canadian North is independent of ALS.





At ALS, the samples were crushed to 70% < 2 mm. The crushed sample was split using a riffle splitter and 1000 g were pulverized to 85% < 75 µm. 30 g of the pulverized material was used for precious metal (Pt, Pd, Au) fire assay analysis with an ICP-AES finish. Multi-element analysis was completed by ICP-AES after 4-acid digestion.

Table 11-2: List of certified reference materials ("CRMs") inserted into the samples stream of the 2021 resampling.

CRM Name	Pt (ppb)	Pd (ppb)	Cu (ppm)	Co (ppm)	Ni (ppm)
OREAS 13b	197	131	2327	75	2247
OREAS 74a	223	171	1178	554	3240
CFRM-100	322	356	3494	184	2985

All except two blanks passed for Cu, Ni, Co, Pt and Pd. One of the failures is due to a sample mix-up. What was logged as blank was a certified reference material (Oreas 13b). The second blank failure followed a sample with elevated Cu, Ni and Pd indicating a carry-over from the mineralized sample.

CRM OREAS 74 passed for Cu, Ni, Co, Pt and Pd. Only two Pt and Pd analysis were available. A bias low was observed for Ni (Figure 11-1).

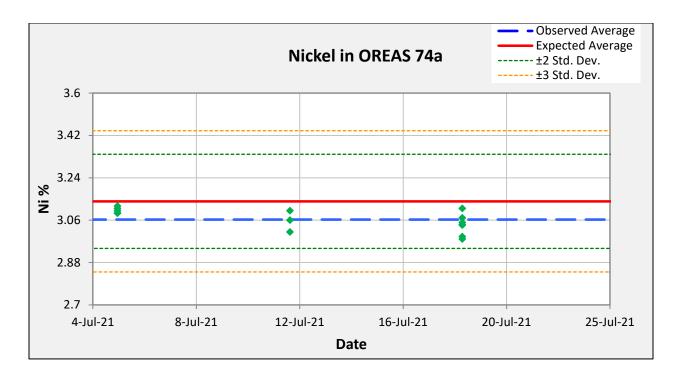


Figure 11-1 Results of CRM OREAS 74a analysis for Ni. Dashed green line = ± 2 standard deviations, dashed orange line = \pm standard deviations.





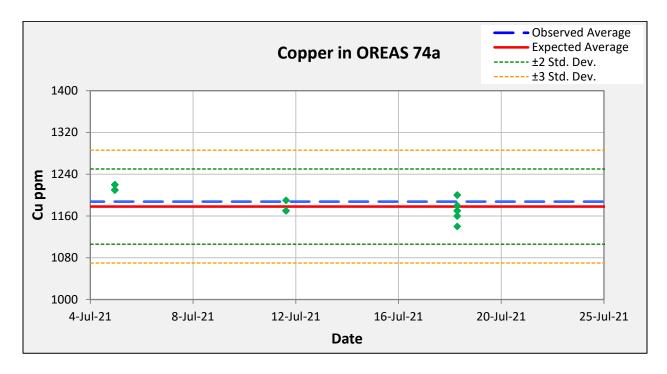


Figure 11-2 Results of CRM OREAS 74a analysis for Cu. Dashed green line $=\pm 2$ standard deviations, dashed orange line $=\pm$ standard deviations.

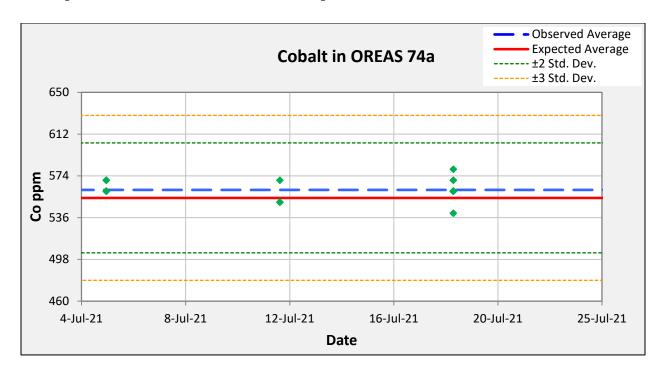


Figure 11-3 Results of CRM OREAS 74a analysis for Co. Dashed green line = ± 2 standard deviations, dashed orange line = \pm standard deviations.





All CRM Oreas 13b analyses passed for Ni and Co (Figure 11-4 and Figure 11-5). One CRM fell outside the acceptable range for Cu (Figure 11-6) and one CRM fell outside the acceptable range for Pt and Pd.

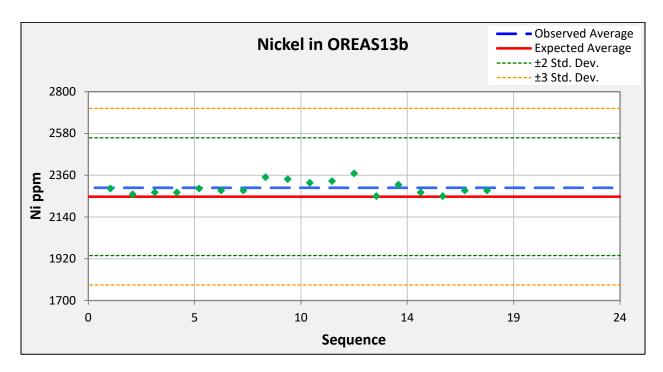


Figure 11-4 Results of CRM Oreas 13b for Ni.

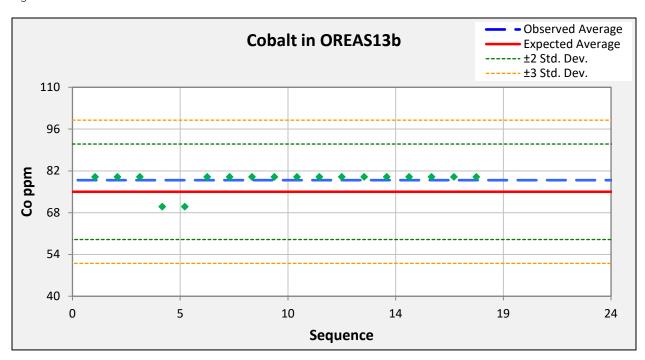


Figure 11-5 Results of CRM Oreas 13b for Co.





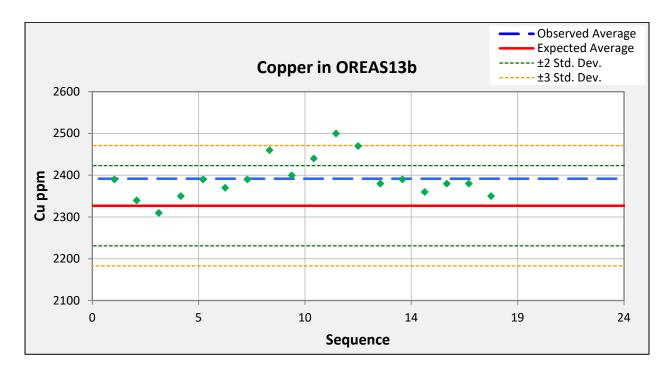


Figure 11-6 Results of CRM Oreas 13b for Cu.

Six CFRM-100s were inserted in the sample stream. All except one passed for all reviewed elements (Cu, Ni, Co, Pt, Pd). The one failure is attributed to a sample mix-up. The CRM was listed at CFRM-100 but is likely OREAS 13b. It was therefore excluded from the analysis and the plots of CFRM-100. It is noted that there was no independent certification document found with respect to the recommended values listed for the CFRM-100.





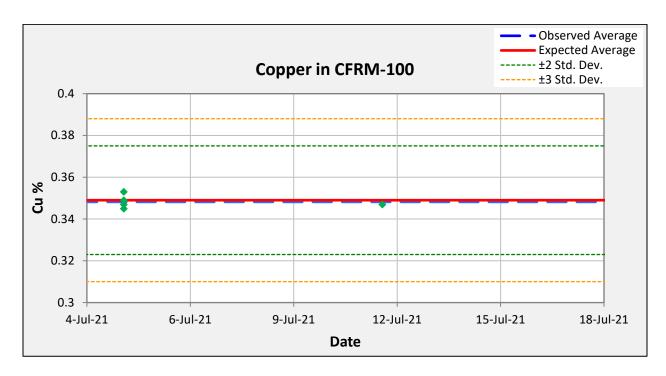


Figure 11-7 Results of CRM CFRM-100 analysis for Cu. Dashed green line = ± 2 standard deviations, dashed orange line = \pm standard deviations.

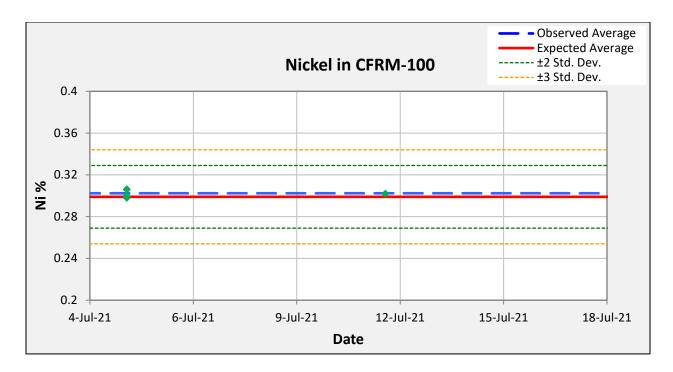


Figure 11-8 Results of CRM CFRM-100 analysis for Ni. Dashed green line = ± 2 standard deviations, dashed orange line = \pm standard deviations.





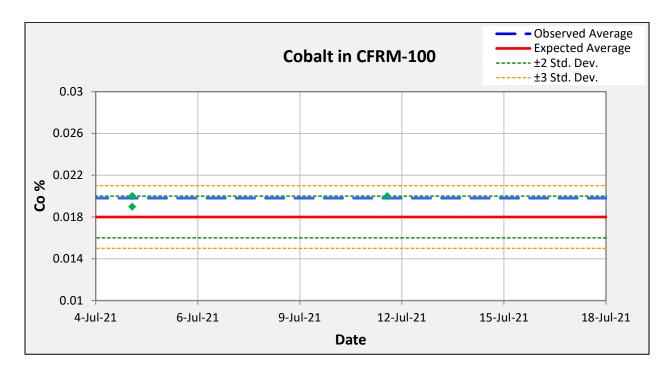


Figure 11-9 Results of CRM CFRM-100 analysis for Co. Dashed green line $=\pm 2$ standard deviations, dashed orange line $=\pm 3$ standard deviations.

The sample preparation, security and analytical procedures were adequate for the purpose of the 2021 resampling program.

11.5 **2021 Drilling Program**

Drill core selected for sampling was cut using a core saw at the core logging facility at the Ferguson Lake camp. Half core samples were collected in plastic bags together with pre-numbered sample tags. Certified reference materials and blanks were inserted in the sample stream in regular intervals (Table 11-3). The samples bags were put into rice bags and stored in the secure logging facility until they were flown to ALS Laboratories ("ALS") in Ranking Inlet, Nunavut, by helicopter and accompanied by company personnel. The samples were prepared at ALS's preparation laboratory in Ranking Inlet and pulps were shipped to ALS Vancouver for analysis. ALS is ISO/IEC 17025 accredited for certain analyses. Canadian North is independent of ALS.

Table 11-3: List of certified reference materials ("CRM") included in the samples stream of the 2021 drilling program.

CRM Name	Pt (ppb)	Pd (ppb)	Cu (ppm)	Co (ppm)	Ni (ppm)
OREAS 13b	197	131	2327	75	2247
OREAS 74a	223	171	1178	554	3240
CRM 100	322	356	3494	184	2985
OREAS 684	3870	1720	978	112	2188





At ALS, the samples were crushed to 70% < 2 mm. The crushed sample was split using a riffle splitter and 1000 g were pulverized to 85% < 75 µm. 30 g of the pulverized material was used for precious metal (Pt, Pd, Au) fire assay analysis with an ICP-AES finish. Multi-element analysis was completed by ICP-AES after 4-acid digestion.

A total of 61 CRM and 63 quartz blanks were inserted. Twenty-five half core samples were cut in half and a quarter core sample was submitted as the original sample; the second quarter core was submitted as duplicate sample.

Assay information was not available as of the effective date of this report.

The sample preparation, security and analytical procedures were adequate.

12.0 DATA VERIFICATION

12.1 Introduction

The database used for resource estimation is comprised of holes drilled exclusively by previous owners of the Ferguson Lake property. The property was drilled by INCO in the 1950s and then by Starfield during the period 1999 to 2008 inclusive and again in 2011. Data verification and evaluation of data verification completed by the authors includes:

- Evaluation of check assay data collected by Canadian North in 2013 which comprises analyses of 63 previously sampled core intervals from select 2007 holes.
- Evaluation of check assay data collected by Canadian North in 2021 which consisted of 464 analysis of previously sampled core intervals from holes drilled in 2007.
- Compilation of all assay certificates from 2007 and 2008 and merging the assay data with logged sample intervals.
- Review of previous data verification measures taken.
- Author Elisabeth Ronacher completed a site visit to the Ferguson Lake property in 2021 during which
 she inspected drill core and outcrops, checked the location of selected drill collars, and collected 9
 samples of previously sampled core from holes drilled in 2004, 2006, 2007, 2008, and 2011.
- Author Jamie Lavigne visited the Ferguson Lake property on 2 separate occasions in 2006 for a total
 of 15 days. During the site visits current and historical core was logged and outcrop along the
 mineralized trend was mapped. The purpose of the work was in support of resource estimation.





12.2 Historic Data Verification

The authors are not aware of any data verification completed during the 1950 phase of drilling.

N.C. Carter, Ph.D., P.Eng., undertook a thorough review of 1950s Inco drilling results in late 1999 and expressed confidence in those results (Nicholson, 2007). During 2002, 2 holes were drilled to twin 2 of the holes drilled by INCO. Only Cu, Ni, and Pd analyses were available for the INCO holes and these are compared with the 2002 Starfield holes in Table 12-1. The intersection lengths are comparable and the average Cu, Ni, and Pd grades are comparable.

Table 12-1: Comparison of Inco and 2002 Starfield data.

