TETRA TECH

GeoSim Services Inc.

GREENLAND MINES

Greenland Mines Ltd.
S-K 1300 Technical Report Summary:
Sarfartoq Rare Earths Project, West Greenland

PREPARED FOR
GREENLAND MINES LTD.
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TABLE OF CONTENTS

LIST OF TABLES

GeoSim Services Inc.

LIST OF FIGURES

1.0 EXECUTIVE SUMMARY

1.1 Introduction

Tetra Tech Canada Inc. (Tetra Tech) and Geosim Services Inc. (Geosim) were retained by Greenland Mines Ltd (GRML) (the "Company" or the "Registrant") to prepare an independent, S-K 1300 compliant technical report summary (TRS) for the Sarfartoq Rare Earths Project (the "Project"). The purpose of this TRS is to inform the ST1 Mineral Resource presented in this technical report. The mineralized Sarfartoq Property (the "Property) includes a 191.29 km^2 mineral exploration license (MEL 2020-32) in southwest Greenland, hosted in a large Proterozozoic carbonatite complex covering approximately 90 km^2. Primary host minerals include Bastnasite, monazite, and pyrochlore bearing zones with key commodities: Nd, Pr, DY, Rb (magnet rare earth elements (REE)), plus La and Ce. Other resources in the license area include Nb, Ta, P and diamonds.

GMRL is a public company listed on the NASDAQ (NSADAQ: GRML). GMRL signed a definitive agreement on 20th of May 2026, to acquire Neo North Star Resources Inc. (NNSR), former owner of the Sarfartoq Project.

1.2 History

The Sarfartoq Carbonatite Complex (SCC) was discovered by GGU (Danish Geological Survey, now GEUS – Geological Survey of Denmark and Greenland) geologists after a field investigation following a regional airborne radiometric survey conducted in 1976. Most of the work on the ST-1 zone was carried out by Hudson Resources Ltd. ('Hudson') between 2009 and 2012. In 2023, Hudson transferred the Sarfartoq mineral exploration license MEL 2020-32 to NNSR. Metallurgical testing resumed, utilizing material left from the previous Hudson program. Exploration activities resumed in 2023 and continued in 2024. The full Project database now comprises 161 drill holes for 35,843 m, of which 94 holes (23,094 m) inform this ST1 Mineral Resource estimate.

1.3 Geology and Mineralization

The SCC is interpreted to straddle the boundary between the Archean craton and the Paleoproterozoic aged Nagssugtoqidian mobile belt. The host rocks are granite and granodiorite gneisses cut by a swarm of Paleoproterozoic diabase dikes called the Kangamiut dike swarm. Age determinations indicate an age of 565 Ma for emplacement of the SCC.

The SCC is sub-circular to oval in shape and has an influence up to 12 km from the core. It has a conical structure with a magnetic core (Figure 6-3) consisting of apatite and magnetite rich ferrocarbonatites. The core is surrounded by narrow close-lying concentric carbonatite sheets with interleaved screens of fenitized/altered country rock, and with a partial rim of sodic fenite. The dominant carbonatite type is ferrocarbonatite with rauhaugite (ankerite dominant) in the core and beforsite (ferrodolomite dominant) in the marginal dikes. Calciocarbonatite (sovite, calcite rich) only occurs as subordinate units in the core. The most common alteration encountered is light-grey and aegirine bearing fenite.

The Nd-Pr REE mineralized ST1 zone that is the in focus for this report is one of several mineralized targets on the outer-ring structure of the Sarfartoq Carbonatite Complex. ST1 represents the most studied and developed target with historical mineral resource estimates.

1.4 Metallurgical Testing

Metallurgical test work completed between 2011 and 2026 included mineralogical characterization, beneficiation, and hydrometallurgical studies on Sarfartoq rare earth mineralization. The results demonstrated significant variability in both mineralogy and metallurgical response among the tested composite samples. Rare earth mineralization occurs within a complex assemblage of carbonate and phosphate minerals, including monazite, bastnaesite, synchysite/parisite, ancylite, carbocernaite, and burbankite-group minerals.

Beneficiation studies identified flotation as the most effective method for upgrading rare earth mineralization. Ore sorting and magnetic separation showed limited potential, whereas flotation testing demonstrated that recoveries and concentrate grades were strongly influenced by mineralogy, grind size, reagent selection, pulp density, and pulp temperature. Under optimized conditions, the ST1 Composite achieved the best flotation performance, producing concentrates grading approximately 19-20% TREO at recoveries of approximately 57-58%.

Hydrometallurgical test work demonstrated that high rare earth recoveries can be achieved through thermal and acid treatment routes. Roasting followed by hydrochloric acid leaching achieved recoveries of up to approximately 96% Nd and 97% Dy, while acid baking followed by water leaching also produced high recoveries. Two-stage leaching with alkaline metathesis further increased recoveries to approximately 98-99% Nd and 92-98% Dy. Overall, the test work indicates that a process flowsheet incorporating flotation concentration followed by roasting or acid baking and leaching represents the most promising approach for the recovery of REE from the Sarfartoq Deposit.

1.5 Mineral Resource Estimate

This Sarfartoq ST-1 Zone mineral resource estimate is based on analytical data from 94 core holes representing 23,094 m of drilling carried out between 2009 and 2023.

Mineral resources are reported independently for three scenarios: an underground scenario, a surface open pit scenario and a hybrid open pit and underground scenario.

The REOs used for reporting purposes are Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, and Y_2O_3. The other REOs (La_2O_3 and Ce_2O_3) contained in the deposit were estimated but considered to have no significant value. Price assumptions are presented in Table 1-1.

Table 1-1 REO Price Assumptions

REE Oxide	Price US$/kg
Pr_6O_{11}	$145.00
Nd_2O_3	$150.00
Sm_2O_3	$10.00
Eu_2O_3	$30.00
Gd_2O_3	$225.00
Tb_4O_7	$3,500.00
Dy_2O_3	$750.00
Y_2O_3	$16.00

The NSR cost assumptions for both mining scenarios are presented in Table 1-2.

Table 1-2 Cost Assumptions – Underground and Open Pit Mining

Operating Cost Assumptions – Underground Mining Scenario		
Parameter	**Value**	**Unit**
Mining	$55.00	US$/t mined*
Processing	$69.72	US$/t processed
G&A	$16.50	US$/t processed
UG Breakeven Cut-off	$141.22	US$/t

Operating Cost Assumptions – Open Pit Mining Scenario		
Parameter	**Value**	**Unit**
Mining	$6.00	US$/t mined*
Processing	$69.72	US$/t processed
G&A	$16.50	US$/t processed
OP Breakeven Cut-off	$92.22	US$/t

**US$/t mined is mined tonnes without dilution*

The resulting cost assumptions were adopted for the development of reporting cut-offs and optimization studies for both the open pit and underground resource scenarios.

1.5.1 Underground Mining Scenario

Conceptual underground mine design was carried out using Deswik software. Stope design parameters are shown in Table 1-3.

Table 1-3 Stope Design Parameters

Parameters	Min	Max
Stope Height (m)	20	20
Stope Length (m)	10	10
Stope Width (m)	3	10
Sub-Stoping Factor	0.5	0.5
Dilution	0	0

Table 1-4 presents the mineral resource estimate for the ST1 zone assuming an underground mining scenario. Table 1-1 and Table 1-2 present the price and cost assumptions used to determine the base case NSR cut-off of $141.22/t.

Table 1-4 Underground Mineral Resource

Class	Ore Tonnes (000's)	TREO %	Magnet Basket									
			Full Basket									
			TREO %									
			Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Sm_2O_3 ppm	Y_2O_3 ppm	Ce_2O_3 ppm	La_2O_3 ppm
Indicated	7,475	1.56	944	3,009	13.0	31.8	66.9	160	298	63.7	7,784	3,268
Inferred	2,603	1.36	774	2,443	9.3	25.9	51.6	113	231	57.0	6,764	3,092
Total	10,078	1.51	900	2,863	12.1	30.3	62.9	148	281	62.0	7,520	3,222

Notes:
1. Mineral resource estimate prepared by Ronald G. Simpson of GeoSim Services Inc. with an effective date of July 31st, 2026.
2. Mineral Resources are estimated consistent with CIM Definition Standards and reported in accordance with S-K 1300.
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
4. Mineral resources are stated using the following assumptions: REO prices as listed in Table 1-1; assumed deductions of metallurgical recovery of 64%, payability of 60%, royalties of 5%, and insurance of 0.5%; underground mining costs of US$55 per tonne; processing costs of US$69.72 per tonne; G&A of US$16.50/t and using the full basket NSR optimization.
5. The base case NSR cut-off of $141.22/t is believed to provide a reasonable margin over operating for underground mining and processing
6. Totals may not sum due to rounding.

1.5.2 Open Pit Mining Scenario

Open pit optimization was carried out using Datamine's Studio NPVS software version 3.0. Parameters are presented in Table 1-5.

Table 1-5 Open Pit Optimization Parameters

Parameter	Value	Unit
Overall Slope Angle	45	degrees
Plant Recovery	64	%
Plant Feed Rate	700,000	tpa
Payability	60	%
Royalties on Revenue	5	%
Insurance on Revenue	0.5	%
NPV Discount Rate	8	%

Table 1-6 presents the mineral resource estimate for the ST1 zone assuming an open pit mining scenario. Table 1-1 and Table 1-2 list the price and cost assumptions used to determine the base case NSR cut-off of $92.22/t.

Table 1-6 Open Pit Mineral Resource

			Magnet Basket									
			Full Basket									
			TREO %									
Class	Ore Tonnes (000s)	TREO %	Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Sm_2O_3 ppm	Y_2O_3 ppm	Ce_2O_3 ppm	La_2O_3 ppm
Indicated	6,608	1.63	979	3,114	13.5	32.9	69.0	168	307	65	8,108	3,444
Inferred	6,015	0.88	516	1,648	6.9	18.9	36.3	82	164	44	4,304	1,893
Total	12,623	1.27	758	2,415	10.4	26.2	53.4	127	239	55	6,295	2,705

Notes:
1. Mineral resource estimate prepared by Ronald G. Simpson of GeoSim Services Inc. with an effective date of July 31st, 2026.
2. Mineral Resources are estimated consistent with CIM Definition Standards and reported in accordance with S-K 1300.
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
4. Mineral resources are constrained by an optimized pit shell using the following assumptions: REO prices as listed in Table 1-1; assumed deductions of metallurgical recovery of 64%, payability of 60%, royalties of 5%, and insurance of 0.5%, open pit mining costs of US$6 per tonne; processing costs of US$69.72 per tonne; G&A of US$16.5/t and using the full basket NSR optimization.
5. The base case NSR cut-off of $92.22/t is believed to provide a reasonable margin over operating costs for open pit mining and processing
6. Totals may not sum due to rounding.

1.5.3 Hybrid Mining Scenario

A conceptual hybrid scenario was run independently of the underground and open pit scenarios. Parameters are identical to the other two independent methods with the addition of an underground development cost to account for the transition between open pit and underground. An exclusion zone was also included to represent the non-recoverable ore that lies between the open pit and the underground resources. The hybrid parameters are presented in Table 1-7.

Table 1-7 Hybrid Optimization Parameters

Parameter	Value	Unit
Overall Open Pit Slope Angle	45	degrees
Plant Recovery	64	%
Plant Feed Rate	700,000	tpa
NPV Discount Rate	8	%
Underground Development Cost	1	US$/t mined
Exclusion Zone	20	m

Table 1-8 presents the mineral resource estimate for the ST1 zone assuming a hybrid, combined open pit and underground scenario. Table 1-1 and Table 1-2 list the price and cost assumptions used to determine the base case NSR cut-off of $92.22/t for the open pit component and $141.22/t for the underground component.

Table 1-8 Hybrid Mineral Resource

Class	Ore Tonnes (000s)	TREO %	Magnet Basket								
			Full Basket								
			TREO %								
			Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Sm_2O_3 ppm	Y_2O_3 ppm	Ce_2O_3 ppm	La_2O_3 ppm
Indicated	6,900	1.60	963	3,070	13.2	32.3	67.9	163	304	65	7,972	3,355
Inferred	5,341	0.96	572	1,850	7.4	20.4	39.7	89	181	47	4,761	2,053
Total	12,240	1.32	792	2,538	10.7	27.1	55.6	131	250	57	6,571	2,787

Notes:
1. Mineral resource estimate prepared by Ronald G. Simpson of GeoSim Services Inc. with an effective date of July 31st, 2026.
2. Mineral Resources are estimated consistent with CIM Definition Standards and reported in accordance with S-K 1300.
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
4. Mineral resources are constrained by an optimized pit shell using the following assumptions: REO prices as listed in Table 1-1; assumed deductions of metallurgical recovery of 64%, payability of 60%, royalties of 5%, and insurance of 0.5%; open pit mining costs of US$6 per tonne; processing costs of US$69.72 per tonne; G&A of US$16.5/t and using the full basket NSR optimization.
5. The base case NSR cut-off of $92.22/t is believed to provide a reasonable margin over operating costs for the open pit mining and processing component. The base case NSR cut-off of $141.22/t is believed to provide a reasonable margin over operating costs for underground mining and processing component.
6. Totals may not sum due to rounding.

Areas of uncertainty that may materially impact the Project's potential economic viability or continued viability include:

- Commodity price assumptions
- Assumptions that all required permits will be forthcoming
- Metallurgical recoveries
- Mining and process cost assumptions
- Ability to meet and maintain permitting and environmental license conditions and the ability to maintain the social license to operate.

There are no other known material factors or issues that materially affect the Project other than normal risks faced by mining projects in Greenland in terms of environmental, permitting, taxation, socio economic, marketing, and political factors. The author is not aware of any known legal or title issues that would materially affect the Project's potential economic viability.

1.6 Interpretation and Conclusions

Geosim has prepared a Mineral Resource Estimate update for the ST-1 Zone of the Sarfartoq Rare Earths Project. The following observations and conclusions were drawn:

- The ST1 Zone is associated with coarse grained ferrocarbonatite bodies composed mostly of ankerite, ferrodolomite, siderite, K feldspar, barite and pyrite. The REE are associated with hematite and ankeritic-calcitic masses containing complex aggregates of fine-grained barite, apatite, strontianite, and REE minerals including bastnäsite, synchysite, and monazite identified with various microanalytical techniques.

- The adequacy of sample preparation, security and analytical procedures are sufficiently reliable to support an indicated and inferred mineral resource estimation, and that sample preparation, analysis, and security are generally performed in accordance with exploration best practices.
- The ST-1 resource estimate is based on analytical data from 94 core holes representing 23,094 m of drilling carried out between 2009 and 2023.
- Statistical analysis of REO grade distribution indicates that cutting or capping of high grades is not warranted.
- The SCC is mineralized across the entire extent of the complex and large areas remain to be drill tested. It is possible that there will be additional bodies discovered similar to the ST1 Zone found as exploration activities continue.

1.7 Recommendations

Based on the exploration work conducted in 2023 and on the conclusions presented above, the main recommendations are as follows:

- Conduct a mineralogy study to create a three-dimensional mineralogical variation model across the ST1 resource to direct continued metallurgical test work and provide a framework for the mineralogical characterization of ST1 resource expansions and of other targets.
- Continue bench scale metallurgical studies on the ST1 resource with a focus on increasing the grade and recovery of REE mineral concentrates and adapting to mineralogical variations of the system.
- Continued drilling at ST1 to expand the resource and delineate higher REE grades and more favorable REE distributions.
- Continued drilling between the ST1 and ST40 Zones to delineate higher grade REE mineralization there, either as a satellite resource or an extension of the ST1 resource.
- Complete additional exploration drilling on other REE targets around the 32 km outer ring structure of the SCC.
- Current underground mining cost parameter is conceptual and requires refinement based on an underground mining method preferred for this orebody and site conditions. It is recommended to conduct an underground mining method evaluation to refine the underground mining costs and revise both the underground mining scenario and the hybrid mining scenario.
- Conduct a revised technical assessment, including updated resource estimates, metallurgical test work, cost estimates, forecasted REE prices, geotechnical stability analysis, hydrogeology, water management and a comparative assessment of open pit, underground, and combined mining development scenarios to identify the preferred development option.
- Begin Prefeasibility Studies as soon as possible.
- Continue Environmental Impact Assessment studies necessary to apply for an exploitation license.
- Continue Social Impact Assessment studies necessary to apply for an exploitation license.
- Begin Archeological Studies in conjunction with local experts.

2.0 INTRODUCTION

2.1 Background

Tetra Tech Canada Inc. (Tetra Tech) and Geosim Services Inc. (Geosim) were retained by Greenland Mines Ltd (GRML) (the "Company" or the "Registrant") to prepare an independent, S-K 1300 compliant technical report summary (TRS) for the Sarfartoq Rare Earths Project (the "Project"). The purpose of this TRS is to inform the ST1 Mineral Resource presented in this technical report. The mineralized Sarfartoq Property (the "Property) includes a 191.29 km^2 mineral exploration license (MEL 2020-32) in southwest Greenland, hosted in a large Proterozozoic carbonatite complex covering approximately 90 km^2. Primary host minerals include Bastnasite, monazite, and pyrochlore bearing zones with key commodities: Nd, Pr, DY, Rb (magnet rare earth elements (REE)), plus La and Ce. Other resources in the license area include Nb, Ta, P and diamonds.

GRML is a public company listed on the NASDAQ (NSADAQ: GRML). GRML signed a definitive agreement on May 20, 2026, to acquire Neo North Star Resources Inc. (NNSR), former owner of the Sarfartoq Rare Earths Project. Closing of the acquisition is subject to customary closing conditions, including approval from the Government of Greenland under Section 69 of the Greenland Mineral Activities Act for the indirect transfer of the mineral rights licenses, as well as certain other regulatory and third-party consents.

This TRS includes an updated mineral resource estimate (MRE) and includes the results of exploration drilling on the Property that was completed in 2023. It updates previous technical reports published for the Project including Tetra Tech 2011 "Preliminary Economic Assessment on the Sarfartoq Rare Earths Element Project, Greenland" and Druecker and Simpson 2012 "Technical Report on the Sarfartoq Project, West Greenland".

2.2 Terms of Reference

Units of measurement used in this report conform to the SI (metric) system. Any currency in this report is United States dollars (US$) unless otherwise noted. All coordinates presented in this TRS are Universal Transverse Mercator (UTM) projection, unless otherwise specified. The reference grid used throughout the exploration program is WGS84 UTM 22N, unless otherwise specified. Definitions for acronyms and abbreviations are provided in Table 2.1.

Table 2-1 Acronyms and Abbreviations

Acronyms/ Abbreviations	Definition	Acronyms/ Abbreviations	Definition
°	Degree	Mn	Manganese
°C	Degrees Celsius	MRA	Mineral Resources Authority
ACME	ACME Analytical Laboratories	MRE	Mineral Resource Estimate
Actlabs	Activation Laboratories Ltd.	Mt	Million tonnes
ALS	ALS Laboratories / ALS Chemex	Nb	Niobium
Ank	Ankerite	Nd	Neodymium
As	Arsenic	NI 43-101	National Instrument 43-101
Ba	Barium	NMR	New Millennium Resources NL
CA$	Dollar (Canadian)	NNSR	Neo North Star Resources Inc.

Acronyms/ Abbreviations	Definition	Acronyms/ Abbreviations	Definition
Carb	Carbonate	NPV	Net Present Value
Ce	Cerium	NSR	Net Smelter Return
CF Minerals	CF Mineral Research Ltd.	OK	Ordinary Kriging
CIM	Canadian Institute of Mining, Metallurgy and Petroleum	P	Phosphorous
cm	Centimeter	PEA	Preliminary Economic Assessment
COG	Cut-off Grade	ppb	Parts per billion
CPI	Consumer Price Index	ppm	Parts per million
CRM	Certified Reference Material	Pr	Praseodymium
Cu	Copper	pXRF	Portable X-Ray Fluorescence
DEM	Digital Elevation Model	Py	Pyrite
DKK	Danish Krone	QA/QC	Quality Assurance / Quality Control
DMS	Dense Media Separation	QP	Qualified Person
Dol	Dolomite	RECO3F	REE-Fluorocarbonate
Dy	Dysprosium	REE	Rare Earth Element
EAMRA	Environmental Agency for Mineral Resource Activities	REM	Rare Earth Minerals
EIA	Environmental Impact Assessment	REO	Rare Earth Element Oxides
EPMA	Electron Probe Micro-Analyzer Analysis	RL	Reflected Light
Er	Erbium	RPEEE	Reasonable Prospects for Eventual Economic Extraction
Eu	Europium	Sb	Antimony
Fe	Iron	SCC	Sarfartoq Carbonatite Complex
FeOx	Iron Oxides	SEM-EDS	Scanning Electron Microscopy with Energy Dispersive Spectroscopy
g	Gram	SG	Specific Gravity
g/t	Grams per tonne	SGS	SGS (Laboratory Services Company)
Gd	Gadolinium	SIA	Social Impact Assessment
GEUS	Geological Survey of Denmark and Greenland	S-K 1300	SEC Regulation S-K 1300 Mining Disclosure Standard
GGU	Geological Survey of Greenland (former Danish Geological Survey)	Sm	Samarium
GPS	Global Positioning System	Sn	Tin
GRML	Greenland Mines Ltd.	Sr	Strontium
ha	Hectare (10,000 m^2)	SRC	Saskatchewan Research Council
HASL	Height Above Sea Level	Ta	Tantalum

Acronyms/ Abbreviations	Definition	Acronyms/ Abbreviations	Definition
Hem	Hematite	Tb	Terbium
Ho	Holmium	Th	Thorium
HREE	Heavy Rare Earth Elements (Tb to Lu plus Y)	TLP	Plane Polarized Light
IBA	Impact Benefit Agreement	TLX	Crossed Polarized Light
ICP-MS	Inductively Coupled Plasma Mass Spectrometry	Tm	Thulium
ICP-OES	Inductively Coupled Plasma Optical Emission Spectrometry	ToR	Terms of Reference
ID2	Inverse Distance Squared	tpa	Tonnes per annum
JORC	Joint Ore Reserves Committee	TREO	Total Rare Earth Elements calculated as Oxides*
k	Kilo (thousand)	TRS	Technical Report Summary
Kfs	Potassium Feldspar	U	Uranium
kg	Kilogram	US$	Dollar (American)
km	Kilometer	UTM	Universal Transverse Mercator
km^2	Square kilometer	W	Tungsten
LREE	Light Rare Earth Elements (La to Gd)	WGS84	World Geodetic System 1984
Lu	Lutetium	XRD	X-Ray Diffraction
m	Meter	Y	Yttrium
M	Million	Yb	Ytterbium
MEL	Mineral Exploration Licence	Zn	Zinc
MLSA	Mineral Licence and Safety Authority	Zr	Zirconium
mm	Millimeter		

* The elements include atomic numbers 57 (lanthanum) to 71 (lutetium), plus 39 (yttrium). The REE are generally trivalent in nature and reported as REE2O3, though tetravalent Ce commonly occurs in cerianite and divalent Eu commonly substitutes for Ca in plagioclase. Results for Ce, Pr, and Tb are commonly reported as Ce_2O_3, Pr_6O_{11}, and Tb_4O_7. The conversion from element to oxide for the individual elements is included below.

Table 2-2 Rare Earth Oxide and Specialty Metal Conversion Factors

Element	Multiplier	Oxide Equivalent	Element	Multiplier	Oxide Equivalent
La	1.173	La_2O_3	Tb	1.176	Tb_4O_7
Ce	1.171	Ce_2O_3	Dy	1.148	Dy_2O_3
Ce	1.228	CeO_2	Ho	1.146	Ho_2O_3
Pr	1.170	Pr_2O_3	Er	1.143	Er_2O_3
Pr	1.208	Pr_6O_{11}	Tm	1.142	Tm_2O_3
Nd	1.166	Nd_2O_3	Yb	1.139	Yb_2O_3
Sm	1.16	Sm_2O_3	Lu	1.137	Lu_2O_3
Eu	1.158	Eu_2O_3	Y	1.270	Y_2O_3
Eu	1.105	EuO	Nb	1.431	Nb_2O_5
Gd	1.153	Gd_2O_3	Ta	1.221	Ta_2O_5
Tb	1.151	Tb_2O_3			

2.3 Sources of Information and Data

The authors have prepared this report and the information, conclusions, and opinions contained herein are based on:

- Information available to the authors at the time of preparation of this report
- Assumptions, conditions and qualifications as set forth in this report
- Data, reports and other information supplied by GRML
- Information collected during site visits

This report was prepared using published information, unpublished company reports, and data generated by Company consultants. References are included in the context of the report and a list of such references is included in Section 23. Literature sources were consulted and where used, are cited accordingly as references.

The authors have not verified the legal details of the property, title, sale and ownership agreements; instead, they have relied on information provided by GRML.

2.4 Qualified Persons and Details of Personal Inspection

Ronald G. Simpson, P.Geo (Geosim Services Inc.) is an independent Qualified Person (QP) retained by GRML and is responsible for the preparation and review of all technical content of this report, with the exception of Section 10.0 which was prepared by QP Hassan Ghaffari, P.Eng., M.A.Sc. (Tetra Tech Canada Inc.). A summary of firms contributing to the content of each section is provided in Table 2-1.

Mr. Simpon was involved in establishing the resource estimates for Tetra Tech 2011, Druecker 2012, as well as the 2023-24 drilling campaign which was led by Jason M. Felsman (Felsman) of Felsman Geologic Services LLC (FGS). Published and internal reports from these periods were reviewed by Mr. Simpson and form the basis for this 2026 MRE update. Mr. Simpson visited the Property from September 7-9, 2010.

Table 2-3 Summary of Technical Contributors

Report Section	Contributing Company
1.0 Executive Summary	GeoSim Services/Tetra Tech
2.0 Introduction	GeoSim Services
3.0 Property Description	GeoSim Services
4.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography	GeoSim Services
5.0 History	GeoSim Services
6.0 Geological Setting, Mineralization, and Deposit	GeoSim Services
7.0 Exploration	GeoSim Services
8.0 Sample Preparation, Analyses, and Security	GeoSim Services
9.0 Data Verification	GeoSim Services
10.0 Mineral Processing and Metallurgical Testing	Tetra Tech
11.0 Mineral Resource Estimates	GeoSim Services/Tetra Tech
12.0 Mineral Reserve Estimates	N/A
13.0 Mining Methods	N/A
14.0 Process and Recovery Methods	N/A
15.0 Infrastructure	N/A
16.0 Market Studies	N/A
17.0 Environmental Studies, Permitting, and Plans, Negotiations, or Agreements with Local Individuals or Groups	Greenland Mines Ltd
18.0 Capital and Operating Costs	N/A
19.0 Economic Analysis	N/A
20.0 Adjacent Properties	Greenland Mines Ltd
21.0 Other Relevant Data and Information	Greenland Mines Ltd
22.0 Interpretation and Conclusions	GeoSim Services
23.0 Recommendations	GeoSim Services/Tetra Tech
24.0 References	Greenland Mines Ltd /GeoSim Services / Tetra Tech
25.0 Reliance on Information Provided by the Registrant	Greenland Mines Ltd /GeoSim Services

3.0 PROPERTY DESCRIPTION

3.1 Project Location

The Sarfartoq Project lies in the Qeqqata municipality of southern West Greenland within the Sarfartoq Carbonatite Complex. The Project is located approximately 60 kilometers southwest of the Kangerlussuaq airport (Figure 3-1), one of Greenland's three international airports, and 140 km northeast of the village of Maniitsoq, and 110 km southeast of the town of Sisimiut.

The Sarfartoq Project mineral exploration license (MEL 2020-32) is centered on the 130 km^2 Sarfartoq Carbonatite Complex, which is located at approximately 66.52° N and 51.35°W UTM Zone 22 ((WGS 84) latitude 66°30'N (the Arctic Circle) and longitude 51°15'W).

The Nd-Pr REE mineralized ST1 zone that is the in focus for this report is one of several mineralized targets - e.g. with ST19, ST24, ST31 and ST40 - on the outer-ring structure of the Sarfartoq Carbonatite Complex. ST1 represents the most studied and developed target with historical mineral resource estimates.

Access to the Project is possible by boat to the Angujaartorfik Inlet (Robinson Bay) on Kangerlussuaq (Søndre Strømfjord), or by a 20-minute helicopter flight from Kangerlussuaq airport. Søndre Strømfjord is a large deep-water sheltered fjord and is navigable by large vessels from the coast up to its terminus at the Kangerlussuaq airport. The coast is usually ice-free for most of the year.

3.2 Mineral Rights

In Greenland, a mineral exploration license (MEL) covers exploration for all mineral resources except hydrocarbons and radioactive elements, unless otherwise indicated in the license. Under the Greenland Mineral Resources Act an exploration license is exclusive, is granted for an initial five-year period (renewable in further periods), and carries minimum annual exploration-expenditure and area-based fee obligations; it confers the exclusive right to explore but not the right to mine, which requires a separate exploitation license. The Terms of Reference required to convert the exploration license to an exploitation license have not yet been prepared, and the tenure remains at exploration-license stage.

Hudson Resources Ltd. ('Hudson') was granted the Sarfartoq MEL 2020-32 1st of March 2020. On the 9th of May 2023, the license MEL 2020-32 was transferred from Hudson Resources Inc. to the Greenland registered company Qaasuitsup Ulloriaa (the Greenland branch of Neo North Star Resources Inc. ('NSSR')). A license expansion to include a proposed access route and harbor was approved on 13th of June 2024, increasing the area covered to 191.29 km^2.

The license is active, with an expiry date of 30th December 2026. This is the only license held by NNSR and covers the known extent of the SCC, except for the Arnangarnup Qoorura (also known as 'Paradis Valley') protected area. A detailed tenure history covering Hudson's various licenses can be found in Druecker & Simpson (2012).

On 20th of May 2026, GRML entered into a definitive agreement with Neo North Star Holdings Inc. (a wholly owned subsidiary of Neo Performance Materials Inc. (TSX: NEO)) and the other stockholders of NNSR to acquire 100% of NNSR - and, indirectly through NNSR, its Greenland branch-company named Qaasuitsup Ulloriaa which is the registered holder of MEL 2020-32 covering the Sarfartoq Project. The memorandum of understanding under which the parties hold the right to negotiate a definitive offtake agreement for up to 60% of the concentrate produced from the Project is unaffected by the transaction and remains in place.

Figure 3-1 Location of Sarfartoq Rare Earths Project, Greenland

Closing of the acquisition is subject to customary closing conditions, including approval from the Government of Greenland (in Greenlandic "Naalakkersuisut"), under Section 69 of the Greenland Mineral Resources Act (Inatsisartut Act No. 7 of 7 December 2009, as amended), for the indirect transfer of the mineral rights license, together with other regulatory and third-party consents.

The formal application for transfer of MEL 2020-32 has been submitted 29th of May 2026 by GRML to the Government of Greenland and the transfer process has been initiated. The Government of Greenland previously approved an equivalent Section 69 transfer of MEL 2020-32 from Hudson Resources Inc. to Qaasuitsup Ulloriaa (NNSR) on the 9th of May 2023, providing a direct and recent precedent for the transfer now under consideration.

This TRS is issued on the basis that Government of Greenland approval of the transfer will have been received on or before the effective date of the report, at which point GRML, through its at that time wholly owned subsidiary Qaasuitsup Ulloriaa, will hold 100% of the mineral rights to the Project under MEL 2020-32. The QP has relied on the Registrant for the status of the transfer application for the Project (see Section 22.0).

3.2.1 Mineral Claims, Licenses, and Leases

The Sarfartoq Rare Earths Project is held under mineral exploration license MEL 2020-32. Table 3-1 and Table 3-2 summarize the MEL and the coordinates for the area covered by the MEL. The extent of MEL 2020-32 is shown in Figure 3-2.

Table 3-1 Mineral Tenure Summary

Mineral Tenure Summary	
Item	**Detail**
License	Mineral exploration license MEL 2020-32 (application M-MLSA-254)
License type	Exploration (exclusive) - not an exploitation/mining license
Registered holder	Qaatsuitsup Ulloriaa (Greenland branch of Neo North Star Resources, Inc.)
Area	191.29 km² (following the 13 June 2024 expansion to include a proposed access route and harbour)
Grant / Transfer / Expiry	▪ MEL 2020-32 granted 1 March 2020. License expansion to include a proposed access route and harbor was approved on 13th of June 2024. Transfer of MEL 2020-32 from Hudson Resources → Qaatsuitsup Ulloriaa (the Greenland branch of Neo North Star Resources Inc.) granted 3 May 2023. MEL expiry 30 December 2026 (can be extended). ▪ Transfer application for MEL 2020-32 in connection with Greenland Mines Ltd.'s acquisition of Neo North Star Resources Inc. submitted to the Government of Greenland on 29 May 2026; approval was pending as of the effective date of this Technical Report Summary and is expected shortly thereafter.
Assets listed	Rare earth elements, niobium, tantalum, cadmium
Governing law	Greenland Mineral Resources Act (Act No. 7 of 7 December 2009, as amended)
Protected area	Excludes (not part of the 191.29km²) the Arnangarnup Qoorua protected area (≈96 km²), which covers part of the complex including the carbonatite core

Source: Mineral License and Safety Authority Greenland, Online Applications Portal (accessed 2026/07/23)

Table 3-2 Coordinates for MEL 2020-32

Mineral Exploration License 2020-32 Coordinates			
Beacon	Long/Lat	Beacon	Long/Lat
A1	N 66, 34, 0 W 51, 19, 0	B1	N 66, 34, 0 W 51, 19, 0
A2	N 66, 34, 0 W 51, 9, 0	B2	N 66, 36, 0 W 51, 19, 0
A3	N 66, 33, 0 W 51, 9, 0	B3	N 66, 36, 0 W 51, 22, 0
A4	N 66, 33, 0 W 51, 7, 0	B4	N 66, 40, 0 W 51, 22, 0
A5	N 66, 32, 0 W 51, 7, 0	B5	N 66, 40, 0 W 51, 24, 0
A6	N 66, 30, 0 W 51, 7, 0	B6	N 66, 41, 30 W 51, 24, 0
A7	N 66, 30, 0 W 51, 8, 0	B7	N 66, 41, 30 W 51, 34, 0
A8	N 66, 29, 0 W 51, 8, 0	B8	N 66, 42, 45 W 51, 34, 0
A9	N 66, 29, 0 W 51, 9, 0	B9	N 66, 42, 45 W 51, 24, 0
A10	N 66, 28, 0 W 51, 9, 0	B10	N 66, 42, 0 W 51, 24, 0
A11	N 66, 28, 0 W 51, 11, 0	B11	N 66, 42, 0 W 51, 18, 0
A12	N 66, 26, 0 W 51, 11, 0	B12	N 66, 38, 30 W 51, 18, 0
A13	N 66, 26, 0 W 51, 20, 0	B13	N 66, 38, 30 W 51, 15, 0
A14	N 66, 27, 0 W 51, 20, 0	B14	N 66, 37, 0 W 51, 15, 0
A15	N 66, 32, 0 W 51, 7, 0	B15	N 66, 37, 0 W 51, 9, 0
A16	N 66, 31, 0 W 51, 22, 0	B16	N 66, 34, 0 W 51, 9, 0
A17	N 66, 33, 0 W 51, 22, 0		
A18	N 66, 33, 0 W 51, 19, 0		

Note: A1 to A18 is the Southern Part of the MEL that was Granted 1st of March 2020, B1 to B16 is the Northern Expansion of the MEL 2020-32 that was Granted 13th of June, 2024.
Source: Mineral License and Safety Authority Greenland, Online Applications Portal (accessed 2026/07/23)

3.2.2 Surface Rights and Leases

In accordance with the Greenland law, there is no ownership of surface rights. GRML has the right to explore under MEL 2020-32 with the option of a rollover into exploitation.