Section	Hole No.	Width (m)	Cu (%)	Ni (%)	Pd (g/t)
42+68W	FL02-136	21.83	1.05	0.54	1.39
	9473 (Inco)	23.92	0.93	0.91	1.86
51+20W	FL02-130	18.72	0.65	0.52	1.17
	9475 (Inco)	15.42	0.75	0.72	1.67

The diamond drill programs from 1999 to 2006 were managed by Nicholson and Associates, a professional geological services company based in Vancouver and managed by Professional Geologists. Nicholson and Associates were responsible for data collection, data base management, drilling and analytical QA/QC, and data verification for the Ferguson Lake project during this period. The data verification reported by Nicholson is as follows:

- In 2004, 24 core sample pulps initially analyzed by Acme Laboratories were analyzed by ALS Chemex.
 In summary, the results for copper are virtually identical while Acme's nickel values are in general almost 10% higher. Palladium values determined by the two laboratories correspond reasonably well but there are apparent difficulties in reproducing consistently similar platinum values (Nicholson, 2007).
- In 2006, a total of 5,894 samples of drill core were taken and sent to Acme Analytical Laboratories for geochemical analysis. A total of 137 of these samples were selected for check analysis by ALS-Chemex. This represents approximately 2.36% of the samples assayed by Acme. In summary, nickel, copper, cobalt and palladium values analyzed by Chemex are, in general, within 10% of those analyzed by Acme. There are, and historically have been, difficulties in reproducing consistently similar platinum values. This inconsistency is due to known nugget effects that occur when sampling for platinum (Nicholson, 2007).

The authors of the present report have not, and are not able to verify the data collected and reported by Nicholson (2007).





In support of a PEA (Clow et al., 2008), Scott Wilson RPA conducted a site visit and collected 3 samples from areas identified by Starfield's geologist as portions of the resource estimate. The results of analyses conducted on the three samples are shown in Table 12-2.

Table 12-2: Results of Scott Wilson RPA sampling.

	Pt (ppb)	Pd (ppb)	Co (%)	Cu (%)	Ni (%)
Method	FAI313	FAI313	ICP90Q	ICP90Q	ICP90Q
Detection	10	1	0.01	0.01	0.01
38257	<10	2720	0.1	0.77	0.91
38258	40	2350	0.11	0.94	0.88
38259	860	2100	0.08	0.79	0.73
DUP-38257	10	2930	0.11	0.78	0.92

The samples collected are not representative of the whole deposit, nor were they sufficient samples collected to provide a statistical comparison with Starfield's samples. The analyses do indicate the presence of copper, nickel, cobalt and palladium in quantities similar to those in the resource estimate and the presence of platinum was noted Clow et al. (2008).

For the purposes of resource estimation completed in 2007 and 2008 the author of the current report (Jamie Lavigne) visited the Ferguson Lake Project on two occasions for a total of fifteen days during the period September to November 2006. During these visits, a number of 2006 as well as historical drill holes were examined and compared with drill log descriptions and assay data. It was concluded that the geological logging and sample descriptions are representative of the lithological units and distribution of sulphide mineralization. The sampling is appropriate for the deposit type and the assay data is consistent with the sulphide abundance, textures and mineralogy. Survey procedures used at Ferguson Lake for drill hole location and down hole trajectory are completed to exploration industry standards. It was concluded on the basis of the field visits that the drill hole exploration data collection procedures utilized at Ferguson Lake would support resource estimation to NI 43-101 standards.

12.3 Historic Data Verification by Canadian North

12.3.1 2013 Work Program

The re-sampling of selected split historical core during the CNRI 2013 field program was completed in order to test the heterogeneity of the previously reported Pt and Pd contents and to fill in analytical gaps in Ni, Cu and Co analyses from previous programs. The heterogeneity tests were completed to support the utilization of the Ni, Cu, Co, Pd and Pt results in the deposit model review discussed in Section 9.1.2. For the program, 63 of the samples were a direct re-sampling of the same previously sampled core sections and thus allow for their direct comparison with the historic results. The samples consisted of the half core that remained after the





original sampling. Table 12-3 lists the comparative historical and 2013 Au, Pd and Pt analyses shown in original reported units. No external blanks or standards were included for analyses during the 2013 program. Tab

Table 12-3 Comparative analytical results for Ferguson Lake drill core duplicates

Drill Hole	From	<u>To (m)</u>	al results for Fe	Au g/t	Pt g/t	ore aupii Pd g/t	Historic	Au g/t	Pt g/t	Pd g/t
	(m)		Lakefield 2013	<u></u>			analyses Sample #s	<u></u>		<u></u>
			Sample #s				<u> </u>			
FL-07-362	125.8	127.76	G0644501	<0.01	0.64	0.86	739202	0.01	1.33	1.86
FL-07-362	127.76	129.33	G0644502	<0.01	<0.02	0.07	739203	<0.01	0.03	0.28
FL-07-362	139.09	141.15	G0644503	<0.01	0.04	0.14	739210	<0.01	0.1	0.21
FL-07-362	141.15	143	G0644504	0.04	0.23	0.48	739211	0.05	1.81	32.33
FL-07-370	106.71	108.71	G0644505	0.05	0.21	0.45	740265	0.05	0.32	0.37
FL-07-370	108.71	109.71	G0644506	0.04	0.18	1.58	740266	0.03	0.4	1.34
FL-07-370	109.71	112.56	G0644507	<0.01	0.08	0.22	740267	<0.01	0.08	0.18
FL-07-375	174.76	176.3	G0644508	<0.01	0.05	0.18	739817	<0.01	0.05	0.19
FL-07-375	176.3	177.58	G0644509	<0.01	0.34	0.33	739818	<0.01	0.33	0.48
FL-07-375	177.58	179	G0644510	<0.01	2.04	3.93	739819	0.01	2.43	5.86
FL-07-374	167.2	168.68	G0644511	<0.01	0.59	2.49	739897	<0.01	0.31	2.16
FL-07-374	168.68	170.18	G0644512	<0.01	2.7	2.61	739898	<0.01	2.55	1.55
FL-07-374	170.18	171.68	G0644513	<0.01	1.22	1.31	739899	<0.01	1.09	1.19
FL-07-374	171.68	173	G0644514	<0.01	2.84	6.68	739900	<0.01	1.95	4.12
FL-07-374	173	174.49	G0644515	<0.01	9.7	1.38	739901	0.01	9.47	2.38
FL-07-374	177.24	178.74	G0644516	<0.01	10.5	2.28	739904	<0.01	9.35	2.39
FL-07-374	178.74	180.24	G0644517	<0.01	5.31	6.4	739905	<0.01	6.1	8.05
FL-07-374	180.24	181.48	G0644518	<0.01	0.19	1.26	739906	<0.01	0.76	2.13
FL-07-374	181.48	182.92	G0644519	<0.01	1.05	10.1	739907	0.02	0.73	6.86
FL-07-378	156.23	157.68	G0644520	<0.01	0.17	0.3	740510	<0.01	0.16	0.28
FL-07-378	157.68	159.1	G0644521	<0.01	0.6	1.16	740511	<0.01	1.23	1.33
FL-07-378	159.1	160.58	G0644522	<0.01	0.6	0.3	740512	<0.01	0.84	0.25
FL-07-378	160.58	162	G0644523	<0.01	0.4	0.44	740513	<0.01	0.81	0.38
FL-07-380	154	156.5	G0644524	<0.01	0.79	0.25	740800	<0.01	0.62	1.19
FL-07-380	156.5	158	G0644525	<0.01	0.54	0.61	740801	<0.01	0.45	0.48
FL-07-380	158	159.5	G0644526	<0.01	0.68	5.56	740802	0.01	0.31	2.98
FL-07-380	159.5	161	G0644527	<0.01	0.07	0.16	740803	<0.01	0.08	0.14
FL-07-379	148.78	149.7	G0644528	0.02	0.1	2.4	740627	0.03	2.61	2.22
FL-07-379	149.7	150.74	G0644529	<0.01	0.61	0.33	740628	0.01	0.7	0.48
FL-07-379	150.74	152.18	G0644530	<0.01	0.15	0.31	740629	<0.01	0.18	0.35
FL-07-379	152.18	153.66	G0644531	<0.01	0.02	0.06	740630	<0.01	0.02	0.05
FL-07-379	153.66	155	G0644532	<0.01	0.21	0.17	740631	<0.01	0.44	0.24
FL-07-378	215	216	G0644533	<0.01	0.51	2.27	740554	< 0.01	0.31	2.13
FL-07-378	216	217	G0644534	<0.01	0.28	0.43	740555	<0.01	0.19	0.69
FL-07-378	217	217.62	G0644535	<0.01	0.27	0.31	740556	<0.01	0.65	0.54
FL-07-378	217.62	218.43	G0644536	<0.01	0.08	0.22	740557	0.01	0.33	1.68
FL-07-378	218.43	219.93	G0644537	<0.01	0.11	0.14	740558	<0.01	0.17	0.33
FL-07-378	219.93	221.4	G0644538	<0.01	0.25	1.22	740559	<0.01	0.2	0.99
FL-07-378	221.4	222.8	G0644539	<0.01	0.49	1.13	740560	<0.01	0.38	2.1
				2.0.	2			2.0.	2.30	





<u>Drill Hole</u>	From (m)	<u>To (m)</u>	SGS Lakefield 2013 Sample #s	Au g/t	Pt g/t	Pd g/t	Historic analyses Sample #s	Au g/t	Pt g/t	Pd g/t
FL-07-378	222.8	224.2	G0644540	<0.01	0.79	0.73	740561	<0.01	0.59	1.06
FL-07-374	251	252	G0644541	<0.01	0.15	0.74	739957	<0.01	0.07	0.55
FL-07-374	252	253	G0644542	<0.01	0.05	0.12	739958	<0.01	0.03	0.34
FL-07-374	253	254	G0644543	<0.01	0.47	0.57	739959	<0.01	0.06	0.45
FL-07-374	254	254.9	G0644544	<0.01	0.4	4.46	739960	<0.01	0.36	2.29
FL-07-374	254.9	255.8	G0644545	<0.01	0.25	1.6	739961	<0.01	0.73	1.84
FL-07-367	180.5	182	G0644546	<0.01	6.19	0.81	740053	<0.01	3.67	0.99
FL-07-367	182	183.49	G0644547	<0.01	2.41	1.54	740054	0.01	2.18	1.72
FL-07-367	183.49	185	G0644548	<0.01	0.75	1.03	740055	<0.01	0.37	0.81
FL-07-367	185	186.6	G0644549	<0.01	0.57	0.99	740056	<0.01	0.43	0.88
FL-07-368	154.08	155.32	G0644550	<0.01	2.35	0.63	739529	0.02	1.58	9.08
FL-07-368	155.32	156.7	G0644651	<0.01	0.7	1.41	739530	<0.01	0.92	1.36
FL-07-368	156.7	158	G0644652	<0.01	0.06	0.1	739531	<0.01	0.08	0.14
FL-07-368	158	159.5	G0644653	<0.01	0.57	0.87	739532	<0.01	0.66	1.11
FL-07-368	159.5	161	G0644654	<0.01	0.24	0.37	739533	<0.01	0.32	0.42
FL-07-368	161	161.84	G0644655	0.22	< 0.01	0.03	739534	0.01	1.02	1.35
FL-07-368	161.84	164	G0644656	<0.01	0.64	0.34	739535	<0.01	0.25	0.29
FL-07-368	164	165.89	G0644657	<0.01	9.87	4.43	739536	0.01	6.43	17.36
FL-07-368	165.89	167	G0644658	<0.01	0.9	3.63	739537	<0.01	0.34	0.22
FL-07-368	167	168.5	G0644659	<0.01	0.09	0.41	739538	<0.01	0.82	3.02
FL-07-368	168.5	170	G0644660	<0.01	0.15	0.27	739585	<0.01	0.15	0.23
FL-07-368	170	171	G0644661	<0.01	0.84	0.97	739539	<0.01	0.62	2.42
FL-07-371	149	150.83	G0645001	<0.01	O.11	0.27	739642	<0.01	0.4	0.37
FL-07-371	150.83	151.66	G0645002	<0.01	3.48	2.34	739643	0.03	1.3	2.12
FL-07-371	151.66	153.65	G0645003	<0.01	0.03	0.06	739644	<0.01	1.45	0.25





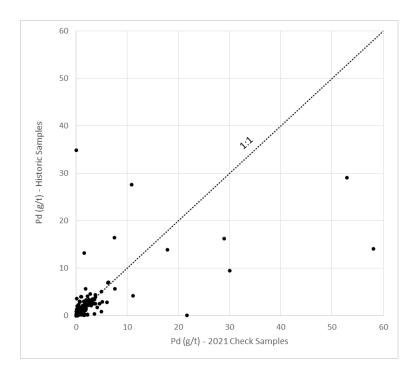


Figure 12-1: Comparison of the historic Pt assays with the 2013 check samples.

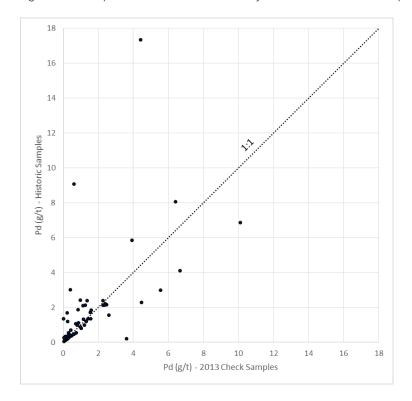


Figure 12-2: Comparison of the historic Pd assays with the 2013 check samples.

One outlier was excluded from this plot. The historic sample contained 32.33 g/t Pd whereas the check sample contained 1.81 g/t Pd.





The results are displayed in g/t from their original values and show reasonable agreement considering the expected heterogeneity in results for drill core duplicate samples being analyzed for precious metals. Based upon the analytical certificate, SGS used in-house standards, which passed appropriately for this batch. The 2013 analyses show some variation with Pd values on average higher than the reported historical results while 2013 Pt values are lower in comparison to the historical results.

12.3.2 2021 Resampling Program

Of the 711 samples collected during the 2021 resampling program, 464 were quarter core samples of originally sampled drill core, 247 were half core samples of drill core that was not previously sampled. A total of 40 blanks and 39 certified reference materials were included in the sample stream and a QA/QC analysis has been completed as described in detail in Section 11.4.

The original historic Pt and Pd assay values were compared with the 2021 check assays (Figure 12-3, Figure 12-4). No historic Cu, Ni and Co assays exist. The Pt and Pd values correspond reasonably well given their nuggety nature.

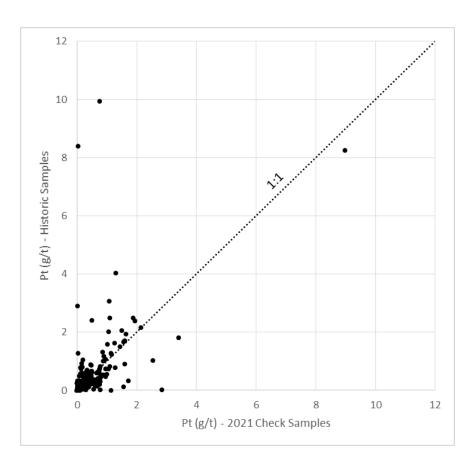


Figure 12-3: Comparison of the historic and check sample Pt assay data.





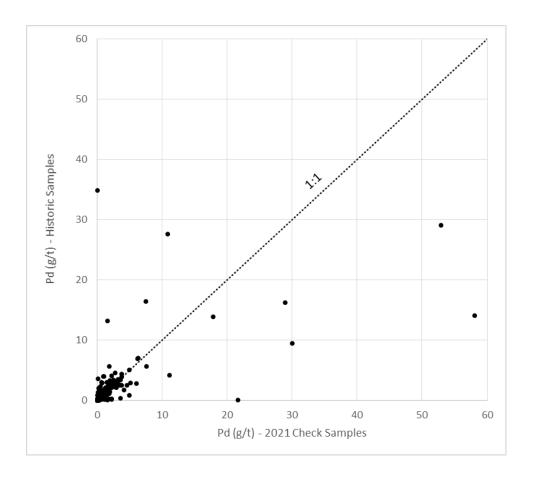


Figure 12-4: Comparison of the historic and check sample Pt assay data.

12.3.3 2007 and 2008 Assay Data Re-Compilation

The 2007 and 2008 drilling at Ferguson Lake was managed by Starfield geologists and the authors of the current report are not aware of data verification reporting from this period. There are some repeat assays completed however lack of documentation precludes detailed evaluation. As a check, the authors of the current report compiled assay certificates from 2007 and 2008 and compiled all logged sample intervals from 2007 and 2008. The compilations were merged ensuring the original assay was identified. The compilation was cross checked independently against original assay certificates. The compiled database was checked against the Starfield database and the re-compiled database for the 2007 and 2008 holes was used for resource estimation.





12.4 **2021 Site Visit**

Elisabeth Ronacher visited the Property on July 8 and 9, 2021. During the personal inspection, Ms. Ronacher reviewed historic diamond drill core and the drill core library (Figure 12-10 to Figure 12-13). She also collected check samples of selected core. A total of 9 samples were collected by cutting the half core that remained in the core box after the original sampling and submitting quarter core samples to AGAT Laboratories in Sudbury, Ontario. The samples are listed in Table 12-4. The check sample results were compared to the original results. Assay certificates were found for nine of the ten check samples. The original values for sample E6357013 were obtain from the Canadian North assay database.

Table 12-4: List of check samples collected during the site visit

Drill Hole Number	From (m)	To (m)	Sample number	Original Sample #	Cu (ppm)	Cu (ppm)- orig	Ni (ppm)	Ni (ppm)- orig	Co (ppm)	Co (ppm)- orig
FL07-369	115.0	116.0	E6357001	740912	7460	13970	11900	9570.7	1510	761.8
FL07-363	68.3	69.4	E6357002	740899	9870	12850	8370	7996.9	1420	954.2
FL06-285	141.2	141.9	E6357006	137897	8310	1454	970	267	201	49
FL06-285	140.6	141.2	E6357007	137896	1840	2610	4630	6230	1040	700
FL11-432	1144.0	1144.6	E6357008	G0644429	4740	5410	6370	5840	1020	652
FL11-432	1125.5	1126.1	E6357010	G0644420	7160	6770	2410	2590	392	315
FL04-188	159.5	160.5	E6357011	L880174	13900	20100	7060	8320	1350	1260
FL08-376	60.5	62.0	E6357012	817827	17400	11110	948	2051	184	280.8
FL07-378	78.0	78.6	E6357013	704875	8260	6274	7600	8093	1390	988
Drill Hole Number	From (m)	To (m)	Sample number	Original Sample #	Pt (ppm)	Pt (ppm)- orig	Pd (ppm)	Pd (ppm)- orig	S (%)	S (%)- orig
FL07-369	115.0	116.0	E6357001	740912	0.17	0.26	1.97	2.2	36.50	NA
FL07-363	68.3	69.4	E6357002	740899	0.28	0.27	1.45	1.97	30.80	NA
FL06-285	141.2	141.9	E6357006	137897	5.61	16.97	8.38	35.07	3.24	NA
FL06-285	140.6	141.2	E6357007	137896	2.01	1.84	7.12	7.65	17.10	NA
FL11-432	1144.0	1144.6	E6357008	G0644429	1.55	0.007	1.60	1.66	25.80	>10.0
FL11-432	1125.5	1126.1	E6357010	G0644420	0.62	0.469	5.91	4.93	6.75	6.52
FL04-188	159.5	160.5	E6357011	L880174	0.18	0.143	0.87	1.185	29.40	>10%
	C O F	62.0	E6357012	817827	0.10	0.023	0.64	0.779	3.59	4.98
FL08-376	60.5	02.0	L033/012	017027						

The check sample results for Cu, Ni and Co correlate well with the original values; the result for Pt and Pd correlate reasonably well with the original samples (Table 12-4, Figure 12-5 to Figure 12-9).



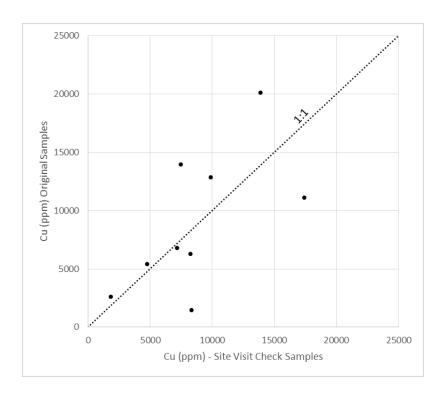


Figure 12-5: Comparison of the Cu values of the historic and site visit samples.

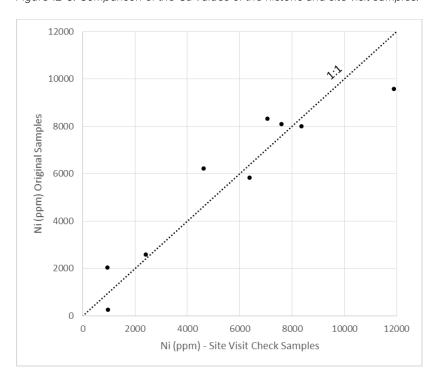


Figure 12-6: Comparison of the Ni values of the historic and site visit samples.



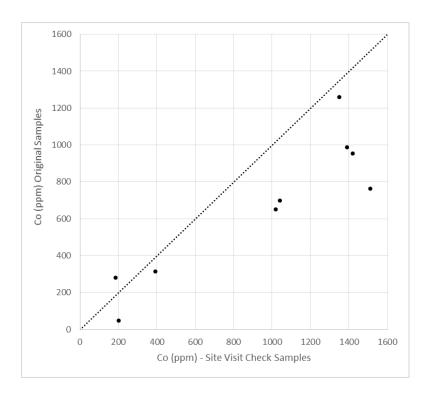


Figure 12-7: Comparison of the Co values of the historic and site visit samples.

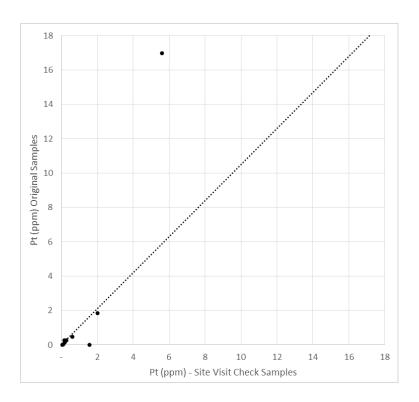


Figure 12-8: Comparison of the Pt values of the historic and site visit samples.



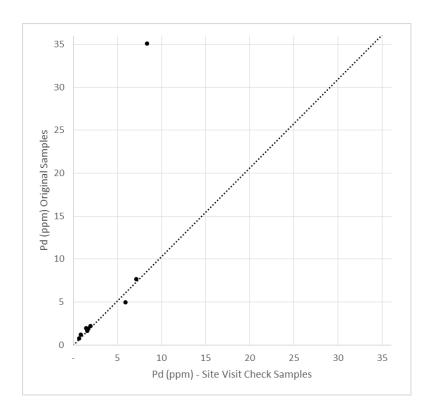


Figure 12-9: Comparison of the Pd values of the historic and site visit samples.



Figure 12-10 Photo of the coarse-grained gabbro that is the host of the mineralization.







Figure 12-11 Photo of the hornblende-rich rock logged as hornblendite.



Figure 12-12 Sheared, coarse-grained gabbro.







Figure 12-13 Photo of typical massive sulfide from drill core.

Ms. Ronacher reviewed drill core with intersections of massive as well as disseminated sulfide and confirmed that the mineralization is hosted by metamorphosed mafic intrusions.

Ms. Ronacher recorded the locations of 7 drill hole collars using a handheld GPS. Three of the drill hole monuments (casing steel) were labeled and 4 were not labeled. The recorded locations of both the labeled and unlabeled collars are completely comparable, within the accuracy limits of the handheld GPS, to the known and assumed collar locations in the drill hole database (Table 12-5).

It is the opinion of the Qualified Persons that the data is adequate for the purposes of this report.

Table 12-5: Locations of casings observed during the site visit.

Drill Hole	Labeled (Y/N)	Observed Easting	Observed Northing	Observed Elevation	Database Easting	Database Northing	Database Elevation	Zone
FL06-278	Υ	611459	6973926	128	611463	6973926	132	E Zone
FL01-102?	Ν	611364	6973877	129	611367	6973877	130	E Zone
FL02-144?	Ν	605628	6973019		605629	6973020	119	C Zone
FL08-382	Υ	605725	6973026	113	605723	6973030	118	C Zone
FL08-385	Υ	605749	6973022	113	605749	6973022	117	C Zone
FL06-317?	Ν	605813	6973005	113	605814	6973005	117	C Zone
FL08-391?	N	605826	6973010	113	605825	6973011	117	C Zone

E Zone = East Zone C Zone = Central Zone Y=yes, N=no





Figure 12-14 Photograph of stake indicating the collar location of drill hole FL08-382.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Mineral processing and metallurgical testing completed by Starfield is described in detail by Clow et al, (2011) and summarized in Section 6.3.

Canadian North completed additional metallurgical testing between 2013 and 2016 to determine new approaches to processing. Details of this testing are described in Boyd (2021); a summary is provided here.

The purpose of Canadian North's metallurgical testing was to determine the recoverability of platinum group elements ("PGE"). Starfield's metallurgical testing produced a residue that was analyzed for platinum group metals ("PGM") by SGS Lakefield on behalf of Canadian North. Most PGM were <10 μ m and grades were 13.2





g/t Pd, 1.0 g/t Pt and 0.4 g/t Au. SGS determined that sulphur could be removed from the concentrate to increase the PGE grades. SGS suggested additional testing to further increase the PGE grades. Boyd (2021) concluded that Canadian North's testing resulted in an increase of recovery of Cu and Co in comparison to Starfield's results (Clow et al., 2011) and allowed an estimate of Pd and Pt recoveries for the first time (SGS Minerals Services 2013).

SGS also completed a review of Starfield's metallurgical testing. Based on this review, flotation tests were recommended and completed to establish flotation conditions suitable to recover the majority of the Cu into a Cu concentrate and the balance of the pay-metals into a bulk Cu-Ni concentrate. A series of comminution, kinetic and flotation tests completed in 2016 resulted in variable 94-98 % overall copper recoveries and 44-61 % nickel recoveries depending upon the grade of the concentrates created (Boyd, 2021). Reported Pd, Co, Pt and Au recoveries were 76-78%, 55-61%, 34-37% and 50-56%, respectively.

SGS made recommendations for further metallurgical testing in their 2016 report (SGS Mineral Services 2016).

The following recommendations were suggested by SGS for future testing:

- Additional comminution tests should be carried out to ensure proper sizing of the crushing and grinding equipment. The fine-grained nature of the mineralization can make extraction by classic flotation technologies challenging.
- In order to validate the proposed flowsheet, a composite representing the resource average should be subjected to the flowsheet and conditions established in test F12 and F13 (SGS Mining Services 2016). This composite could also be used to optimize the flotation conditions and develop grade recovery curves for the copper and bulk Cu/Ni circuits.
- Due to the noted variability between massive sulphide samples, a range of variability composites (domains, spatial, and mine life composites) should be subjected to variability testing.
- Develop a model that evaluates grade targets for the bulk Cu/Ni concentrate as a function of metal prices and hydrometallurgical processing costs.
- In order to confirm that high extraction rates can be achieved for the higher-grade bulk composite and to produce a more robust mass balance, additional Platsol tests are recommended.

The material for the metallurgical work came from a small bulk sample gathered by Starfield Resources from the surface of the West Pit Zone in 2010 and was stored in a sealed cold storage environment until utilized by CNRI. There was no significant oxidation of the sample material noted by CNRI or SGS. The metallurgical work is representative of the massive sulphide mineralization and no deleterious elements have been found.





14.0 MINERAL RESOURCE ESTIMATES

14.1 Summary

Table 14-1: Mineral Resources Canadian North Resources Ferguson Lake

Indicated Resources									
Method Tonnes Co Cu Ni Pd Pt									
	(Mt)	(%)	(%)	(%)	(gpt)	(gpt)	(\$US)		
Open Pit	22.4	0.07	0.84	0.60	1.37	0.23	255		
Underground	1.9	0.07	1.03	0.60	1.49	0.32	275		
Total	24.3	0.07	0.85	0.60	1.38	0.23	257		

Inferred Resources									
Method	Pd	Pt	NSR						
	(Mt)	(%)	(%)	(%)	(gpt)	(gpt)	(\$US)		
Open Pit	12.1	0.04	0.59	0.40	0.99	0.22	170		
Underground	35.1	0.07	1.02	0.57	1.54	0.26	269		
Total	47.2	0.06	0.91	0.53	1.40	0.25	244		

- CIM definitions (2014) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019) were followed for Mineral Resources.
- 2. Mineral Resources were estimated at NSR cutoff values of US\$49.70 for open pit and US\$94.50 for underground.
- NSR values were calculated using long-term metal prices of US\$8.00/lb for Nickel, \$US3.30/lb for Copper, US\$20.60/lb of Cobalt. US\$900/oz Platinum, and US\$1.910/oz Palladium.
- 4. Metallurgical recoveries used in the NSR calculation were 91% for Nickel, 96% for Copper, 90% for Cobalt, 50% for Platinum and 81% for Palladium.
- 5. Open pit Mineral Resources are reported at a base case NSR value of US\$49.70 within a conceptual pit.
- 6. Underground Mineral Resources were estimated using a minimum true width of 2.5 metres and US\$94.50 NSR value.
- 7. The independent Qualified Person for the current Mineral Resource estimate is Mr. Jamie Lavigne, P. Geo.
- 8. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability.
- 9. All figures are rounded to reflect the relative accuracy of the estimate. Numbers may not add due to rounding

The current mineral resource estimate (Table 14-1) has been completed by Jamie Lavigne P.Geo and Qualified Person as defined in NI 43-101 and was published by Canadian North on June 13, 2022. Jamie Lavigne is responsible for the preparation and reporting of the mineral resource estimate. The Ferguson Lake resources have been estimated and reported following CIM definitions (2014) and NI 43-101.