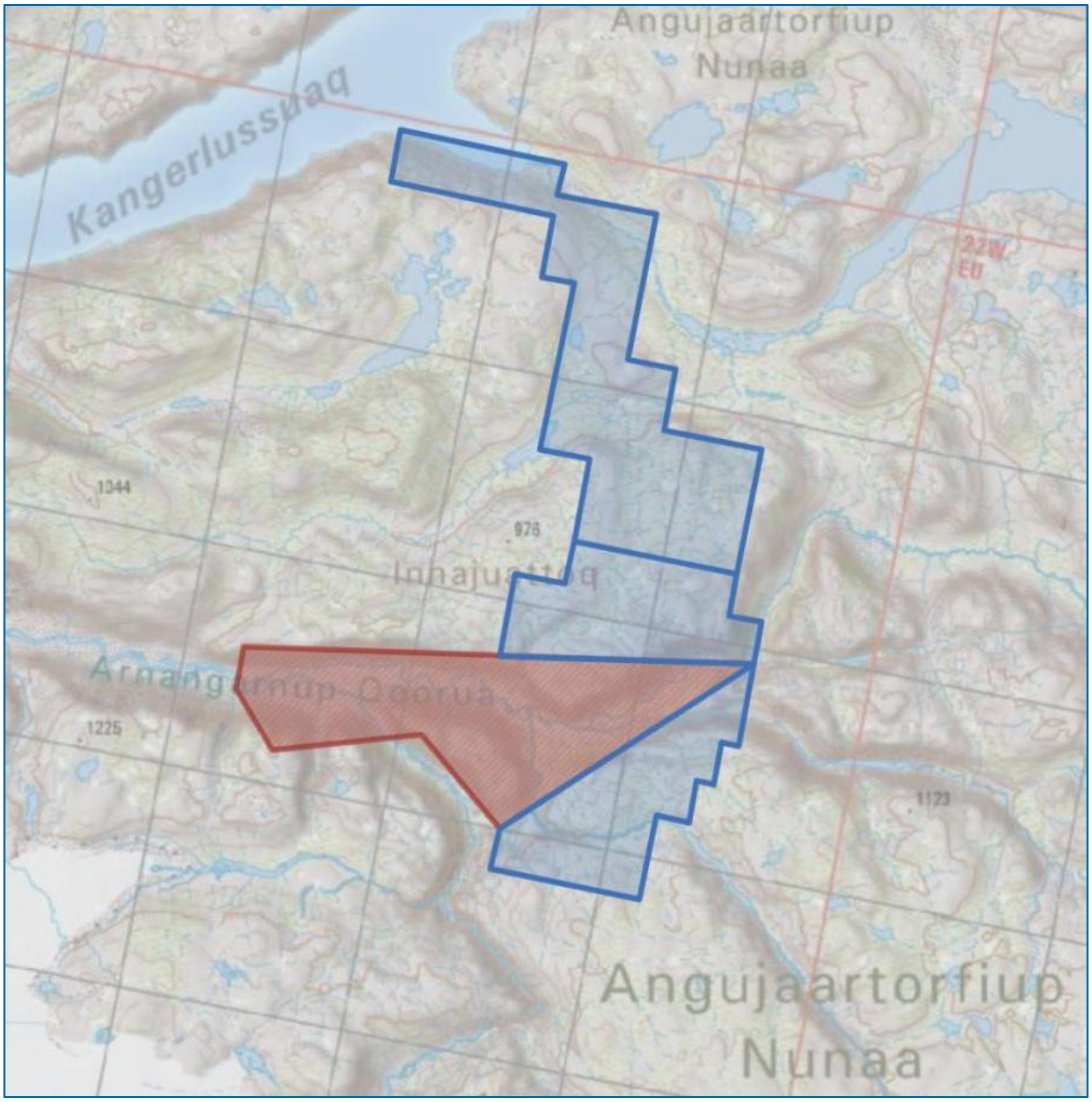


Figure 3-2 MEL 2020-32 in blue and the Arnangarnup Qoorua protected area in red

Source: Mineral License and Safety Authority Greenland, Online Applications Portal (accessed 2026/07/23).

3.3 Property Encumbrances

The Project is at the exploration-license stage. Under the Standard Terms, geological and geochemical work, handheld-equipment sampling (within specified weight limits) and non-explosive geophysical surveys may be carried out without specific approval, whereas core drilling, use of explosives or radioactive sources, use of vehicles and any terrain works require pre-approval from the authorities.

The Arnangarnup Qoorua protected area (≈96 km²), which covers part of the complex including the carbonatite core, carries additional access restrictions (for example minimum aircraft altitudes and prohibitions on ground traffic, fires and collection of vegetation or antiquities), and the carbonatite core is presently not accessible for field work.

An exploitation license has not been applied for; environmental baseline work is ongoing, with a further year of baseline studies intended ahead of submission. No material environmental liabilities from prior activity are known.

In Greenland, a first mineral exploration license period is between 1 and 5 years. At expiration the licensee is entitled to be granted a new 5-year license for the same area and mineral resources, provided the Mineral Resources Authority has received an application for this no later than December 31, in year 5. The new license period will count as years 6 through 10. At expiration of the second license period, the licensee may be granted new 3-year licenses for the same area and mineral resources.

There is a fixed fee to be paid at the granting of the license at each period (DKK 25,000 adj to 38,600). During years 6-10 there is an annual fee per license (DKK 25,000) which is indexed to the Danish CPI.

The licensee is obligated to spend exploration expenses per calendar year (adjusted for inflation) as follows:

- Years 1-2: DKK 100,000 (adj to 177,000)
- Years 3-5: DKK 200,000 (adj to 353,000)
- Years 6-10: DKK 400,000

An amount per km^2 per calendar year as follows:

- Years 1-2: DKK 1,000 (adj to 1,770) per km^2
- Years 3-5: DKK 5,000 (adj to 8,840) per km^2
- Years 6-10: DKK 10,000 per km^2

The license Period, fees and obligations are available on the Mineral Resources Authority website: govmin.gl

Mineral activities are governed by the Mineral Resources Act (Act No. 7 of 7 December 2009, in force 1 January 2010, as amended). All minerals belong to the Government of Greenland (Naalakkersuisut), which grants licenses; there is no private land, and there is no ownership of surface rights. The Mineral License and Safety Authority (MLSA) administers licensing and safety, and the Environmental Agency for Mineral Resource Activities (EAMRA) administers environmental matters. Exploration is conducted under the Standard Terms for Exploration Licenses for Minerals (Excluding Hydrocarbons).

The right to mine requires an exploitation license, typically granted for 30 years, containing terms for royalty, the exploitation and closure plans, reporting, and an Impact Benefit Agreement between the company, the municipality and the Government. The path requires an Environmental Impact Assessment (EIA) and a Social Impact Assessment (SIA), each preceded by baseline studies (commonly two, can be extended to three years) and public consultation: Terms of Reference are published for public hearing; a draft EIA/SIA is published for consultation; the licensee addresses comments in a White Paper; and, following approval, a Mine Plan, Closure Plan and financial security are required before mining may commence. Recent exploitation-license grants (Greenland Resources molybdenum, June 2025; Amaroq/Greenland Graphite, December 2025) indicate a functioning current permitting process.

Greenland's Uranium Act (Inatsisartut Act No. 20 of 1 December 2021) prohibits the exploitation of uranium and of any mineral resource containing more than 100 ppm uranium and authorises the Government to introduce similar restrictions on other radioactive elements. The available Sarfartoq composite head assays indicate uranium of the order of 5 ppm - well below the 100 ppm threshold - which is favourable for permitting. Thorium is, however, present as naturally occurring radioactive material, and the Government retains standing authority to extend radioactive-element restrictions. The sub-threshold uranium status should be confirmed across the Mineral Resource, not only the test composites.

3.4 Royalties or Similar Interests

The principal commercial agreement affecting the property is an offtake arrangement: under a memorandum of understanding between Neo and NNSR, Neo holds the right to negotiate a definitive offtake agreement for up to 60% of the concentrate produced; this is reflected in the marketing and payability assumptions and is unaffected by the GRML acquisition. No other royalties, back-in rights, production streams or material encumbrances are known.

Mineral production in Greenland is subject to a royalty payable to the Government of Greenland. Under section 1408.d of, and Appendix 2 to addendum no. 3 of 1 July 2014 to, the Standard Terms for Exploration Licences for Minerals (Excluding Hydrocarbons) in Greenland, a licensee exploiting rare earth elements pays a sales royalty of 5% of the value of the minerals sold, against which corporate income tax and corporate dividend withholding tax actually paid may be offset.

The royalty rate is 5% for uranium, 2.5% for minerals other than rare earth elements, uranium and gemstones, and 5.5% for gemstones. A surplus royalty of 15% on profit above a 40% margin applies to gemstones only and does not apply to rare earth elements.

A royalty of 5% has been applied as a deduction in the net smelter return calculations used to constrain the Mineral Resource estimate reported herein.

The property is currently held under an exploration licence. The royalty and other fiscal terms applicable to production will be determined in the exploitation licence granted under the Mineral Resources Act and are not yet contractually fixed.

Taxation of income arising from the Project is addressed in the economic analysis prepared separately for the Project and is not a determinant of the Mineral Resource estimate reported herein.

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

4.1 Topography and Elevation

The topography of the area is rugged with elevation ranging from 1,200 m at the Garnet Lake site, just east of the local icecap Kangaamiut Sermiat (formerly known as Sukkertoppen Iskappe) which is located 25 km south-west of Sarfartoq, to sea level in the Sarfartoq Valley and Søndre Strømfjord. The current base of operations for the Project is known as Sarfartoq Camp (formerly known as 'Neo Camp'), which is located at about 730 m elevation with ready access northwards to the fjord.

The license area is characterized by steeply incised streams and creeks and broad glacial valleys with higher plateau areas above. Intermittent streams are numerous. The area underlain by the core of the Sarfartoq Carbonatite Complex is less rugged and may be more vegetated due to the presence of phosphates present in the carbonatite.

The area is host to subarctic vegetation, with till-covered areas blanketed by grasses and ground shrubs (Labrador tea, dwarf willow and birch) and flowering plants. Wildlife is plentiful, and includes caribou (reindeer), muskox, arctic hare, arctic fox, ptarmigan and other land and sea birds. The greatest concentrations of wildlife occur in the Sarfartoq Valley, outside of the exploration license boundaries.

4.2 Accessibility

The property is allocated approximately 60 km southwest of the Kangerlussuaq. Historically, Kangerlussuaq Airport, which has a long, all-weather paved runway built as the United States Sondrestrom Air Base and chosen for its stable weather, was Greenland's most important international transportation hub, offering regular flights from Copenhagen and numerous settlements in Greenland. Recently, international air service was transferred to the capital city of Nuuk, but the airport at Kangelussuaq remains in service. Several new, international routes to Nuuk are being added. However, Kangerlussuaq Airport remains to be services regular from Copenhagen and is also a major hub for the Danish Military and associated military surveillance, rescue services and flights.

The Arctic Basic Training (in Danish: Arktisk Basisuddannelse) under the Danish Military is based in Kangerlussuaq, Greenland, utilizing the military facilities adjacent to Kangerlussuaq Airport. The Arctic Basic Training is administered by the Danish Ministry of Defence through Arctic Command, but it was developed in close cooperation with the Government of Greenland. It is intended primarily for young people residing in Greenland and is designed to strengthen Greenland's emergency preparedness, resilience, and local recruitment into military and civilian emergency services. While the airport itself is not the training site, its infrastructure supports accommodation, logistics, and access to the surrounding Arctic terrain, where recruits receive military and emergency-response training under realistic Arctic conditions.

Helicopter is the preferred means of transportation for field activities; however, during the summer months (May to September), the property can be accessed by boat, from Søndre Strømfjord. Small boats can be rented in Kangerlussuaq; however, a larger craft and crew (if needed) must be chartered from larger centres, such as Nuuk. The fjord is typically ice free from March through November, but this varies from year to year.

There is no road network connecting the communities, although a road of about 170 km between Kangerlussuaq and Sisimiut has been discussed. The coastal town of Sisimiut, a port and the home of Greenland's mining school, lies about 130 km to the north-west, and Kangerlussuaq lies near the head of the Søndre Strømfjord, which provides deep-water sealift access from the coast.

Access to the Sarfartoq Project is possible by boat and larger vessels/barges to the Angujaartorfik Inlet (Robinson Bay) on the southern side of the central part of Kangerlussuaq fjord (Søndre Strømfjord). Søndre Strømfjord is a large deep-water sheltered fjord and is navigable by large vessels from the coast up to its terminus at the Kangerlussuaq airport. The coast is usually ice-free for most of the year.

When the terrain and fjord are covered with snow and ice, the Property is accessible via snowmobile. Driving in the terrain is not allowed without a permit.

There are no roads between Kangerlussuaq and other communities, but there have been discussions about building a 170 km long road to Sisimiut.

4.3 Climate

The climate is strongly continental subarctic, and Kangerlussuaq - the nearest settlement and the regional reference station - is one of the driest inhabited parts of Greenland. Temperature varies from -35° C to 20° C, with a mean annual temperature of approximately -5.4° C. Precipitation is sparse throughout the year (of the order of 170–290 mm per year). The area is usually ice and snow free from June through September. Winters are characterized by cold conditions (February mean ≈ −17 to −20° C, with cold spells below −35° C most years) and summers short but relatively mild, with July daytime maxima of about 14–16° C.

As the Property is located on the Arctic Circle there are certain limitations for various activities. Exploration techniques such as prospecting, heavy mineral sampling and geological studies are limited to the summer months (May to September) when the snow cover is mostly melted. Activities such as ground or airborne geophysics and drilling can be conducted over a much greater period during the year (March to October), being limited only by the practicalities of working in the low temperatures and light levels of the mid-winter (December – February) months. Radiometric surveys must be completed when the ground is completely snow and ice free, typically July to mid-September.

4.4 Local Resources and Infrastructure

Kangerlussuaq provides airport, fuel, accommodation and logistics services and is the natural staging point for the Project; diesel, Jet-A1 and gasoline are available there, while propane is typically shipped from Nuuk. Sisimiut, the second-largest town in Greenland and the seat of the Arctic mining school, is a source of trained mining and trades personnel and of port services. The operation is expected to be supported on a fly-in / fly-out basis through Kangerlussuaq, with local hiring and training obligations addressed through the Impact Benefit Agreement under any exploitation license

Power for operations in the field must be generated locally. Drilling and camp operations are generally powered by diesel generators, with supplemental use of small gasoline generators and solar panels. Transportation in the field is via helicopter, using Jet-A1 fuel. Diesel and gas powered vehicles may be used with the proper permits. Propane is used as heating and cooking fuel. Fuel stored in the field is transported via helicopter and/or barge in propane tanks, 200 liter drums, or 1,000 liter cubes. Diesel, Jet-A1, and gasoline are available in Kangerlussuaq, and propane is typically shipped from Nuuk.

A hybrid renewable (hydro-diesel) power configuration, taking advantage of the region's hydropower resources, is identified as a potential opportunity moving forward that could reduce operating cost and emissions. The

Kangerlussuaq region is recognized for its substantial hydropower potential, supported by abundant glacial meltwater and favorable topography. Several of Greenland's largest identified hydropower resources are located between Kangerlussuaq and Nuuk, making the region a strategic focus for future renewable energy. Several studies have been conducted on this. The Government of Greenland has initiated a competitive tender process for two major hydropower resources, Tasersiaq and Tarsartuup Tasersua, located between Kangerlussuaq and Nuuk.

Process and potable water are expected to be readily available from local lakes, rivers and glacial meltwater, subject to seasonal flow and freezing.

The Project already holds material field infrastructure for supporting exploration and development activities - an established camp for approximately 25–30 personnel and two diamond drill rigs in good condition with field-support facilities, which GRML intends to re-open in 2026. Concentrate export would route through a marine facility, either by sealift from the head of the Søndre Strømfjord near Kangerlussuaq or via a coastal port such as Sisimiut.

Table 4-1 Overview of Population Centres and Local Available Potential Workforce in the Sarfartoq/Kangerlussuaq Region

Population Centre	Population	Distance → Sarfartoq	Transport Connection	Workforce Potential and Relevant Skills
Kangerlussuaq (town)	~400–450	~60 km east	Kangerlussuaq International Airport; large boat/vessel access (deep harbour); local roads/tracks; helicopter/charter access	Nearest workforce base. Aviation, logistics, construction support, mechanics, tourism operators, accommodation, catering, field operations, Arctic survival skills. Limited population capacity for large projects.
Sisimiut (town)	~5,500	~150 km west	Domestic airport; large boat/vessel access harbour; regional transport hub	Most important nearby labour pool. Skilled trades, construction workers, electricians, mechanics, maritime workers, operators, administration, apprentices, vocational graduates. Regional hospital and education facilities support larger projects.
Maniitsoq (town)	~2,500	~200 km southwest	Heliport; harbour; coastal shipping	Additional workforce pool with maritime, fishing, construction, mechanical, and operational experience.
Nuuk (town)	~20,000	~300 km south	Nuuk International Airport; major harbour large boat/vessel access (deep harbour); national services	Largest Greenlandic professional workforce. Engineers, project managers, consultants, administration, government interfaces, contractors, technical specialists.

4.5 Seismicity

There is no significant seismic activity recorded in this region.

5.0 HISTORY

The Sarfartoq region has been the focus of several sustained exploration programs since the 1970s. Early-stage generative diamond exploration was conducted by subsidiaries of De Beers and Rio Tinto, in the early 1970s.

In the 1980s, work was conducted on the carbonatite looking for niobium and tantalum. Following the discovery of diamond deposits in the Canadian arctic, the 1990s saw sustained generative campaigns for diamond exploration at Sarfartoq.

5.1 Rare Earth and Specialty Metals Exploration

The Sarfartoq Carbonatite Complex (SCC) was discovered by GGU (Danish Geological Survey, now GEUS – Geological Survey of Denmark and Greenland) geologists after a field investigation following a regional airborne radiometric survey conducted in 1976 (Secher, 1976).

Between 1976 and 1981, mapping by Secher & Larsen (GGU) combined with airborne geomagnetic and ground magnetometer surveys provided a geologic map of the complex and detailed information in reference to the petrology, mineralogy and petrogenesis of the complex (Secher, 1986; Secher and Larsen, 1981). In 2009, A. Bedini concluded that a lithological map of the different carbonatite types and alterations can be obtained using a Hymap imaging spectrometer data. He also confirmed the ferrocarbonate nature of the core and the hematite alteration in what he refers to as the marginal zone that surrounds the SCC.

In 1976, Secher inferred a potential resource for large phosphorous, niobium, and REE deposits. He estimated that the phosphorous content was limited to the inner core of the complex, a magnetite-apatite bearing ferrocarbonatite. Niobium mineralization recognized as pyrochlore accumulations is present within the marginal zone of the core of the SCC and associated with uranium bearing faults and fractures. Sarfartoq No. 1 is the main locality of potential economic Nb mineralization.

In 1989, Hecla Mining Company undertook a diamond drilling program consisting of 13 holes totaling 567.51 m in the Sarfartoq No.1 niobium occurrence. Druecker (1989) calculated a non-compliant resource estimate of 25,000 to 30,000 tonnes at a cut-off grade of 10% Nb_2O_5; and he interpreted that the pyrochlore zone pinched out laterally at both ends of the shear zone. Hecla surrendered the license at the end of 1989. Texas Energy Corporation NL (TEC) and Foundation Resources were granted a license (MEL25/96) in 1996 and conducted geological and metallurgical investigations on the Sarfartoq No.1 Niobium occurrence in 1997.

In 1998, TEC and Foundation Resources signed an exclusive rights agreement with New Millenium Resources NL (NMR). NMR then drilled 15 NQ diamond drill holes totaling 707 m at Sarfartoq No. 1 and took channel samples over the deposit. Maynard (1999) provides an independent non-compliant resource estimate of 35,000 tonnes at 7.9% Nb (11.3% Nb_2O_5) using a cut-off grade of 5% Nb to a vertical depth of 45 m in the measured category. The resource estimate has an indicated non-compliant resource estimate of 186,000 tonnes at 3.2% Nb (4.6% Nb_2O_5). In 1999, NMR conducted a Landsat 7 interpretation of the complex.

In 2000, NMR contracted Tesla to fly a low-level high-resolution heli-aeromagnetic and radiometric survey over the entire Sarfartoq license. Southern Geoscience interpreted the results. The radiometric anomalies were followed up in the 2000 and 2001 field seasons. The license was transferred to NMR in 2000.

In 2001, Snowden Mining Industry Consultants prepared an independent technical audit of the Sarfartoq No. 1 Resource. They concluded that there was not enough information to permit a Measured Resource status under the JORC code. Maynard in 2001 revised the resource estimate as follows: 35,000 tonnes at a grade of 7.8% Nb, an

Indicated Resource of 100,000 tonnes at a grade of 3.2% Nb and up to 300,000 tonnes or more at a grade of 3.2% Nb within the existing strike length. This resource estimate is not compliant with NI43-101 or JORC.

NMR completed an in-house resource estimate in 2002 that conformed to JORC Standard as follows: Measured Resource of 23,478 tonnes with 5.95% Nb (8.51% Nb_2O_5) using a lower cut-off grade of 3.0% Nb to a vertical depth of 75 m and an Inferred Resource of 64,301 tonnes at 3.89% Nb (5.56% Nb_2O_5) using a cut-off grade of 1.0% Nb to a vertical depth of 90 m (taken from Woodbury, 2003).

The reader is cautioned that these resource estimates are not compliant with JORC or NI 43-101 standards. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. Nor is the issuer treating the historical estimate as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 of NI 43-101. Finally, the historical estimates should not be relied upon.

NMR also focused on identifying new, high-grade pyrochlore occurrences in the license. The U-Th radiometric anomalies were ranked, named, prospected and sampled on a regional scale. Stream sediment sampling was conducted on the margins of the Sarfartoq license, but no significant Nb or Ta anomalies were identified outside of the carbonatite complex.

In 2003, Hudson entered a joint-venture agreement with NMR to explore for diamonds on the Sarfartoq license. In 2006, Hudson acquired the right to 100% of all metals and diamonds on the license.

Work by Hudson on the SCC began in 2009 with encouraging results and that success continued through 2012. Hudson conducted diamond core drilling, rock chip sampling, ground geophysical surveys, petrographic analysis, and bench scale metallurgical test work. Hudson's efforts culminated in a Preliminary Economic Assessment (PEA) on the ST1 Resource in late 2011. The PEA included an inferred mineral resource estimate of 14.1 Mt averaging 1.51% TREO and a cut-off grade of 0.8% TREO. The PEA also included a potentially positive economic analysis and recommendation to proceed to a prefeasibility study (Broad, 2011). Neither the PEA nor 2011 technical report on the property were updated after the 2012 drill program.

In 2023, Hudson transferred the Sarfartoq mineral exploration license MEL 2020-32 to Qaatsuitsup Ulloriaa (NNSR). Metallurgical testing resumed, utilizing material left from the previous Hudson program. Drill core from 2011 was sent to SGS Lakefield, Ontario for further testing. Exploration activities resumed in 2023 and continued in 2024. This included geologic mapping and sampling, soil geochemical surveys, and ground geophysical surveys. An infill drill program was conducted in 2023 to upgrade the 2011 resource estimate. NSSR did an internal (non-NI 43-101-compliant) technical update; project re-focused on neodymium–praseodymium; updated ST1 resource in 2025. The non-NI 43-101-compliant internal resource estimates in the 2025 report (Felsman, Simpson, Goode and Druecker for NNSR; effective 4 April 2025) for ST1 resulted in Indicated 6.6 Mt @ 1.64%, Inferred 3.6 Mt @ 1.11%; underground: Indicated 7.2 Mt @ 1.68%, Inferred 2.5 Mt @ 1.53% TREO.

The results of 2012 and 2023 drilling are validated and included in the current mineral resource estimate in this report which is in accordance with S-K 1300 standards. The full project database now comprises 161 drill holes for 35,843 m, of which 94 holes (23,094 m) inform this ST1 Mineral Resource estimate

5.2 Diamond Exploration

The Sarfartoq region has been the subject of significant diamond exploration in the past. In certain areas, Hudson's exploration licenses overlap areas previously held by Platinova A/S, Monopros Ltd. (Monopros), Dia Met Minerals Ltd. (DiaMet), Aber Resources Ltd (Aber), and Metalex Ventures Ltd.

Exploration Licenses 29-96 and 03-98 were part of a property package held in a joint venture between Platinova A/S and Aber. Aber was the operator of the joint venture and later relinquished the ground at the end of 2000. Much of the ground covered by these licenses was subsequently acquired by NMR for niobium and tantalum exploration.

Exploration Licenses 38-96 was part of a property package held in joint venture by Monopros, Dia Met and Citation Resources Inc. (Citation). Monopros was the operator of the joint venture, which included several other exploration licenses throughout west Greenland. At the end of 1999, Monopros relinquished its interest in MEL 38-96 to DiaMet and Citation. Exploration License 38-96 was later dropped by DiaMet and Citation.

Licenses MEL 17-97 and MEL 18-97 were both included in a separate property package held in joint venture by DiaMet, Cantex Mine Development Ltd. (Cantex) and Citation. DiaMet was operator of the joint venture that also included several other exploration licenses. In early 2001, control of DiaMet was acquired by a wholly owned subsidiary of BHP-Billiton Diamonds Inc (BHP); hence, DiaMet's interests in both joint ventures were taken over by BHP. These MEL's were later dropped by the joint venture. The main license area was then picked up by Metalax Ventures and represented the same personnel involved with the DiaMet venture (Chuck Fipke, et al).

Exploration license number a0455 was formerly two licenses, namely 2004/03 & 2005/08 held by Cantex Mine Development Corp. These licenses were dropped between 16th September 2006 and 16th January 2007.

Exploration conducted by DiaMet and other companies such as Monopros and Aber/Platinova was restricted to heavy mineral sampling and prospecting conducted over one or two field seasons. Results from prior heavy mineral sampling programs demonstrated that kimberlite indicator minerals with excellent diamond inclusion chemistry are present. Abundant kimberlite indicator minerals were identified by DiaMet throughout the license based upon the results of heavy mineral sampling program during 1997 and 1998 (Counts, 1999, 2002). DiaMet Indicator mineral processing was completed at CF Mineral Research Ltd. (CF Minerals) of Kelowna, B.C.

Numerous kimberlite occurrences in outcrop and float are found in the area and yield large numbers of pyrope garnets and kimberlitic picroilmenites. Three important points can be gleaned from this distribution of indicator minerals: First, the full suite of indicator minerals appear in samples that are associated abundant kimberlite bodies; and that the prospective samples and kimberlites are within 60 km north and east of the Sukkertoppen ice cap. Second, the mineral assemblage seen in the areas further east and north lack significant amounts of pyrope garnet and kimberlitic picroilmenite, indicative of related alkaline to ultramafic intrusions that are not kimberlitic. Third, the lack of a true kimberlite and associated mantle mineral assemblage in surface samples collected between the property and the main continental icecap is strong evidence that the indicator minerals recovered from the property are derived from local kimberlites or kimberlite that lies beneath the Sukkertoppen Ice cap, not from beneath the main continental ice cap.

Microprobe analysis of the pyrope garnets by CF Minerals demonstrated that many grains recovered by DiaMet on the property were most likely formed under the same temperatures and pressures at which diamond is stable. This indicates that kimberlites in the area have the potential to contain diamonds. Microprobe results from pyrope garnets recovered by DiaMet compare favorably with the chemistry of pyrope garnets found as inclusions in diamonds. They also compare favorably to pyrope garnets from the Lac de Gras kimberlite field in the Northwest Territories of Canada, where economic quantities of gem quality diamonds occur (Counts, 2002). Many pyrope garnets identified in the heavy mineral samples from the property by DiaMet are "G-10" Garnets, which are derived from a depleted mantle source that is prospective for diamonds.

In each successive year since 2003, Hudson recovered ever larger diamonds from its exploration programs. The largest stones recovered in Greenland all emanated from the Hudson licenses. Hudson completed a large amount of geophysical surveys (airborne mag and EM, seismic and ground geophysics), a significant drill program, extensive reconnaissance and significant bulk sampling programs.

Hudson was successful in identifying numerous occurrences of diamondiferous kimberlite. The majority of individual surface locations can be classified as glacial float with a likelihood of a nearby in-situ source. Drilling revealed in-situ kimberlite in almost all drill holes. The body of principal focus is a kimberlite dike dipping at approximately 20° to the east with a strike of 160° to grid north, at a locality called Garnet Lake within the Sarfartoq claim block. This body, which is called the Garnet Lake Dike, averages 2.5 four m in thickness and has been tested by drilling approximately 1.4 km along strike and 900 m down slope (to a depth of 330 m) and by seismic reflection to approximately 2,160 m down slope (to a depth of 646 m).

Hudson collected kimberlite samples from the Garnet Lake Dike of 47 (2006), 160 (2007) and 499 (2008) dry tonnes from two locations where the dike is exposed in sub crop. The samples were extracted by drilling, blasting and excavating down to a maximum depth of approximately five m.

The 47 tonne sample was processed by dense media separation (DMS) followed by x-ray and grease table processing at SGS Facilities in Lakefield Ontario. The sample generated a total of 383 diamonds, weighing 12.07 carats, including a single 2.392 carat stone.

The 160 and 499 tonne samples were processed on-site in Greenland, utilizing Hudson's DMS plant, with final liberation and diamond picking occurring at SRC Facilities in Saskatoon, Saskatchewan. The much coarser crushed 160 tonne sample generated 252 diamonds, weighing 15.47 carats. This included a 2.51 gem quality diamond valued at $600/ct and a broken very high quality diamond that likely weighed 3.5 to 4 carats. That stone had a potential unbroken stone value of $5,000/ct.

The 2008 bulk sample program processed 499 dry tonnes of kimberlite through the Company's on-site DMS plant and yielded 78.26 carats. There were 23 diamonds in the 0.25 to 1.0 carat range, including an exceptional 0.95 carat amber colored diamond. A high proportion of the diamonds recovered were high quality, inclusion free stones.

6.0 GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT

6.1 Regional Geology

The SCC was first described by Secher (1976, 1986, Secher and Larsen 1980). This intrusion is interpreted to straddle the boundary between the Archean craton and the Paleoproterozoic aged Nagssugtoqidian mobile belt (Figure 6-1). The host rocks are granite and granodiorite gneisses cut by a swarm of Paleoproterozoic diabase dikes called the Kangamiut dike swarm. Age determinations indicate an age of 565Ma for emplacement of the SCC (Secher and Larsen 1980).

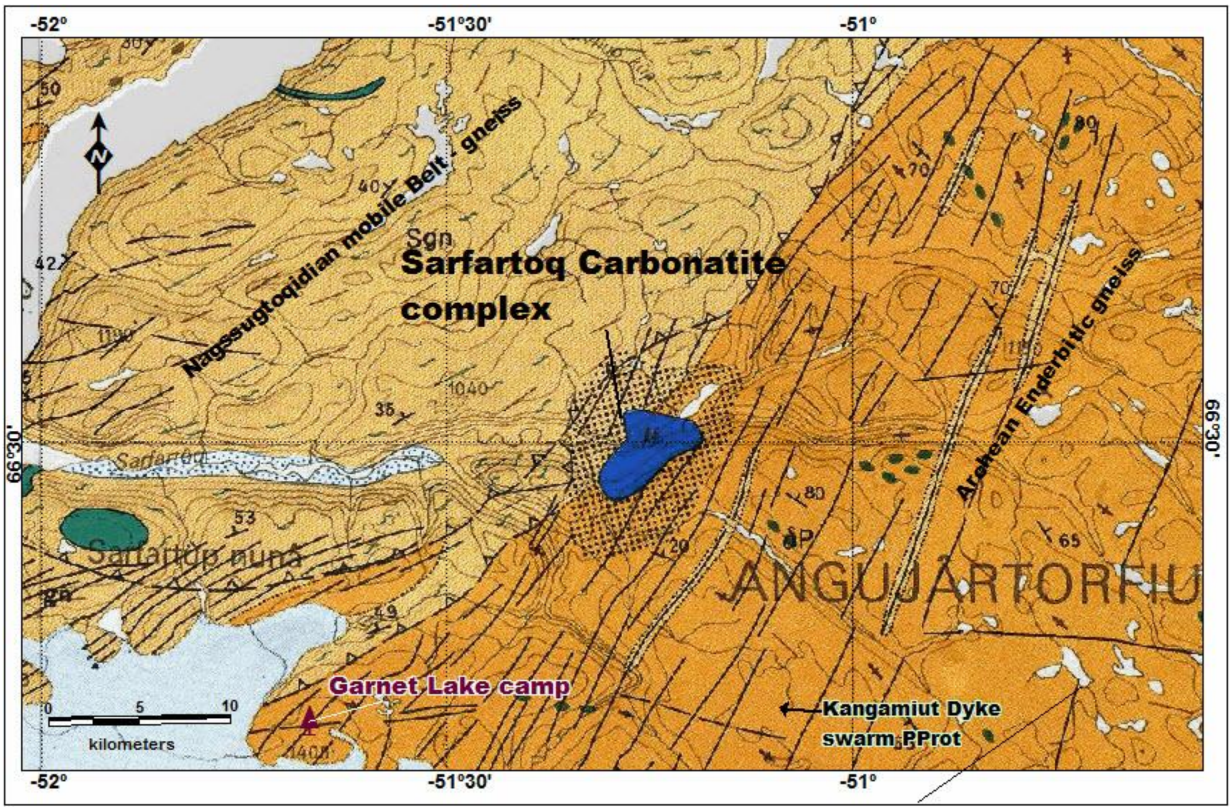


Figure 6-1 Regional Geology

The SCC is sub-circular to oval in shape and has an influence up to 12 km from the core (Figure 6-2). It has a conical structure with a magnetic core (Figure 6-3) consisting of apatite and magnetite rich ferrocarbonatites. The core is surrounded by narrow close-lying concentric carbonatite sheets with interleaved screens of fenitized/altered country rock, and with a partial rim of sodic fenite. The dominant carbonatite type is ferrocarbonatite with rauhaugite (ankerite dominant) in the core and beforsite (ferrodolomite dominant) in the marginal dikes. Calciocarbonatite (sovite, calcite rich) only occurs as subordinate units in the core. The most common alteration encountered is light-grey and aegirine bearing fenite (Secher, 1986).

During their field investigation, NMR also identified serpentinites, hornblendite, pyroxenites and kimberlite in the magnetic core of the complex (Barnes, 2000). It is likely that the composition and zonation of the SCC is more complex than that described by Secher and colleagues in 1976, 1986 and 1980.

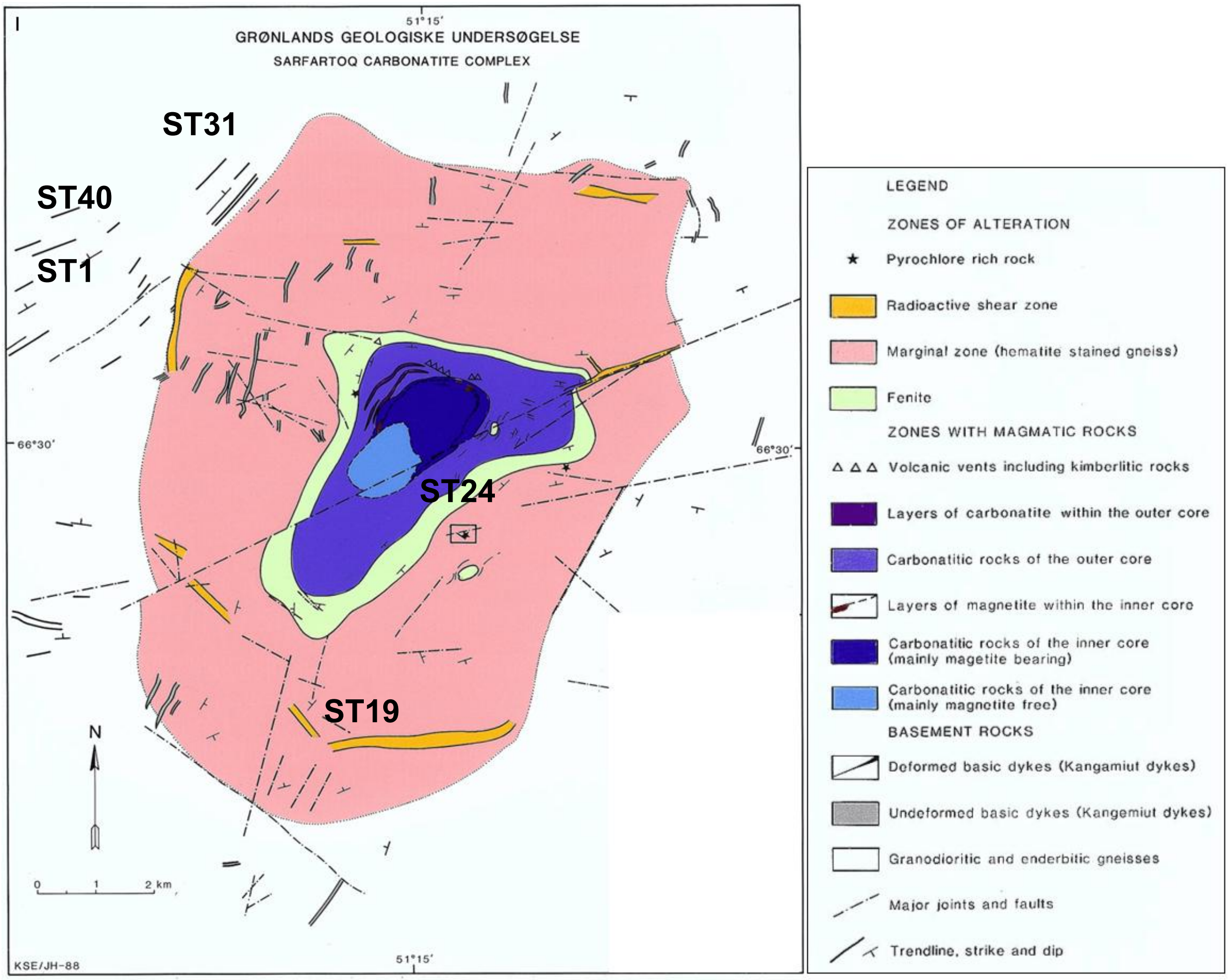


Figure 6-2 Geology of the Sarfartoq Carbonatite Complex, from Secher et al. (1986)

The carbonatites in the marginal zone also contain K-feldspar, chlorite, quartz, barite, pyrite, hematite and Nb-rutile; many are richer in silicates than the core rocks and may have been contaminated with country rock gneisses during emplacement or metasomatically altered. Mineral analyses of these phases are given in Secher and Larsen (1980).