The Mineral Resources for the Ferguson Lake deposit were last estimated effective November 30, 2011, in support of a Preliminary Economic Assessment (Clow et al., 2011). Allowing for the addition of 3 holes drilled in 2011 and modifications to the assay data as a result of current data verification, the drill hole database used is essentially the same as that used in Clow et al., 2011. As such, the current estimate is an update of the 2011 model to include revised geological interpretation and updated price and recovery factors as follows:

The Central Zone has been re-interpreted to include a domain of low-sulphide Pt and Pd ("LSPGE")
mineralization in addition to the previously interpreted lenses of massive sulphide. This revised





- interpretation is based largely on reinterpretation 2007 and 2008 drilling which targeted LSPGE mineralization below previously delineated massive sulphide.
- 2. For the 2011 estimate, the West Zone was interpreted using the sectional polygonal method. For the current estimate, continuous lenses of massive sulphide mineralization have been interpreted and utilized for block model geostatistical resource estimation.
- 3. For the 2011 estimate, the East Zone was interpreted using the sectional polygonal method. For the current estimate, continuous lenses of massive sulphide mineralization have been interpreted and utilized for block model geostatistical resource estimation.
- 4. Metal prices have been updated and Pt and Pd have been included in the revenue calculation.
- 5. Metal recovery factors have been updated based on review of factors used on similar deposit types in recent technical reports.

A conventional approach to resource estimation at Ferguson Lake has been applied. The general procedures are as follows:

- 1. Geological interpretation and interpretation of massive sulphide ("MS") and low sulphide Pd + Pt mineralization ("LSPGE") domains.
- 2. Statistical and geostatistical evaluation of raw assay data and composited assay data within and related to the geological and mineralization domains.
- 3. Block model grade and tonnage estimation constrained by the domain wireframes and statistical evaluation and completed using ordinary kriging and inverse distance methods and includes methods to validate the block model.
- 4. Economic evaluation and classification of the block model.

14.2 Drill Hole Database

Mineral Resources have been estimated for the Ferguson Lake deposit exclusively from diamond drill hole data. A total of 611 diamond drill holes are in the Ferguson Lake database which has been used to estimate Mineral Resources. The Qualified Person responsible for the mineral resource estimate is of the opinion that drill hole database is adequate for the purpose used in this report.

The total number of holes and metres drilled by drill campaign are contained in Table 14-2.

Table 14-2: Drilling summary by year.

Year	Company	No. Holes	Metres
1953	Inco	173	26,385
1999	Starfield	19	3,923
2000	Starfield	48	15,533
2001	Starfield	38	21,500
2002	Starfield	53	24,957
2003	Starfield	9	2,721
2004	Starfield	55	23,018
2005	Starfield	29	16,973





Year	Company	No. Holes	Metres
2006	Starfield	116	24,951
2007	Starfield	19	6,139
2008	Starfield	49	18813
2011	CNRD	3	1866
	Totals	611	186,779

14.2.1 Sample and Assay Data

The assay database includes a total of 36,739 samples. All of the drill core samples collected by Starfield from 1999 to the end of 2006 have been analyzed for Ni, Cu, Co, Pt, and Pd. In the 2007 and 2008 drill campaigns, samples from drill holes that targeted the LSPGE style of mineralization had only Pt and Pd analyses completed. Ni, Cu, and Co analyses were completed only on selected samples in the targeted LSPGE mineralization.

The Inco samples (1953) were initially analyzed for only Ni and Cu. After the Inco field programs at Ferguson Lake, Inco re-analyzed selected core samples for Pt, Pd, and Au, however, Inco has only reported this data as a total (i.e., Pt + Pd + Au equals total PGE).

The total number of samples and metres of core analyzed by year is contained in Table 14-3.

Table 14-3: Sample summary by year.

Year	Company	No. of Samples	Total Metres
1953	Inco	2,350	3,277
1999	Starfield	912	680
2000	Starfield	2,351	2,172
2001	Starfield	1,868	1,792
2002	Starfield	3,396	3,602
2003	Starfield	1,107	1,415
2004	Starfield	4,746	6,075
2005	Starfield	2,099	2,504
2006	Starfield	5,927	5,897
2007	Starfield	2,713	3,764
2008	Starfield	9,088	12,681
2011	CNRD	182	254
	Total	36,739	44,113

14.2.2 Lithology

Logging by both Inco and Starfield included the identification and documentation of rock types. This includes the major distinctions between the intrusion, the country rocks to the intrusion, and massive sulphides. The country rocks are broken out into several types of amphibolites, gneisses and granitic rocks. The intrusion is





mainly described as gabbro with lesser hornblendite. Hornblendite is usually spatially associated with massive sulphide. Massive sulphide was broken out as a rock type in the lithological description of the core. The author notes that differences in mafic and metamorphic rock type coding between closely spaced holes, particularly those from different drill campaigns indicate inconsistent identification of the major silicate rock types. However, it appears based primarily on the down hole distribution of Ni, that sulphide abundances have been consistently logged especially during the period 1999 to 2006.

14.2.3 Bulk Density Determinations

The Ferguson Lake drill hole database contains 1,248 specific gravity (SG) measurements taken over 1,229 m of core, all from the 2006 drill campaign. The SG was determined using the water immersion method and was completed at ACME laboratories.

14.3 Mineral Resource Modelling and Domains

Clow et al. 2008 and 2011 have distinguished the West Extension, West Main, East Zones over the approximately 12 km strike length of magmatic sulphide intersected in drilling. This convention is maintained here, however the zones are referred to as the West, Central, and East zones (Figure 14-1). Clow et al., 2008, modelled the Central zone as a series of stacked MS lenses or sheets with a west strike and moderate north dip. The interpretation was based on the occurrence of greater than 50% sulphide as estimated on a sample-by-sample basis and incorporates inclusions of weakly mineralized to barren host rock. The model of Clow et al. 2008 was limited to drill results up to and including 2006.

Clow et al. 2012 updated the Clow et al. 2008 model to include the 2007 and 2008 drilling in the Central Zone which included intersections of the LSPGE style of mineralization which were interpreted as lateral continuations of MS lenses and sheets.

The interpretation of a series of stacked MS lenses or sheets with a west strike and moderate north dip for the Main West zone is consistent with and supported by the following observations:

- Dominant and strong magnetic linear with slightly variable but dominant east-west trend and north dipping asymmetry.
- Gabbro-sulphide contact locally mapped in outcrop with an east-west strike and coincident with a
 magnetic high (magnetic susceptibility data from drill core does not indicate any other significant
 magnetic expression other than pyrrhotite).
- Model conductive plates (three dimensional geophysical interpretations), based on ground electromagnetic surveys, trend east-west and dip moderately to the north.
- Selected holes drilled from south to north (as opposed to all drilling at Ferguson Lake which has been at azimuth 180° grid, approximately 175° true) have intersected massive sulphide down dip supporting the geometry of the lenses with an west strike, north dip and limited thickness.





• This orientation of massive sulphide sheets with average east-west strike and north dips with much shorter down hole ranges is consistent with the variography by Clark (2006).

The current interpretation relies on those of Clow et al., 2008 and Clow et al., 2012 however this has been modified to consistently model MS based on the intersected occurrence of massive or semi-massive sulphide and to model a discrete zone of LSPGE mineralization.

The current massive sulphide model is largely consistent with that of Clow et al., 2008 being comprised of a series of stacked MS lenses or sheets with a west strike and moderate north dip and incorporates the 2007 and 2008 drilling. The current model contains 28 individual lenses or sheets within the Central Zone (Figure 14-2).

The West zone was previously estimated (Clow et al., 2008 and 2012) using the sectional polygonal method. For the current estimate, MS intercepts were interpreted as a zone of MS mineralization comprised of 2 wireframes planar and subparallel sheets with a third wireframe spanning the West and Central Zones (Figure 14-1).

The East Zone was previously estimated (Clow et al., 2008, 2012) using the sectional polygonal method. For the current estimate, MS intercepts were interpreted as discrete and continuous zones of MS mineralization. A total of 10 wireframes comprises the East Zone resource model (Figure 14-1).



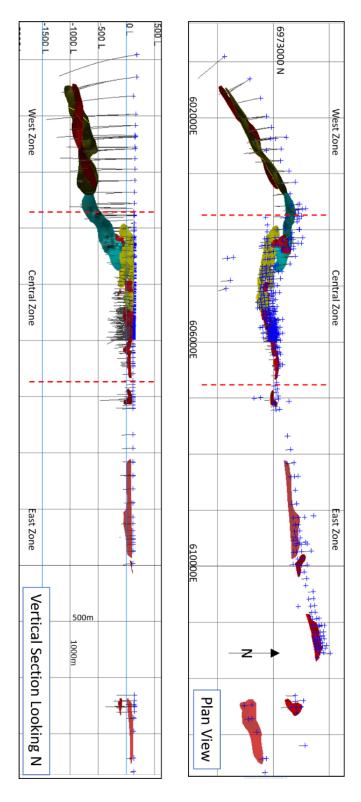


Figure 14-1: Mineralization domains and drill holes.





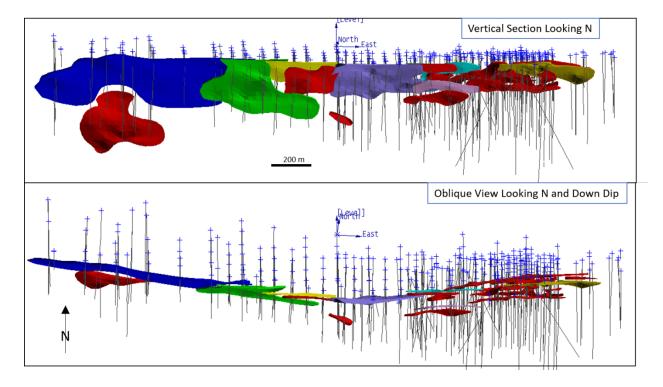


Figure 14-2: Central Zone massive sulphide lenses.

The LSPGE mineralization is characterized by a low-sulfide style that comprises millimeter- to centimeter thick veins, and disseminated, interstitial, and vari-textured sulfides hosted by metagabbro. The LSPGE mineralization is characterized by elevated to locally high Pd and Pt assay grades accompanied by low to very low Ni, Cu, and Co assay grades. In general, Pd grade is greater than Pt grade in the LSPGE zone.

The distribution of potentially economic Pd intercepts, and high grade Pd intercepts in the LSPGE is highly erratic. Geological controls on the distribution of LSPGE mineralization have not been established to the extent to predict the orientation or range of grade continuity. Based on Exploratory Data Analyses ("EDA") of Pd grade statistics and distribution, the author has interpreted 2 domains of LSPGE mineralization. The upper domain occurs within and adjacent to the zone of MS lenses and sheets in the Central Zone and consists of LSPGE mineralization lenses generally parallel to the MS lenses. The second domain occurs in the footwall position to the MS lenses and has been interpreted as a steeply dipping zone (Figure 14-3) potentially subparallel to a regional fold axis. The lower steeply dipping domain remains poorly constrained by the current drilling.





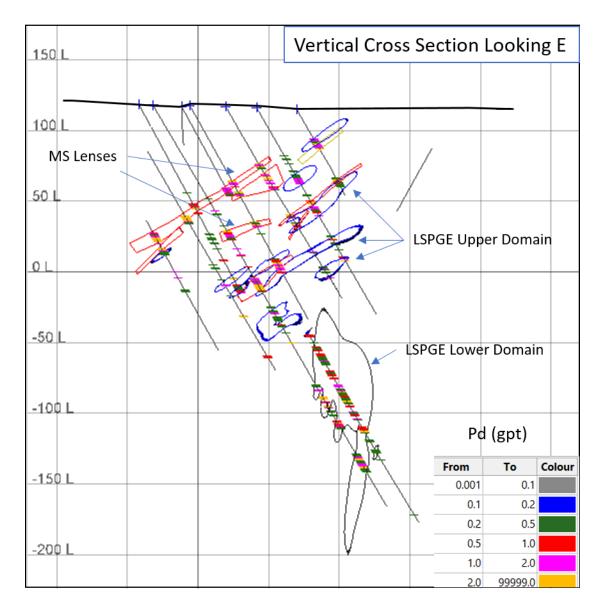


Figure 14-3: Cross section of mineralized domain, Central Zone.

14.3.1 Assay Statistics

Within the MS wireframes there are a total of 5,320 samples that have been analyzed for Ni and Cu and a total of 4,599 samples that have been analyzed for Pt, Pd, and Co. Within the LSPGE domains, there is a total of 6,182 samples that have been analyzed for Pt and Pd, and 5,508 samples that have been analyzed for Ni, Cu, and Co. The statistics of the assay data is summarized in Table 14-4 and Table 14-5.





Table 14-4: Summary statistics of MS assay data.

			West Zone)	
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	526	526	526	526	526
Mean	0.073	1.137	0.623	1.643	0.296
Standard Deviation	0.047	0.917	0.373	0.921	0.502
Variance	0.002	0.842	0.139	0.849	0.252
CV	0.639	0.807	0.598	0.561	1.696
Max	0.412	8.354	1.344	4.93	4.195
Upper quartile	0.105	1.521	0.919	2.325	0.344
Median	0.087	1.018	0.789	1.88	0.117
Lower quartile	0.026	0.476	0.215	0.789	0.04
Min	0.001	0.001	0.002	0.003	0.001

	Central Zone				
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	3,787	4,251	4,251	3,787	3,787
Mean	0.074	0.906	0.615	1.514	0.25
Standard Deviation	0.054	0.838	0.415	1.201	0.546
Variance	0.003	0.702	0.172	1.442	0.298
CV	0.729	0.925	0.676	0.793	2.183
Max	0.8	13.3	1.77	35.07	17.01
Upper quartile	0.109	1.224	0.95	2.17	0.29
Median	0.084	0.773	0.735	1.68	0.157
Lower quartile	0.022	0.351	0.151	0.547	0.04
Min	0.001	0.001	0.001	0.002	0.001

			East Zone		
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	286	543	543	286	286
Mean	0.061	0.768	0.547	0.931	0.193
Standard Deviation	0.05	1.158	0.442	0.725	0.341
Variance	0.002	1.342	0.195	0.526	0.116
CV	0.82	1.509	0.808	0.779	1.765
Max	0.239	12.41	1.873	4.04	2.73
Upper quartile	0.11	0.928	0.932	1.56	0.2
Median	0.057	0.46	0.48	0.855	0.1
Lower quartile	0.011	0.19	0.101	0.233	0.02
Min	0.001	0.002	0.001	0.005	0.001





Table 14-5: Summary statistics of LSPGE assay data.

	Upper Domain				
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	3,879	3,879	3,879	4,350	4,350
Mean	0.022	0.274	0.166	0.889	0.308
Standard Deviation	0.036	0.574	0.29	1.905	1.236
Variance	0.001	0.33	0.084	3.629	1.528
CV	1.64	2.094	1.747	2.143	4.011
Max	0.348	13.047	1.424	56.79	42.67
Upper quartile	0.02	0.308	0.135	1	0.268
Median	0.006	0.041	0.036	0.41	0.1
Lower quartile	0.003	0.008	0.018	0.22	0.03
Min	0.001	0.001	0.002	0.004	0.001

	Lower Domain				
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	1,629	1,629	1,629	1,832	1,832
Mean	0.013	0.119	0.094	0.705	0.15
Standard Deviation	0.024	0.414	0.195	1.223	0.367
Variance	0.001	0.172	0.038	1.497	0.134
CV	1.925	3.483	2.066	1.735	2.451
Max	0.173	6.68	1.424	26.71	9.25
Upper quartile	0.009	0.051	0.066	0.8	0.16
Median	0.004	0.014	0.026	0.35	0.058
Lower quartile	0.003	0.005	0.016	0.132	0.01
Min	0.001	0.001	0.002	0.004	0.001

14.3.2 Grade Capping

Prior to compositing, the assay database was evaluated for the presence of high-grade outliers for the purposes of establishing grade capping levels. The analysis employed a spatial evaluation to establish if any clustering of high grade exists and an evaluation of statistical distributions using summary statistics, histograms, and probability plots. The grade distributions were evaluated on a zone-by-zone basis. The analysis resulted in a relatively small number of assays being capped. The capping levels and the number of samples capped are reported for the MS and LSPGE types of mineralization in Table 14-6.





Table 14-6: Summary of assay grade capping.

Zone	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
MS	nc	7(9)	1.5(6)	7(2)	5.5(4)
LSPGE	nc	7.75(1)	nc	21(9)	11(5)

Notes: nc – no cap required

First number is the cap grade

Number in parenthesis is the number of samples capped

14.3.3 Compositing and Composite Statistics

To establish equal support for the purposes of grade interpolation, the assay database has been composited to equal lengths. The average sample length of all samples within the MS and LSPGE domains is 1.06 m. The average length in the MS domains is .93 m and the average sample length in the LSPGE domains is 1.16 m. The histogram of sample length for all samples in the mineralization domains is in Figure 14-4. A composite length of 1 m has been selected for all zones. The samples have been composited in a down hole direction within the mineralization domains. Composite lengths have been optimized to ensure all samples are included. The histogram of composite lengths is contained in Figure 14-4. Summary statistics of the composite data for the MS domains is contained in Table 14-7 and the summary statistics for the LSPGE domains is contained in Table 14-8.



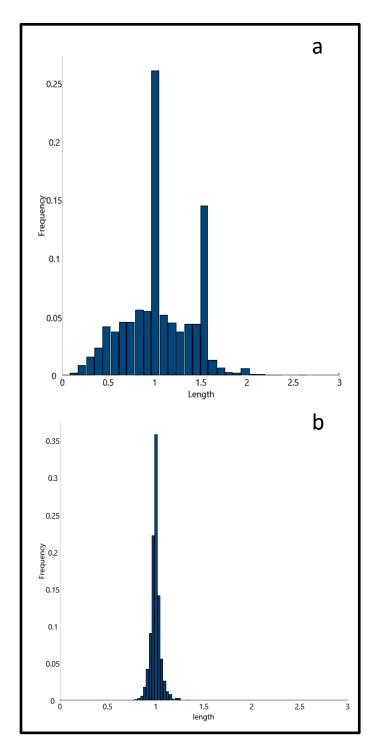


Figure 14-4: Histogram of samples (a) and composite (b) lengths.





Table 14-7: Summary statistics of MS composites.

Table 14-7: Summary statistics of	MS composite:	S.			
			West		
Data	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	498	498	498	498	498
Mean	0.074	1.103	0.641	1.672	0.295
Standard Deviation	0.039	0.679	0.32	0.792	0.425
Variance	0.001	0.46	0.103	0.627	0.18
CV	0.519	0.615	0.499	0.473	1.438
Max	0.26	4.634	1.15	3.718	3.889
Upper quartile	0.103	1.492	0.894	2.291	0.333
Median	0.084	1.052	0.751	1.843	0.161
Lower quartile	0.047	0.594	0.404	1.068	0.064
Min	0.001	0.001	0.002	0.005	0.001
			Central		
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	3,560	4,102	4,102	3,560	3,560
Mean	0.073	0.849	0.6	1.497	0.244
Standard Deviation	0.047	0.659	0.384	0.93	0.334
Variance	0.002	0.434	0.147	0.866	0.111
CV	0.638	0.776	0.639	0.622	1.365
Max	0.428	5.411	1.5	7	5.5
Upper quartile	0.105	1.181	0.917	2.121	0.29
Median	0.079	0.776	0.661	1.6	0.168
Lower quartile	0.033	0.376	0.232	0.736	0.072
Min	0.001	0.001	0.001	0.005	0.001
			East		
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	218	464	464	218	218
Mean	0.059	0.648	0.545	0.922	0.164
Standard Deviation	0.044	0.58	0.387	0.663	0.211
Variance	0.002	0.336	0.15	0.439	0.045
CV	0.747	0.895	0.711	0.718	1.288
Max	0.154	4.1	1.5	4.025	1.526
Upper quartile	0.101	0.907	0.882	1.452	0.195
Median	0.051	0.495	0.452	0.835	0.101
Lower quartile	0.016	0.24	0.209	0.322	0.04
Min	0.001	0.01	0.004	0.005	0.001





Table 14-8: Summary statistics of LSPG composites.

	Upper Domain				
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	5,469	5,469	5,469	5,469	5,469
Samples excluded	0	0	0	0	0
Mean	0.016	0.189	0.118	0.78	0.273
Standard Deviation	0.026	0.388	0.213	1.27	0.645
Variance	0.001	0.151	0.045	1.614	0.416
CV	1.681	2.054	1.803	1.63	2.361
Max	0.237	6.128	1.323	21	10.47
Upper quartile	0.015	0.205	0.098	0.9	0.258
Median	0.004	0.02	0.028	0.431	0.115
Lower quartile	0.002	0.004	0.014	0.241	0.047
Min	0	0	0	0	0

	Lower Domain				
	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
Number of samples	2,568	2,568	2,568	2,568	2,568
Samples excluded	0	0	0	0	0
Mean	0.01	0.094	0.072	0.617	0.138
Standard Deviation	0.019	0.316	0.149	0.976	0.305
Variance	0	0.1	0.022	0.953	0.093
CV	1.97	3.369	2.081	1.581	2.217
Max	0.199	4.562	1.232	19.611	7.009
Upper quartile	0.008	0.039	0.055	0.713	0.15
Median	0.004	0.011	0.024	0.355	0.061
Lower quartile	0.002	0.004	0.014	0.165	0.017
Min	0	0	0	0	0

14.3.4 Density

The density used for block model tonnage estimate is based on the specific gravity data collected in 2006 and reported in Clow et al., 2008. No SG data has been generated since 2006. Based on the SG analyses of the 2006 core samples, Clow et al. (2008) established a regression relating SG to Ni for MS of:

SG = 1.3638 * Ni + 2.9435.

The spatial distribution of the SG data has been evaluated relative to the update MS interpretation and the SG/Ni regression determined by Clow et al. (2008) remains appropriate and is used in the current estimate.

Clow et al. (2008) also established a SG/Ni relationship for SG determinations completed on samples outside of the MS. However, given uncertainty on the distribution of mineralization in the LSPGE zone and the incomplete Ni analyses in the zone a single value 2.90 tonnes/m3 is used for density in the LSPGE zone.





14.3.5 Variography

Spatial analysis was completed on the Central Zone MS. Down hole variograms were calculated to determine the nugget value and to estimate the average range of correlation across the MS lenses. Directional variograms were used to establish the ranges of continuity along strike and down dip. The variograms were calculated using an average orientation of the MS lenses across the eastern portion of the Central Zone where the MS forms a series of stacked lenses. The experimental variograms were evaluated with various single and double structure spherical and exponential models. The results of the analysis are contained in Table 14-9 using a single structure exponential model.

Table 14-9: Variogram model parameters.

Metal	Nugget	Sill		Model Type		
Metai	Nugget	SIII	Strike	Strike Dip		woder Type
Со	0.20	0.80	120	70	15	Exp
Cu	0.40	0.60	65	55	8	Exp
Ni	0.25	0.70	75	40	25	Exp
Pd	0.25	0.60	70	60	10	Exp
Pt	0.50	0.50	40	40	10	Exp

14.3.6 Block Model

Block modeling and grade interpolations was completed using Maptek Vulcan software version 11. The block model was created in UTM NAD83 Z14N space. The block model was not rotated. Parent block size was 20m x 20m x 20m with 2.5m sub blocking and a maximum block size of 5m x 5m x 5m inside the MS and LSPGE wireframes. The block model encompassed all the resource wireframes and was extended sufficiently to support pit optimization study. A bedrock – overburden surface was created using drill hole data and this surface was extrapolated to cover and limit the block model where appropriate.

14.3.7 Grade Interpolation

Nickel, copper, cobalt, platinum, and palladium have been estimated for all mineralization domains. Blocks and composites have been coded by wireframe domain and block grade interpolation is restricted to those blocks and composites within a given wireframe domain. In the Central zone where there is Inco drilling which does not include Pt and Pd analyses, block grades for these metals in the MS zones have been estimated from the later (adjacent) drilling only which includes Pt and Pd analyses. This approach is supported by the evaluation of adjacent holes and adjacent sections which indicates continuity of these metals. The effect of this approach is reflected in resource classification. In the case of the LSPGE, a number of the samples from the 2007 and 2008 drill holes were not analyzed for Ni, Cu, or Co. In this case, it assumed that the holes were logged, no mineralization recognized, and therefore the values for these metals has been set to 0 for the purposes of block grade estimation. In the East zone, some mineralization lenses are informed completely or dominantly by Inco holes and in these cases Pt and Pd have not been estimated.





Block grade has been interpolated by Ordinary Kriging ("OK") and Inverse Distance ("ID") methods. MS in the Central zone contains the highest density drilling and forms the only indicated resource in Ferguson Lake resource model (discussed below). For the purposes of validation and sensitivity analyses the Central MS has been estimated by both OK and ID (ID squared) methods. The West and East zones MS, being characterized by generally widely spaced drilling has been estimated using ID (ID squared). Several sensitivity runs were completed in the estimation of the LSPGE zone that included ID to the powers 2 and 3 and variation in the search neighborhood including restrictive searches and limiting samples for block grade estimation.

The OK and ID (ID squared) models for the MS in the Central zone were evaluated and compared and based largely on visual criteria, the ID model is the resource model. For the LSPGE mineralization, the resource model utilizes ID power 3 and the same search strategy as that used for the MS.

Search orientation for the MS was specific to each MS lens. For the upper LSPGE domain, the search orientation was set to the average orientation of MS lenses in the Central zone. The search orientation for the lower LSPGE zone was set to a strike of 264 and a dip of 84. Grade estimation was accomplished through multiple passes utilizing increasing search distances and varying sample constraints. The interpolation parameters are summarized in Table 14-10.

Table 14-10: Summary of grade interpolation strategy.

Parameter	Pass 1	Pass 2	Pass 3	Pass 4
Ellipse Orientation		zone	specific	
Along Strike	50	75	75	200
Down Dip	50	75	75	200
Across Lens	15	25	25	50
Min. per estimate	3	3	3	1
Max. per estimate	8	8	8	5
Max. per hole	2	2		
	tation Along Strike Down Dip Across Lens Min. per estimate Max. per estimate	tation Along Strike 50 Down Dip 50 Across Lens 15 Min. per estimate 3 Max. per estimate 8	tation zone Along Strike 50 75 Down Dip 50 75 Across Lens 15 25 Min. per estimate 3 3 Max. per estimate 8 8	tation zone specific Along Strike 50 75 75 Down Dip 50 75 75 Across Lens 15 25 25 Min. per estimate 3 3 3 Max. per estimate 8 8 8

The block model has been compared with the underlying drill hole assay values on a section-by-section basis and block grades and grade trends are consistent with the assay data. For the purposes of comparison with input (composite) data, the block model grades are tabulated at 0 cutoff grade and presented in Table 14-11. The average block model grades in Table 14-11 are reasonably similar to the mean values of the composite data presented in Table 14-7 and Table 14-8. The average Pd block model grade is compared with the average nearest neighbor block model grade and with the composite data in Table 14-12. Collectively, the comparative data indicate that the model is a reasonable global estimate of the assay data. The Ni grades of the block model at 0 cutoff grade are illustrated in Figure 14-5.





The reader is cautioned that the block model metal grades presented in tables 14-11 and 14-12 are not resource model grades. Classification criteria and economic evaluation have not been applied. These tables are presented for the purposes of comparison with composite data and model validation.

Table 14-11: Block model grades.

Zone	Co (%)	Cu (%)	Ni (%)	Pd (gpt)	Pt (gpt)
MS West Zone	0.073	1.095	0.605	1.682	0.281
MS Central Zone	0.069	0.867	0.592	1.387	0.231
MS East Zone	0.059	0.657	0.533	0.984	0.170
LSPGE Upper Domain	0.022	0.281	0.155	0.622	0.162
LSPGE Lower Domain	0.010	0.092	0.070	0.599	0.118

Table 14-12: Average model and composite Pd grades.