Niobium, as pyrochlore is closely related to a series of ring dike structures enclosing the central core of the complex. Pyrochlore is also found in lower, but potentially economic concentrations within carbonatites, previously misidentified as radioactive shear zones.

Bedini (2009) describes the outer ring structures as 50 to 200 meter wide radioactive shear zones that consist of strongly limonitized, hematized, jointed and crushed gneisses. They show as thorium and uranium anomalies on the radiometric maps. Most of them follow valleys and streams formed mostly because of the friable and soluble nature of these rocks. Recent evaluation has yet to confirm any evidence of shearing, but the zones correlate with abundant carbonatite occurrences and are now interpreted as carbonatite dike swarms.

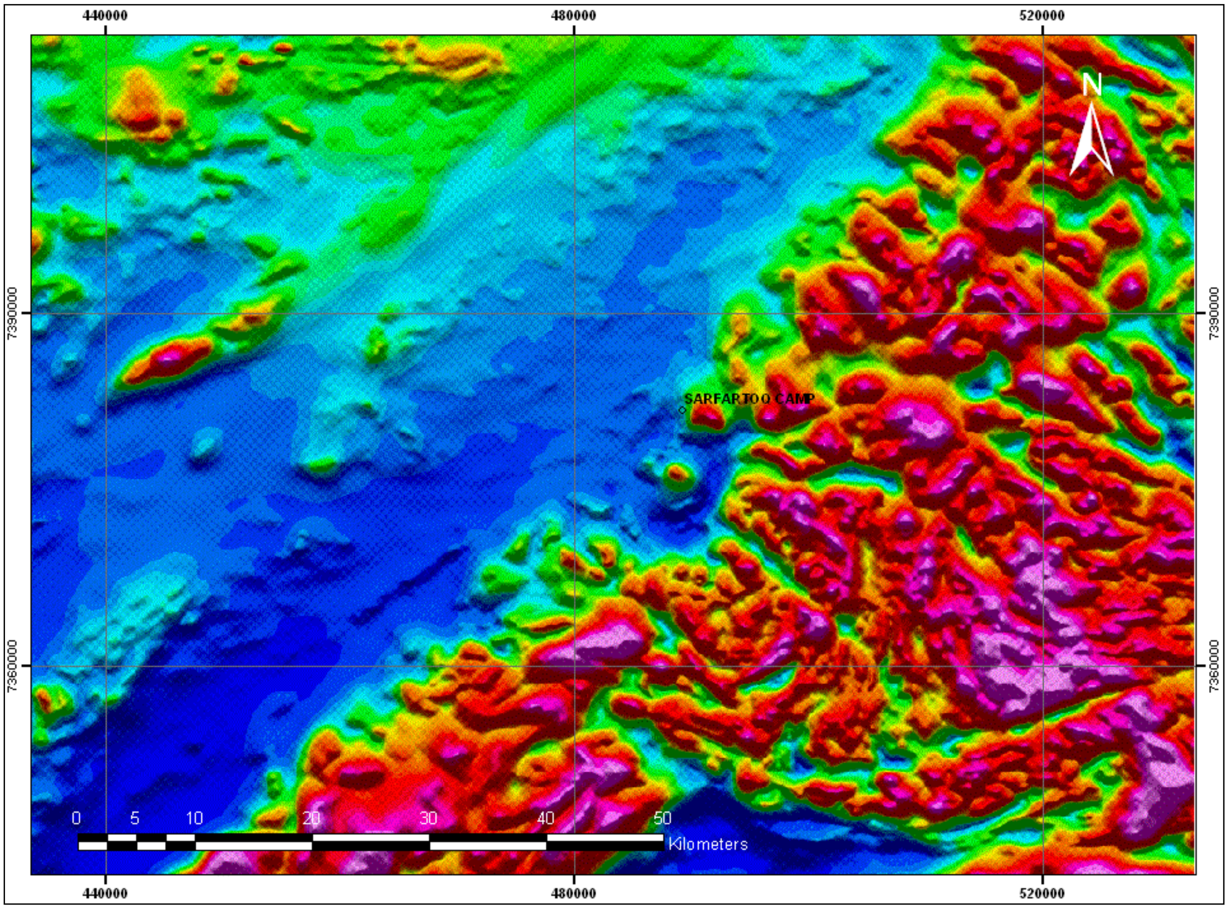


Figure 6-3: Regional Magnetic Map Showing the Carbonatite Near the Center of the Image

6.2 Local and Property Geology

The geology of the license area received little historical attention beyond preliminary descriptions by GEUS/GGU (Secher et al., 1981) and NMR (Barnes, 1999, 2000, & 2001). Hudson exploration programs focused on drilling known occurrences of REE mineralization at prospects identified by NMR. Geochemical sampling programs and geophysical surveys were limited in scope. Preliminary systematic geologic mapping, rock chip sampling, soil geochemical surveys, geophysical surveys, and mineralogical characterization programs were initiated by NNSR in 2023.

6.2.1 Rock Units

The Archean enderbitic gneiss occurring in the SE of the license area is a regionally mapped granulite facies unit (Figure 6-1). The Paleoproterozoic Nagssugtoqidian gneiss occurring in the NW of the license area was subject to later shearing and thrusting. This unit is regionally differentiated from the Archean gneiss by its hosting deformed Kangamiut dikes and local retrograde amphibolite facies mineral assemblages. Kangamiut dikes hosted in the Nagssugtoqidian gneiss can lack evidence of deformation. In practice, the two gneiss units are not reliably differentiated during field mapping or core logging, though structural analysis indicates a change in tectonic setting across the contact mapped by GEUS. Though local variations (granitic gneiss, amphibolite gneiss, granodiorite, granite, pegmatite, aplite) can be mapped and/or correlated between drill holes, these units are simplified and combined as granite gneiss (GGN) for license scale mapping and deposit modeling.

Abundant mafic bodies are mapped and logged within the license. Rock types identified include gabbro, dolerite, diorite, lamprophyre, basic dike, alkaline mafic intrusion, pyroxenite, amphibolite, metabasite, and mafic gneiss. Evidence for multiple phases of mafic intrusion is lacking, so mafic units are either included as mafic bands within the granite gneiss or interpreted as Kangamiut dikes (GAB).

The carbonatite (CARB) core of the system is no longer accessible, due to increased restrictions on entering Arnangarnup Qoorua. Previous geophysics, mapping and descriptions must be relied upon and are summarized in Section 6.1.

The outer ring structure of the carbonatite (CARB) system hosts significant REE mineralization and is the focus of current exploration efforts.

The carbonatites occur as swarms of narrow dikes. The dikes range from hairline fracture fillings to drill intercepts exceeding 100 m. True thicknesses are poorly established, but individual dikes likely reach 10s of m in thickness. Individual dikes can occur in almost any orientation but have a statistical preference for orientations consistent with radial and concentric dikes around the central mass of carbonatite and locally conform to wall rock foliation. The swarms are subvertical and can exceed 700 m in width. Based on the geometry of carbonatite occurrences around the central mass, the carbonatite dike swarms are identified as a ring dike structure. Though preexisting structures, such as foliation planes are observed to locally affect carbonatite emplacement, the carbonatite seems to have been emplaced within an isotropic stress environment with deposit-scale intrusions conforming to radial and concentric orientations about the central carbonatite mass. Previously mapped radioactive shear zones are now interpreted as carbonatite exposures. No evidence of shearing is observed, and radioactivity is due to thorium enrichment in REE mineralized carbonatite.

The dominant carbonatite type is dolomite carbonatite, though the best mineralized examples might be classified as ferrocarbonatite. Multiple phases of carbonatite are recognized but are generally not mappable or reliably correlated between drill holes. Variations include fine-grained, grey dolomite carbonatite, potassium feldspar carbonatite porphyry, apatite-rich carbonatite, white carbonatite dominated by coarse-grained ankerite, carbonatite matrix breccia, and red ferrocarbonatite. The carbonatites do not appear to be affected by oxidation due to weathering or hydrothermal alteration, as iron oxide minerals often coexist with unoxidized sulfides. Carbonatites hosting the highest grades of REE mineralization tend to host masses or pseudomorphs composed of abundant, fine-grained, earthy hematite. These mineral aggregates are rich in Fe, Ca, Ba, REE, and Th; and host an inconsistent variety of fine-grained REE minerals, carbonates, phosphates, sulfates, and oxides. Where occurring as pseudomorphs, these masses tend to be hexagonal; and the primary mineral might be burbankite.

Most carbonatite dikes do not crop out; and those that do are typically not large enough to be mapped as units at the complex scale. Carbonatite occurrences are plotted as points and lines in Figure 6-4 to visualize their spatial distribution.

Two breccia (BX) types are identified in the area. A small (65 x 40 m) diatreme is exposed in the ST1 resource area. Other, very small carbonatite matrix intrusion breccias are common throughout the outer ring structure. Neither breccia type appears to host significant REE mineralization.

A zone of sodic fenite is mapped by GEUS, surrounding the carbonatite core. Other evidence of fenitization is restricted to a red staining of the wall rocks in a halo extending from the sodic fenite zone to the outer ring structure hosting carbonatite dike swarms.

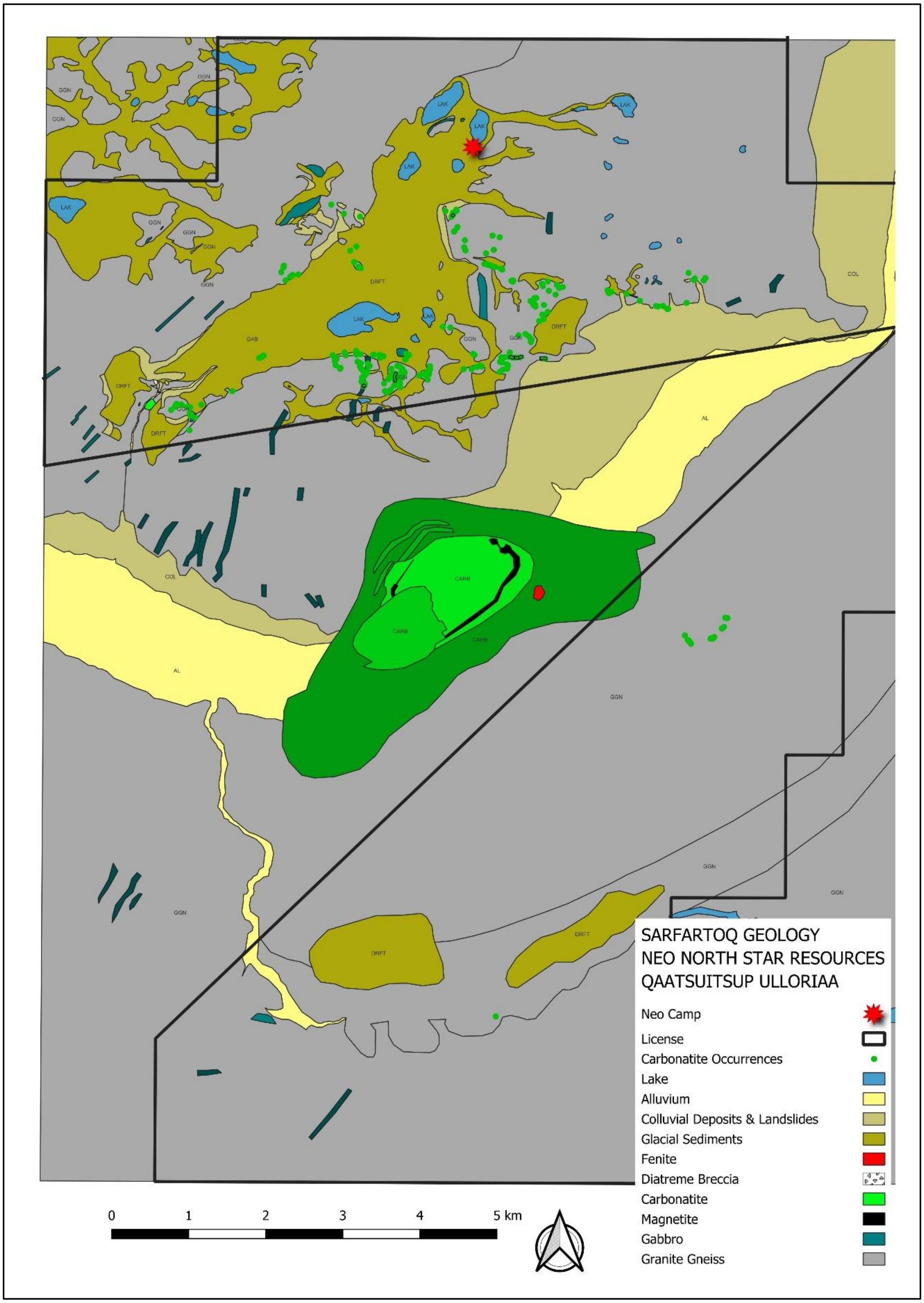


Figure 6-4 Geologic Map of the Sarfartoq Carbonatite Complex

Glacial sediments are mapped as undifferentiated drift (DRFT), but consist of till, moraine, and outwash. Much of the carbonatite complex is hidden beneath glacial sediments, which also obscure the radiometric signature of the carbonatites.

Colluvial deposits and landslides (COL) are common, especially along the glacial valley walls through the center of the Project. Alluvium (AL) occurs in small amounts along valley floors, except in the large glacial valley bisecting the license.

6.2.2 Structural Analysis

The structural geology of the Project is poorly understood, but is of paramount importance, as the carbonatite dikes are structurally controlled. More than 1,300 planar structures were measured in 2024 to support a structural analysis of the license area. The focus was on the carbonatite rich areas north of Arnangarnup Qoorua.

FOLIATION: The ST1 to ST31 trend appears to fall along the steeply dipping NW limb of a major NE plunging anticline. Near horizontal foliations at ST40, ST34, and ST37 indicate these prospects lie within the hinge zone of the fold, or in a different domain as mapped by GEUS. Previous mapping indicates that the ST1 – ST31 trend lies within the Paleoproterozoic Nagssugtoqidian gneiss, while the prospects to the SE lie within the Archean gneiss. Foliation measured at ST34 appears to capture a fold with an axial plane dipping about 58° at an azimuth of 186°. It's axis plunges about 18° at a trend of 108° azimuth. The interlimb angle is 80° (tight). The 10 foliation measurements at ST43 appear to have captured isoclinal folding with ENE axial plane orientations.

Carbonatite occurrences along the ST1 – ST31 trend are concordant with mapped and measured structures. The trend of carbonatite occurrences from ST34 to ST43 is also concordant with E-W foliation in those areas. The foliation measurements indicate that the major trends of carbonatite emplacement immediately north of Arnangarnup Qoorua might be controlled by Precambrian structures rather than a stress field imposed by the intrusion itself. This might explain difficulty in delineating NdPr-enriched mineralization at ST40, if near horizontal structures are a control on carbonatite emplacement there.

VEINS: Veins are dominantly composed of quartz. Other veins are composed of epidote ± chlorite and calcite. The veins tend to be oriented subparallel to foliation across the mapped area (Figure 6-5 and Figure 6-7). This indicates veins are orogenic and not controlled by carbonatite emplacement.

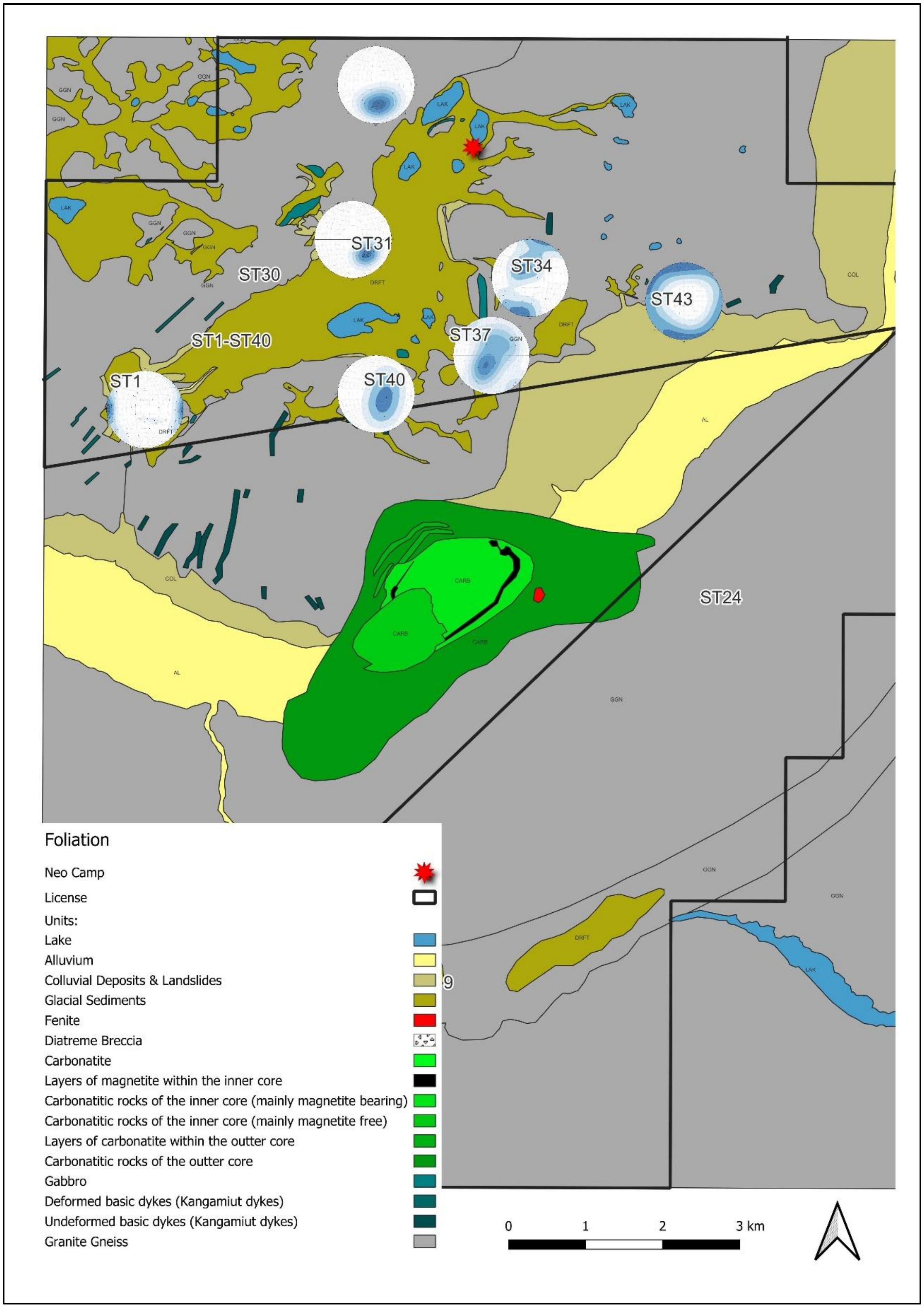


Figure 6-5 Foliation

QUARTZ VEINS: Quartz veins dip moderately to the NW, with a smaller, subvertical population trending NNW. This indicates quartz veining is subparallel to foliation and cleavage and most likely orogenic, predating carbonatite emplacement.

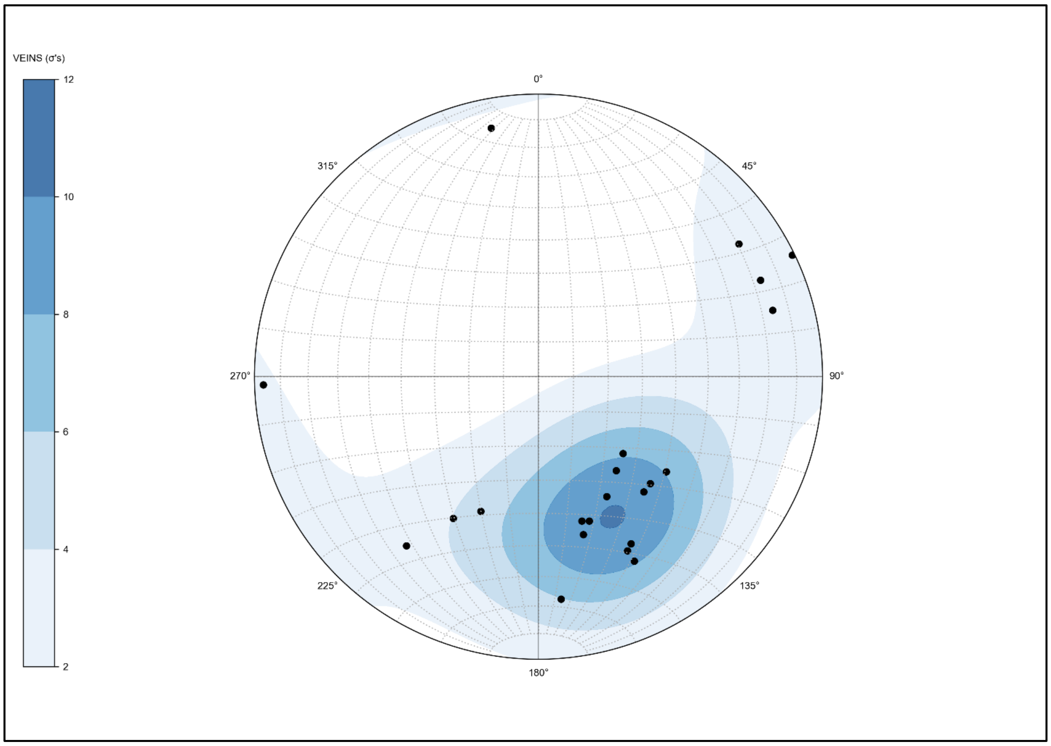


Figure 6-6 Stereonet: Quartz Veins

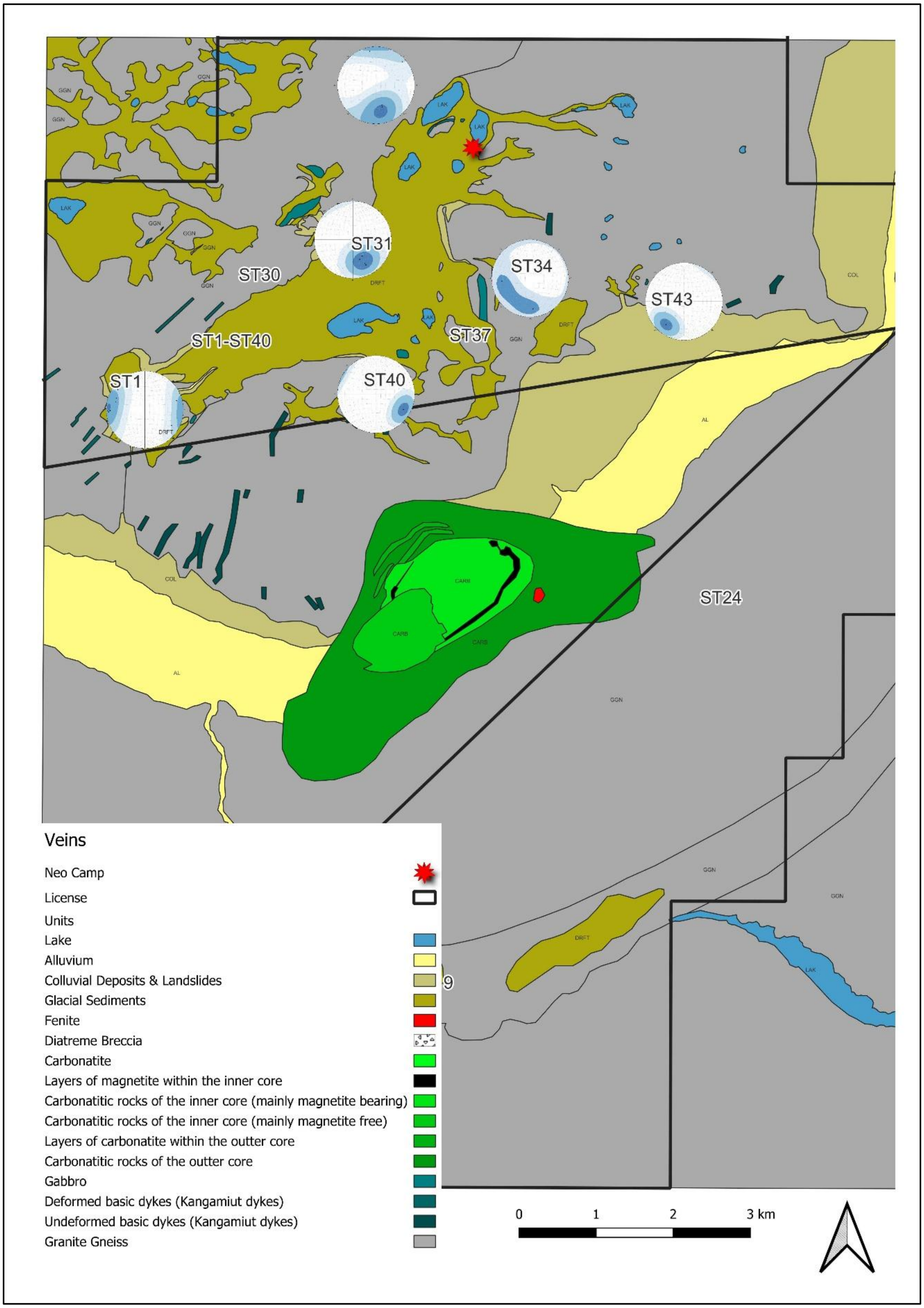


Figure 6-7 Veins

CARBONATITE DIKES: Most observed dikes are composed of carbonatite. Other rock types occurring as dikes include aplite, pegmatite, and lamprophyre. Many dike orientations conform to Precambrian foliation and vein orientations at the various prospects, but most do not. This indicates that preexisting structures are a secondary control on carbonatite orientations. In general, carbonatite orientations appear to be consistent with radial and concentric dikes about the central mass of carbonatite mapped by GEUS and inferred from magnetic data (Figure 6-8).

NON-CARBONATITE DIKES: The only apparent trend in the data is a cluster of lamprophyre dikes dipping steeply to the east (Figure 6-9). It is quite possible that the non-carbonatite dikes are actually bands in the granite gneiss, with the aplite and pegmatites being textural variations of granitic layers and the lamprophyre dikes being amphibolite layers or Kangamiut gabbro dikes.

CONTACTS: The few observed contacts tend to trend NW and dip steeply. Observed breccia contacts are rare and nearly horizontal (Figure 6-10).

FAULTS: The few observed faults trend NE and dip steeply (Figure 6-10).

Observed jointing around the northern part of the complex indicates orthogonal NW and NE trending, near vertical joint sets, or perhaps concentric and radial jointing around the central carbonatite stock. There is no evidence of a preexisting joint fabric, nor a syn-intrusion tectonic controlled joint set facilitating carbonatite emplacement (Figure 6-11).

ALL JOINTS: The two strongest populations of joints trend ENE with near vertical dips and NE with steep dips to the SE. There is also a strong population of NW trending joints with near vertical dips and a weaker NNE trending set of near vertical joints. All rock types are Precambrian and located in a stable craton. Jointing is likely related to carbonatite emplacement rather than tectonic deformation (Figure 6-12).

JOINTS GGN: Dominant orientations mimic those of the total joint data set. Other pre-carbonatite rock types have a preference for steep joint orientations, but lack evidence for preferred trends (Figure 6-13).

JOINTS AGN: Joints in AGN include those found in mafic bands of the granite gneiss as well as those found in deformed Kangamiut dikes. The prevalence of subvertical orientations and the similarity to GGN jointing indicate that jointing in the AGN unit is related to carbonatite emplacement rather than tectonics (Figure 6-13).

JOINTS GAB: The GAB unit in this context describes undeformed Kangamiut Dikes. The predominance of near vertical orientations and similar trends to AGN joints indicate jointing is not related to tectonics, but rather related to cooling of the Kangamiut dikes themselves and/or carbonatite emplacement (Figure 6-13).

JOINTS CARB: Though contouring reveals a weak clustering of SW dips, no strongly preferred orientations are apparent in joints hosted in carbonatite. Joints in carbonatite are likely cooling related and lack preferred orientation due to a lack of deformation since emplacement (Figure 6-13).

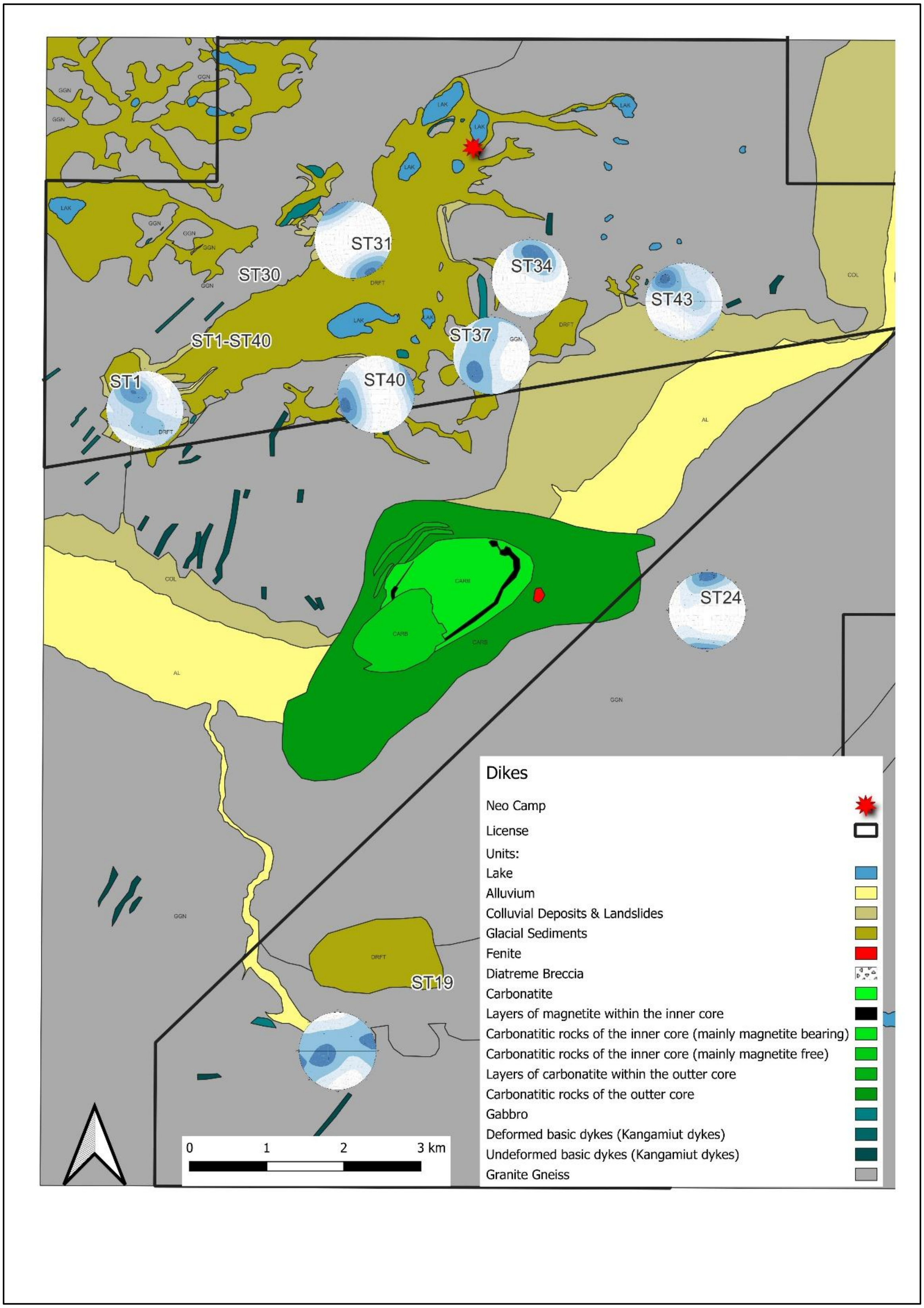


Figure 6-8 Carbonatite Dikes

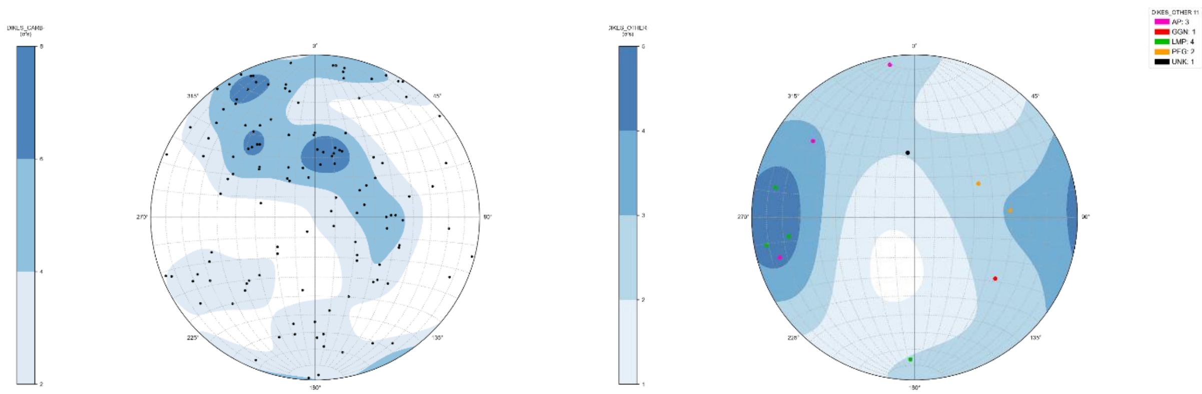


Figure 6-9 Stereonets: Carbonatite Dikes (l) and Non-Carbonatite Dikes (r)

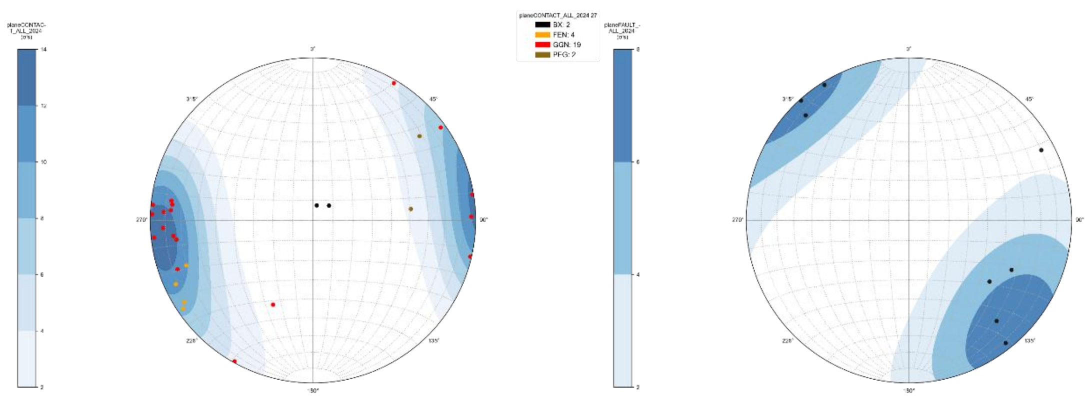


Figure 6-10 Stereonets: Contact (l) and Faults (r)