	Pd (gpt)						
Zone	Resource Model	NN Model	1 m Composites				
MS West Main	1.387	1.456	1.497				
MS Far West	1.682	1.533	1.672				
MS East	0.984	1.024	0.922				
LSPGE Upper Domain	0.622	0.584	0.780				
LSPGE Lower Domain	0.599	0.474	0.617				

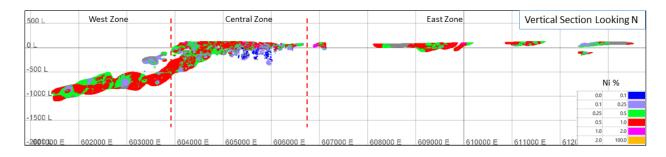


Figure 14-5: Ni grades of block model at 0 cutoff grade.





14.4 Block Model Classification and Economic Evaluation

The Mineral Resource Estimate presented in this Technical Report has been prepared and reported in compliance with all current disclosure requirements for mineral resources as set out in NI 43-101 Standards of Disclosure for Mineral Projects. Economic evaluation and resource classification of the Ferguson Lake block model is based on the following CIM definitions:

- A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.
- An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
- An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
- A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

The Ferguson Lake deposit contains resources potentially extractable by both open pit and underground mining methods. The Ferguson Lake deposit resources are classified as Inferred and Indicated. The Ferguson Lake deposit does not currently contain measured resources. The Mineral Resource block model was peerreviewed by Allan Armitage, PhD, P.Geo of SGS Geological Services. Dr. Armitage is an Independent Qualified Person as defined in NI-43-101.





14.4.1 Resource Classification

The Ferguson Lake resources are classified as Indicated and Inferred. The level of confidence is based on geological knowledge and data density and the classification is based on data density (drill spacing), variogram range, and interpolation pass. The basis of classification is as follows:

- 1. The interpretation of massive sulphide intercepts as continuous planar sheets comprising the West Zone provides a reasonable basis for resource estimation. The drilling, however, is on approximately 200 m spaced sections. Blocks > 100 m distance from a drill hole have not been included as resource (allowing for reasonable continuity across the zone) and the West Zone is classified as Inferred.
- 2. The interpretation of the LSPGE zone is based on assumed orientations and potentially economic parameters. Controls on the distribution of the LSPGE zone remain unknown and the orientation and range of geological and grade continuity is not known. The LSPGE zone is classified as Inferred.
- 3. Stacked lenses comprising the Central Zone MS is a geological unit which is interpreted with a higher degree of confidence based on mapped exposure, geophysics, and drill density and supports an Indicated classification.
- 4. Classification of the massive sulphide mineralization as Indicated is based on the along strike Pd variogram range. Blocks that have been estimated in the first 2 interpolation passes and therefore from a minimum of 2 drill holes are classified as Indicated and the remaining MS blocks are Inferred.

Palladium variogram range is chosen as the basis of classification due to the fact that the earlier Inco holes have not been analyzed for Pd. The distribution of Indicated and Inferred resource blocks is illustrated in Figure 14-6. The Indicated resources are dominantly in the Central zone supported by the higher drilling density. A smaller zone is also located in the eastern part of the East zone supported by the higher drill density (see figure 1 for dill hole distribution). The effect of the Inco holes on classification is evident in the Central zone where a section of Inferred blocks is due to the dominance of Inco holes in the local search neighborhood.

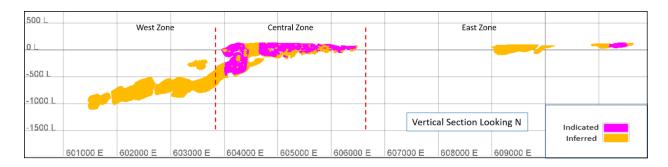


Figure 14-6: Distribution of indicated and inferred resource blocks.





14.4.2 Economic Evaluation

In order to evaluate the open pit mining potential of the Ferguson Lake deposit, a conceptual pit was completed using WhittleTM pit optimization software. The economic and technical parameters used for the pit optimization are contained in Table 14-13: Pit optimization parameters. A Whittle pit shell at a revenue factor of 1 was selected as the constraint for open pit mining resource. All blocks with an NSR value equal to or greater than US\$49.70 (open pit mining cut off NSR) are potentially mineable as ore and those with an NSR value less than US\$49.70 would be mined as waste. The block NSR value is calculated as follows:

∑ (metal block grade*metal recovery*metal price) ... where metal is each of Co, Cu, Ni, Pd, and Pt

Recovery factors for Ni, Cu, and Co are those that were used in Clow et al. (2012). Recovery factors for Pd and Pt are based on review of those factors used for similar deposit types in recent technical reports and includes an operating mine. Metal prices are based primarily on long term historical prices as well as other considerations.

The reader is cautioned that the results from the pit optimization are used solely for the purpose of testing the "reasonable prospects for eventual economic extraction" by open pit mining and are not an estimate of Mineral Reserves.

Table 14-13: Pit optimization parameters.

Parameter	Unit	Value
Nickel Price	US\$ per pound	8.00
Copper Price	US\$ per pound	3.30
Cobalt Price	US\$ per pound	20.60
Platinum Price	US\$ per ounce	900.00
Palladium Price	US\$ per ounce	1910.00
UG Mining	US\$ per tonne mined	48
Open Pit Mining Cost	US\$ per tonne mined	3.2
Processing Cost (incl. crushing and G&A)	US\$ per tonne milled	46.5
Overall Pit Slope	Degrees	55
Nickel Recovery	Percent (%)	91
Copper Recovery	Percent (%)	96
Cobalt Recovery	Percent (%)	90
Platinum Recovery	Percent (%)	50
Palladium Recovery	Percent (%)	81
Waste Specific Gravity	g/cm3	2.88/2.90
Mineral Zone Specific Gravity	g/cm3	Ni/SG Regression





The WhittleTM pit optimization resulted in 3 separate pits (Figure 14-7). The largest pit encompasses the West Zone and the two smaller pits are located in the East Zone. The resources contained in the pits are summarized in Table 14-14.

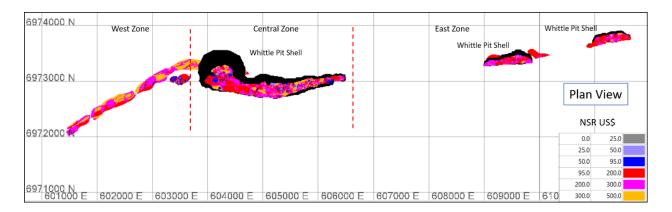


Figure 14-7: Three separate pits resulting from Whittle™ pit optimization.

Table 14-14: Table of open pit resources.

Indicated Resource Open Pit										
Zone	Tonnes	Со	Cu	Ni	Pd	Pt	NSR			
	(Mt)	(%)	(%)	(%)	(gpt)	(gpt)	(\$US/tonne)			
Central	21.2	0.07	0.84	0.60	1.39	0.23	\$257			
East	1.2	0.07	0.74	0.62	0.97	0.16	\$228			
Total Indicated	22.4	0.07	0.84	0.60	1.37	0.23	\$255			

Inferred Resource Open Pit										
Zone	Tonnes	Co	Cu	Ni	Pd	Pt	NSR			
	(Mt)	(%)	(%)	(%)	(gpt)	(gpt)	(\$US/tonne)			
Central	7.9	0.04	0.47	0.30	1.00	0.23	\$147			
East	4.3	0.06	0.78	0.58	0.97	0.21	\$211			
Total Inferred	12.2	0.05	0.58	0.39	0.99	0.22	\$170			

Notes:

- 1. CIM definitions (2014) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019) were followed for Mineral Resources.
- 2. Mineral Resources were estimated at NSR cutoff values of US\$49.70 for open pit and US\$94.50 for underground.
- 3. NSR values were calculated using long-term metal prices of US\$8.00/lb for Nickel, \$US3.30/lb for Čopper, US\$20.60/lb of Cobalt, US\$900/oz Platinum, and US\$1,910/oz Palladium.
- 4. Metallurgical recoveries used in the NSR calculation were 91% for Nickel, 96% for Copper, 90% for Cobalt, 50% for Platinum and 81% for Palladium.
- 5. Open pit Mineral Resources are reported at a base case NSR value of US\$49.70 within a conceptual pit.
- 6. Underground Mineral Resources were estimated using a minimum true width of 2.5 metres and US\$94.50 NSR value.
- 7. The independent Qualified Person for the current Mineral Resource estimate is Mr. Jamie Lavigne, P. Geo.
- 8. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.
- 9. All figures are rounded to reflect the relative accuracy of the estimate. Numbers may not add due to rounding







The blocks below and adjacent to the WhittleTM pits have been assessed for their underground mining potential. Given the planar nature and apparent continuity of the MS mineralization it is assumed that it may be mined using the longitudinal longhole retreat mining method (a branch of the generic mining method known as sublevel stoping). The general parameters used to evaluate the block model for UG resources are a minimum true width of 2.5 m which is appropriate for the method and a cut-off NSR value of US\$94.50.

Where blocks less than cut-off occur as isolated blocks or small clusters of blocks in otherwise greater than cut-off grade blocks these low-grade blocks were left in the resource as it is assumed they will have to be mined as ore.

Where blocks less than cut-off grade form larger clusters of blocks the local average NSR value was calculated. If the average NSR grade was greater than cutoff grade, then the sub-zone being assessed was included as resource. If the sub-zone being assessed was less than cutoff grade and formed a minimum $10m \times 10m$ panel (long section view) then it was assumed to be left as a pillar and removed from resource.

The East Zone required the additional constraint of having a crown pillar over potential resources under Ferguson Lake. A 50 m thick crown pillar was assumed. The East Zone under Ferguson Lake remains in the early stages of drilling with widely spaced and closer to surface drilling. Removal of the crown pillar material resulted in small resources which likely would not support the lateral development and for this reason have been removed from resource.

The LSPGE zone extends below Main West Zone pit. The average NSR value for this zone is US\$ 53 (at a 0 block model cutoff). This zone was evaluated for its UG mining potential by first calculating composites based on a cut-off grade of 2.0 g/t Pd and a minimum true width of 2.5 m. The resulting composites were then evaluated for continuity that could potentially support interpretation of an UG mining position. Continuity was not apparent from the distribution of composites and as a result UG potential was not further evaluated.

The UG resources are tabulated in Table 14-15 and are illustrated in Figure 14-8.

The reader is cautioned that the results from the UG assessment based on mining width and cut-off NSR are used solely for the purpose of testing the "reasonable prospects for economic extraction" by UG mining and are not an estimate of Mineral Reserves.





Table 14-15: Table of underground resources.

Indicated Resources Underground									
Zone Tonnes Co Cu Ni Pd Pt NSR (Mt) (%) (%) (%) (gpt) (gpt) (\$US/tonne)									
Central	1.9	0.07	1.03	0.60	1.49	0.32	\$275		

Inferred Resources Underground										
	Tonnes	Co	Cu	Ni	Pd	Pt	NSR			
	Torines	(%)	(%)	(%)	(gpt)	(gpt)	(\$US/tonne)			
Central	3.9	0.08	1.13	0.65	1.67	0.27	\$298			
East	1.2	0.05	0.71	0.58	0.86	0.11	\$175			
West	30.0	0.07	1.01	0.56	1.53	0.26	\$269			
Total Inferred	35.1	0.07	1.02	0.57	1.53	0.26	\$269			

Notes:

- CIM definitions (2014) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019) were followed for Mineral Resources.
- 2. 3.
- Mineral Resources were estimated at NSR cutoff values of US\$49.70 for open pit and US\$94.50 for underground. NSR values were calculated using long-term metal prices of US\$8.00/lb for Nickel, \$US3.30/lb for Copper, US\$20.60/lb of Cobalt, US\$900/oz Platinum, and US\$1,910/oz Palladium.
- Metallurgical recoveries used in the NSR calculation were 91% for Nickel, 96% for Copper, 90% for Cobalt, 50% for 4. Platinum and 81% for Palladium.
- Open pit Mineral Resources are reported at a base case NSR value of US\$49.70 within a conceptual pit.
- Underground Mineral Resources were estimated using a minimum true width of 2.5 metres and US\$94.50 NSR value. 6.
- The independent Qualified Person for the current Mineral Resource estimate is Mr. Jamie Lavigne, P. Geo.
- 8. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.
- All figures are rounded to reflect the relative accuracy of the estimate. Numbers may not add due to rounding

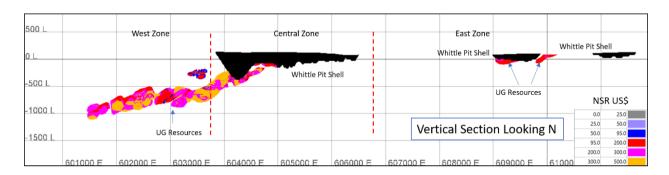


Figure 14-8: Section illustrating UG resources.





Sensitivity to Cutoff Grade

The MS intercepts have been modelled primarily on the occurrence of massive or semi-massive sulphide as a lithological type. The metal content of intercepts comprising this unit typically results in a NSR value greater than US\$180. The LSPGE style of mineralization within the optimized pit shell is approximately twice the open pit NSR cutoff value. The block model within the optimal pit has been tabulated at various NSR cutoff values above and below the base case NSR value used to establish resource (Table 14-16) and is illustrated for the Indicated and Inferred resources in Figure 14-9. In the open pit resources, all of the LSPGE mineralization is Inferred and most of the MS mineralization is Indicated. The Inferred resources (LSPGE mineralization) is more sensitive to change in NSR cutoff than the Indicated resources however all resources remain well above breakeven at the lowest cutoff NSR values considered.

The LSPGE style of mineralization below the open pit is characterized by lower to marginal NSR values and is not included as UG resource. A small tonnage of LSPGE mineralization comprises UG resource immediately west of the Central Zone pit. Thus, the UG resource consists dominantly of MS mineralization and given the reasonable continuity of MS evident and the average resource NSR values (Table 14-15) relative to the NSR cutoff value, the UG resource is interpreted to be relatively insensitive to a reasonable increase in NSR cutoff value. Tabulation of the underground resource at a 25% increase in cutoff NSR results in an approximately 5% increase in average NSR value and an approximately 8% decrease in tonnes. The sensitivity of the underground resources to cutoff NSR value is indicated in Table 14-17 and Figure 14-10.

Table 14-16: Table of open pit resources at various NSR cutoff values.

	Indicated Resources		Inferred R	Resources
Cutoff (\$US)	NSR (\$US)	Tonnage (Mt)	NSR (\$US)	Tonnage (Mt)
30	254	22.6	154	13.9
35	254	22.5	158	13.4
40	255	22.5	162	12.9
45	255	22.4	166	12.5
49.7	255	22.4	170	12.1
55	256	22.3	173	11.8
60	257	22.3	176	11.5
65	257	22.2	179	11.2
70	258	22.1	182	10.9





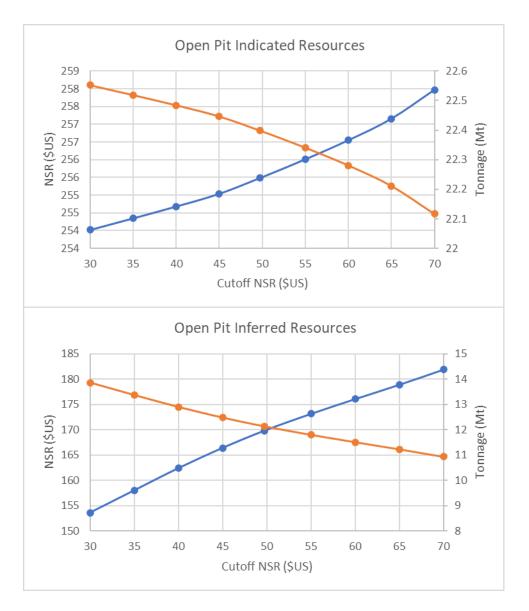


Figure 14-9: NSF sensitivity curves for open pit resources

Risks

The LSPGE mineralization contained in the resource model is classified as Inferred and there is no guarantee that it will be classified as Indicated in the future. Oher risks associated with the resource include changes in metal price, changes in direct mining costs, and changes in metallurgical recoveries. CAPEX and development costs are risks due to the remote location and lack of infrastructure are project development risks. Undetermined risks including environmental, permitting, legal, title, taxation, socioeconomic, marketing, political, or other relevant factors could impact economic evaluation of resources in the future.





Table 14-17: Table of underground resources at various NSR cutoff values.

	Indicated	d Resources	Inferred	Resources
Cutoff (\$US)	NSR (\$US)	Tonnage (Mt)	NSR (\$US)	Tonnage (Mt)
60	270	1.9	264	35.9
65	270	1.9	265	35.8
70	271	1.9	265	35.7
75	272	1.9	266	35.6
80	272	1.9	266	35.6
85	273	1.9	267	35.4
90	274	1.9	268	35.2
94.5	275	1.9	269	35.1
100	276	1.9	271	34.7
105	276	1.9	274	34.1
110	277	1.8	277	33.5
115	278	1.8	280	32.8
120	279	1.8	281	32.7
125	280	1.8	283	32.4





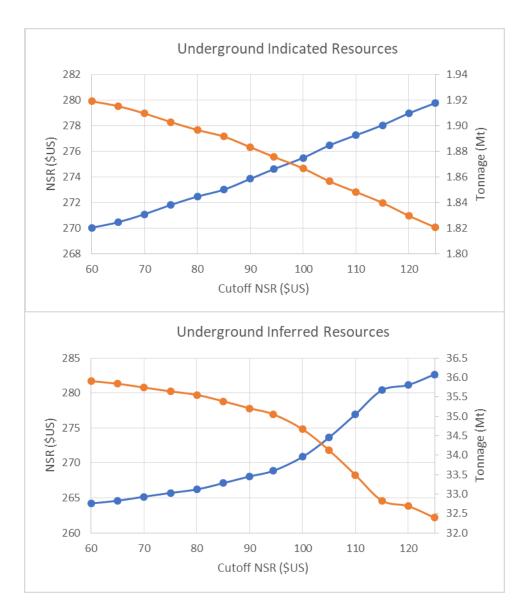


Figure 14-10: NSF sensitivity curves for underground resources.

14.4.3 Indicated Resource Validation

Validation of the Indicated Resources included calculation of swath plots comparing composite grades to block model grades on a sectional and level basis (Figure 14-11, Figure 14-12), change of support evaluation (Figure 14-13), and tabulation of 9 individual lenses within the Central zone indicated MS resource.





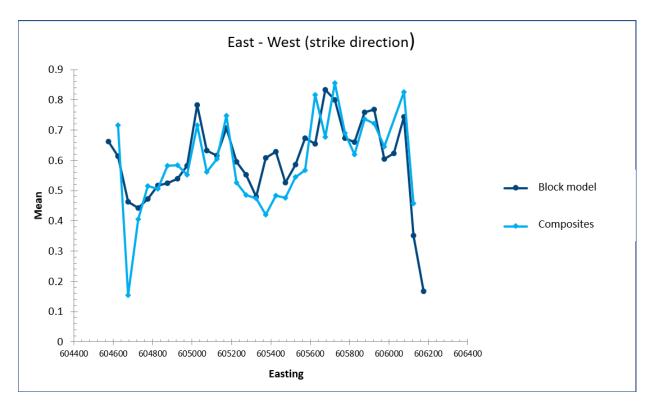


Figure 14-11: Ni % swath plot by section.

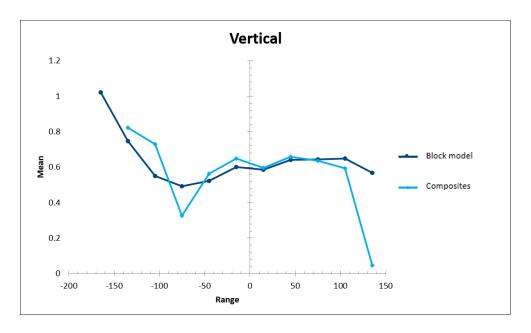


Figure 14-12: Ni % swath plot by levels.



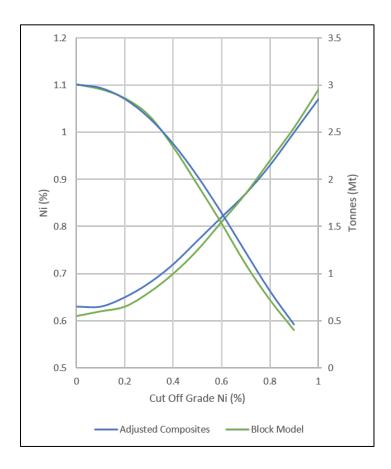


Figure 14-13: Change of support check of indicated resource block model

15.0 ADJACENT PROPERTIES

The QP is not aware of any information about exploration on mineral claims immediately adjacent to the property in the public domain.

16.0 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this technical report more understandable.

17.0 Interpretations and Conclusions

Extensive diamond drilling on the Ferguson Lake Property has intersected copper, nickel, cobalt, palladium and platinum values associated with fracture-filling, disseminated and semi-massive to massive sulphides over an east-west strike length of more than 12 km. The three drill-delineated principal mineral zones within this overall strike length are the East, Central and West Zones. The diamond drilling has provided necessary





information for a detailed estimate of the grade and tonnages of the present mineral resources at Ferguson Lake. The best Cu-Ni-Co-Pd-Pt grades are invariably associated with semi-massive and massive sulphide lenses within all these zones.

The principal mineral zones are associated with a north-dipping, sill-like, medium- to coarse-grained gabbro unit (also referred to as hornblendite in drill logs). The more mafic and coarser-grained varieties of this unit consist of interlocking hornblende crystals after original pyroxene.

Geological studies (Miller 2005a and b) suggest that the gabbro may be part of a layered intrusion while other reviews suggest some of the gabbro is intruded as a series of separate smaller, later, domal bodies along the favorable amphibolitic horizon serving as conduits for the upwelling, and emplacement of intermittently thick high-grade pods of magmatic sulphides (Yang 2018). This latter interpretation is consistent with the highly variable thickness and grade of the deposit ranging from <2 to >20 metres thick along its 12 km strike length. More study, including a detailed age dating research program, is needed to better understand the metallogenesis of the deposit and area.

The detailed drilling in the Central Zone (formerly West Zone) to define a near surface sulphide resource was also successful in identifying a separate style of low sulphide platinum group element mineralization in footwall gabbro up to >100 metres below the sulphide horizons. Broadly distributed, low palladium values envelope discontinuous, locally high-grade platinum and palladium within a zone traced by drilling to date over a strike length of hundreds of metres and associated with cross-cutting steeply dipping gabbro dykes. Further investigation of this low sulphide - PGM style of mineralization is required.

Exploration work focused on the massive sulphide portions of the deposit, with early work by Canico in the 1950s sampling only for nickel and copper. Historic resource estimates for the East Zone lack cobalt and precious metal grade estimates, as a high proportion of the drilling in the zone was completed in the early programs.

No resource delineation has been attempted for the east side of the Central Zone located under Ferguson Lake (Figures 6.3 and 9.3), despite early successes in exploration drilling intersecting excellent base and precious metal grades over mineable widths. Considerable detailed drilling is needed for both the West and East Zones in order to upgrade them to mineral resources on par with the most of the Central Zone and include them in any pre-feasibility evaluation of the Ferguson Lake Property.

Review of the geochemical composition of the metamorphic rocks along the Ferguson Lake horizon suggests that wider and higher-grade Ni and Cu intersections may also be associated with higher Mg contents and more ultramafic compositions of the host rocks in the Central and West zones. This has resulted in the identification of favorable target areas for focused follow-up drilling.

Previous work on the Ferguson Lake Property paid relatively little attention to the PGM potential in the economic evaluation of the project. Including the PGM values not only increases the value of the massive





sulphide material but also increases their potentially economic mineable widths because significant Pd and Pt contents commonly persist into the immediate wall rocks as the base metal contents drop.

The resource estimation presented in this report is based primarily on the verification, re-evaluation and remodelling of the diamond drilling completed by Starfield Resources as reported in the PEA authored by Clow et al. 2011, Reinterpretation has resulted in the modelling of continuous MS sheets and lenses in the West and East Zone, greater continuity of MS in the Central zone, and the modelling of separate LSPGE domains in the Central zone The block model has been evaluated using updated metal prices and recovery factors. The cumulative effect of the re-modelling and application of updated economic and technical factors is an increase in Indicated and Inferred Resources.

Based upon the exploration work completed to-date on the Property, including close examination of the deposit model of the Ferguson Lake mineralized zones, and the current resource estimate, it is concluded the West, Central and East mineralized zones remain open for expansion down-plunge to the west, along strike to the east under Ferguson Lake and down dip at multiple locations along its 12 km mineralized horizon.

Other than those discussed in Item 14, the QPs are not aware of any risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information and mineral resource estimate.

18.0 RECOMMENDATIONS

Based on historic exploration data and the current mineral resource estimate the following exploration is recommended to advance the property.

- 1) Complete an infill diamond drilling program for the East Zone to evaluate the previously unassayed platinum, palladium and cobalt contents of the mineralized horizon, most of which was last tested in the 1950s. Target depths would average 200 metres. The program would also aim towards defining an Indicated Resource similar to the Central Zone.
- Carry out diamond drilling program to complete additional definition drilling and test selected exploration targets along strike, down dip and down plunge throughout the West Zone mineralized horizon based upon the assessment of geological, geophysical and geochemical criteria. Targets depths would be variable ranging from 250 to 500 metres.
- 3) Include specific gravity measurements in the analysis protocol.
- 4) Complete a detailed geological interpretation of the LSPGE style of mineralization with the objective of determining the range and orientation of PGE grade continuity and the geological factors controlling those orientations and ranges with the objective of supporting future estimation of indicated LSPGE resources.
- 5) Reprocessing and re-interpretation of the original ground 1999 2001 UTEM survey data with focus of defining strike and dip of conductive bodies and definition of features associated with





low sulphide PGM rich bodies. Compilation of the geophysical data with other exploration results into a 3D exploration model as an aid for selecting exploration targets for drill testing.

- 6) Complete drone magnetic survey over a missing block in Ferguson Lake plus re-processing, integration and interpretation of previous magnetic surveys with this program results.
- 7) Complete a Lidar survey on the property.
- 8) Continue to prepare Ferguson Lake camp and site for operation of a major drilling and exploration program including repair / replacement of equipment and tanks, and re-supply of fuels. This would include the organization of winter overland transport supply trains for the camp and drilling program and the removal of waste materials.

Canadian North has all permits to complete the recommended work.

18.1 **Proposed Budget**

Table 18-1 contains the recommended exploration and development budget for the Ferguson Lake Property.

Table 18-1 Recommended 2022 exploration and development budget.

Item	Amount	Units	Rate	\$(CAN) Cost
PHASE 1				
Diamond drilling at the East, Central and West zones including mob-demob, support and camp costs, helicopter and fixed wing transportation and analyses.	15,000	metres	900	13,500,000.00
Geophysical consulting, reprocessing and reinterpretation of ground 1999-2001 UTEM survey data plus exploration 3D modelling of geophysical and other data,	250	hours	200	50,000.00
Drone airborne magnetic survey over missing blocks on Ferguson Lake including mob and demob and processing.	200	line-km	250	50,000.00
Lidar survey on entire property	1	each	100,000	100,000.00
Repair, preparation, replace and re-supply of Ferguson Lake camp with equipment and fuels.				1,000,000
Total				14,700,000





19.0 REFERENCES

Aboriginal Affairs and Northern Development Canada. (2013): Re: Water License 2BE-FER0712 Inspection Report, letter to Starfield Resources Inc., (May 7, 2013).

Bell, R.T. (1971): Geology of Henik Lakes (East Half) and Ferguson Lake (East Half) Map-Areas, District of Keewatin, Geological Survey of Canada Paper 70-61.

Boyd, T. (2013): Re: Inspection of Water License 2BE-FER0712, letter to Department of Aboriginal Affairs and Northern Development Canada, Nunavut Regional Office. (September 19, 2013).

Boyd, T. (2013): Memo on Due Diligence Review of Ferguson Lake Property and Project, draft private report for 2369785 Ontario Inc. by Caracle Creek International Consulting Inc., (June 5, 2013).

Boyd, T. (2013): Technical Report Ferguson Lake Property, Kivalliq Region, Nunavut, private report for Canadian North Resources and Development Corp. (December 12, 2013).

Boyd, T. (2015): Assessment Report for the 2015 Field Season Ferguson Lake Nickel-Copper-Cobalt-PGE Property, Ferguson Lake Area, Kivalliq Region, Nunavut For INAC By Canadian North Resources and Development Corp., (November 24, 2015).

Boyd, T. (2017): Ferguson Lake Project Central Zone Geochemical Study. Internal memo prepared for Canadian North Resources and Development Corp. management. (April 27, 2017).