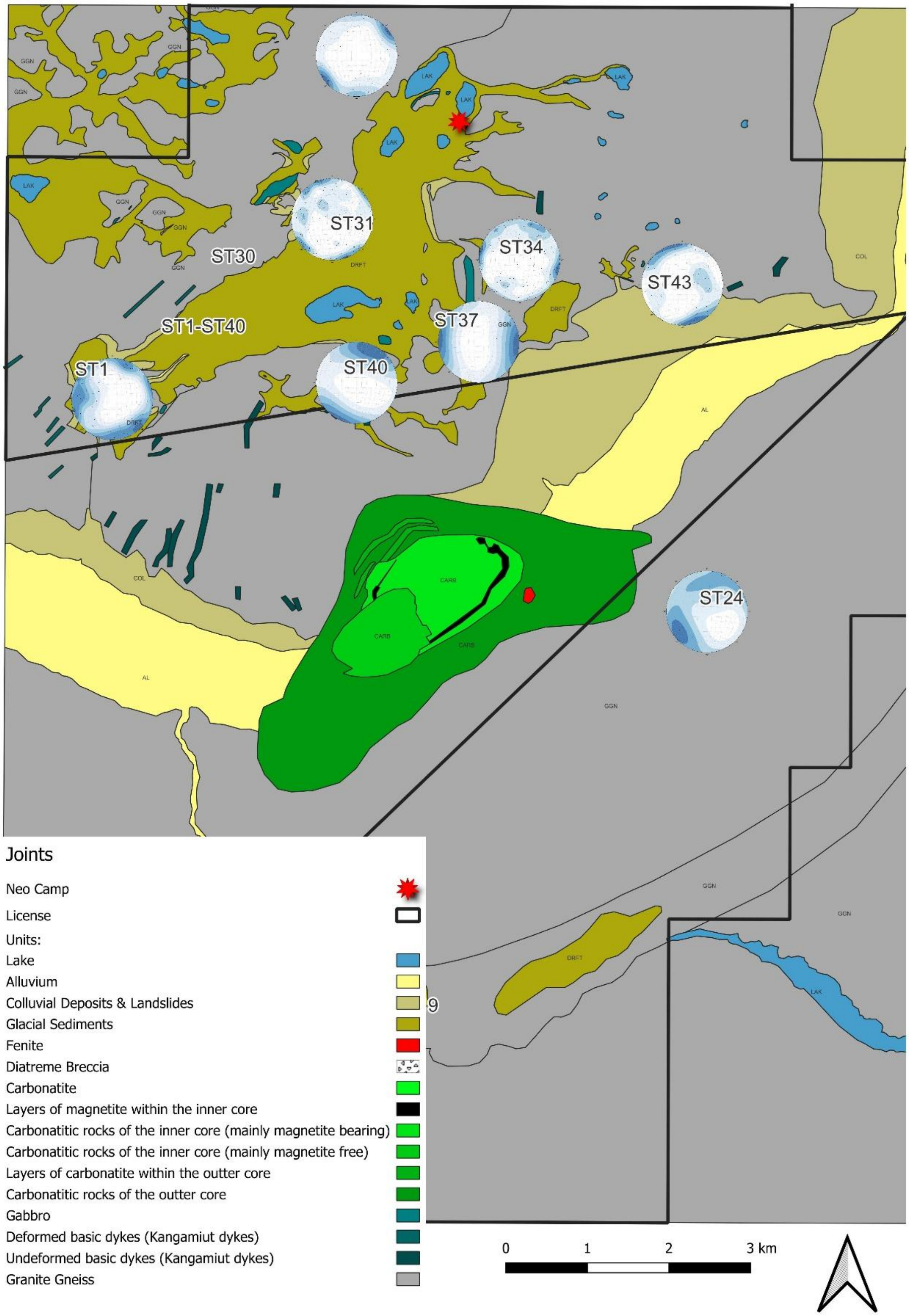


Figure 6-11 Joints

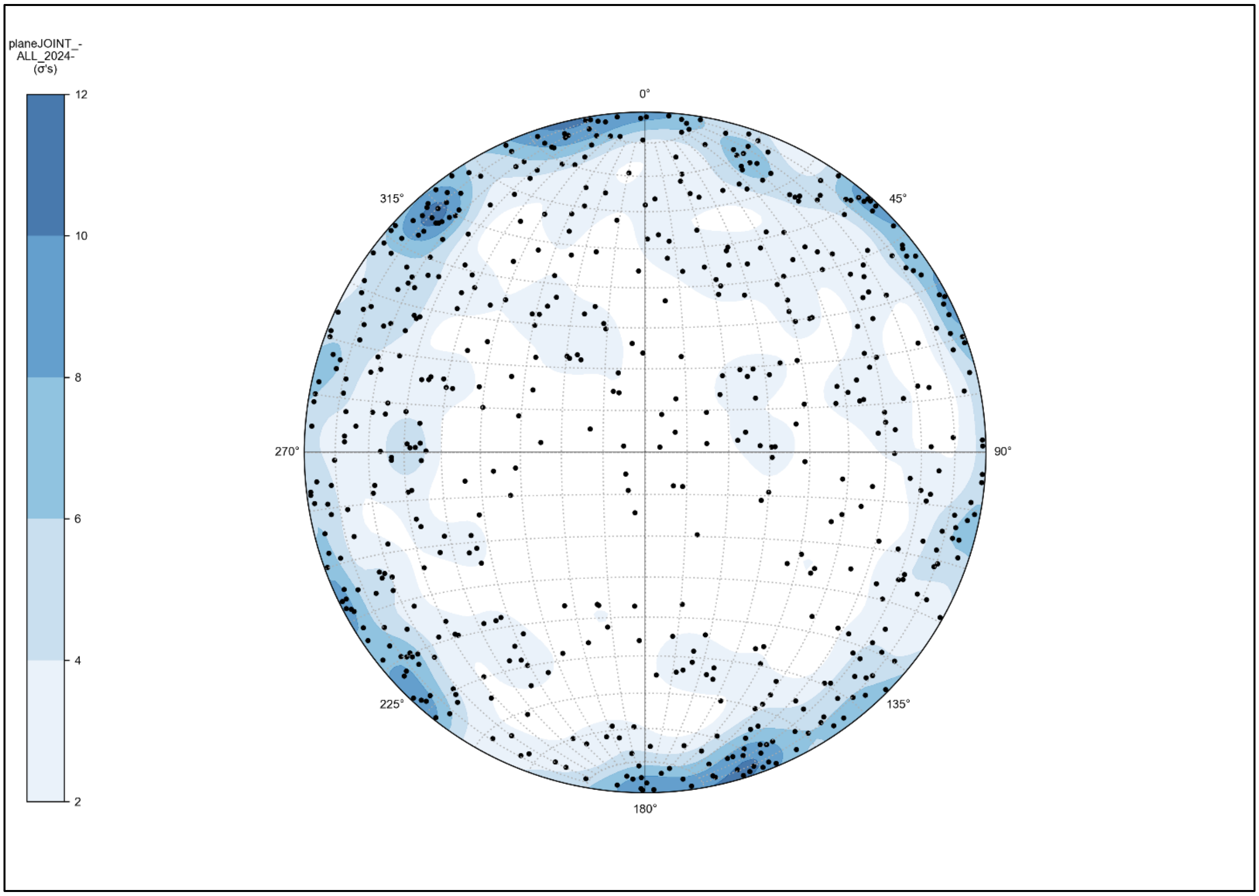


Figure 6-12 Stereonet: All Joints

The structural setting of the Project area is consistent with regional mapping by GEUS. The Nagssugtoqidian terrain NW of the main carbonatite mass is composed of granitic gneiss deformed during the Paleoproterozoic; and hosts deformed Kangamiut dikes. The Archean terrain to the SE hosts undeformed Kangamiut dikes. In the area north of Arnangarnup Qoorua hosting abundant carbonatite, the exposed Nagssugtoqidian terrain consists of the limb of a major, north plunging anticline. The exposed Archean terrain hosts E-W trending isoclinal folds. The general outcrop pattern of carbonatite is coincident with these major structures. Combined with local observations of carbonatite dikes exploiting foliation planes, this indicates that preexisting structures are a significant control on carbonatite emplacement.

Observed carbonatite dike contacts conform to expected ring and radial dike patterns about the main carbonatite mass and do not correlate with stereonet plots of preexisting structures such as foliation and veins. This indicates both the lack of a tectonic stress field during emplacement and that the primary control on carbonatite emplacement was the stress field created by the carbonatite intrusion itself. Preexisting structures are therefore considered to be a secondary, local control on carbonatite emplacement.

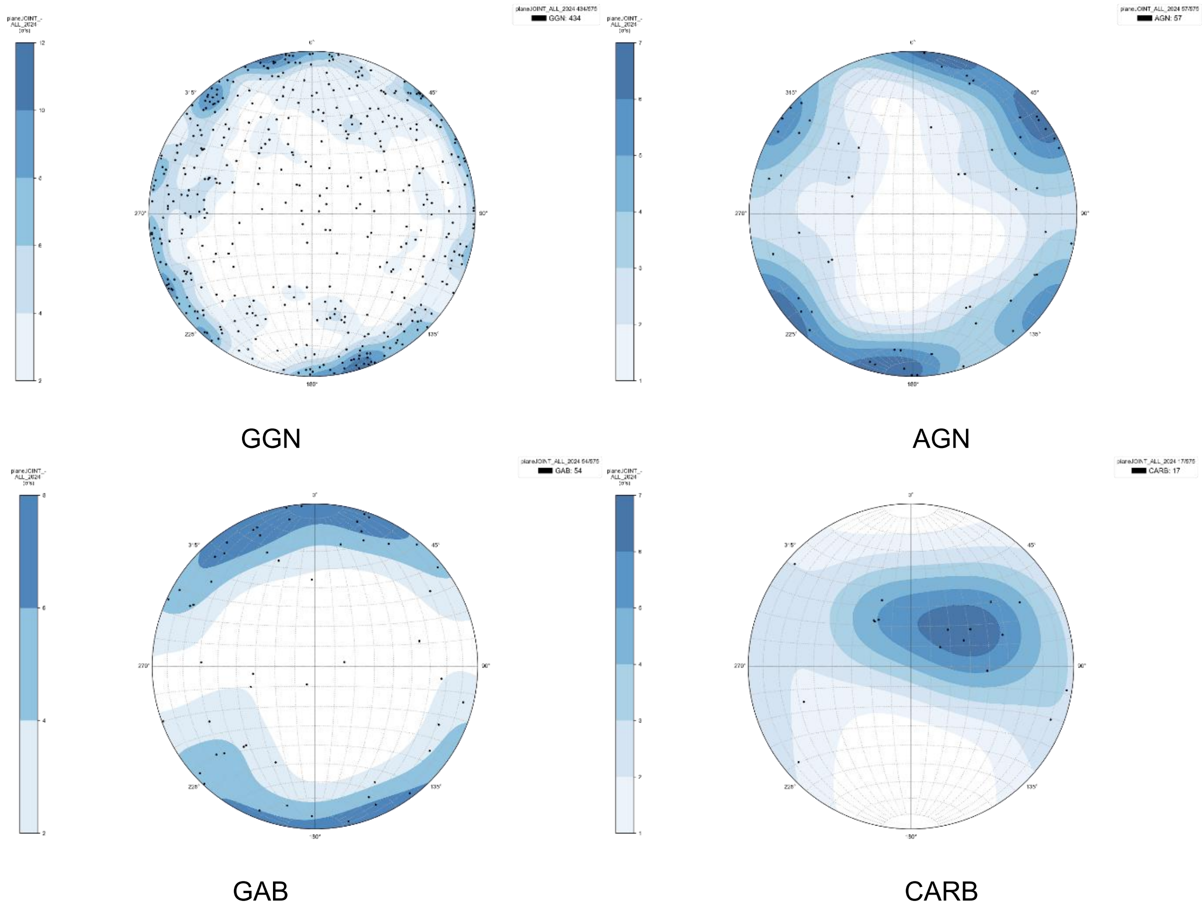


Figure 6-13 Stereonets: Joints by Rock Unit

7.0 EXPLORATION

7.1 Rare Earth Exploration

In 2009, diamond exploration was halted in favor of rare earth exploration. The objective was to test previously reported REE mineralization associated with the outside ring structure of the SCC. To this affect a sampling and prospecting program was undertaken in late June and July. Based on the positive results of this program, a reconnaissance drill program was executed between September 5 and 25, 2009. The objectives were to drill test the areas where anomalous grab samples were taken during the earlier summer work. These areas were not previously drilled.

In 2010, exploration increased in scope with ground geophysics and trenching complimenting an expanded drilling and sampling program. In addition, a new camp was established closer to the property. In 2011, a larger program of drilling, prospecting and geophysics was conducted. Work carried out from early May to late September in 2011 included:

- An additional 31 rock chip samples were collected and sent for assay.
- A 7-tonne bulk sample was collected from the ST1 zone and sent for assay.
- A diamond drilling program of 71 holes totaling 16,292 m began to delineate the ST1 zone and test new prospective areas.
- Numerous ground geophysical grids were surveyed at the ST1, ST19 and ST24 zones.
- Both medium and high-definition DEM was purchased, covering the entire Sarfartoq carbonatite as well as some surrounding areas including Robinson Bay.
- An Environmental Impact Assessment (EIA) was initiated with studies done on local flora and fauna.
- A Preliminary Economic Assessment study was initiated, and engineers were on site in July.
- Socio-economic talks began and were conducted in various towns and communities proximal to the Project area.

The PEA was completed with an effective date of 25 November 2011, including a resource estimate. This study is considered historic and is not in compliance with current NI 43-101 standards.

In 2012, economic interest in REE declined. Additional drilling occurred at Sarfartoq, but results were not incorporated into the ST1 resource estimate, until recently. Baseline studies and community consultation necessary to complete an EIA and Social Impact Assessment (SIA) were suspended and the Project entered a period of care and maintenance.

The Project remained idle until 2023, when the license was transferred from Hudson to Qaatsuitsup Ulloriaa (NNSR). The 2023 program consisted of:

- Renewed metallurgical studies at SGS utilizing stored Hudson samples.
- Re-establishment of a field camp (Neo Camp – now renamed by GRML to ‘Sarfartoq Camp’).
- Environmental baseline studies, in preparation for the EIA.

- Resumed socio-economic impact consultations, in preparation for the SIA.
- Preliminary geologic mapping and rock chip sampling.
- Preliminary ground geophysics surveys.
- Preliminary soil geochemistry surveys.
- Infill drilling at the ST1 Resource area.
- Mineral characterization study.

The 2024 program lacked drilling, but REE exploration efforts began in earnest. Components of the program included:

- Continuing metallurgical studies at SGS, on 2011 drill core.
- Geologic mapping and rock chip sampling.
- Ground geophysics surveys.
- Soil geochemical surveys.

7.2 Sampling and Prospecting

Sampling and prospecting by Hudson from 2009 to 2012 included small ground geophysics surveys, rock (Figure 7-2) and stream sediment sampling, and reconnaissance mapping focused on known radiometric anomalies (ST1, ST40, ST19, & ST24).

There has yet to be a comprehensive, property-wide sampling and prospecting program. This work began with the 2023 and 2024 programs began this work in a limited fashion.

A geologic mapping program began in earnest in 2024. A total of 109 rock chip samples were collected in conjunction with geologic mapping in 2024. Results confirm significant REE mineralization across the northern block of the license as well as at ST24 (Figure 7-1).

Soil geochemistry programs in 2023 and 2024 sampled a total of 1,114 sites. The strongest REE anomaly overlies ST1, where significant REE mineralized carbonatite crops out. Mineralized trends from ST1 to ST31 and from ST1 through ST40 to ST43 are marked by REE soil anomalies (Figure 7-6). Neodymium in soils mimics TREE (Figure 7-8). The ST1 to ST31 trend and ST43 host HREE soil anomalies, which are absent from ST40 and ST37 (Figure 7-7). Carbonatites identified SE of Neo Camp are marked by slightly elevated REE in soils (Figure 7-6).

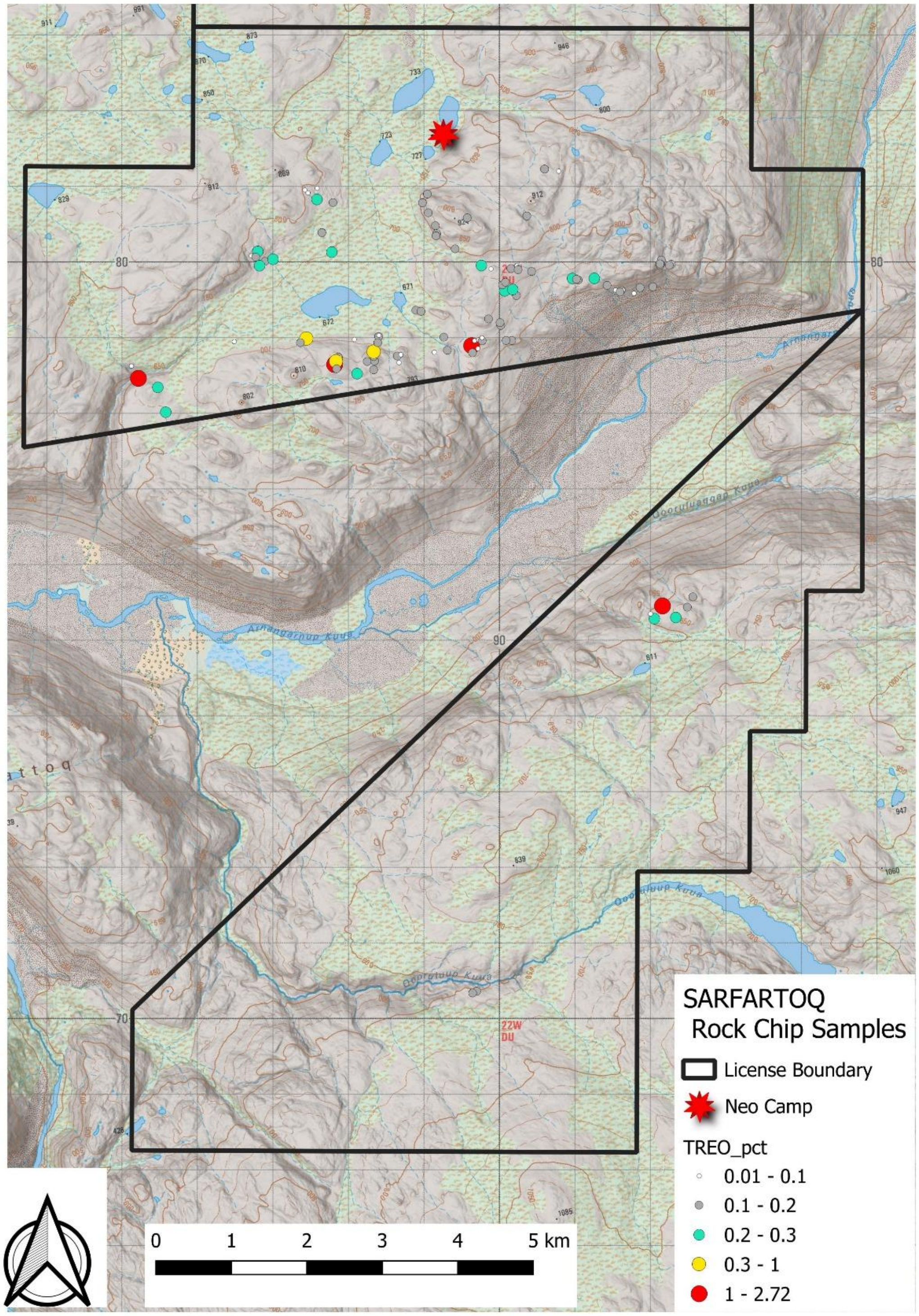


Figure 7-1 Rock Chip Sample Results, 2024

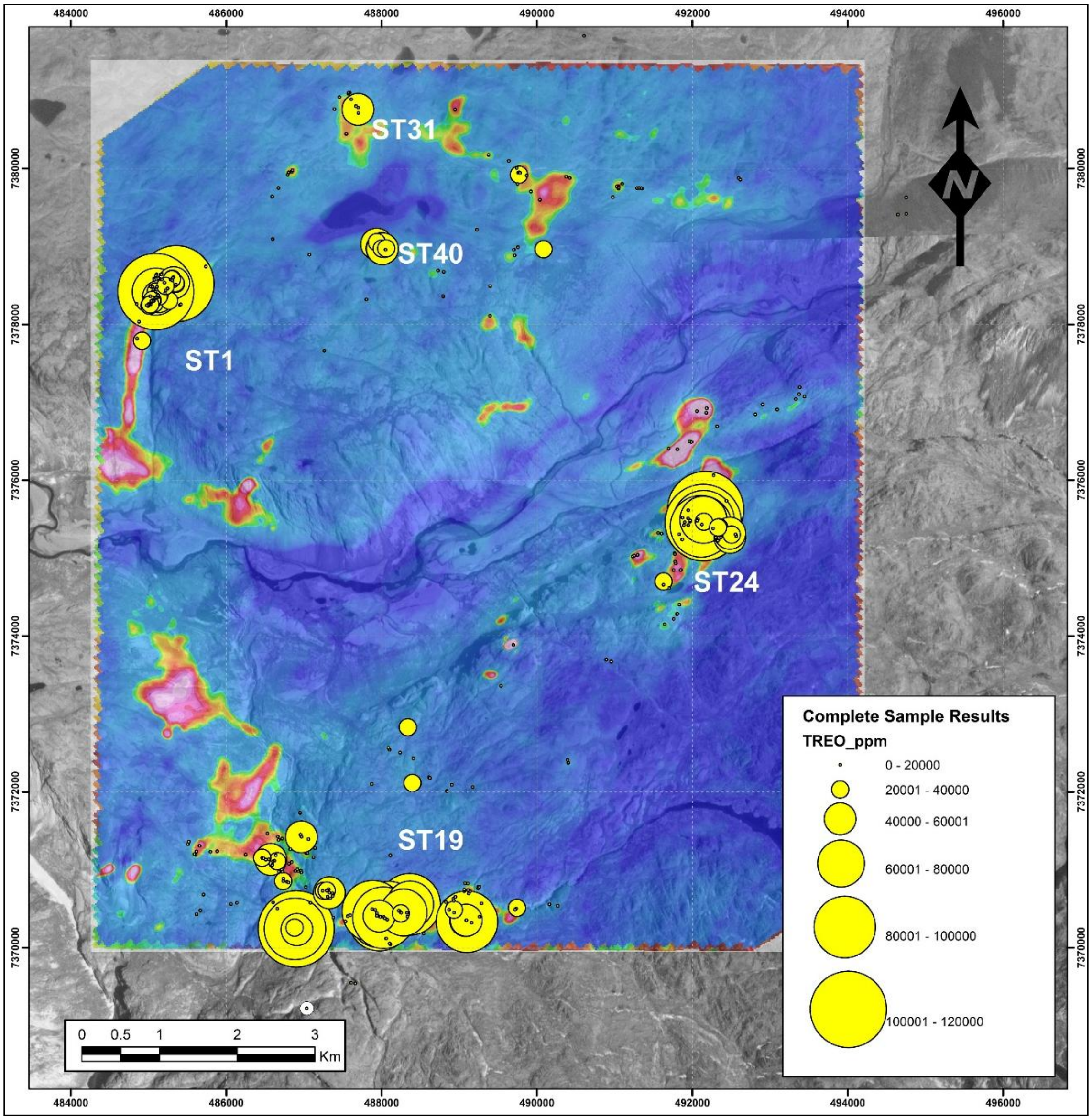


Figure 7-2 Thematic Results for Historic Rock Chip Samples

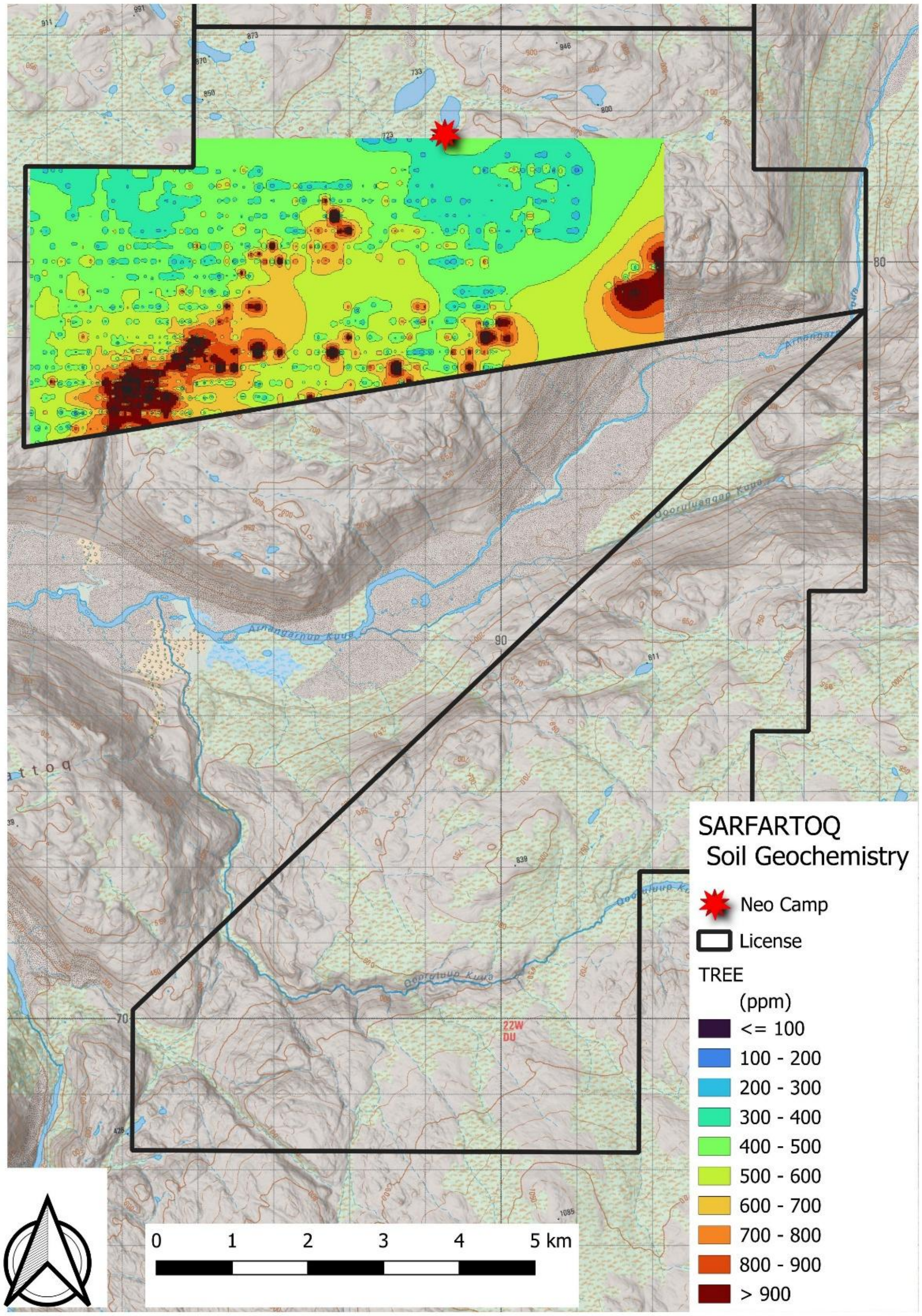


Figure 7-3 Soil Geochemistry Results, 2023 - 2024

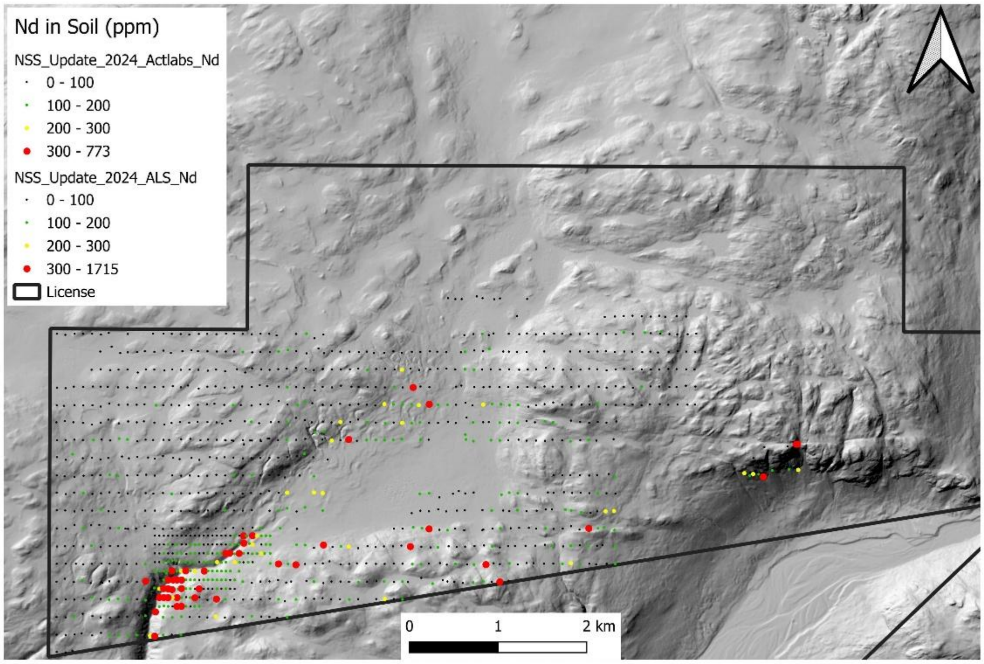


Figure 7-4 Nd in Soil

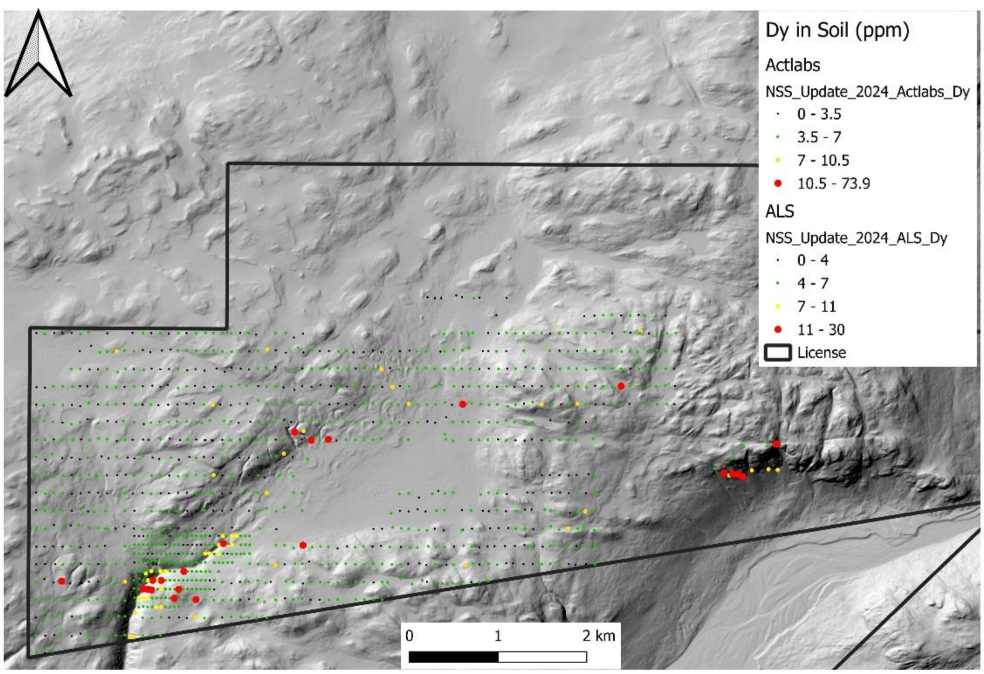


Figure 7-5 Dy in Soil

ST1: Since 2009, the ST1 area has produced the most significant results for Hudson and NNSR, with wide zones of REE-bearing ferrocarbonatite dike swarms identified in drill holes. The REE grades in these zones are considered to be potentially economical.

A strongly gossanous area at ST1 is highlighted by a strong radiometric anomaly that centers in a steeply cut, north/south running gully. Veins and veinlets of ferrocarbonatite crop out along the eastern slope of the gully over a distance of approximately 400 m; and REE bearing ferrocarbonatite is plentiful where thick overburden covers the slope. Surface rock samples with TREO concentrations from 1-10% are common.

Prospecting and rock geochemical sampling conducted by Hudson confirmed the potential for extensive and potentially economic REE mineralization at ST1. Work by NNSR in 2023 and 2024 focused on infill drilling, a soil geochemistry survey, and geophysical surveys. Few rock chip samples were collected. A preliminary soil survey over ST1 in 2023 indicated that soil geochemistry would be an effective exploration tool at Sarfartoq, and the survey was extended across much of the northern part of the carbonatite complex. The preliminary survey also indicated that pXRF analysis was adequate to detect REE concentrations found in soils overlying the ST1 resource. It was discovered in 2024 that pXRF analysis is not adequate for detecting REE concentrations in soils across the entire property. The ST1 area hosts the most robust REE in soil anomaly identified to date (Figure 7-6).

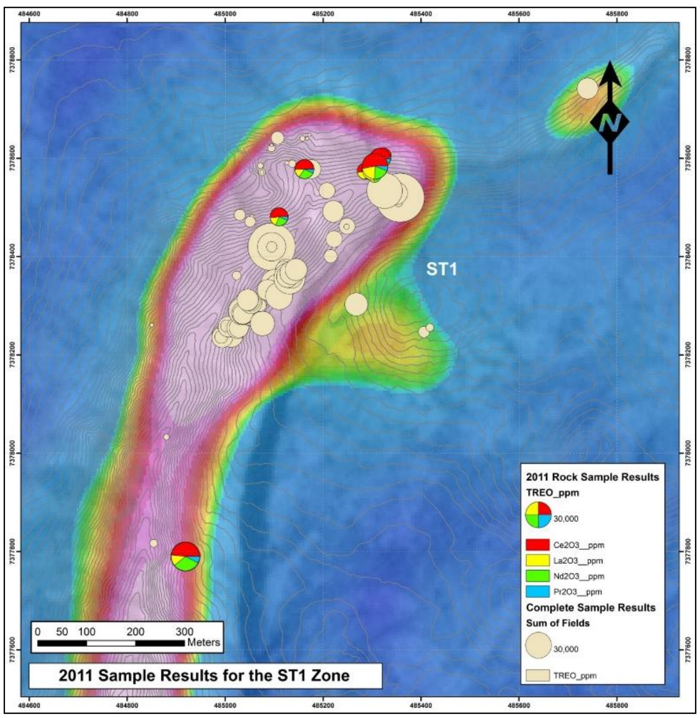


Figure 7-6 Thematic Historic Rock Chip Sample Results for the ST1 Zone

ST40: Historic assay results from the area show considerably higher percentages of neodymium relative to TREO than the other targets, making ST40 a highly prospective target (Figure 7-7). NNSR soil geochemistry indicates a potential trend of Nd enrichment extending from ST40, through ST 37 to ST43 (Figure 7-4). The ratio of Ce:Nd is variable, indicating that previously identified Nd enrichment relative to La+Ce is not evenly distributed across ST40. Rock chip samples collected in 2024 also have variable Ce:Nd ratios, with few mineralized samples containing Nd>Ce.

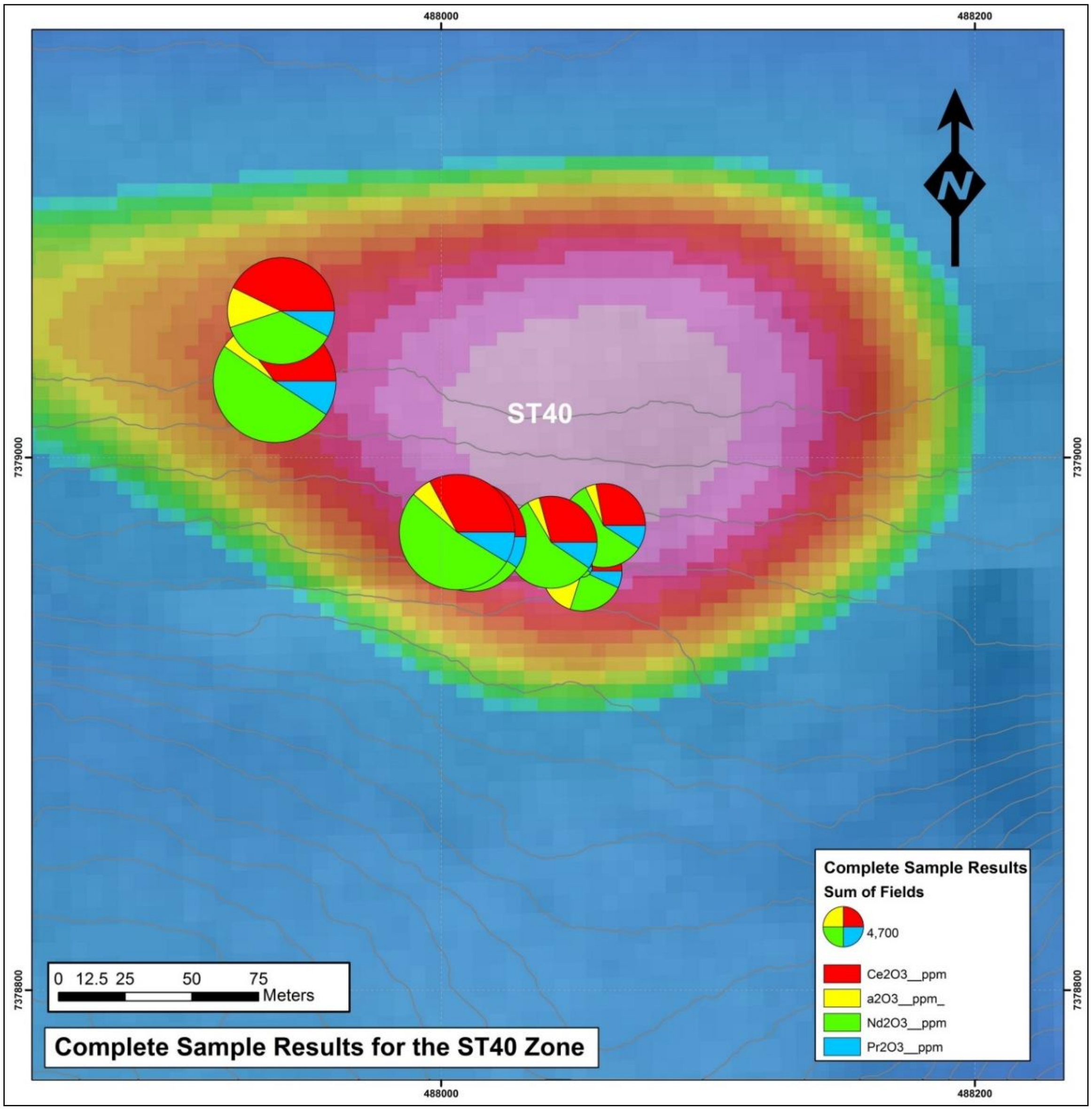


Figure 7-7 Results of Samples Collected Previously at the ST40 Zone

ST19: ST19 is a highly prospective area following the southern extents of the SCC outer ring structure and the associated radiometric anomaly. The radiometric anomaly and associated gossan are coincident with the river that cuts through the area from east to west. The area of interest is approximately 4 km long by 1.5 km wide. Hudson collected numerous surface samples containing 8 to 10% TREO, prompting drill programs in 2009 to 2011 with mixed results. NNSR has conducted no significant exploration activity at ST19.

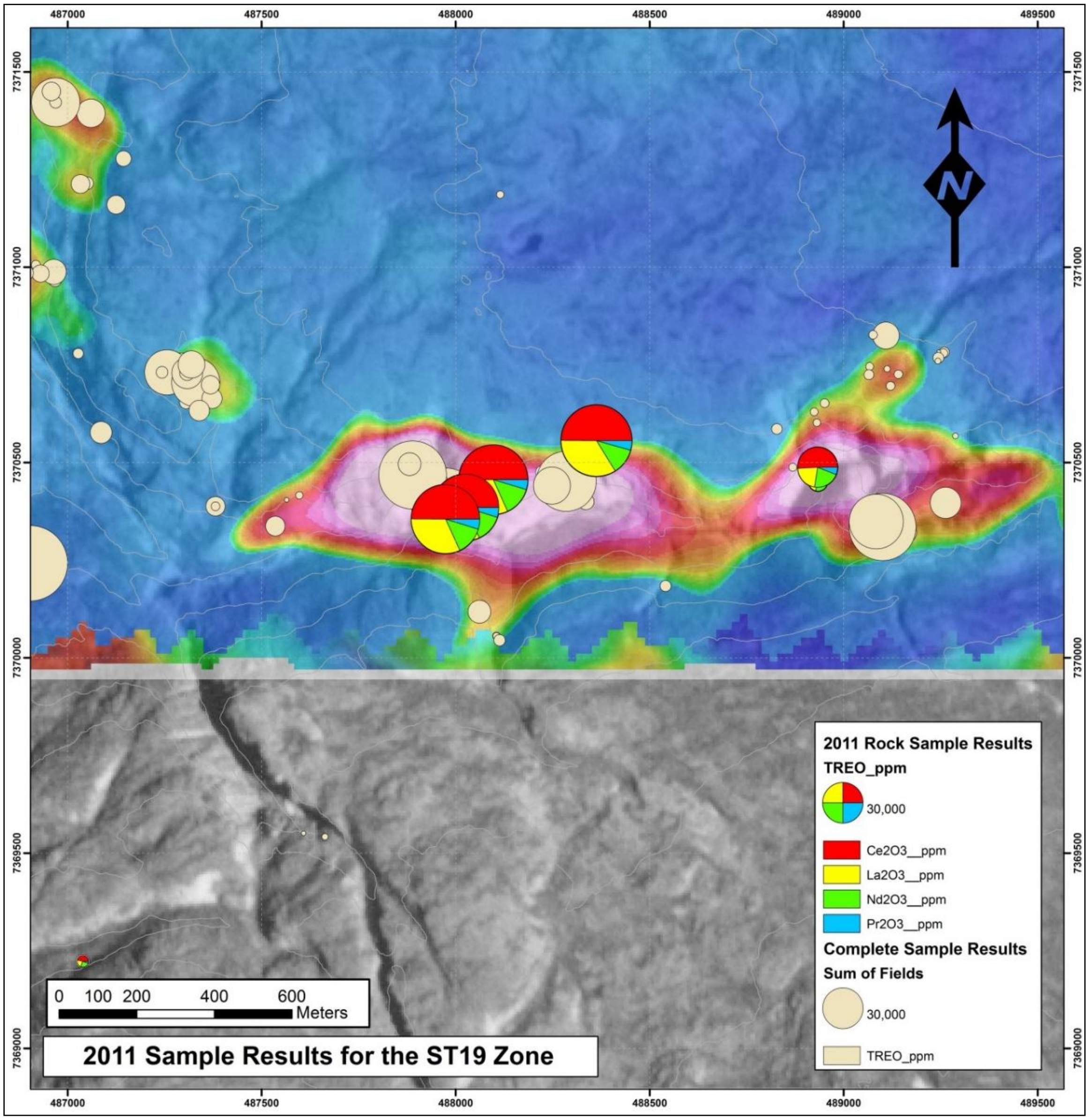


Figure 7-8 Thematic Sample Results for the ST19 Zone

ST24: The ST24 area lies along the eastern rim of the SCC associated ring structure. It is coincident with a high radiometric signature and is a large gossanous area. Terrain-wise it differs from ST1 and ST19. The anomaly lies on top of the bluffs overlooking the Sarfartoq Valley to the north. There is no deeply cut river valley through the heart of the anomaly like those found at both ST1 and ST19.

Hudson collected numerous samples containing >10% TREO. Drilling in 2010 and 2012 failed to intercept such well mineralized material subsurface. Minor follow up mapping and sampling by NNSR confirms an abundance of REE mineralized carbonatite exposed at ST24.

ST31: Rock chip and soil samples collected from the ST30 and ST31 anomalies confirm the presence of REE mineralized carbonatite. These targets represent the potential NE extension of mineralization at ST1 and are logical drill targets to extend known mineralization.

ST34: The 2 km long ST34 Th anomaly received its first significant evaluation in 2024. Abundant carbonatite was observed, but rock chip samples indicate only weak REE mineralization (<0.3% TREO; <500ppm Nd). The soil survey indicates a lack of anomalous REE concentrations.

ST37: The area falls along an ENE trend of REE enrichment from ST1 to ST43 and is marked by airborne and ground radiometric Th anomalies. Steeply dipping, E-W trending carbonatite dikes are mapped through the anomalies. Though most rock chip samples are weakly anomalous with respect to REE concentrations (<0.3% TREO), one sample contains 1.71% TREO. A significant REE in soil anomaly occurs at ST37. This anomaly is similar to the REE in soil anomaly at ST40 in that it indicates HREE enrichment compared to other REE targets in the SCC.

ST43: The ST43 target lies along the face of Sarfartoq Valley wall and is extremely rugged. This prospect also received its first significant evaluation in 2024. The first rock chip samples from the anomaly are only weakly mineralized (<0.3% TREO; <500ppm Nd), but a small batch of soil samples identified a strong REE anomaly with significant HREE enrichment. This target warrants additional mapping and sampling as well as exploratory drilling.

7.3 Geophysics

Multiple geophysical surveys were conducted on or include the Sarfartoq license area. The carbonatite complex was discovered during a 1975 – 1976 airborne radiometric survey (Secher, 1976). Multiple magnetic/ electromagnetic surveys were conducted in the late 1990s for Softrock Petroleums LTD (1996), Platinova (1997), Monopros (1998), GEUS (O'Connor, 1999), and NMR (Barnes, 2001). The NMR survey was carried out in 1999 and also included radiometry, the most useful survey conducted on the property with regard to REE and Nb exploration (Figure 7-9 and Figure 7-10). In 2002, NMR followed this up with ground based radiometrics. A hyperspectral survey targeting kimberlites was flown over central West Greenland for GEUS, in 2002 (Tukiainen, 2002). Hudson conducted seismic surveys on the Garnet Lake diamond project in 2006 and 2007, followed by numerous small ground based electromagnetic, magnetic, radiometric, and gravity surveys over REE targets in 2010 and 2011. Hudson's geophysical surveys were successful in proof of concept, but generally covered areas too small to provide context and identify significant anomalies. Each of the historic geophysics data sets may be accessed via the Greenland Mineral Resources Portal (greenmin.gl).

In 2023, NNSR conducted small geophysical test surveys using a gamma ray spectrometer and radon detectors. Finally, in 2024, NNSR followed up its successful ground gamma radiometrics test with a survey over much of the northern part of the SCC and expanded Hudson's ground based gravity survey.

The 2009 airborne radiometrics and magnetic survey for NMR was pivotal in defining the extent of the SCC and identifying the major pyrochlore and REE prospects. Thorium is trivalent and has a similar ionic radius to the REE. As a result, Th is nearly ubiquitous in REE minerals and REE deposits. Its strong association with REE mineralization facilitates radiometric exploration methods, with REE mineralization manifest as radiometric Th highs. Fenitization, or alkali – ferric iron metasomatism, is the manifestation of hydrothermal alteration associated with carbonatite magmatism. Fenite mineral assemblages often include alkali feldspars, biotite, sodic pyroxene, alkali amphibole, hematite, sulfides, apatite, fluorite, and REE minerals. The alkali feldspar component is often potassic, forming radiometric K highs as aureoles around carbonatites. The alkali – ferric iron effect is the tendency for ion to become stabilized in the ferric state in highly alkaline fluids or melts. Fenitization is therefore prone to be magnetite destructive, crystallizing ferric iron bearing phases such as hematite (Mariano, 1988). Magnetic lows, especially when coincident with radiometric highs, are therefore prospective for carbonatite/fenite/REE occurrences. At Sarfartoq, surficial thorium anomalies mark surface occurrences of the carbonatite ring dike structures; and coincident magnetic lows confirm that the outer ring structure continues at depth (Figure 7-9 and Figure 7-10).

A 2010 magnetic survey over the ST40 area added detail to the survey area, but was of limited extent, only covering the ST40 and parts of the ST1 and ST31 areas. Numerous significant drill intercepts correlate with magnetic lows (Figure 7-11); and a prominent magnetic low extends from ST1, through the ST1-ST40 corridor and ST30, to ST31 (Figure 7-12). Expansion of the ground magnetic survey is highly recommended for future drill targeting.

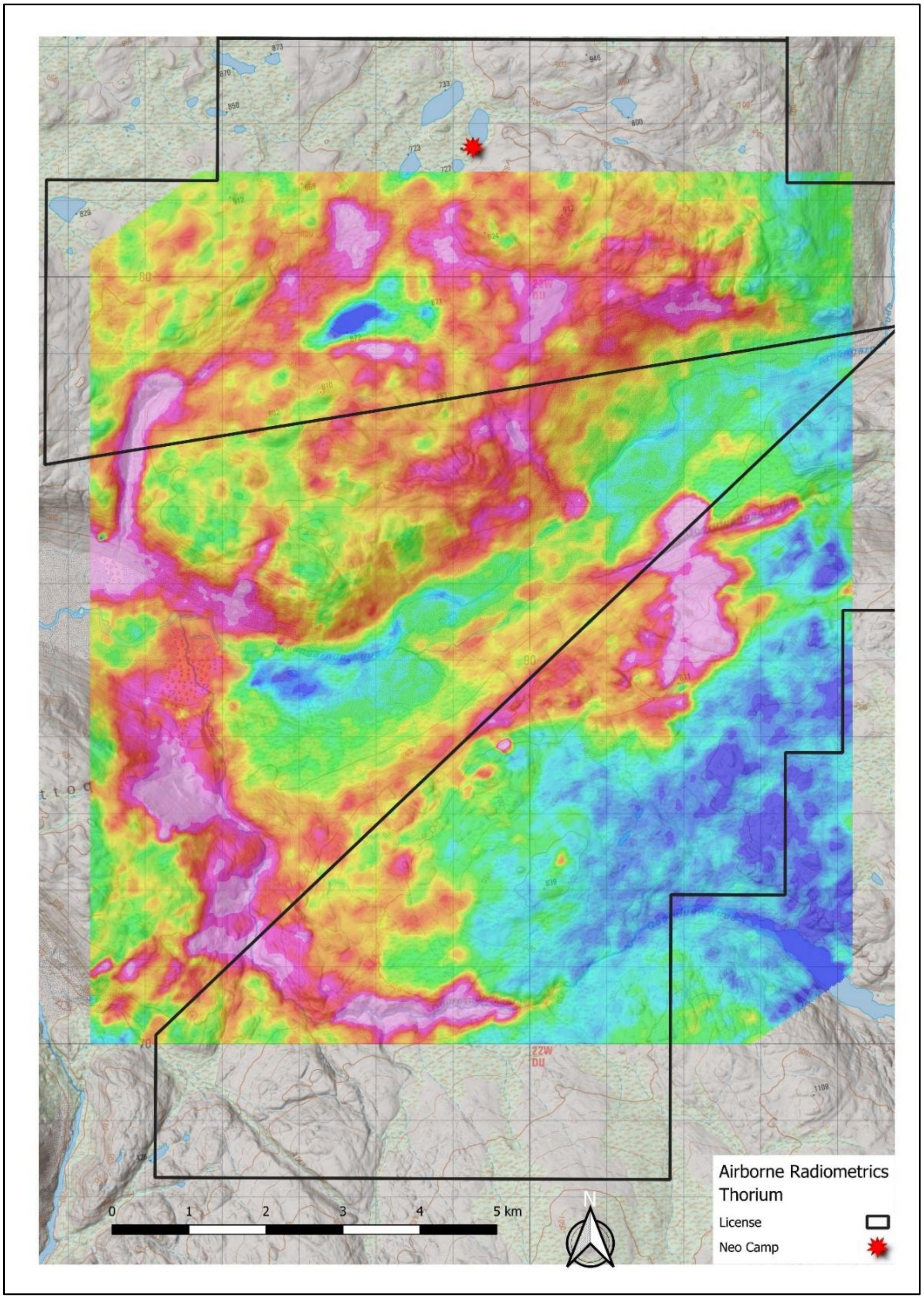


Figure 7-9 Airborne Thorium Radiometrics, NMR (1999)

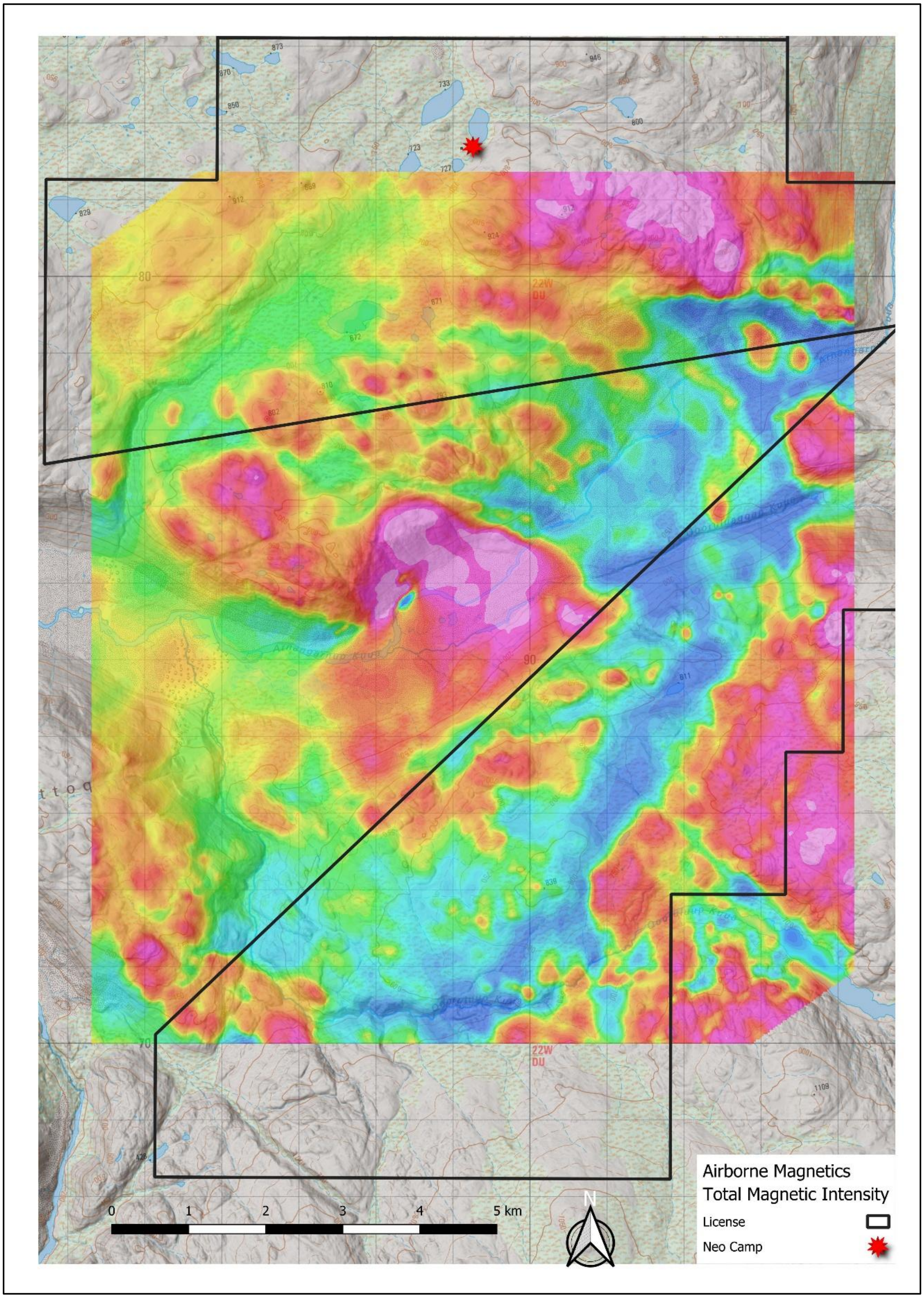


Figure 7-10 Airborne Magnetics, NMR (1999)

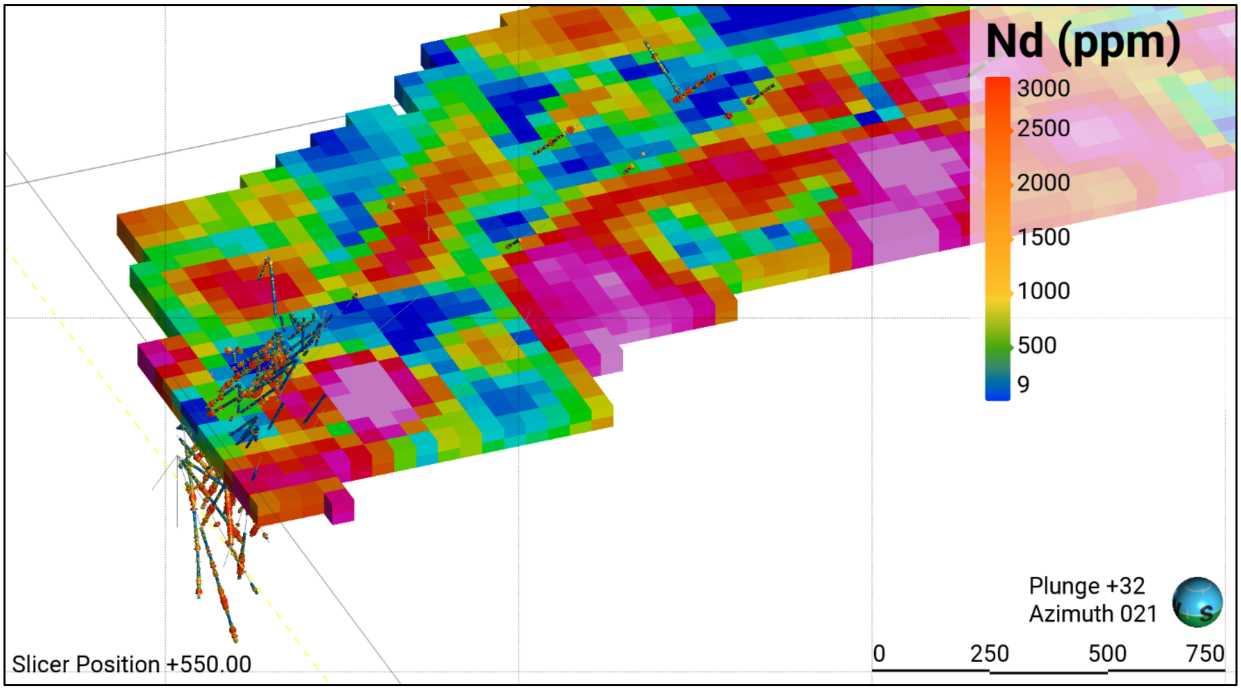


Figure 7-11 Drilling and Magnetics (MVI Amplitude) at ST1

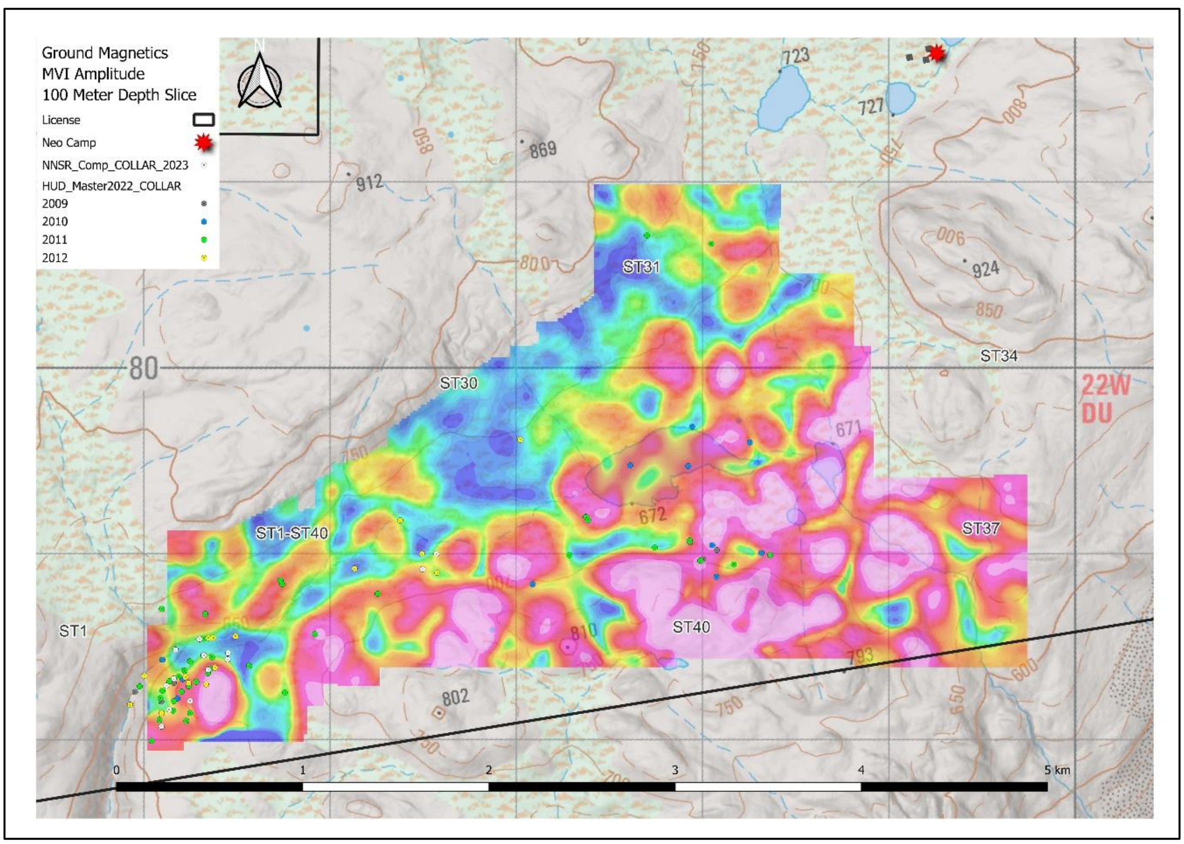


Figure 7-12 Ground Magnetics

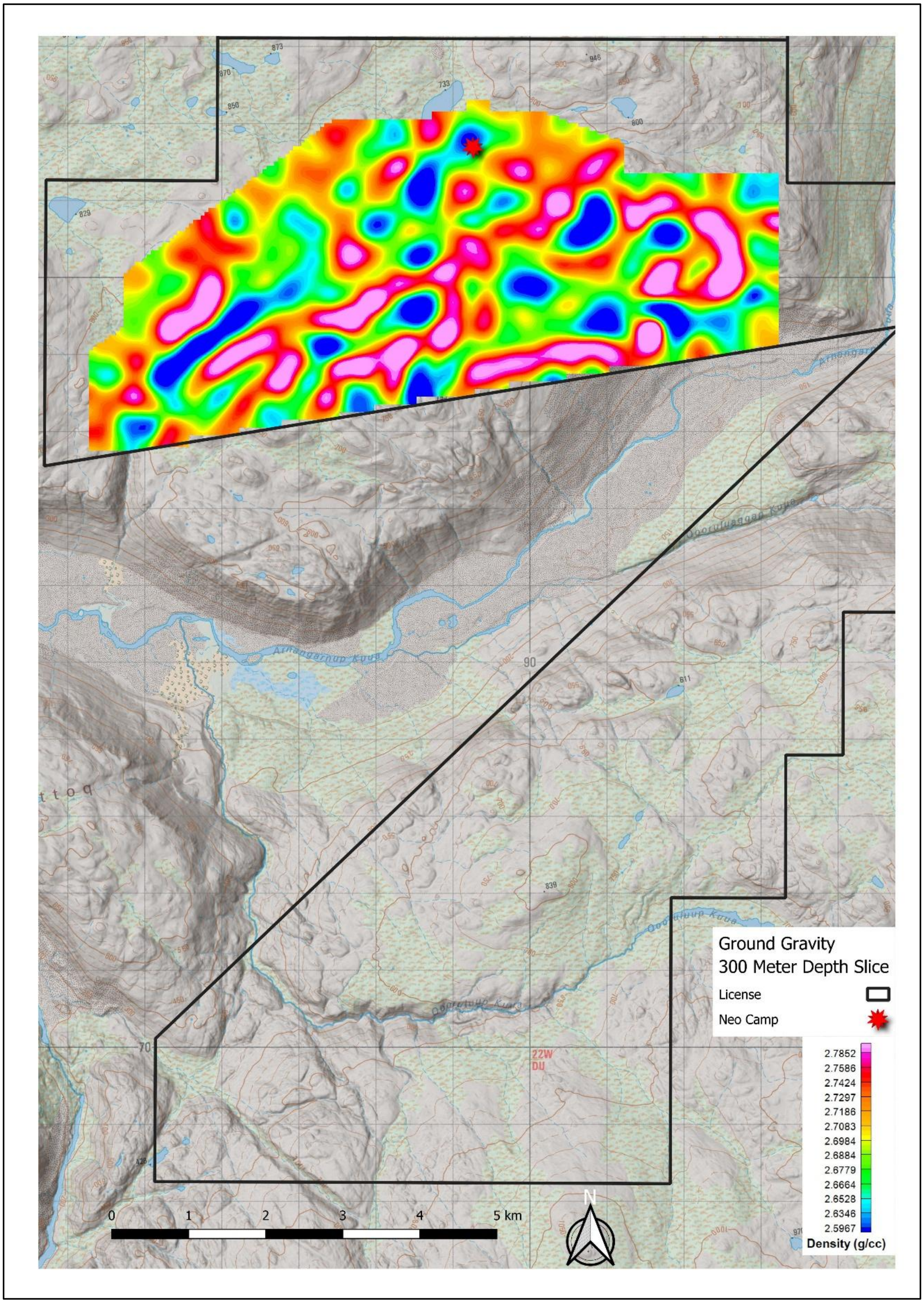


Figure 7-13 Ground Gravity Survey

The 2024 gravity survey conducted by Magee Geophysics and processed by Ellis Geophysical Consulting covered most of the northern part of the SCC ring dike structures (Figure 7-13). An earlier gravity survey from Hudson was merged with the 2024 data. Strong NE and NNW trending density lows correlate with regional metamorphic structures and major zones of carbonatite emplacement. The most striking feature is a NE trending density low extending from ST1 through ST30, ST31, and continuing to the area around Neo Camp. This anomaly correlates with carbonatites found along the major north to NE trending fold limb in that area. The WNW trending density low is coincident with the ST34 and ST43 carbonatite occurrences and E-W oriented fold axes interpreted from foliation measurements. Overlapping Th highs and gravity lows are therefore considered prospective. An interesting feature of the gravity survey is that the ST40 mineralization is coincident with a density high (Figure 7-14). This is hypothesized to be due to abundant barite associated with the carbonatite in this area, but the best mineralized intercept at ST40 occurs in a break along the density high). The ST1 resource also appears to occur in a low density break in a large linear density high (Figure 7-15 and Figure 7-16). The observation of breaks along density highs could indicate fenitized country rock hosting carbonatite.

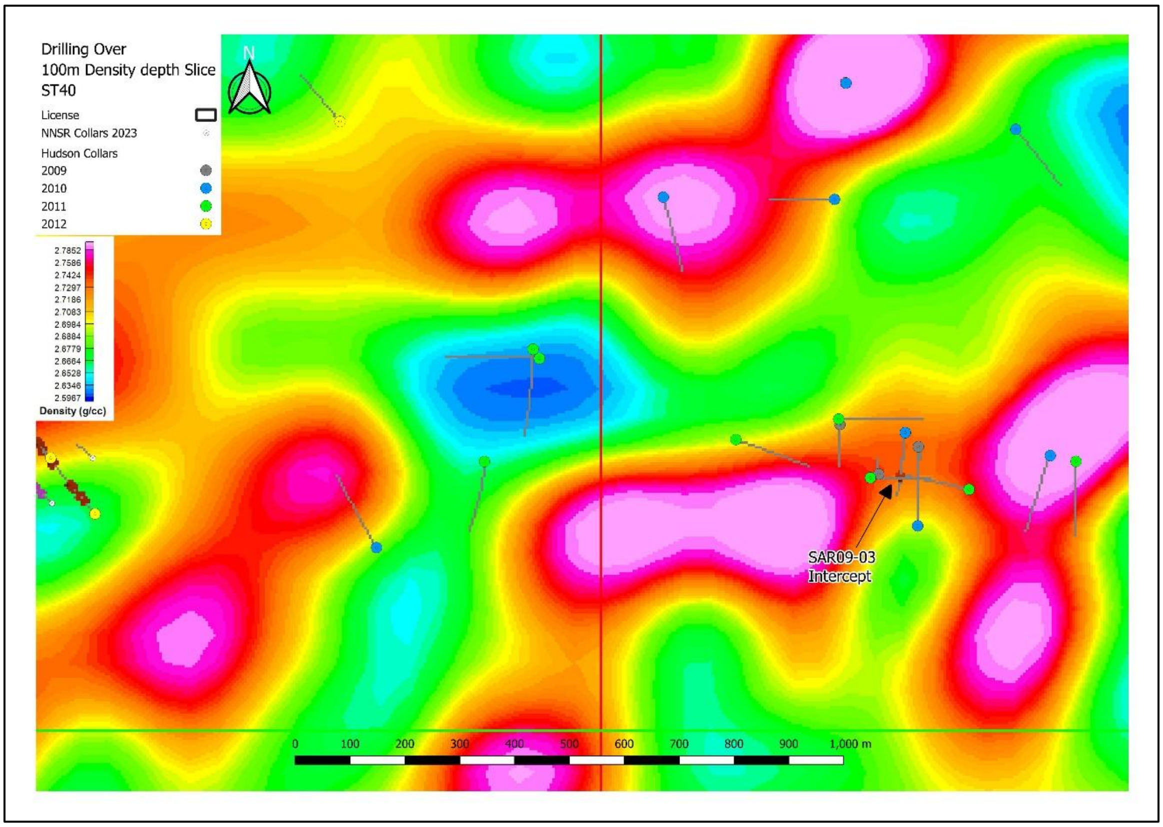


Figure 7-14 ST40 Drilling Superimposed on Density

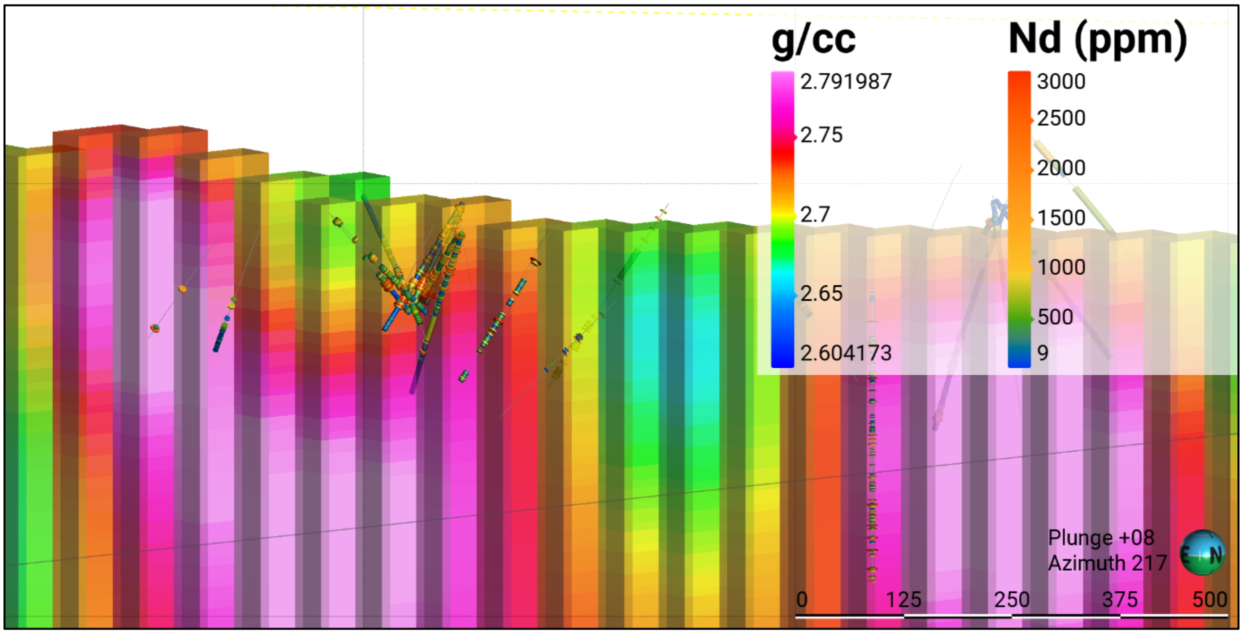


Figure 7-15 ST40 Drill Intercepts Associated with a Break in a Density High

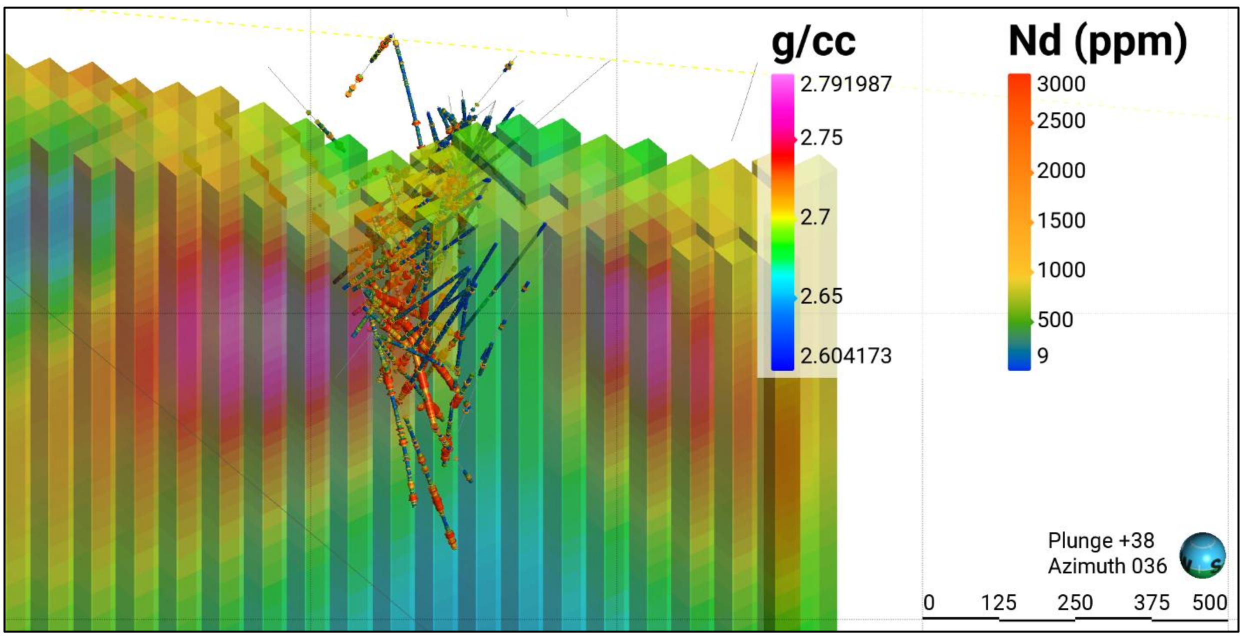


Figure 7-16 ST1 Resource Drilling Between Density Highs

A test program was conducted in 2023, utilizing Thoron Pairs, provided by Radonova, a radon gas testing company. Goals of the Thoron Pair survey included increasing the resolution of known Th anomlaies at the drill target scale and detecting thorium anomalies beneath glacial till, lakes, and alluvium.