Boyd, T. (2021): Technical Report Ferguson Lake Property, Kivalliq Region, Nunavut, report for Canadian North Resources Inc., (March 15, 2021).

Burga, E., and Evans, J.P. (2008): Scoping Study Update for Starfield Resources Ferguson Lake Project; Process Development and Capex / Opex for Process Facilities for Starfield Metallurgical Recovery Plant, Andeburg Consulting Services Inc., Report: A7-801-SR-SS101 REV2, (March 2008).

Cameron, G.H. (1987): Geological Report on the Ferguson Lake Property, Northwest Territories, DIAND, Yellowknife Assessment Report 082539.

Carter, N.C. (1998a): Ferguson Lake Copper-Nickel Property, Prospecting Permit No.2179 and FERG 1,2 and 3 Mineral Claims, Ferguson Lake Area, Keewatin Region, Nunavut Territory, Northwest Territories, Part A: Geological Report and Recommendations for Further Exploratory Work; Part B: Property Evaluation Report, private report for Mr. Lawrence Barry, (dated May 25).

Carter, N.C. (2006): Report on Revised Estimates of Mineral Resources Ferguson Lake Nickel-Copper-Cobalt-PGE Property, Ferguson Lake Area, Kivalliq Region, Nunavut Territory, prepared for Starfield Resources Inc. (dated May 15, 2006). Starfield Resources Inc. – Ferguson Lake Project, Project # 1726

Chinn, J. (2009): Update of the Mineral Resource Estimate for the Ferguson Lake, a letter report prepared by Scott Wilson RPA for Starfield Resources Inc., 40 p. (July 2009).

CIM Standing Committee on Reserve Definitions, 2014, CIM Definition Standards for Mineral Resources & Mineral Reserves: Canadian Institute of Mining, Metallurgy and Petroleum.

CIM Mineral Resource & Mineral Reserve Committee, 2019, CIM Estimation of Mineral Resources & Reserves Best Practice Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum.





Clow, G.G., Bergen, R.D., Cox, J.J., Harris, G.B. and Lavigne, J.G., (2008): Preliminary Assessment of the Ferguson Lake Project, Nunavut Territory, Canada: Independent Technical Report for Starfield Resources Inc. (December 15, 2008).

Clow, G.G., Lecuyer, N.L., Rolph, D.J., Lavigne, G.G. and Krutzelmann, H. (2011): Preliminary Economic Assessment of the Ferguson Lake Project, Nunavut Territory, Canada, A NI 43-101 Technical Report prepared by Roscoe Postle Associates Inc. for Starfield Resources Inc. (November 30, 2011).

Clarke, I. (2006): Report on Sampling and Classification of Mineral Resources, Ferguson Lake Nickel-Copper-Cobalt-PGE Property, Ferguson Lake Area, Kivalliq Region, Nunavut Territory, prepared for Starfield Resources Inc., (dated August 4, 2006).

Cooke, R. (1977): Review of Ferguson Lake Deposit, District of Keewatin, N.W.T., N.T.S. 651-15. Assessment report, (May 30, 1977).

Diagnos com. (2008): CARDS Modeling and Predictions Ferguson Lake, Kivalliq region, Nunavut Territory Canada, private report for Starfield Resources Inc., (September 2008).

Eade, K.E. (1986): Precambrian Geology of the Tulemalu - Yathkyed Lake Area, District of Keewatin, Geological Survey of Canada Paper 84-11.

Eckstrand, O.R. (1996): Nickel-Copper Sulphide in Geology of Canadian Mineral Deposit Types, Geological Survey of Canada, Geology of Canada, no.8, p.584-608

Evans, P. (2011): Capex and Opex Update for Ferguson Lake Resources, Ferguson Lake Project, Process Development and Capex/Opex Update for Process Facilities for Starfield Metallurgical Recovery Plant, prepared by Andeburg Consulting Services Inc. for Starfield Resources Inc., Parts A and B, (November 2011).

Field, M. (2009): Report of Starfield Resources Inc. Results of Y-Lake Diamond Project, Ground Geophysical Follow-up and Core Drilling of Magnetic Anomalies, private report by Thanda Resources Inc., (November 17, 2009).

Hanmer, S., Sandeman, H.A., Davis, W.J., Aspler, L.B., Rainbird, R.H., Ryan, J.J., Relf, C. and Peterson.

T.D. (2004): Geology and neoarchean tectonic setting of the Central Hearne supracrustal belt, Western

Churchill Province, Nunavut, Canada, Precambrian research, 134, p.63-68.

Henderson, M (1999): Lithologic and Structural Setting of the Ferguson Lake Cu-Ni-PGE Property, private report for Starfield Resources Inc., (September 1999).

Irwin, R. (2010): Ferguson Lake Project-Y Lake Area, Nunavut Geology and Exploration Potential, private report for Starfield Resources Inc., (February 2010).

Kivalliq Inuit Association (KIA) (2013): Site Inspection Report 2013 Lands Department Starfield Resources – Ferguson Lake, inspection report by KIA, (September 9, 2013).

Kraft, Tom (2001): Prospecting, Geological Mapping and Geophysical Report, Ferguson Lake Copper-Nickel-PGE Property. Kivalliq Region, Nunavut Territory, dated November 2001, DIAND Assessment Report

Leggett, S.R., Barrett, K.R., and LaPorte, P.J. (1976): Geology, Ferguson Lake, 65I/15, DIAND Map E.G.S.1976-2





Lewry, J.F., Sibbald, T.I.I., and Schledewitz, D.C.P. (1985): Variation in Character of Archean Rocks in Western Churchill Province and its Significance, in Evolution of Archean Supracrustal Sequences, Geological Association of Canada Special Paper 28, pp. 239-262

Lo, Bob (2004): Geophysical Report on a VTEM Survey over the Ferguson Lake Project in Nunavut, Canada, private report for Starfield Resources Inc.

Lo, Bob (2006): Geophysical Report on a VTEM Survey over the Ferguson Lake 2005 Project, Nunavut, private report for Starfield Resources Inc.

Lupu C. and Verbaan, N. (2013): Processing Options of Ferguson Lake Chloride Leach Residue Samples, private report by SGS Mineral Services prepared for Canadian North Resources and Development Corporation. (December 2013).

Martel, E., and Sandeman, H.A. (2004): Geology and Deformation History Around the Ferguson Lake Ni-Cu-PGE Deposit, Yathkyed Greenstone Belt, Western Churchill Province, Nunavut, Geological Survey of Canada Open File 4623.

McGill, W.P. (1955): Ferguson Lake, Keewatin, DIAND Yellowknife Assessment Report 062075.

Miller, A.R. (2005a): Metamorphosed Compositional Layering in the Ferguson Lake Intrusive Complex, Northwestern Hearne Domain, Western Churchill Province, private report for Starfield Resources Inc., (November 14, 2005).

Miller, A.R. (2005b): A Review: Geology and Metallogeny of the Northwestern Hearne Sub-Domain, Western Churchill Province, Nunavut, private report for Starfield Resources Inc., (November 30, 2005).

Morton, N. and Grammatikopoulos, T. (2013): The Mineralogical Characteristics of a Secondary Ore Leach Residue, Ferguson Lake Deposit, Nunavut, private report by SGS Mineral Services prepared for Canadian North Resources and Development Corporation. (November 2013). *final report pending*.

Nicholson, J.A. (2007): Technical Review and Report on Revised Estimates of Mineral Resources, Ferguson Lake Nickel-Copper-Cobalt-PGE Property, Ferguson Lake Area, Kivalliq Region, Nunavut Territory, for Starfield Resources Inc., (July 15, 2007).

Naldrett, A.J. (1999): World Class Ni-Cu-PGE deposits - key factors in their genesis, Mineralium Deposita (1999) 34, p.227-240

Ralph, Kevin (2005): Geophysical Survey report covering Surface and Borehole Pulse EM Surveys over the Ferguson Lake Property, private report by Crone Geophysics for Starfield Resources Inc.

Rescan, (2013): Memorandum of Fuel Containment Area Water Sampling, private report by Rescan Environmental Services, (September 13, 2013).

Rescan, (2013): Ferguson lake Atmospherics and Water Quality, private field preliminary report by Rescan Environmental Services, (August 14, 2013).

Pezzot, E.T., Visser, S. and Davie, M. (2001): Geophysical Report – UTEM, Borehole UTEM, Ground Magnetic, Airborne Magnetic, GPS Surveys, Ferguson Lake Project, Keewatin Region, Nunavut, conducted by SJ Geophysics Ltd., private report for Starfield Resources Inc. (April, 2001).

SGS Minerals Services (2011a): An Investigations into Testing of Oxidation and Hydrolysis of Iron Chloride Salts, private report prepared for Starfield Resources Inc., Project 12323-001 (April 13, 2011). Starfield Resources Inc. – Ferguson Lake Project, Project # 1726







SGS Minerals Services (2011b): An Investigation into the Flotation Properties of a Composite from the Ferguson Lake Deposit, private report prepared for Starfield Resources Inc., Project 12323-002 (January 17, 2011).

SGS Minerals Services (2011c): An Investigation into the Primary Ore Leaching of Ferguson Lake Flotation Concentrate, private report prepared for Starfield Resources Inc., Project 12323-003 (May 13, 2011). Starfield Resources Inc. – Ferguson Lake Project, Project # 1726

SGS Mineral Services (2013): An investigation into processing options of Ferguson Lake chloride leach residue samples, private report prepared for Canadian North Resources and Development Corporation, Project 14241-001, December 5, 2013.

SGS Mineral Services (2016): An investigation into the selective flotation of copper, nickel, and PGMs on two massive sulphide composites from the Ferguson Lake project, private report prepared for Canadian North Resources and Development Corporation, Project 14214-001, December 9, 2016.

True Grit Consulting Ltd. (2008): Starfield Resources Inc. Remedial Action Plan Old Camp Site and Seasonal Airstrip, Ferguson Lake, Nunavut, private report prepared for Starfield Resources Inc. (February 2008).

Yang, K. (2018): Ferguson Lake Proposed Exploration Model, Internal Presentation made to Canadian North Resources and Development Corp.





20.0 STATEMENT OF AUTHORSHIP

This Report, titled "Independent Technical Report, Updated Mineral Resource Estimate, Ferguson Lake Project, Nunavut, Canada", and dated June 13, 2022 was prepared and signed by the following authors:

"Signed and sealed"

Elisabeth Ronacher, PhD, P.Geo. June 13, 2022 Sudbury, Ontario

"Signed and sealed"

Jamie Lavigne, P.Geo. June 13, 2022 Gananoque, Ontario





Appendix 1 – Certificates of Qualified Persons





CERTIFICATE OF QUALIFICATIONS

Elisabeth Ronacher
Ronacher McKenzie Geoscience
2140 Regent St., Unit 6
Sudbury, ON, P3E 5S8
Canada
Elisabeth.Ronacher@RMGeoscience.com
705-419-1508

I, Elisabeth Ronacher, do hereby certify that:

- 1. I am the Principal Geologist at Ronacher McKenzie Geoscience Inc.
- 2. I am responsible for all sections of the report titled "Independent Technical Report, Updated Mineral Resource Estimate, Ferguson Lake Project, Nunavut, Canada" with an effective date of June 13, 2022, and prepared for Canadian North Resources Inc. except Section 14-Mineral Resource Estimates; I am jointly responsible for Section 12.
- 3. I hold the following academic qualifications: M.Sc. Geology (1997), University of Vienna, Vienna, Austria; Ph.D. Geology (2002), University of Alberta, Edmonton, Canada.
- 4. I am a member in good standing of the Association of Professional Geologists of Ontario (APGO, member # 1476), Northwest Territories Association of Professional Engineers and Geoscientists (NAPEG, member #L4780) the Society of Economic Geologists (SEG) and the Society for Geology Applied to Mineral Deposits (SGA).
- 5. I have worked on exploration projects worldwide (including Canada, Mongolia, China, Austria) and on a variety of commodities including Au, Cu, base-metal, Cu-Ni PGE and U deposits since 1997.
- 6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 7. I visited the property on July 8 and 9, 2022.
- 8. I am independent of the issuer as described in section 1.5 of the National Instrument 43-101.
- I have had no prior involvement with the property that is subject of this report:
- 10. I have read the National Instrument 43-101 and this report has been prepared in compliance with this Instrument.
- 11. That, as of the date of this technical report, to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this 13th Day of June, 2022

"Signed and sealed"

Elisabeth Ronacher, Ph.D., P.Geo. Ronacher McKenzie Geoscience





CERTIFICATE OF QUALIFICATION

JAMIE LAVIGNE, P.Geo. 205 Golf Club Lane, Gananoque, ON, K7G 2V5 jglavigne51@gmail.com

I, Jamie Lavigne, M.Sc., P.Geo. certify that:

- 1. I am an Independent Consulting Geologist with offices at 205 Golf Club Lane, Gananoque, Ontario.
- 2. I am responsible for Section 14 and jointly responsible for Section 12 with my co-author of the report titled "Independent Technical Report, Updated Mineral Resource Estimate, Ferguson Lake Project, Nunavut, Canada" with an effective date of June 13, 2022, and prepared for Canadian North Resources Inc.
- Canada" with an effective date of June 13, 2022, and prepared for Canadian North Resources Inc.

 3. I am a graduate of Memorial University of Newfoundland, St. Johns, Newfoundland, Canada in 1987 with a B.Sc. Geology degree, and of the University of Ottawa, Ottawa, Ontario, Canada in 1991 with a M.Sc. in Geology.
- 4. I am a Licensee (P.Geo.) with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists, (#L1244).
- 5. I have practiced my profession in mineral exploration continuously since graduation a period of approximately 30 years. I have accumulated experience in the exploration for a number of deposit types and my experience in magmatic sulfides includes exploration in the Sudbury Basin, Ontario, exploration in the Raglan District, Quebec, and regional geological mapping and metallogeny studies in Western Newfoundland. I have completed mineral resource estimates for various deposit types and my experience in resource estimation for magmatic sulphide deposits includes the McCreedy West and Levack deposits in the Sudbury Basin and the Ferguson Lake deposit, Nunavut.
- 6. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purpose of NI 43-101.
- 7. I previously completed resource estimates for the Ferguson Lake deposit and was a co-author on NI43-101 Technical reports on Ferguson Lake in 2008 and 2012.
- 8. I am independent of the Issuer, Canadian North Resources Inc., as described in Section 1.5 of National Instrument 43-101.
- 9. I have read National Instrument 43-101 and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.
- 10. As of the date of the technical report, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this 13th Day of June, 2022
"Signed and sealed"
Jamie Lavigne, P.Geo.