Radon (Ra) surveys are an established exploration method for uranium deposits obscured by cover. By conducting a radon survey, one can infer where U anomalies might exist. It is not necessary to differentiate between the isotopes of Ra, as the short half-life of the Th daughter Ra-220 (Thoron) results in much lower diffusion than the U-238 daughter Ra-222 (Radon).

The 2023 Thoron survey at Sarfartoq was an innovative approach, attempting to track known Th anomalies beneath cover. A successful survey would require detectors that can differentiate between Ra-220 and Ra-222. It would also require a source of Th of high enough concentration and shallow enough depths to overcome the short half-life of Ra-220.

Two hundred Thoron Pairs were ordered from Radonova, in May of 2023. Two sample grids were laid out: one extending from ST1 to ST40, and another at ST24. Nominal site spacing was 100 m, with a line spacing of 200 m. The survey grids were planned to cover known Th anomalies in areas of abundant outcrop as well as covered areas, which appear as Th lows in previous surveys. Five pairs were located around Camp as controls. A successful test of the Thoron Pairs would result in (1) strong correlation with Th anomalies identified by previous surveys and (2) extensions of those anomalies beneath covered areas.

Sites were moved or cancelled if they were on outcrop, in a body of water, or if the ground was saturated. One hole was dug at each site. Depths ranged between 10 and 30cm, with an average of 16cm. Measurement time ranged from 33 to 46 days, with an average of 40 days. Field duplicate results varied from about 15 to 26% (Table 7-1 and Figure 7-17).

Table 7-1 Thoron Pair Duplicate Results

Site ID	Primary	Duplicate	Primary - Duplicate	Primary / Duplicate
T011	17635	21674	-4039	18.64
T033	36635	31961	4674	14.62
T060/TJ026	29288	24647	4641	18.83
TJ041/TJ042	7678	10431	-2753	26.39

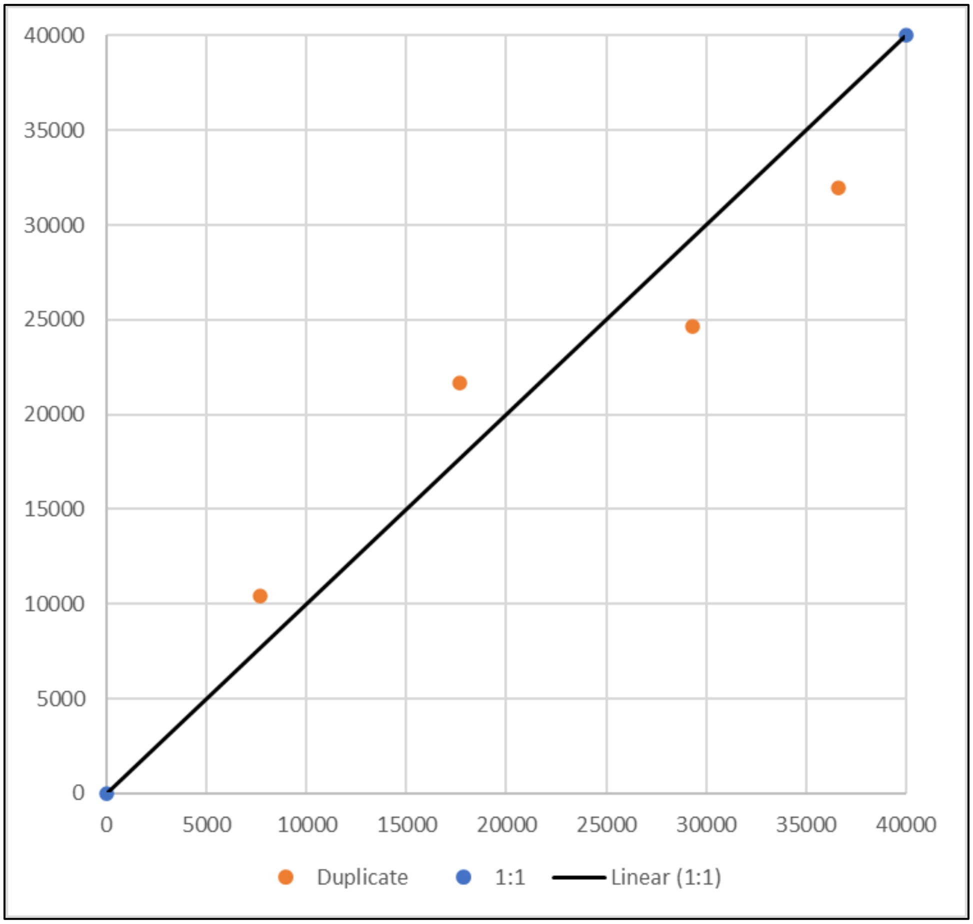


Figure 7-17 Thoron Pair Duplicate Results

Two Thoron Pairs were opened at the end of the program and submitted as blanks. The results were below detection for Thoron and Radon (Table 7-2). The results for an unburied pair placed in the core logging tent are also below detection. Two pairs buried at Camp have mid-range results. One sample was placed directly over a well mineralized carbonatite dike at ST1. This site successfully produced one of the highest concentrations of Thoron, exceeding the 70,000 kBqh/m^3 exposure limit of detection. The results at this site confirm the Thoron Pairs successfully detect high Th concentrations. The only other overlimit in the survey was from a site that does not correlate with very high Th in the 1999 airborne survey, indicating the Thoron pairs likely test more localized areas than spectrometer surveys.

Table 7-2 Thoron Pair Blank Results

Site ID	Exposure calculated (kBqh/m³)_R	Exposure (kBqh/m³)_R	Conc. calculated (Bq/m³)_R	Concentration (Bq/m³)_R	Exposure calculated (kBqh/m³)_T	Exposure (kBqh/m³)_T	Conc. calculated (Bq/m³)_T	Concentration (Bq/m³)_T
T120	5	< 31	6	< 40	0	-31	0	< 40
T118	2	< 31	3	< 40	0	-63	0	< 80

Ten of the Pairs were recovered from the surface, having been pulled out of the ground. One of these was partially pulled into another hole, nearby. Foxes are the most likely culprit.

A total of 16 analyses were below detection for Radon exposure, 6 of which are also below detection for Thoron. Detection limits ranged from 30 to 77 kBq/m3. A total of 17 samples were below detection for Thoron exposure, 6 of which are also below detection for Radon. Detection limits seem quite variable, ranging from 31 to 1,121kBqh/m³. It is unclear how detection limits are determined by Radonova.

Results were plotted over the 1999 NMR radiometric survey, and the results of the two surveys correlate poorly. The Th low at the NE corner of the ST1 to ST40 survey (Figure 7-18) is due to thick moraine and soil cover, with the water table near the surface. The Thoron Pairs failed to detect any Th anomalies in this area. The SE part of the Thoron Pair survey at ST24 (Figure 7-19) hosts a lake and saturated ground with an associated airborne Th low. The Thoron Pairs failed to detect any Th anomalies there either. Numerous Thoron Pair highs occur in airborne Th lows and vice versa, at both survey areas.

The survey is considered a technical success, as the detectors clearly identify thorium enrichment. However, the detectors seem to identify localized zones of thorium enrichment and more closely spaced sample sites would be required to generate useful anomalies. For practical purposes, the survey seems to have failed, as the results correlate poorly with those of previous surveys and the Thoron Detectors failed to identify anomalies beneath cover.

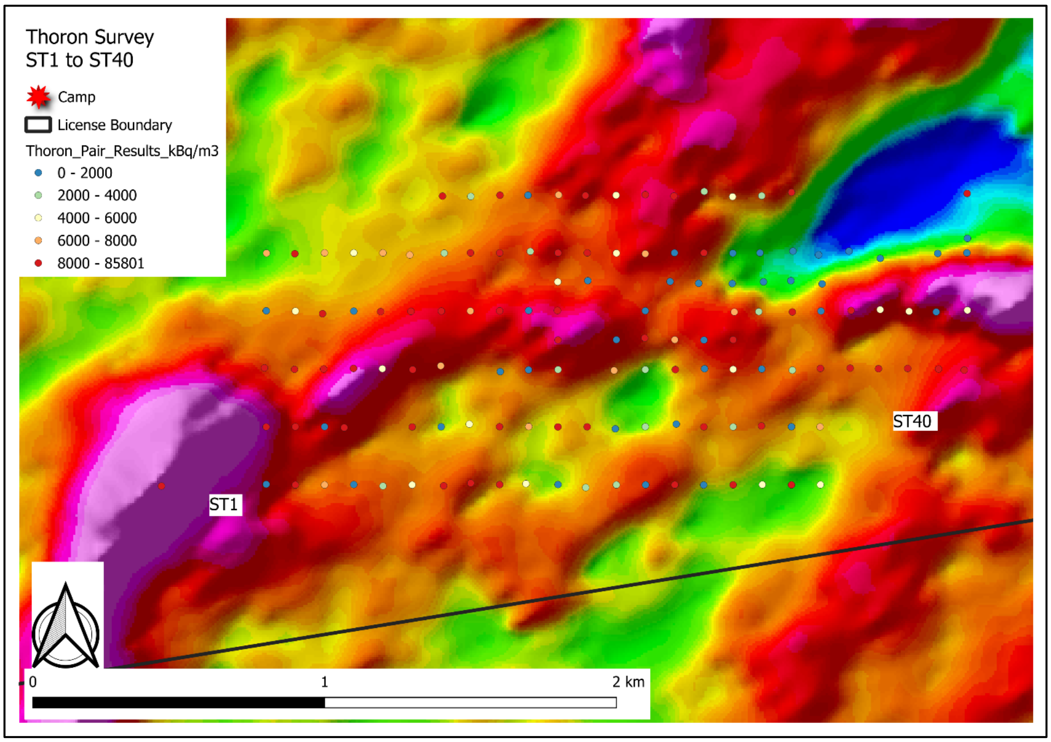


Figure 7-18 Thoron Pair Results ST1 to ST40

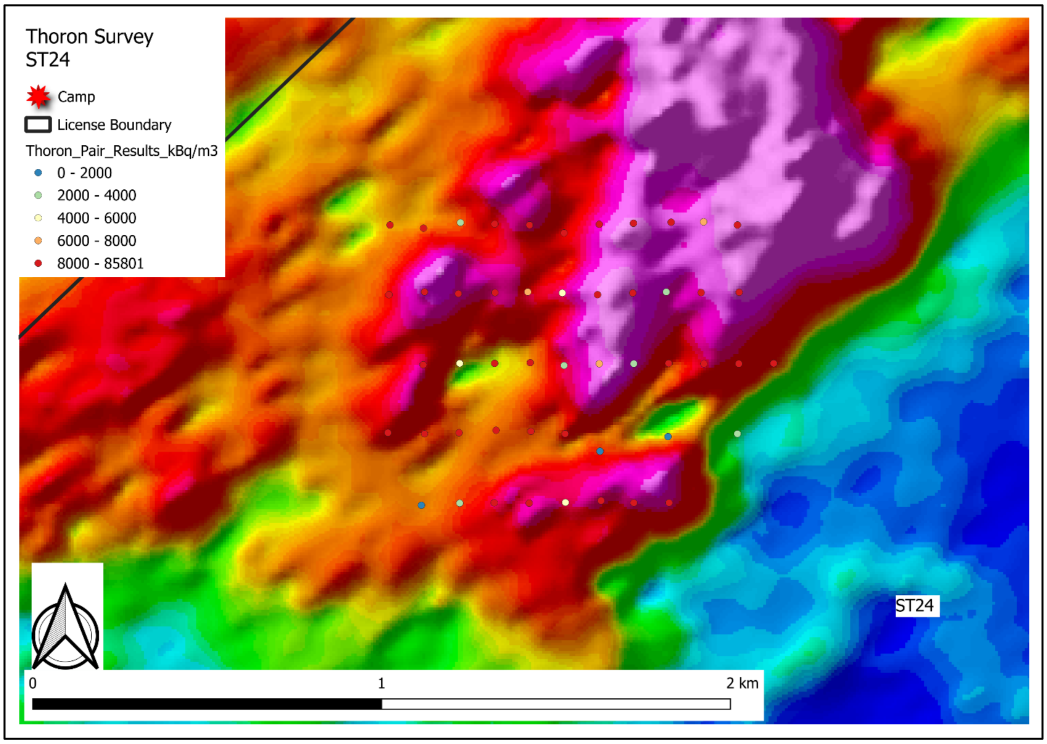


Figure 7-19 Thoron Pair Results ST24

A ground gamma radiometric survey was conducted using a backpack mounted Medusa MS700 gamma ray spectrometer. Lines were oriented N-S at a 100 m spacing; and spectral gamma measurements were taken every 3 seconds. Approximately 300 line km and 243,607 spectra are included in the survey. The resolution is significantly higher than the airborne survey conducted by NMR in 1999 and coverage extends to the northern boundary of the license (prior to the 2024 expansion). Future surveys are planned to cover the entire SCC, within the exploration license.

Overall, the results of the ground gamma survey agree with the 1999 airborne gamma survey. The increased resolution should be used as a guide to support continued exploration and drill targeting along anomalies stretching from ST1 to ST31 and from ST1 to ST40, as well as guiding detailed drill planning within the previously drilled areas. Expanding the survey across the entire property is recommended to guide drill targeting in the ST37 to ST 40, ST24, and ST19 prospects. Additional targets might also be identified, and the extent of the system would be better defined (Figure 7-20).

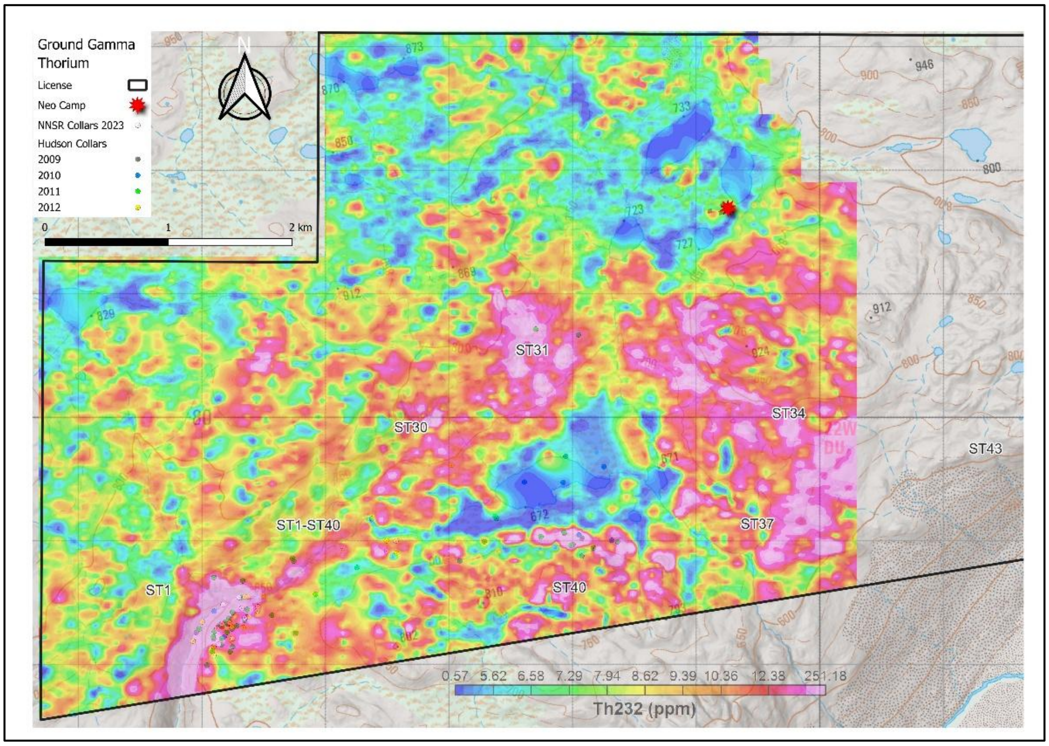


Figure 7-20 Ground Gamma Survey Results (2023 - 2024)

7.4 Drilling

Drill results indicate that REE mineralization is associated with coarse-grained bodies classified as ferrocarbonatite, also called ferroan carbonatites, formed mostly of ankerite, ferroan dolomite, siderite, and barite. The REE are associated with coarse grained hexagonal pseudomorphs and amorphous masses dominantly composed of hematite and ankeritic-calcitic. The masses also contain fine-grained REE fluorocarbonates and phosphates as well as a host of fine-grained gangue minerals including apatite, barite, and strontianite.

The enclosing granitic to granodiorite gneisses are weakly to pervasively fenitized with an assemblage including K-feldspar, hematite, aegirine and ferrocarbonates. Within the alteration zones, stringers and veins of carbonates hosting barite and hematite masses are common. The veins are usually multiphase, multidirectional, and cross cutting. Outside of the main alteration zone, fractures in the granitic gneisses tend to be weakly fenitized and hematite stained. Fine-grained light grey carbonatite dikes, micro dikes and intrusive breccias are commonly associated with fenitization and are present in all drill holes. Sulfides are ubiquitous and include mostly pyrite. Sphalerite, galena, and chalcopyrite are observed locally.

Drill targets are coded after thorium anomalies identified by NMR. Hudson drilled the ST1, ST19, ST24, ST31, and ST40 targets from 2009 to 2012. Drilling by NNSR in 2023 focused on ST1, with two holes collared between ST1 and ST40. All drilled areas are strongly enriched in LREE, but the relative abundance of REE varies from area to area. The high ratio of neodymium at ST40 and ST1, in comparison with other world-wide deposits, is an important economic driver for the Company's exploration and development program.

Significant intercepts are presented in Table 7-3 for the 2023 drill program, as well as historic significant intercepts for ST19, ST24, and ST40. Historic intercepts are not considered relevant at ST1, as the mineralization is sufficiently drilled to facilitate resource estimation.

The highest historic drill sample contained 8.09% TREO over 2 m, in SAR10-23, drilled at ST19. A 2 m, 7.98% TREO sample was drilled in SAR10-22, also at ST19. Other ≥7.5% TREO drill samples are from SAR11-71 (2 m of 7.5% TREO) and SAR12-03 (2 m of 8.04% TREO) at the NE edge of the ST1 resource, and SAR11-50 (2 m of 7.96% TREO) in the area between ST1 and ST40. Numerous drill samples from the 2023 drill program exceed 7.5% TREO, with 6 samples besting the highest historic TREO value. These samples were collected from SAR23-09 (2.07 m of 9.09% TREO), SAR23-14 (1.15 m of 7.68% TREO), and SAR23-15 (1.45 m of 7.66% & 1.17 m of 11.97% TREO) at the NE end of the ST1 resource; and SAR23-16 (1.52 m of 7.51%, 0.6 m of 8.01%, 0.94 m of 8.16%, 2.07 m of 9.09%, 1.2 m of 9.27%, & 0.32 m of 11.79% TREO) in the area between ST1 and ST40. This concentration of exceptionally high REE grades at the NE edge of the ST1 resource and in the ST1 to ST40 corridor is a positive indication that REE grades increase to the NE, making the area between ST1 and ST40 a prime exploration target.

Table 7-3 Significant Intercepts in Historic Core Holes

ST1 to ST40 Corridor						
DRILL HOLE	FROM(m)	TO(m)	INTERVAL(m)	TREO(%)	NdPrOx/TREO	$Nd_2O_3 + Pr_2O_3$(%)
SAR11-47	103.00	105.00	**2.00**	**2.45**	18%	0.45
SAR11-47	107.00	109.00	**2.00**	**2.38**	19%	0.45
SAR11-48	112.00	121.00	**9.00**	**1.46**	20%	0.30
SAR11-48	139.60	140.40	**0.80**	**3.01**	19%	0.58
SAR11-50	104.00	110.00	**6.00**	**1.12**	18%	0.20
SAR11-50	206.00	220.00	**14.00**	**3.26**	17%	0.55
Including	206.00	210.00	**4.00**	**7.15**	17%	1.19
SAR11-52	203.70	204.90	**1.20**	**5.46**	18%	0.99
SAR12-10	23.00	25.00	**2.00**	**2.42**	17%	0.40
SAR12-10	31.70	33.33	**1.63**	**6.22**	16%	1.00
SAR12-10	94.00	96.00	**2.00**	**3.85**	20%	0.75
SAR12-10	198.00	206.00	**8.00**	**1.37**	18%	0.25
SAR12-12	189.00	193.00	**4.00**	**1.85**	20%	0.36
Including	189.00	191.00	**2.00**	**2.21**	19%	0.43
SAR12-12	233.00	237.00	**4.00**	**2.90**	19%	0.54
Including	233.00	235.00	**2.00**	**4.73**	19%	0.90
SAR12-15	88.00	100.00	**12.00**	**3.07**	16%	0.49
Including	90.00	94.00	**4.00**	**5.85**	15%	0.87
SAR12-15	163.00	181.00	**18.00**	**2.34**	17%	0.39
Including	163.00	169.00	**6.00**	**4.34**	17%	0.72
SAR12-15	233.00	287.00	**54.00**	**2.11**	16%	0.33
Including	241.00	251.00	**10.00**	**2.27**	17%	0.38
Including	259.00	265.00	**6.00**	**4.09**	15%	0.62
Including	277.00	283.00	**6.00**	**5.53**	14%	0.79
SAR12-18	38.00	40.00	**2.00**	**2.28**	17%	0.39
SAR12-18	48.00	56.00	**8.00**	**2.59**	17%	0.45
Including	48.00	50.00	**2.00**	**4.45**	17%	0.77
SAR12-18	82.00	92.00	**10.00**	**1.66**	17%	0.29
Including	82.00	84.00	**2.00**	**2.83**	18%	0.50
SAR12-18	116.00	124.00	**8.00**	**2.29**	16%	0.38
Including	116.00	118.00	**2.00**	**3.41**	17%	0.58
And	122.00	124.00	**2.00**	**3.63**	16%	0.59
SAR12-18	130.00	136.00	**6.00**	**1.80**	17%	0.30
Including	132.00	134.00	**2.00**	**2.42**	17%	0.40
SAR12-18	142.00	148.00	**6.00**	**1.06**	18%	0.19
SAR12-18	154.00	170.00	**16.00**	**2.81**	16%	0.45
Including	154.00	158.00	**4.00**	**3.68**	17%	0.62
And	162.00	168.00	**6.00**	**3.17**	15%	0.48
SAR12-18	200.00	208.00	**8.00**	**3.48**	14%	0.48
Including	204.00	206.00	**2.00**	**6.89**	13%	0.91
SAR12-19	46.00	52.00	**6.00**	**3.11**	17%	0.52
Including	48.00	50.00	**2.00**	**4.21**	16%	0.68
SAR12-19	130.00	136.00	**6.00**	**1.45**	18%	0.26
Including	134.00	136.00	**2.00**	**2.57**	18%	0.45
SAR12-19	148.00	150.00	**2.00**	**2.89**	14%	0.39
SAR12-19	156.00	158.00	**2.00**	**2.46**	16%	0.40
SAR12-19	160.00	162.00	**2.00**	**4.62**	13%	0.61
SAR12-19	172.00	174.00	**2.00**	**2.18**	15%	0.32
SAR12-19	198.00	200.00	**2.00**	**2.70**	16%	0.42

ST40						
DRILL HOLE	FROM(m)	TO(m)	INTERVAL(m)	TREO(%)	NdPrOx/TREO	$Nd_2O_3 + Pr_2O_3$(%)
SAR09-03	92.20	102.42	**10.22**	**1.36**	54%	0.74
SAR10-03	105.50	111.00	**5.50**	**1.26**	33%	0.42
Including	106.50	107.00	**0.50**	**4.26**	31%	1.33
SAR11-10	47.00	49.00	**2.00**	**2.19**	22%	0.48

Significant REE intercepts from the 2023 drill program are presented in

Table 7-4. Drill holes SAR23-08, SAR23-11, and SAR23-17 failed to reach target depth and were not sampled. Drill hole SAR23-13 also failed to reach target depth and has no significant intercepts. Most 2023 drilling occurred at the

ST19						
DRILL HOLE	FROM(m)	TO(m)	INTERVAL(m)	TREO(%)	NdPrOx/TREO	$Nd_2O_3 + Pr_2O_3$(%)
SAR09-08	156.00	172.00	**16.00**	**1.02**	17%	0.17
SAR10-22	36.00	40.00	**4.00**	**1.33**	18%	0.24
SAR10-22	60.00	64.00	**4.00**	**3.65**	15%	0.54
SAR10-22	70.00	106.00	**36.00**	**2.46**	15%	0.37
Including	90.00	94.00	**4.00**	**6.52**	14%	0.91
SAR10-22	110.00	120.00	**10.00**	**2.67**	18%	0.47
SAR10-23	32.00	74.00	**42.00**	**2.68**	15%	0.41
Including	42.00	56.00	**14.00**	**4.91**	15%	0.73
SAR10-28	12.00	16.00	**4.00**	**1.60**	18%	0.29
SAR10-29	18.25	18.70	**0.45**	**5.41**	18%	0.97
SAR11-57	102.00	106.00	**4.00**	**1.79**	22%	0.39
Including	104.00	106.00	**2.00**	**2.28**	22%	0.49
SAR11-59	10.00	14.00	**4.00**	**1.58**	16%	0.25
SAR11-59	46.00	50.00	**4.00**	**4.90**	16%	0.76
SAR11-59	76.00	134.00	**58.00**	**2.70**	16%	0.43
Including	84.00	102.00	**18.00**	**4.03**	14%	0.58
And	108.00	110.00	**2.00**	**6.46**	14%	0.92
And	116.00	120.00	**4.00**	**4.48**	15%	0.69
SAR11-60	32.00	48.00	**16.00**	**1.03**	18%	0.18
SAR11-60	56.00	58.00	**2.00**	**3.80**	15%	0.59
SAR11-60	136.00	138.00	**2.00**	**2.10**	17%	0.36
SAR11-65	272.00	274.00	**2.00**	**3.56**	17%	0.62
SAR11-67	16.50	18.50	**2.00**	**4.56**	18%	0.83
ST24						
DRILL HOLE	FROM(m)	TO(m)	INTERVAL(m)	TREO(%)	NdPrOx/TREO	$Nd_2O_3 + Pr_2O_3$(%)
SAR10-21	12.00	14.00	**2.00**	**2.21**	18%	0.40
SAR12-11	32.50	33.50	**1.00**	**2.01**	20%	0.41
SAR12-13	18.00	24.00	**6.00**	**1.21**	17%	0.20
Including	22.00	24.00	**2.00**	**2.15**	16%	0.35
SAR12-13	90.00	100.00	**10.00**	**1.35**	20%	0.26
SAR12-13	130.00	138.00	**8.00**	**1.00**	25%	0.25

ST1 target area, but SAR23-16 and SAR23-17 were drilled NE of the ST1 resource, between the ST1 and ST40 targets.

Significant Nb intercepts from 2023 drilling are presented in Table 7-5. While few intercepts at ST1 match the grades at the Sarfartoq No. 1 Niobium occurrence, many intercepts compare favorably with Nb grades reported at deposits such as Niobec, Araxa, and Elk Creek. Niobium grades exceeding 1% Nb_2O_5 were intercepted in carbonatite dikes in SAR23-01, SAR23-04, and SAR23-09, at ST1, but the most impressive mineralization was intercepted in SAR23-16, in the ST1 to ST40 corridor. Intercepts with grades up to 5.18% Nb_2O_5 over 1.36 m and as thick as 131 m of 0.53% Nb_2O_5 indicate there is potential for significant value added from byproduct Nb, or even the discovery of a stand alone Nb deposit.

Table 7-4 Significant Intercepts, 2023

DRILL HOLE	FROM(m)	TO(m)	INTERVAL(m)	TREO(%)	NdPrOx/TREO	$Nd_2O_3 + Pr_2O_3$(%)
SAR23-01	231.70	242.68	**10.98**	**1.08**	26%	0.28
Including	232.53	234.52	**1.99**	**2.32**	24%	0.56
SAR23-02	237.17	242.73	**5.56**	**1.66**	24%	0.40
Including	240.39	242.73	**2.34**	**2.35**	24%	0.56
SAR23-02	284.04	307.89	**23.85**	**2.21**	28%	0.62
Including	291.00	305.35	**14.35**	**2.99**	28%	0.84
SAR23-02	347.48	362.17	**14.69**	**1.11**	30%	0.34
SAR23-02	398.88	407.15	**8.27**	**0.59**	35%	0.20
SAR23-03	204.06	267.68	**63.62**	**1.71**	27%	0.47
Including	215.05	221.40	**6.35**	**2.52**	28%	0.71
And	251.85	258.21	**6.36**	**2.69**	31%	0.83
SAR23-03	318.00	330.18	**12.18**	**1.20**	25%	0.31
SAR23-03	355.00	362.28	**7.28**	**0.86**	27%	0.23
SAR23-04	202.92	216.00	**13.08**	**0.82**	25%	0.20
Including	212.71	213.39	**0.68**	**3.67**	24%	0.87
SAR23-04	226.60	238.60	**12.00**	**1.27**	20%	0.26
Including	235.65	236.82	**1.17**	**3.01**	18%	0.56
SAR23-04	310.60	311.30	**0.70**	**3.35**	20%	0.65
SAR23-05	40.90	53.28	**12.38**	**1.68**	23%	0.39
SAR23-05	72.00	84.90	**12.90**	**1.19**	33%	0.39
SAR23-06	21.00	177.85	**156.85**	**0.94**	26%	0.25
Including	41.03	45.98	**4.95**	**3.20**	24%	0.76
And	69.58	76.48	**6.90**	**2.87**	25%	0.71
SAR23-07	21.00	64.23	**43.23**	**1.86**	24%	0.45
Including	50.05	62.58	**12.53**	**3.47**	23%	0.79
SAR23-07	78.26	85.51	**7.25**	**0.85**	28%	0.24
SAR23-07	98.82	111.23	**12.41**	**0.64**	27%	0.17
SAR23-07	120.88	165.00	**44.12**	**1.08**	26%	0.28
Including	135.00	146.65	**11.65**	**2.03**	25%	0.52
SAR23-09	165.00	205.40	**40.40**	**2.19**	21%	0.46
Including	184.01	193.80	**9.79**	**5.01**	20%	1.02
SAR23-09	277.44	282.24	**4.80**	**1.38**	21%	0.29
Including	277.44	278.05	**0.61**	**4.48**	20%	0.88
SAR23-10	189.84	197.55	**7.71**	**1.03**	22%	0.22
Including	193.73	194.61	**0.88**	**3.00**	20%	0.60
SAR23-10	225.80	239.00	**13.20**	**1.05**	21%	0.22
SAR23-12	227.90	255.21	**27.31**	**1.85**	20%	0.37
Including	245.34	247.40	**2.06**	**4.17**	20%	0.85

DRILL HOLE	FROM(m)	TO(m)	INTERVAL(m)	TREO(%)	NdPrOx/TREO	$Nd_2O_3 + Pr_2O_3$(%)
SAR23-14	205.83	229.26	**23.43**	**2.69**	20%	0.53
Including	205.83	206.66	**0.83**	**4.54**	19%	0.87
And	213.00	219.67	**6.67**	**3.75**	20%	0.73
And	222.28	223.43	**1.15**	**7.68**	20%	1.51
And	224.15	227.63	**3.48**	**3.77**	19%	0.71
SAR23-14	256.47	257.94	**1.47**	**2.93**	20%	0.58
SAR23-14	270.33	275.50	**5.17**	**0.71**	20%	0.14
SAR23-15	104.08	113.05	**8.97**	**1.24**	23%	0.29
Including	104.08	106.32	**2.24**	**2.97**	23%	0.68
SAR23-15	119.14	129.28	**10.14**	**1.04**	24%	0.24
Including	124.61	126.37	**1.76**	**3.02**	23%	0.71
SAR23-15	204.00	217.82	**13.82**	**4.46**	19%	0.87
Including	211.40	217.82	**6.42**	**6.87**	19%	1.33
SAR23-15	230.70	236.11	**5.41**	**4.46**	20%	0.90
SAR23-16	64.90	65.63	**0.73**	**2.83**	18%	0.50
SAR23-16	82.30	105.00	**22.70**	**1.17**	18%	0.21
Including	88.73	92.55	**3.82**	**3.52**	18%	0.63
And	104.33	105.00	**0.67**	**4.02**	18%	0.71
SAR23-16	144.10	149.14	**5.04**	**6.90**	17%	1.19
Including	147.94	149.14	**1.20**	**9.27**	17%	1.59
SAR23-16	163.46	173.89	**10.43**	**2.78**	15%	0.42
Including	169.02	171.09	**2.07**	**8.69**	15%	1.29
SAR23-16	185.21	204.11	**18.90**	**2.42**	16%	0.39
Including	188.08	189.79	**1.71**	**3.79**	14%	0.55
And	191.96	197.46	**5.50**	**5.10**	16%	0.81
SAR23-16	213.40	220.34	**6.94**	**2.02**	15%	0.29
Including	219.40	220.34	**0.94**	**8.16**	14%	1.16
SAR23-16	264.69	265.72	**1.03**	**5.81**	19%	1.08
SAR23-16	275.83	281.67	**5.84**	**0.99**	20%	0.19
Including	275.83	277.19	**1.36**	**2.71**	20%	0.55
SAR23-16	310.36	311.43	**1.07**	**3.13**	17%	0.52
SAR23-16	315.06	320.43	**5.37**	**1.33**	17%	0.23
Including	315.06	315.87	**0.81**	**4.23**	17%	0.73
SAR23-18	27.88	29.20	**1.32**	**2.61**	21%	0.55
SAR23-18	99.20	104.90	**5.70**	**4.58**	21%	0.97
SAR23-19	14.67	29.30	**14.63**	**0.55**	22%	0.12
SAR23-19	63.70	64.40	**0.70**	**3.78**	21%	0.79
SAR23-19	73.17	103.55	**30.38**	**0.79**	21%	0.17
Including	77.50	78.63	**1.13**	**2.71**	21%	0.58
SAR23-19	136.23	137.12	**0.89**	**3.01**	19%	0.58
SAR23-19	143.78	150.00	**6.22**	**1.05**	20%	0.21
Including	143.78	144.58	**0.80**	**3.68**	19%	0.68

Table 7-5 Significant Nb Intercepts in 2023

Drill Hole ID	From (m)	To (m)	Interval (m)	Nb_2O_5 (%)
SAR23-01	20.17	20.75	0.58	12.35
SAR23-02	280.66	287.45	6.79	0.45
Including	280.66	282.27	1.61	0.63
SAR23-02	324.32	332.35	8.03	0.26
Including	330	332.35	2.35	0.56
SAR23-03	136.75	137.66	0.91	0.60
SAR23-04	124.87	128.62	3.75	0.51
Including	126.58	128.62	2.04	0.83
SAR23-04	195.64	227.68	32.04	0.28
Including	202.92	204.92	2	1.33
And	222	223.55	1.55	0.51
SAR23-06	43.4	83.65	40.25	0.16
Including	65.65	69.58	3.93	0.63
SAR23-07	106.56	148.36	41.8	0.24
Including	123.85	135	11.15	0.50
SAR23-09	150	184.01	34.01	0.17
Including	150	152.41	2.41	0.51
And	165	166.36	1.36	1.02
SAR23-10	96.35	99.3	2.95	0.28
Including	98.56	99.3	0.74	0.66
SAR23-10	161.6	162.49	0.89	0.56
SAR23-10	189.84	193.73	3.89	0.43
Including	190.64	192.54	1.9	0.63
SAR23-12	8.42	18.85	10.43	0.25
Including	8.42	9.13	0.71	0.51
And	13.15	14.25	1.1	0.76
And	18.19	18.85	0.66	0.80
SAR23-12	187.87	200.08	12.21	0.19
Including	187.87	189	1.13	0.74
SAR23-12	213.1	235.13	22.03	0.13
Including	213.1	213.68	0.58	0.83
And	227.9	229.27	1.37	0.63
SAR23-12	253.18	260.71	7.53	0.53
Including	255.21	258	2.79	0.97
SAR23-14	180.73	190.09	9.36	0.28
Including	188.68	190.09	1.41	0.51
SAR23-14	203.73	208.33	4.6	0.17
Including	206.66	208.33	1.67	0.50
SAR23-14	234.88	245.46	10.58	0.25
Including	240.87	242.7	1.83	0.73
SAR23-15	106.32	113.05	6.73	0.34
Including	111.63	113.05	1.42	0.50
SAR23-15	119.14	132.46	13.32	0.20
Including	119.14	120.53	1.39	0.51
SAR23-16	79.2	210.38	131.18	0.53
Including	86.65	92.55	5.9	1.28
And	102	105	3	2.65
And	108.45	111	2.55	1.49
And	119.08	120.15	1.07	4.51
And	136.1	137.73	1.63	1.46
And	144.1	149.14	5.04	1.62
And	169.02	171.09	2.07	2.36
And	191.33	196.86	5.53	2.94
SAR23-16	244.76	245.92	1.16	0.64
SAR23-16	263.2	266.62	3.42	0.69
Including	264.69	265.72	1.03	1.87
SAR23-16	275.83	281.67	5.84	1.34
Including	275.83	277.19	1.36	5.18
SAR23-16	289.88	290.67	0.79	0.92
SAR23-16	301.1	316.8	15.7	0.22
Including	310.36	311.43	1.07	1.22
And	315.06	315.87	0.81	1.39

7.4.1 Collar and Down Hole Surveys

The header information for each drill hole is presented in Table 7-6 and locations are illustrated in Figure 7-21. Historic (2009 – 2012) elevations in the table use the height above sea level (HASL) and have been collected using either a handheld Garmin GPS or a more accurate Trimble GPS. All historic collar elevations at ST1 were measured using the Trimble differential GPS and for the purposes of the resource estimate, the Height Above Elipsoid was used. Drill collars were professionally surveyed in 2023, by Asiaq. The projection used is WGS 84, UTM Zone 22N.

A Reflex EZ-trac tool was utilized to conduct down-hole orientation surveys of most historic drill holes. Down-hole surveys in 2023 were conducted with a Reflex Sprint-IQ continuous north seeking gyro.

Table 7-6 Sarfartoq REE Drillhole Collar Data

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)	Target	Azimuth	Dip	Start Date	End Date
SAR09-01	488006	7378969	693	105	ST40	355	-75	2009-09-08	2009-09-09
SAR09-02	487935	7379060	677	122	ST40	181	-50	2009-09-09	2009-09-10
SAR09-03	488078	7379019	679	128	ST40	180	-54	2009-09-12	2009-09-13
SAR09-04	485163	7378305	645	131	ST1	320	-81	2009-09-15	2009-09-16
SAR09-05	485102	7378429	570	149	ST1	150	-50	2009-09-16	2009-09-17
SAR09-06	484955	7378255	546	137	ST1	120	-50	2009-09-17	2009-09-18
SAR09-07	485096	7378204	635	156	ST1	300	-80	2009-09-19	2009-09-20
SAR09-08	487872	7370618	540	201	ST19	170	-80	2009-09-21	2009-09-22
SAR09-09	488234	7370545	542	201	ST19	180	-75	2009-09-23	2009-09-24
SAR10-01	487946	7379682	669	342	ST40	0	-90	2010-05-01	2010-05-04
SAR10-02	487925	7379470	669	186	ST40	270	-50	2010-05-04	2010-05-06
SAR10-03	487613	7379474	669	198	ST40	160	-45	2010-05-06	2010-05-08
SAR10-04	488318	7379003	695	219	ST40	195	-45	2010-05-08	2010-05-10
SAR10-05	488054	7379045	677	164	ST40	180	-45	2010-05-10	2010-05-12
SAR10-06	488054	7379045	677	234	ST40	180	-60	2010-05-12	2010-05-14
SAR10-07	488255	7379598	672	196	ST40	135	-45	2010-05-14	2010-05-16
SAR10-08	485102	7378429	570	379	ST1	180	-45	2010-05-16	2010-05-19
SAR10-09	485102	7378429	570	250	ST1	0	-90	2010-05-19	2010-05-21
SAR10-10	485172	7378483	586	332	ST1	180	-45	2010-05-22	2010-05-25
SAR10-11	485172	7378483	586	204	ST1	340	-45	2010-05-25	2010-05-27
SAR10-12	485172	7378483	586	156	ST1	100	-45	2010-05-27	2010-05-28
SAR10-13	485211	7378325	653	384	ST1	255	-59	2010-05-28	2010-05-31
SAR10-14	485211	7378325	653	155	ST1	0	-90	2010-05-31	2010-06-01
SAR10-15	485211	7378325	653	323	ST1	255	-45	2010-06-01	2010-06-04
SAR10-16	485245	7378287	656	348	ST1	255	-60	2010-06-04	2010-06-07
SAR10-17	485182	7378221	649	305	ST1	320	-55	2010-06-08	2010-06-10
SAR10-18	487090	7378835	700	216	ST40	330	-45	2010-06-10	2010-06-12
SAR10-19	488077	7378875	712	220	ST40	0	-51	2010-06-12	2010-06-14

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)	Target	Azimuth	Dip	Start Date	End Date
SAR10-20	492168	7375465	610	104	ST24	287	-46	2010-08-17	2010-08-18
SAR10-21	492160	7375438	615	204	ST24	86	-44	2010-08-18	2010-08-20
SAR10-22	489083	7370334	585	180	ST19	85	-59	2010-08-20	2010-08-22
SAR10-23	489156	7370348	585	180	ST19	272	-56	2010-08-22	2010-08-24
SAR10-24	489156	7370348	585	159	ST19	267	-80	2010-08-24	2010-08-26
SAR10-24A	489156	7370348	585	21	ST19	265	-80	2010-08-24	2010-08-24
SAR10-25	488009	7370351	431	281	ST19	38	-42	2010-08-26	2010-08-29
SAR10-26	488009	7370351	431	32	ST19	35	-80	2010-08-29	2010-08-30
SAR10-27	487366	7370726	512	129	ST19	276	-74	2010-08-31	2010-09-01
SAR10-28	487366	7370726	512	124	ST19	275	-43	2010-09-01	2010-09-02
SAR10-29	486893	7370203	403	61	ST19	40	-80	2010-09-02	2010-09-03
SAR10-30	486955	7371462	480	75	ST19	160	-43	2010-09-03	2010-09-04
SAR10-31	486955	7371462	480	143	ST19	166	-65	2010-09-04	2010-09-05
SAR10-32	484930	7378187	542	232	ST1	93	-43	2010-09-05	
SAR10-33	484930	7378187	542	312	ST1	76	-59		
SAR10-34	484980	7378285	550	304	ST1	82	-45		
SAR10-35	484980	7378285	550	171	ST1	90	-60		
SAR10-36	484980	7378285	550	308	ST1	90	-53		
SAR11-01	487990	7378962	695	181	ST40	91	-51	2011-05-06	2011-05-08
SAR11-02	487990	7378962	695	181	ST40	91	-57	2011-05-08	2011-05-09
SAR11-03	487990	7378962	695	128	ST40	91	-65	2011-05-09	2011-05-10
SAR11-04	487745	7379032	679	256	ST40	110	-55	2011-05-10	2011-05-13
SAR11-05	488170	7378941	695	177	ST40	282	-45	2011-05-13	2011-05-14
SAR11-06	488170	7378941	695	162	ST40	282	-50	2011-05-14	2011-05-16
SAR11-07	487932	7379070	676	244	ST40	90	-50	2011-05-16	2011-05-18
SAR11-08	488365	7378992	695	198	ST40	180	-45	2011-05-18	2011-05-20
SAR11-09	487704	7380711	751	235	ST31	335	-45	2011-05-20	2011-05-22
SAR11-10	487376	7379197	673	95	ST40	180	-45	2011-05-20	2011-05-23
SAR11-11	487704	7380711	751	222	ST31	335	-90	2011-05-23	2011-05-24
SAR11-12	487376	7379197	673	332	ST40	180	-60	2011-05-22	2011-05-26
SAR11-13a	488048	7380666	723	36	ST31	315	-45	2011-05-24	2011-05-26
SAR11-13b	488048	7380666	723	149	ST31	315	-45	2011-05-25	2011-05-26
SAR11-14	487287	7378992	680	201	ST40	180	-50	2011-05-28	2011-05-30
SAR11-15	487387	7379180	675	268	ST40	270	-50	2011-05-28	2011-05-30
SAR11-16	485244	7378286	656	249	ST1	310	-65	2011-05-30	2011-06-01
SAR11-17	485244	7378286	656	329	ST1	310	-45	2011-06-01	2011-06-01
SAR11-18	487387	7379180	675	263	ST40	270	-81	2011-05-30	2011-06-06

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)	Target	Azimuth	Dip	Start Date	End Date
SAR11-19	485085	7378106	628	326	ST1	310	-65	2011-06-03	2011-06-06
SAR11-20	485204	7378257	654	253	ST1	310	-45	2011-06-04	2011-06-06
SAR11-21	485085	7378106	628	198	ST1	310	-50	2011-06-07	2011-06-08
SAR11-22	485162	7378206	647	307	ST1	310	-45	2011-06-07	2011-06-09
SAR11-23	485098	7378143	630	128	ST1	310	-60	2011-06-08	2011-06-11
SAR11-24	485251	7378143	649	400	ST1	310	-60	2011-06-09	2011-06-13
SAR11-25	485098	7378143	630	281	ST1	310	-65	2011-06-11	2011-06-13
SAR11-26	485102	7378263	638	307	ST1	310	-90	2011-06-13	2011-06-14
SAR11-27	485098	7378143	630	217	ST1	310	-45	2011-06-13	2011-06-15
SAR11-28	485102	7378263	638	198	ST1	310	-45	2011-06-14	2011-06-15
SAR11-29	485230	7378101	641	387	ST1	310	-65	2011-06-15	
SAR11-30	485284	7378310	671	247	ST1	317	-45	2011-06-16	2011-06-17
SAR11-31	485249	7378421	645	247	ST1	310	-90	2011-06-17	2011-06-19
SAR11-32	485249	7378421	645	158	ST1	301	-65	2011-06-19	2011-06-19
SAR11-33	485345	7378357	686	132	ST1	310	-45	2011-06-20	2011-06-21
SAR11-34	485345	7378357	686	268	ST1	310	-50	2011-06-21	2011-06-23
SAR11-35	485368	7378442	657	259	ST1	310	-50	2011-06-23	
SAR11-36	485368	7378442	657	214	ST1	310	-70	2011-06-19	2011-06-21
SAR11-37	485160	7378155	643	360	ST1	310	-65	2011-06-19	
SAR11-38	485368	7378442	657	269	ST1	310	-75	2011-06-21	
SAR11-39	485091	7378223	635	262	ST1	310	-70	2011-06-23	2011-06-25
SAR11-40	485188	7378340	647	192	ST1	310	-50	2011-06-24	2011-06-25
SAR11-41	485091	7378223	635	192	ST1	310	-45	2011-06-25	2011-06-27
SAR11-42	485217	7378372	646	189	ST1	310	-45	2011-06-25	2011-06-27
SAR11-43	485139	7378314	642	252	ST1	310	-50	2011-06-27	2011-06-28
SAR11-44	485217	7378372	646	116	ST1	120	-60	2011-06-27	2011-06-28
SAR11-45	485217	7378372	646	153	ST1	120	-80	2011-07-28	2011-07-29
SAR11-46	485331	7378675	667	207	ST1	180	-55	2011-07-29	2011-07-31
SAR11-47	485745	7378835	671	214	ST1	180	-55	2011-07-29	2011-07-31
SAR11-48	485735	7378857	675	246	ST1	315	-55	2011-07-31	2011-08-02
SAR11-49	485331	7378675	667	240	ST1	0	-55	2011-07-31	2011-08-02
SAR11-50	486258	7378784	682	244	ST1	315	-55	2011-08-02	2011-08-04
SAR11-51	485098	7378702	688	311	ST1	90	-60	2011-08-02	2011-08-05
SAR11-52	485921	7378567	676	259	ST1	315	-55	2011-08-04	2011-08-07
SAR11-53	485324	7378541	603	76	ST1	130	-45	2011-08-05	2011-08-06
SAR11-54	485324	7378541	603	256	ST1	130	-55	2011-08-06	2011-08-08
SAR11-55	485760	7378252	676	137	ST1	220	-45	2011-08-07	2011-08-08

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)	Target	Azimuth	Dip	Start Date	End Date
SAR11-56	485324	7378541	603	207	ST1	130	-70	2011-08-08	2011-08-10
SAR11-57	489119	7370340	590	143	ST19	150	-75	2011-08-08	2011-08-10
SAR11-58	485222	7378369	646	311	ST1	44	-49	2011-08-10	2011-08-13
SAR11-59	489119	7370340	590	198	ST19	0	-90	2011-08-10	2011-08-11
SAR11-60	489119	7370340	590	217	ST19	15	-82	2011-08-11	2011-08-14
SAR11-61	489320	7370398	589	238	ST19	224	-50	2011-08-14	2011-08-15
SAR11-62	485252	7378419	646	166	ST1	130	-75	2011-08-13	2011-08-15
SAR11-63	489012	7370290	524	210	ST19	10	-50	2011-08-15	2011-08-17
SAR11-64	485361	7378381	687	229	ST1	315	-63	2011-08-15	2011-08-18
SAR11-65	488101	7370498	553	299	ST19	215	-80	2011-08-18	2011-08-20
SAR11-66	485322	7378452	647	174	ST1	225	-85	2011-08-17	2011-08-20
SAR11-67	488008	7370552	556	232	ST19	250	-75	2011-08-20	2011-08-22
SAR11-68	485568	7378397	677	366	ST1	310	-50	2011-08-20	2011-08-25
SAR11-68A	485568	7378397	677	18	ST1	310	-45	2011-08-20	2011-08-20
SAR11-69	484980	7378285	550	372	ST1	179	-54	2011-08-22	2011-08-25
SAR11-70	485044	7377993	626	314	ST1	310	-73	2011-08-25	2011-08-29
SAR11-71	485377	7378547	611	214	ST1	57	-80	2011-08-26	2011-08-28
SAR12-01	485302	7378540	604	152	ST1	130	-75	2012-05-16	2012-05-18
SAR12-02	484928	7378187	543	387	ST1	110	-64	2012-05-16	2012-05-20
SAR12-03	485302	7378540	604	196	ST1	130	-77	2012-05-18	2012-05-20
SAR12-04	485349	7378546	610	226	ST1	120	-82	2012-05-20	2012-05-23
SAR12-05	484928	7378187	543	454	ST1	130	-73	2012-05-20	2012-05-25
SAR12-06	485336	7378297	695	327	ST1I	315	-54	2012-05-23	2012-05-28
SAR12-07	485097	7378143	631	421	ST1	310	-84	2012-05-25	2012-05-30
SAR12-08	487023	7379612	697	193	ST1	320	-55		
SAR12-09	492181	7375013	594	165	ST24	45	-55		
SAR12-10	486134	7378919	672	226	ST1	320	-45		
SAR12-11	492391	7375380	667	175	ST24	270	-85		
SAR12-12	485494	7378555	619	259	ST1	310	-58	2012-06-03	2012-06-07
SAR12-13	492062	7375528	590	186	ST24	90	-50		
SAR12-14	491664	7375421	516	210	ST24	100	-60		
SAR12-15	486577	7378897	686	314	ST40	320	-45		
SAR12-16	484928	7378187	543	122	ST1	320	-60	2012-06-08	2012-06-09
SAR12-17	484928	7378187	543	181	ST1	0	-90	2012-06-09	2012-06-11
SAR12-18	486496	7378999	684	284	ST40	320	-45		
SAR12-19	486379	7379178	682	229	ST1	145	-49		
SAR12-20	485243	7378304	658	281	ST1	315	-55	2012-06-21	2012-06-24

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)	Target	Azimuth	Dip	Start Date	End Date
SAR12-21	485226	7378335	657	201	ST1	315	-45	2012-06-24	2012-06-26
SAR12-22	485006	7378343	556	351	ST1	135	-55	2012-06-26	2012-06-29
SAR12-23	485385	7378386	686	21	ST1	315	-45		
SAR23-01	485096	7378071	629	306	ST1	315	-45	2023-07-05	2023-07-14
SAR23-02	485097	7378070	629	453	ST1	315	-60	2023-07-14	2023-07-21
SAR23-03	485138	7378162	640	375	ST1	315	-56	2023-07-21	2023-07-26
SAR23-04	485250	7378208	651	354	ST1	315	-60	2023-07-26	2023-07-31
SAR23-05	485123	7378290	642	222	ST1	315	-45	2023-07-31	2023-08-02
SAR23-06	485162	7378328	646	226	ST1	315	-45	2023-08-03	2023-08-05
SAR23-07	485163	7378327	646	285	ST1	315	-65	2023-08-05	2023-08-08
SAR23-08	485323	7378453	647	27	ST1	315	-45	2023-08-08	2023-08-14
SAR23-09	485348	7378375	687	327	ST1	315	-62	2023-08-11	2023-08-15
SAR23-10	485347	7378375	687	289	ST1	315	-45	2023-08-15	2023-08-19
SAR23-11	485324	7378453	648	45	ST1	315	-60	2023-08-19	2023-08-21
SAR23-12	485452	7378430	668	282	ST1	315	-60	2023-08-21	2023-08-25
SAR23-13	485452	7378430	667	141	ST1	315	-45	2023-08-25	2023-08-27
SAR23-14	485455	7378465	662	288	ST1	315	-56	2023-08-28	2023-09-03
SAR23-15	485454	7378465	662	279	ST1	315	-46	2023-09-03	2023-09-06
SAR23-16	486498	7378916	687	324	ST40	315	-45	2023-09-06	2023-09-13
SAR23-17	486573	7378998	684	54	ST40	315	-45	2023-09-14	2023-09-16
SAR23-18	485301	7378541	604	141	ST1	315	-46	2023-09-16	2023-09-18
SAR23-19	485172	7378482	586	189	ST1	135	-55	2023-09-18	2023-09-20

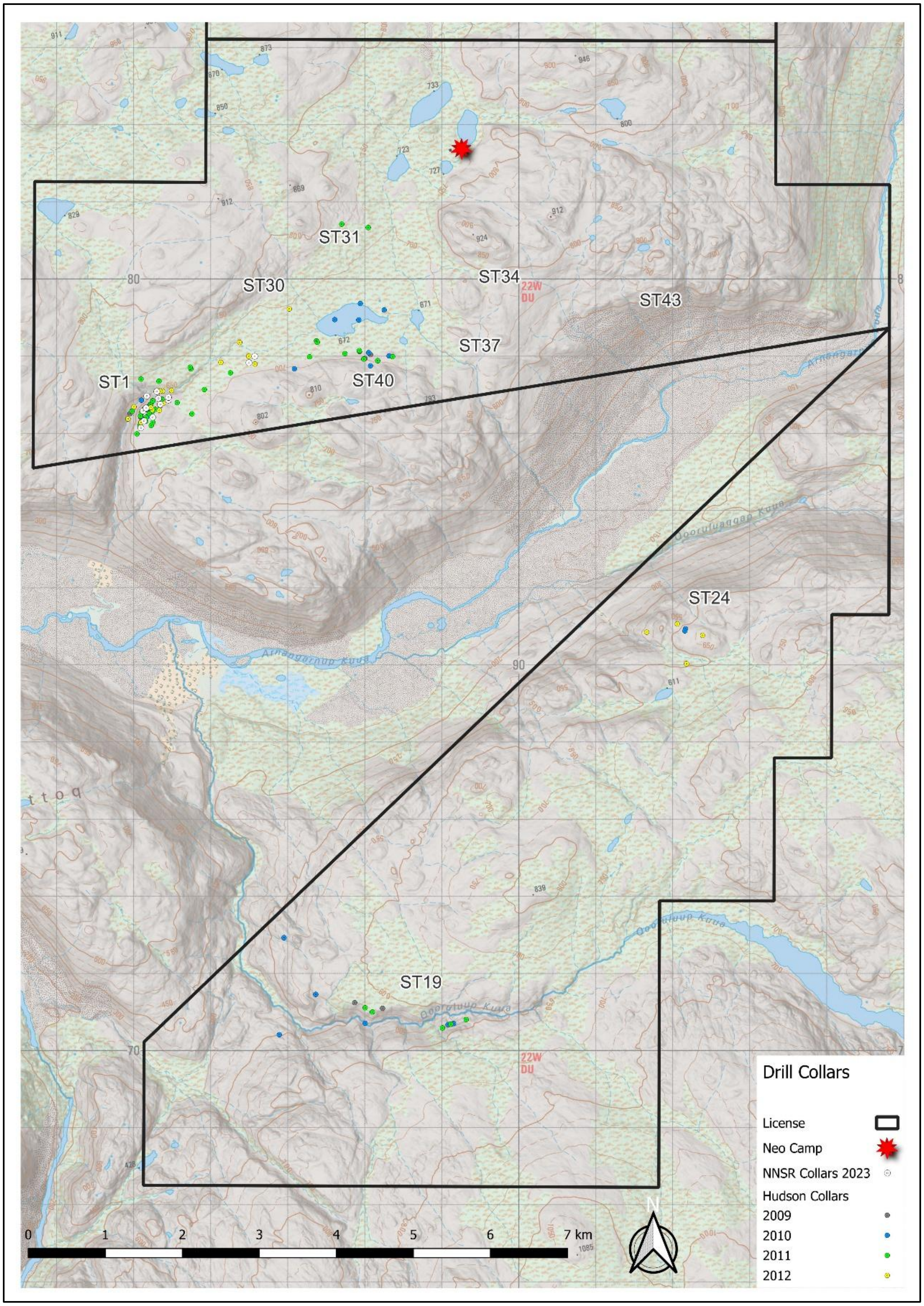


Figure 7-21 Drillhole Locations on the Sarfartoq Project

7.4.2 ST40 Drill Results

The ST40 target was drilled in 2009, 2010, and 2011. A 10.33 meter wide zone of REE mineralization identified in hole SAR09-03 was targeted with numerous drill holes in 2010 and 2011 to test the zone's dip and strike (Figure 7-22). The zone was determined to have an east/west strike and a steep dip. The longest intersection encountered was 22 m in hole SAR11-02 and though none of the carbonatite encountered here in 2012 assayed up to expectations, the amount of neodymium relative to TREO remained high at 40 to 50 percent. It is this abnormally high Nd/TREO ratio that commands attention; and continued drill testing is warranted. Careful drill targeting should be supported by detailed geologic mapping, soil and rock chip geochemistry, and geophysics.

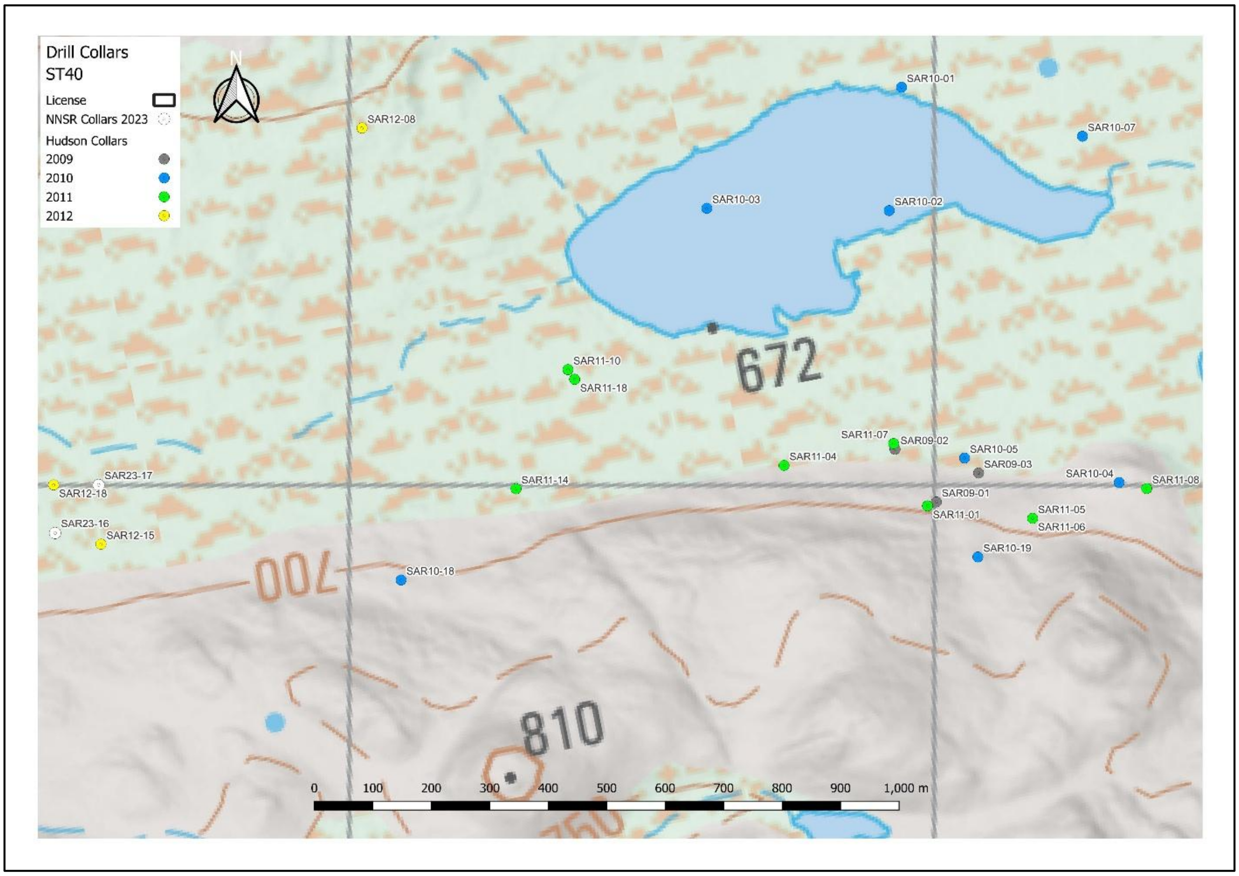


Figure 7-22 Drillhole Locations at the ST40 Zone

7.4.3 ST1 Drill Results

Since 2009, ST1 has been drilled with 102 holes totaling approximately 24,800 m, most aimed at delineating the resource. A steeply incised valley with an intermittent stream characterizes this area. Most holes were collared from the valley floor or the top of the plateau overlooking the valley and drilled NW or SE, with the aim of cross cutting the carbonatite dike swarm at regular intervals (Figure 7-15 and Figure 7-23).

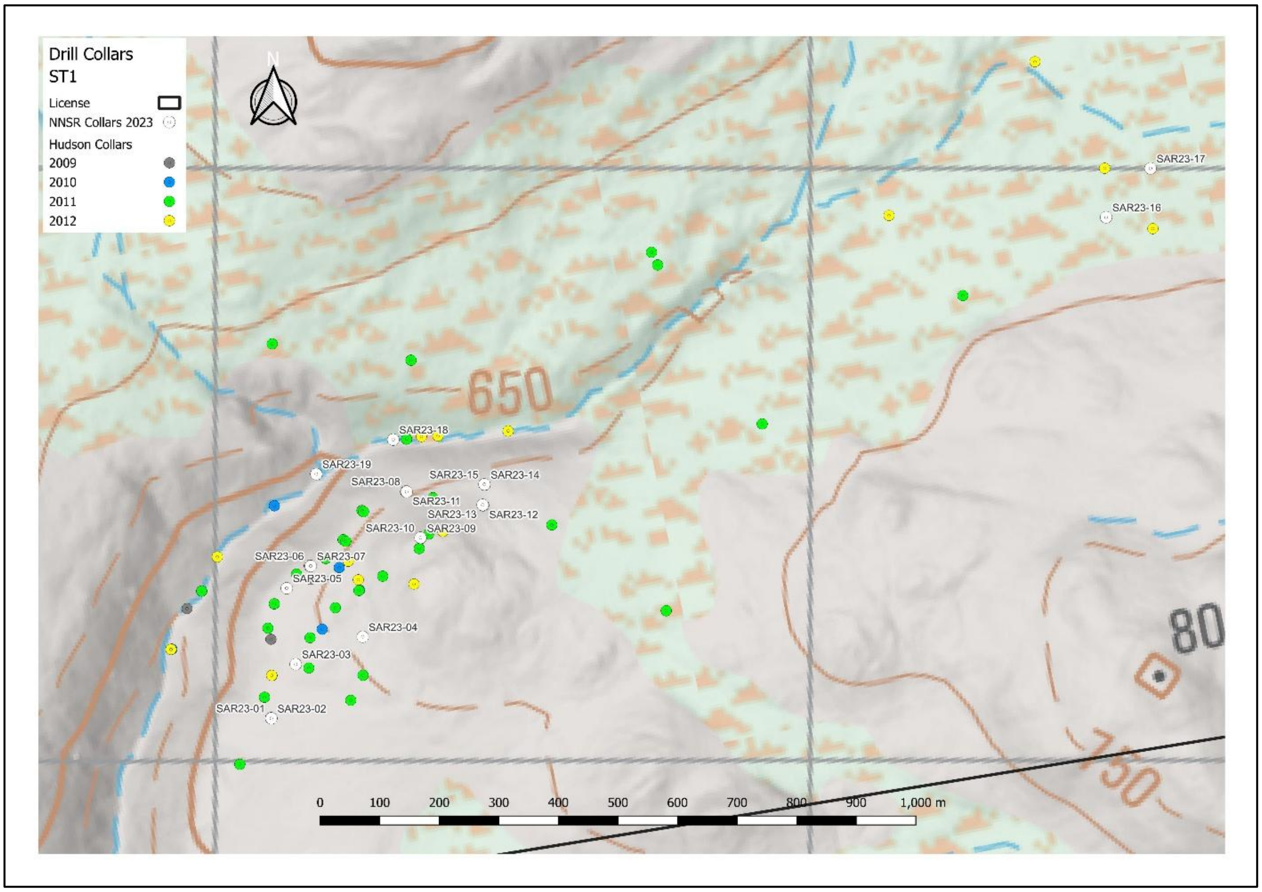


Figure 7-23 Drillhole Locations at the ST1 Zone

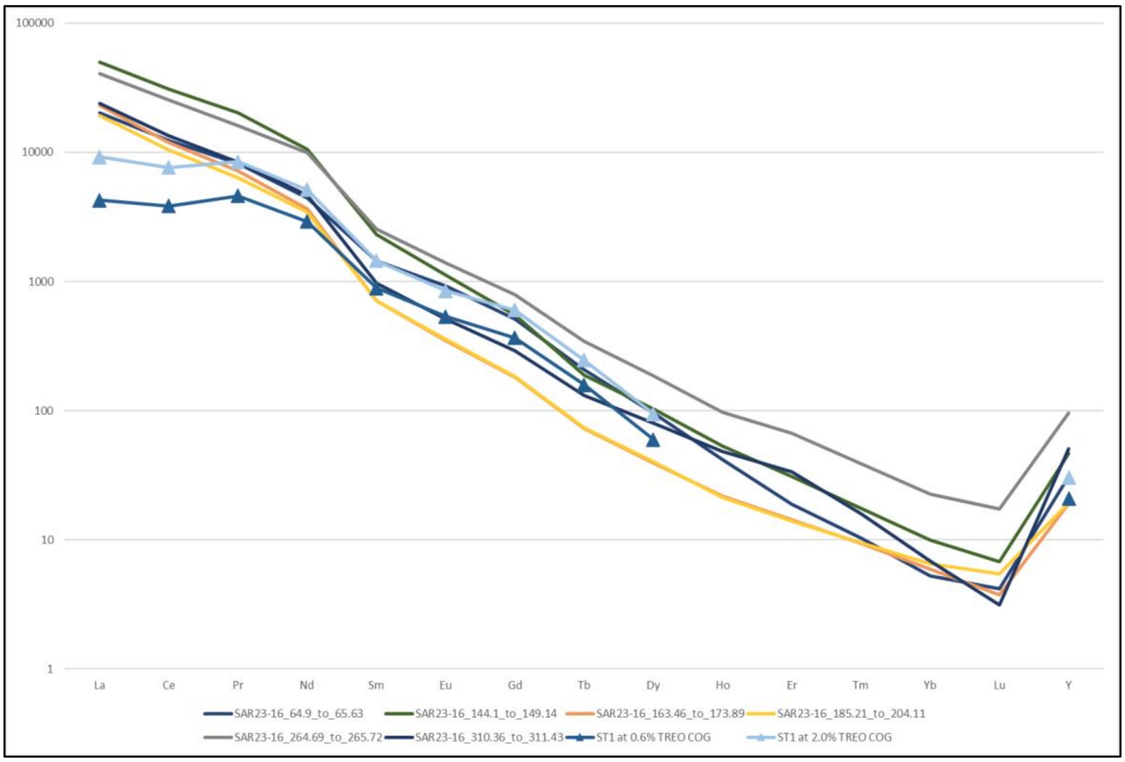
Most holes intersected zones of ferrocarbonatite emplaced into altered granite and granodiorite gneisses with amphibolite horizons and dolerite dikes. The alteration is weak to pervasive and consists of hematitization and dolomitization of the gneisses. There are numerous centimeter wide fine-grained carbonatite dikes and intrusive breccias. Within the altered rocks, stringers of Fe-carbonates and multidirectional veins of Fe-carbonates with barite and masses of calcite and hematite are present. The REE mineralization is associated with bodies of coarse-grained ferrocarbonatite that contain a wide variety of different minerals.

These bodies have sharp contact with the altered rocks and are locally intruded by light grey-beige carbonatite dikes establishing a sequence of events, the ferrocarbonates being older than the finer grained carbonatite dikes. Petrographic determination has identified this rock as a ferrodolomite-ankerite (+siderite) ferrocarbonatite (LeCouteur, 2009). It contains ferrodolomite, ankerite, siderite, barite and dark red masses. The masses are dominantly composed of hematite and calcite hosting fine-grained REE minerals, notably bastnäsite, synchysite, and monazite (Le Couteur, 2009). The masses exhibit internal zonation and could be of hydrothermal origin. They commonly have a coarse-grained hexagonal habit, indicating they might be pseudomorphs, perhaps of primary burbankite. Pyrite is disseminated in the carbonatite material. Sphalerite, galena and fluorite are locally observed.

The 2023 drilling program was successful in upgrading much of the resource from the inferred category to the indicated category. A second phase of drilling designed to expand the resource has yet to be carried out.

Drill hole SAR23-16 was designed to follow up on positive results from 2012 drilling to the northeast of ST1. This area might be an extension of ST1 mineralization; and might also host the intersection of structures hosting mineralization at ST1 and ST40. Many of the mineralized intercepts in this ST1-ST40 corridor host significantly higher TREO, NdPr, and Nb grades than commonly observed at ST1 (Figure 7-24;

Table 7-4; Table 7-5). A chondrite normalized plot of several significant intercepts from SAR23-16 and the ST1 resource at cut off grades of 0.6 and 2.0% TREO illustrates the elevated NdPr at the ST1-ST40 corridor but also



indicates that the significantly higher grades in this area are also due to a lack of La and Ce depletion typical of ST1 mineralization.

Figure 7-24 Chondrite Normalized REE Distribution of the ST1 Resource and SAR23-16 Intercepts

Continued drilling at ST1 is strongly recommended, with a focus on expanding the resource to the southern boundary of the license, to the west, across the valley, and to the northeast to test potential continuations to the ST31 and ST40 areas.

7.4.4 ST19 Drill Results

The ST19 prospect was drilled in 2009, 2010, and 2011 (Figure 7-25).

Hole SAR10-22 was collared on top of a high, narrow ridge cutting between a set of deep parallel gorges. Prospecting here in 2010 identified numerous carbonatite veins hosted by fenetized granitic gneiss. The veins ran in various directions and dips in a zone thought to be approximately 25 m wide at surface. Aiming for this zone at depth the drill encountered ferrocarbonatite mineralization at the 60 meter mark and continued in the zone until the 120 m mark. Numerous broken, fractured zones were encountered throughout the hole. The zone averaged 2.6% TREO over 60 m and included a 12 m zone averaging 4.0% TREO.

Hole SAR10-23 was drilled from a set up approximately 75 meter east of SAR10-22. It was designed to intersect the zone discovered in hole SAR10-22 from the opposite direction. The hole intersected ferrocarbonatite mineralization from 43 m to 93 m but the zone here was diluted by several small sections of fenetized granitic gneiss and crackle breccias. Again, the drill had problems with zones of broken, fractured rock. The hole, however, returned higher than expected REE averages. The hole averaged 2.2%TREO over 60 m including a 14 m section that averaged 4.9%TREO.

These holes were followed up in 2011 to test the potential size of the body and though hole SAR11-57 returned 60 m grading 2.58% TREO, it is thought the drill ran down dip. It is now thought the body is smaller than originally anticipated and no further drilling is planned.

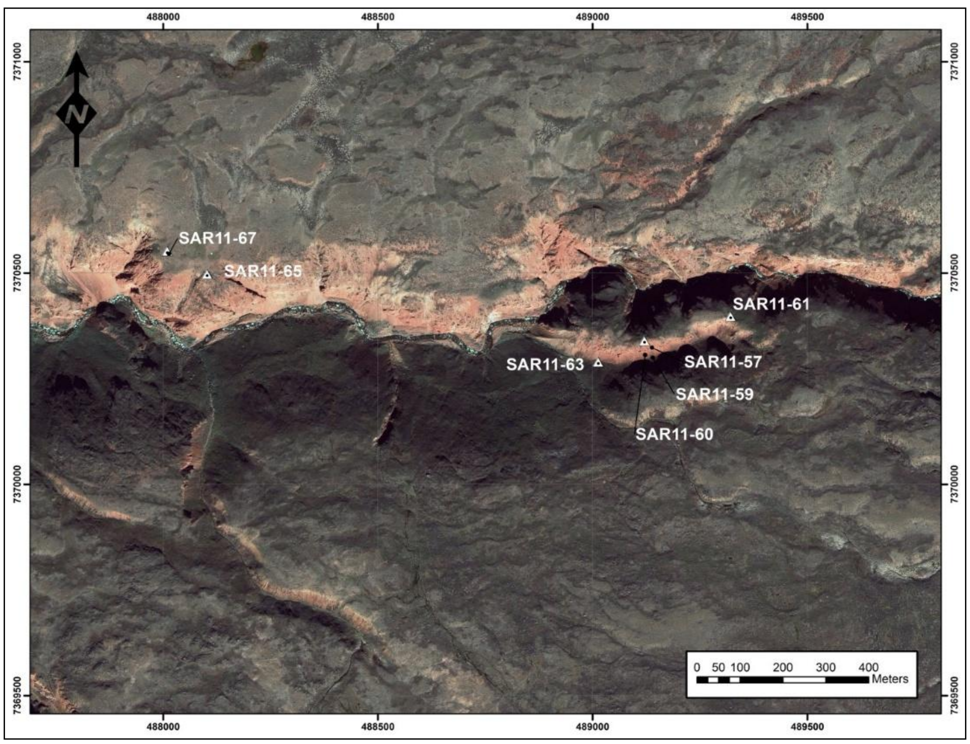


Figure 7-25 Drillhole Locations at the ST19 Zone

7.4.5 Other Drill Results

The ST31 target was drilled in 2011 (Figure 7-26). Three holes targeted weak radiometric and rock chip anomalies. It was also thought this area might host an extension of mineralization from ST1. Unfortunately, very little carbonatite was encountered; and core sampling identified no significant REE mineralization with a maximum TREO assay of 0.36% over 2 m. Few carbonatites were mapped in the area during 2023; and rock chip samples contain <0.3% TREO. Thorium radiometric and REE in soil anomalies at this target are predominantly hosted in colluvium and glacial till, though there are some radiometric and soil anomalies hosted in bedrock. A REE in soil anomaly hosted in granite gneiss overlies the projection of SAR11-09 and SAR11-11. Ground Th anomalies extend from near these drill collars for about 500 m to the NW. The larger anomalies hosted in glacial sediments and colluvium likely have a local source to the north. These anomalies warrant further drill testing, but the prospect is considered weakly mineralized and low priority, at this time.

The most surprising result of 2011 came out of hole SAR11-50, located a few hundred meters northeast of the ST1 zone. This area, as ST1 N or the ST1 to ST40 Corridor, lies between ST1 and ST40, and might host an intersection of ST1 and ST40 structures. Targeting a linear low mag feature, SAR11-50 intersected carbonatite just past the 200 meter mark that assayed 3.26% TREO over 14 m including a surprising 7.15% over 4 m. Follow up drilling in 2012 and 2023 intercepted abundant carbonatite (up to 54 m of 2.11% TREO) with impressive grades (up to 9.27% TREO over 1.2 m (Table 7-4 and Figure 7-25). The highest NdPr results (up to 1.59% Nd_2O_3 + Pr_2O_3) from the property were intercepted here. These encouraging results indicate there is potential to not only expand the ST1 resource to the NE, but to improve the grade of the deposit in terms of TREO and Nd_2O_3 + Pr_2O_3.

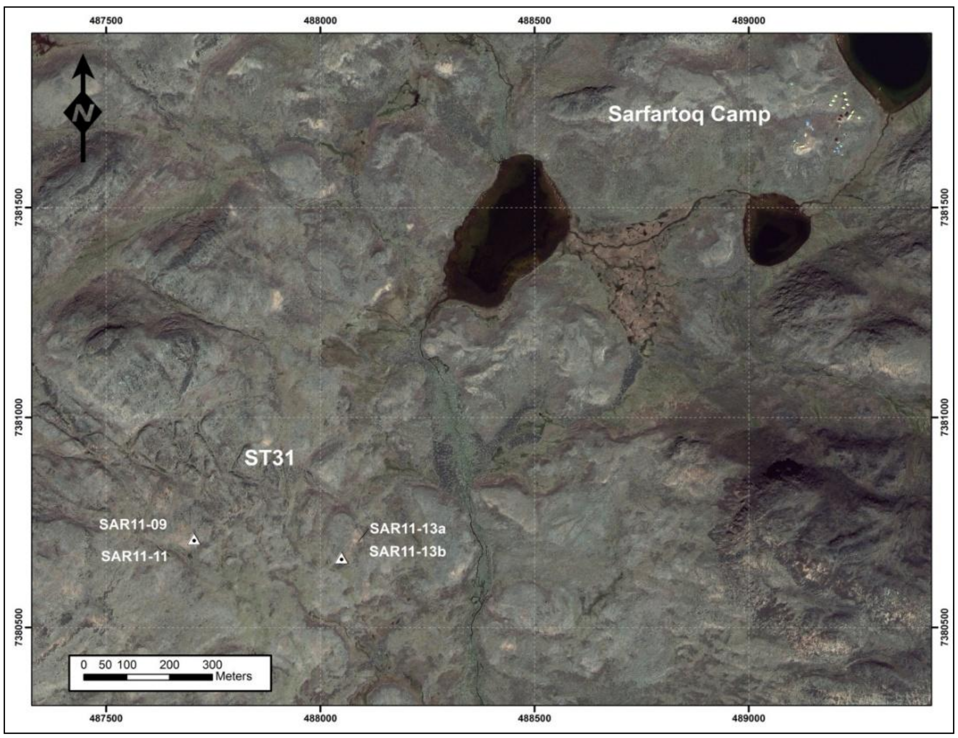


Figure 7-26 1 Drillhole Locations on the ST31 Zone

7.5 Bulk Sampling

In 2011, a 7-tonne bulk sample of carbonatite was collected from surface at the ST1 zone and sent to SRC Laboratories in Saskatoon, Canada for assay. It was collected by hand using picks and shovels and was comprised of in-situ outcrop. It was placed in bulk bags which were closed and fitted with security seal to prevent tampering. The results proved to be extremely good. The entire sample averaged 2.36% TREO and 20.9% neodymium (of TREO). This bulk sample was used for metallurgical testing from 2011 to 2013 at Hazen, SRC, and SGS.

7.5.1 Sampling Method and Approach

The 2011 bulk sample was collected from the ST1 zone at a large known surface showing. The material was in-situ and was freed using picks and shovels

Rock chip samples were routinely collected by hand during the 2024 geologic mapping program. These samples were submitted to Activation Laboratories for analysis. Sampling focused on carbonatite, but some wall rock samples were collected as well.

Soil samples were collected during the 2023 and 2024 programs with pick and shovel. The 2023 soil grid at ST1 included 180 samples at a 100x50 meter spacing. The 2024 soil grid was designed to cover the entire license at a spacing of 100x200 m. Sampling in 2024 brought the total number of soil samples collected to 1,114 and extended coverage over the main drill targets north of Arnangarnup Qoorua.

Soil Sampling Method:

1. Sample sites were located via handheld GPS. Sites were cancelled or moved if the planned site was determined to be in recent sediments such as alluvium or till, if the site was on outcrop, or if the site was saturated with water.
2. The soil pits were hand dug, with steel tools, to various depths from 25 to 90cm. Samples were ideally collected from the C horizon, though most samples were collected from the B horizon due to thickness of the B horizon.
3. Data collected from each site includes a simplified textural description, color, horizon, moisture, and gamma radiation dose measured in μR/h.
4. Approximately ½ to 1 kilogram of soil was placed in a sample bag and returned to camp.
5. The soils were dried in a heated tent, over the course of a few days.
6. Dried samples were sieved to -80 mesh (180μm) and analyzed with a Niton XL5 Plus before being submitted to ALS Chemex in 2023 or Activation Laboratories in 2024.

For core logging, Microsoft Excel spreadsheets were used to record sample intervals, geology and other parameters. It is recommended to change to a purpose-built drill database to ensure data integrity.

Historic sampling methods can be found in Giovenazzo (2010) and Druecker & Simpson (2011, 2012, & 2012). In 2023, sample intervals were marked on the core by the logging geologist. An electro-hydraulic core splitter was used to split the core into two pieces, with one-half put back in the core box and the other half sent for analysis. Duplicate samples were collected by splitting the archive half core into quarter core, so that the primary sample is composed of half core, the duplicate sample is composed of quarter core, and the archive is composed of quarter core. Metallurgical samples were collected in the same way as duplicate samples. Paper sample tags matching those inserted into sample bags were left in the boxes. A hardcopy archive of sample books is stored onsite.

In general, the core had extremely good recovery. Overall recovery was just over 95%, though median recovery was >99.5% and the mode was 100%. Overall recovery did not approach 100%, because the top part of most holes cut through unconsolidated soil and glacial sediments with near zero recovery.

Quality Assurance/ Quality Control samples (controls) for the 2023 drill program at Sarfartoq consist of 51 Standards (SARF-1 Certified Reference Material), 51 Duplicates (1/4 core field duplicates), 52 Blanks (Quartz Vein material), and 102 Check Analyses, including 5 Standards, 7 Duplicates, and 5 Blanks.

In 2023, 52 blanks, 51 standards and 51 duplicates were inserted at regular intervals when preparing the split drill core samples. One set of controls was inserted about every 40 samples, amounting to 151 controls over 2019 total samples, or 7.5%. The blanks were composed of local quartz vein material which is un-mineralized with respect to REE. The standards, designated SARF-1, were produced from ST1 carbonatite. The analytical results were reviewed and assessed using the blanks, the standards and the duplicates.

The drill core archive is stored on site. Core drilled in 2009 and 2010 is stored at an old core logging site at ST40. This archive fell into disrepair and there are no legible box labels nor sample tags remaining. Core drilled in 2011, 2012, and 2023 is stored at the current Neo Camp logging facility. Much of the 2011 and 2012 core was also found to be lacking legible box labels and sample tags. The boxes were identified and relabeled, but much of the archive was consumed for metallurgical testing.

7.5.2 Sample Interval

The nominal sample interval for drill core was two meters, but actual intervals were adjusted to match geological contacts, mineralogical variations, alteration zones, and zones of carbonatite dike emplacement.

7.5.3 Chain of Custody

Drill core was emptied from the innertube directly into wooden core boxes by drill contractors, at the drill. The core boxes were covered (wooden top) and bound with strong fiber tape, then transported by helicopter to the core shack at the Company's secure project campsite. At the core shack, the drill core was logged, labeled, marked for sampling, and photographed by NNSR geologists.

Recovery, RQD, geologic logging observations (lithology, alteration, mineralization, structures), sample numbers, intervals, gamma ray scintillometer/spectrometer readings, pXRF analyses, and magnetic susceptibility measurements were recorded and entered into digital forms. The drill core was then split in half with an electro-hydraulic core splitter. One half of the core was placed in sample bags, labeled, marked with a unique in-sequence sample ID number, and sealed.

Soil and rock chip samples were brought to Neo Camp by those who collected them and held in the logging facility until shipment.

Sample bags were then placed in super sacks that were taken via helicopter to the Kangerlussuaq airport. All drill samples and the 2023 soil samples were held in a shipping warehouse in Kangerlussuaq until loaded on a ship and sailed to Denmark. These samples were then carried by truck to ALS in Sweden, for preparation. The prepared pulps were air freighted to ALS Ireland for analysis. Rock chip and soil samples collected in 2024 were shipped via air cargo from Kangerlussuaq to Copenhagen, Denmark, then to Activation Laboratories in Ancaster, Ontario, Canada. All sampling information was recorded in hardcopy sample ticket books and transcribed into digital spreadsheets. Drill sample information is duplicated in digital log forms as well. Hardcopy sample ticket books are stored onsite, at the Neo Camp office.

From the moment all samples were collected from the field, until they left camp via helicopter, the samples were in possession of NNSR personnel. After leaving camp, the helicopter traveled directly to the Air Greenland helicopter hangar at the Kangerlussuaq international airport, which is a secured facility. Passengers are not allowed during slings, so NNSR personnel could only accompany internal shipments of samples to the airport. Only personnel with airport security clearance were allowed contact with the samples between the airport and shipping warehouses.

NNSR used ALS as the primary analytical laboratory in 2023. Activation laboratories were the secondary lab in 2023 and the primary lab in 2024. Both labs are corporately accredited to ISO 9001A:2000.

8.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The primary laboratories used for analytical work in 2023 and 2024 were ALS and Activation Laboratories in Ancaster, Ontario. All drill core was prepared and analyzed by ALS in 2023, with check analyses performed at Actlabs. ALS analyzed the 2023 soil samples. The 2024 soil samples and rock chip samples were analyzed at Actlabs.

8.1 Sample Preparation

Preparation of drill core and rock chip samples for analytical work was not performed by NNSR. Once drill core samples were split and put into sample bags, no other sample preparation steps were conducted by employees, consultants, officers, directors, or associates of the Company. Sample security was more than adequate at the remote project site.

Soil samples were dried and sieved to -80 mesh on site, by NNSR personnel. At ALS the drill core samples were crushed to 70% passing 2 mm or better, which is a standard preparation procedure for samples where a representative split was pulverized. The sample was then split using a riffle splitter and pulverized to 85% passing 75 micron or better.

8.2 Laboratory Method

The 2023 drill core samples were analyzed using the ME-MS81d analytical package, which is a combination of REE and trace element analysis by ME-MS81 plus major oxides by ME-ICP06. The ME-MS81h package was used for overlimit REE. The ME-OGREE analysis was used for ME-MS-81h overlimits on Ce and Pr. The ME-XRF15c method was used for Nb overlimits. A lithium borate fusion of the sample is conducted prior to acid dissolution and ICP-MS analysis. This technique solubilizes most mineral species, including those that are highly refractory. Core samples drilled from 2009 – 2012 were analyzed using the ME-MS81h and ME-MS61 packages.

From the 2023 drill samples, 102 pulp splits from ALS were sent to Actlabs Ancaster, Ontario where they were analysed using the 8-REE package. This package uses a lithium metaborate/tetraborate fusion with analysis by ICP-OES and ICP-MS. The package provides results for the full REE suite as well as trace elements and major oxides.

9.0 DATA VERIFICATION

Jason Felsman is the lead author of this revision of the Sarfartoq REE Technical Report. He was the Project manager during 2023 and 2024; and was on site to oversee the drilling, mapping, soil sampling, and geophysical surveys. He personally examined the geology of the license area, the data produced from each of the programs, and drill core. He observed and directed NNSR personnel in preparing and shipping drill samples. He also received all 2023 and 2024 analytical certificates from the labs, evaluated them, and finds everything to be in order.

Quality Assurance/ Quality Control samples (controls) for the 2023 drill program at Sarfartoq consist of 51 Standards (SARF-1 Certified Reference Material), 51 Duplicates (1/4 core field duplicates), 52 Blanks (Quartz Vein material), and 102 Check Analyses, including 5 Standards, 7 Duplicates, and 5 Blanks.

The quartz vein Blank material was confirmed to contain 2 to 3 orders of magnitude lower REE concentrations than mineralized carbonatite from the ST-1 resource area, which includes the collection site for the SARF-1 CRM. No instances of apparent contamination were flagged.

The only Certified Reference Material (CRM or Standard) used in the 2023 drill program was the SARF-1 CRM. This CRM was prepared by CDN Resource Laboratories Ltd. (CDN) in Langley, BC, from material collected from a mineralized carbonatite in the ST-1 resource area. The CRM was certified by Smee & Associate Consulting Ltd. (Druecker, 2011). Though numerous individual results from ALS fell outside of two standard deviations from the certified values, the mean values of ALS results fell within two standard deviations. Also, all ALS results had less than 20% variance from the certified values and variances of more than 10% are rare, except for Th. Actlabs outperformed ALS in terms of accuracy, but the data from both labs is acceptable.

Filed duplicates analyzed at ALS demonstrate good correlation and duplicate pair variance was generally good. Individual duplicate pair variance could be significant, but this is most certainly due to heterogeneous mineralization at the drill core scale.

Check analyses between the two labs show good correlation, especially in the more abundant REE, which are the elements of interest at Sarfartoq. Excluding the Blanks, variance was less than 20% for all check samples, including CRMs.

Overall, evaluation of the control samples indicates the results from ALS are acceptable. Further investigation is warranted regarding Th results and minor, but systematic overestimation of REE grades at ALS.

9.1 Standards

For the initial exploration drilling conducted in 2009, seventeen NRCan OKA-2 standards were used. This standard had very high concentrations of La, Ce, and Nd; and was not an ideal standard for the Sarfartoq REE mineralization.

In 2010, Hudson commissioned an REE standard to be created from Sarfartoq ST1 Zone material. The standard was prepared by CDN Resource Laboratories Ltd. (CDN) in Langley, BC. CDN prepared a homogeneous pulp from ST1 material and 60 samples of 30g each were split and sent out for round-robin analysis to six independent laboratories. Results were then certified by Smee & Associates Consulting Ltd as presented in Table 9-1.

Table 9-1 Analysis of Certified Standards vs Standards Submitted into Drill Program

Certified Standard Smee & Associates Consulting Ltd.	Certified Mean	2 Standard Deviations	Drill Standards based on 125 Samples submitted to Actlabs Mean	2 Standard Deviations	Variance to Mean	Drill Standards based on 154 Samples submitted to ALS Mean	2 Standard Deviations	Variance to Mean
Fusion Ce	6768 ppm	572 ppm	6,439 ppm	468 ppm	-4.9%	6,726 ppm	724 ppm	-0.6%
Fusion La	2665 ppm	196 ppm	2,713 ppm	178 ppm	1.8%	2,770 ppm	297 ppm	3.9%
Fusion Nd	2615 ppm	272 ppm	2,489 ppm	141 ppm	-4.8%	2,614 ppm	261 ppm	0.0%
Fusion Pr	746 ppm	62 ppm	734.54 ppm	51 ppm	-1.5%	803.1 ppm	91 ppm	7.7%
Fusion Sm	235 ppm	16 ppm	243.94 ppm	14 ppm	3.8%	88.63 ppm	20 ppm	-62.3%
Fusion Eu	50.9 ppm	2.8 ppm	50.683 ppm	3 ppm	-0.4%	52.11 ppm	6 ppm	2.4%
Dusion Dy	25.5 ppm	2.2 ppm	21.922 ppm	3 ppm	-14.0%	24.88 ppm	3 ppm	-2.4%
Fusion Th	442 ppm	46 ppm	458.53 ppm	27 ppm	3.7%	508.1 ppm	94 ppm	15.0%

The certified values for the SARF-1 CRM are presented in Table 9-2.

In 2011, a total of 279 blanks, 279 standards and 279 duplicates were inserted at regular intervals when preparing the 7000+ split drill core samples (approx. one standard per 25 samples). The analytical results were reviewed and assessed using the blanks, the standards and the duplicates. A similar frequency was used in 2009 and 2010. In general, the mean results fall within two standard deviations of the certified standard and demonstrate the veracity of the drill results.

A total of 51 SARF-1 CRMs were submitted to ALS, in 2023. Five of these were to be submitted to Actlabs as check samples, but the entirety of each sachet of CRM was consumed at ALS. New sachets of reference material were submitted to Actlabs. Every CRM submitted to both labs was SARF-1.

Of the 51 SARF-1 CRMs analyzed at ALS, numerous results fell more than 2 standard deviations from the certified values: 9 for La, 2 for Ce, 8 for Pr, 7 for Sm, 10 for Eu, 3 for Dy, and 37 for Th. All Nd results were within two standard deviations of the certified value. Overall, the mean results from ALS fall within 2 standard deviations of the certified values for the REE, but the mean of Th results does not. No ALS results had more than 20% variance from the certified value. Variances of more than 10% are rare for REE, including only 1 failure for Ce, 2 for Pr, and 3 for Dy, but Th variances exceed 10% in 35 of the 51 analyses. A summary of the ALS results is presented in Table 9-3.

Of the 5 SARF-1 CRMs analyzed at Actlabs, two had results falling more than 2 standard deviations from the certified values (Table 9-4). One CRM had failures for Sm, Eu, and Dy. The other only had Dy concentration falling more than 2 standard deviations from the certified value. All other results were within 2 standard deviations of the certified values. Overall, the mean values of La to Eu, Dy, and Th results from Actlabs all fall within 2 standard deviations of the certified values. No Actlabs result had more than a 20% variance from the certified value. Variances greater than 10% include only one result for Nd and one for Dy.

Though Actlabs significantly outperformed ALS in terms of accuracy in analyzing the SARF-1 CRM, the small sample size and generally good correlation between the labs indicates no significant issues with either lab, for REE. Also, there are no significant issues apparent, regarding the 2023 drill data. These conclusions should be corroborated by an experienced geochemist before publicly reporting any drill data or resource estimates based on the 2023 drilling. Also, the significant fail rate for Th at ALS warrants additional investigation.

Table 9-2 Certified Values for the SAFR-1 CRM

Analyte	Fusion La	Fusion Ce	Fusion Pr	Fusion Nd	Fusion Sm	Fusion Eu	Fusion Dy	Fusion Th
Certified Mean (ppm)	**2665**	**6768**	**746**	**2615**	**235**	**50.9**	**25.5**	**442**
TWO Standard Deviations (ppm)	196	572	62	272	16	2.8	2.2	46

Table 9-3 ALS Results for SARF-1 CRM

ALS	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
MAXUMUM (ppm)	2950	7280	852	2720	258	56.4	118	9.51	27.7
MINIMUM (ppm)	2570	6120	712	2390	222	46.9	93.7	6.66	22.5
MEAN (ppm)	**2764**	**6691**	**786**	**2581**	**242**	**51.4**	**103.4**	**8.55**	**24.9**
TWO STANDARD DEVIATIONS	196	461	52	162	16	4.0	9.6	1.12	2.0
ALS	**Ho**	**Er**	**Tm**	**Yb**	**Lu**	**Y**	**Nb**	**Th**	**U**
MAXUMUM (ppm)	2.63	4.56	0.43	2.18	0.27	56.4	666	546	11
MINIMUM (ppm)	2.09	2.97	0.23	0.87	0.08	39.6	491	461	9.15
MEAN (ppm)	**2.39**	**3.39**	**0.28**	**1.08**	**0.14**	**46.0**	**588**	**498**	**9.95**
TWO STANDARD DEVIATIONS	0.23	0.53	0.06	0.37	0.06	4.5	65	33	0.81

Table 9-4 Actlabs Results for SARF-1 CRM

Actlabs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
MAXUMUM (ppm)	2770	6900	753	2570	235	52.3	92.9	8.2	24.2
MINIMUM (ppm)	2600	6320	691	2360	216	47.4	84.8	7.9	22.8
MEAN (ppm)	**2690**	**6640**	**723**	**2494**	**226**	**49.7**	**89.0**	**8.1**	**23.5**
TWO STANDARD DEVIATIONS	108	373	39	141	12	3.1	5.2	0.2	1.0
Actlabs	**Ho**	**Er**	**Tm**	**Yb**	**Lu**	**Y**	**Nb**	**Th**	**U**
MAXUMUM (ppm)	2.3	3	0.26	1.4	0.18	41	523	460	10.4
MINIMUM (ppm)	2.2	2.8	0.25	1.3	0.17	40	490	445	9.3
MEAN (ppm)	**2.2**	**2.9**	**0.26**	**1.4**	**0.17**	**41**	**511**	**454**	**9.8**
TWO STANDARD DEVIATIONS	0.1	0.2	0.01	0.1	0.01	1	23	11	0.7
MAXUMUM (ppm)	Ho	Er	Tm	Yb	Lu	Y	Nb	Th	U

9.2 Blanks

The 2009 – 2012 blanks consisted of local un-mineralized and unaltered granitic gneisses from the Garnet Lake area. The REE content was extremely low. Of the 277 blanks submitted in 2011, the mean REE content was 304 ppm (standard deviation of 284 ppm).

In 2023, a total of 52 blanks was inserted into drill core submittals to ALS, with 5 of the pulps being forwarded to Actlabs for check analysis. Both labs confirm strikingly low concentrations of REE in the blank material.

The blank material is composed of hand collected, milky quartz vein material, collected from a hill 425 m northwest of Neo Camp. The blank material is not certified, nor has this source been analyzed before, so the accuracy of the results cannot be evaluated. The precision of the results and variability of the source material are evaluated, here.

Results from both labs were two orders of magnitude lower than all the certified values (La to Eu, Dy, & Th) for SARF-1 certified reference material. Blank results were also two to three orders of magnitude lower than REE concentrations calculated for ST-1 resource modeling. The blank material used in 2023 should be considered ideal for the Sarfartoq REE program, as the material is readily available at the Project site and consistently hosts low concentrations of REE, 2-3 orders of magnitude below concentrations found in mineralized carbonatite from the property.

It should be noted that the labs have significantly different lower limits of detection for the REE suite, hampering statistical analysis and comparison between the labs.

Blank results are summarized in Table 9-5 and Table 9-6.

Table 9-5 ALS Results for Blanks

ALS	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
MAXIMUM (ppm)	50.6	82.9	7.75	26.4	2.56	0.65	1.52	0.21	1.58
MINIMUM (ppm)	0.2	0.4	0.03	0.1	0.03	0.02	0.05	0.01	0.05
MEAN (ppm)	**4.7**	**9.9**	**1.06**	**3.4**	**0.39**	**0.12**	**0.27**	**0.03**	**0.16**
TWO STANDARD DEVIATIONS	18.0	33.8	3.51	10.8	1.00	0.27	0.63	0.08	0.59
ALS	**Ho**	**Er**	**Tm**	**Yb**	**Lu**	**Y**	**Nb**	**Th**	**U**
MAXIMUM (ppm)	0.32	0.95	0.14	0.83	0.08	9.7	13.95	11.6	1.3
MINIMUM (ppm)	0.01	0.03	0.01	0.03	0.01	0.1	0.46	0.06	0.05
MEAN (ppm)	**0.03**	**0.08**	**0.02**	**0.10**	**0.02**	**0.43**	**2.47**	**1.25**	**0.13**
TWO STANDARD DEVIATIONS	0.11	0.37	0.07	0.42	0.05	2.67	5.19	3.99	0.50

Table 9-6 Actlabs Results for Blanks

Actlabs	La	Ce	Pr*	Nd	Sm*	Eu**	Gd**	Tb**	Dy**
MAXIMUM (ppm)	28.6	74.6	8.75	29.6	3.0	0.72	1.7	0.1	0.6
MINIMUM (PPM)	0.3	0.9	<0.05	0.4	<0.1	<0.05	<0.1	<0.1	<0.1
MEAN (PPM)	**7.2**	**17.8**	**2.56**	**6.9**	**1.1**	**NA**	**NA**	**NA**	**NA**
TWO STANDARD DEVIATIONS	21.5	57.0	7.16	22.8	2.7	NA	NA	NA	NA
Actlabs	**Ho**	**Er**	**Tm**	**Yb**	**Lu**	**Y**	**Nb**	**Th**	**U****
MAXIMUM (ppm)	<0.1	<0.1	<0.05	<0.1	<0.04	<2	13	7.6	0.2
MINIMUM (PPM)	<0.1	<0.1	<0.05	<0.1	<0.04	<2	6	0.3	<0.1
MEAN (PPM)	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**9**	**1.9**	**NA**
TWO STANDARD DEVIATIONS	NA	NA	NA	NA	NA	NA	5	5.7	NA

*Note: *Statistics are calculated only on results above detection. **Only one sample had a detectible concentration.*

9.3 Field Duplicates

Duplicates were collected at the same frequency as both standards and blanks. For each of the 277 designated duplicate samples collected in 2011, the split core was re-split into quarters and both quarters were sent to the lab. From the duplicate quarter, one field duplicate and two laboratory duplicates (split and pulp) were obtained. At both Actlabs and ALS the field duplicates demonstrated good correlation (R2 = 0.91 and 0.94) considering the heterogeneity of the sample material (Figure 9-1). Lab duplicates also demonstrated excellent correlation for prep duplicates and pulp duplicates (R2 = 0.992 and 0.998 for Actlabs and 0.986 and 0.961 for ALS) as can be seen in Figure 9-2 and Figure 9-3.

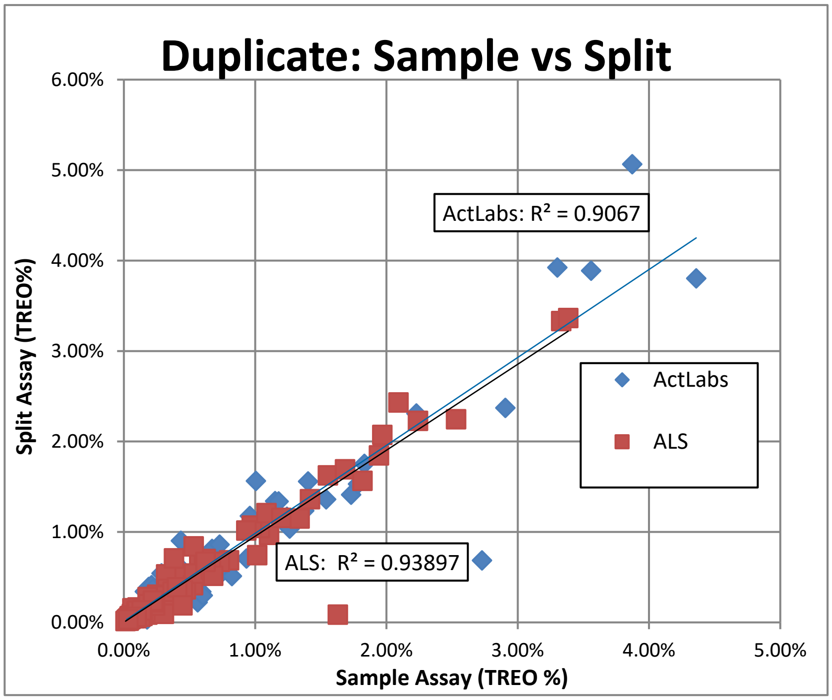


Figure 9-1 REE Field Sample Verification (Duplicates)

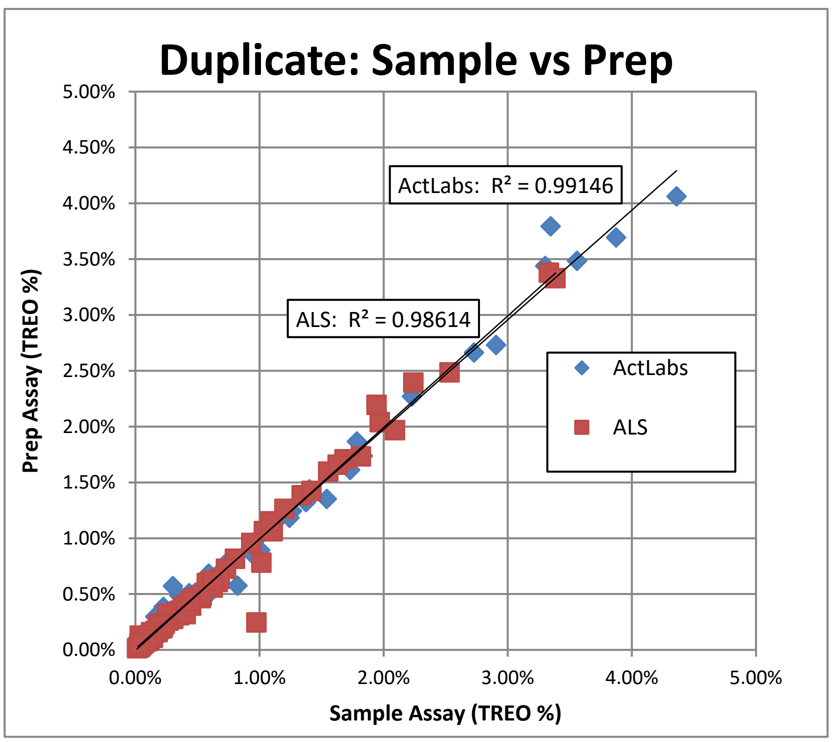


Figure 9-2 REE Lab Sample Verification (Prep Duplicates)

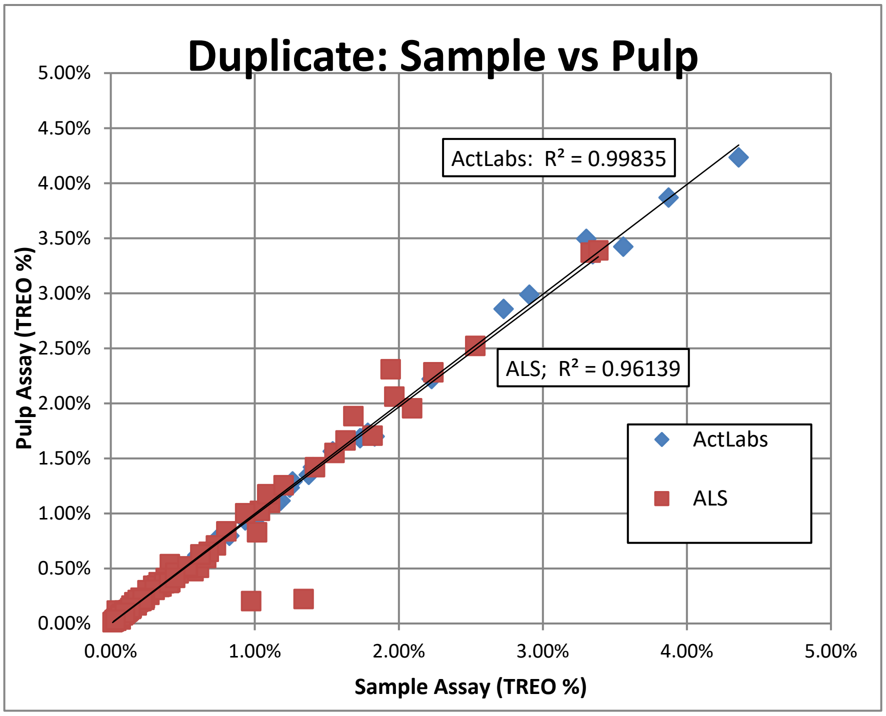


Figure 9-3 REE Lab Sample Verification (Pulp Duplicates)

In 2023, a total of 51 duplicate samples were collected in the field. The primary samples were collected from BTW diameter drill core, by splitting the core in half, using an electrohydraulic splitter. One half of the core was submitted as a sample, and the other half was retained as archive material. Duplicate samples were collected by splitting the archive half of the drill core. So, for duplicated samples, there is a primary sample composed of ½ core, a duplicate sample composed of ¼ core, and an archive sample composed of ¼ core.

Results from ALS show good correlation between primary and duplicate samples. Some scatter in the variance is expected, due to heterogeneity in the mineralization at the drill core scale (cm). Results above detection limits are removed from the plots presented in Figure 9-4 to Figure 9-11.

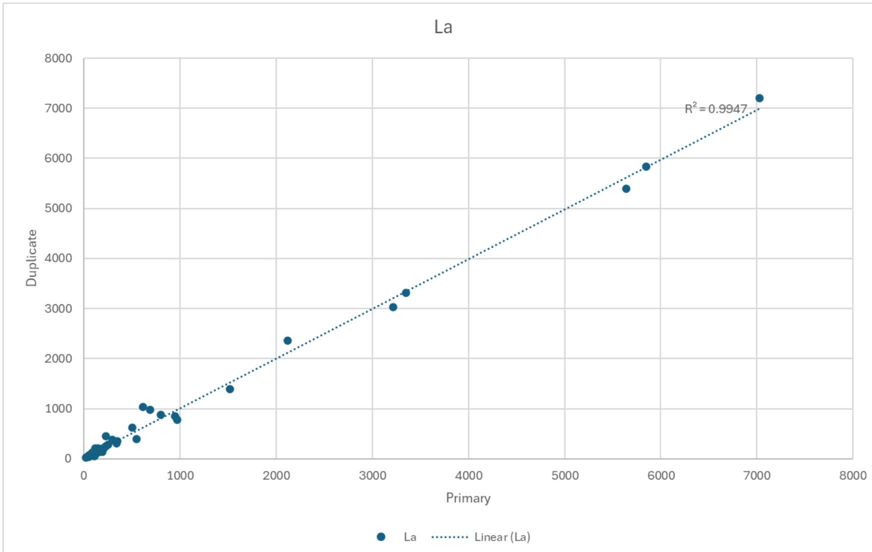


Figure 9-4 Field Duplicates: Lanthanum Duplicates

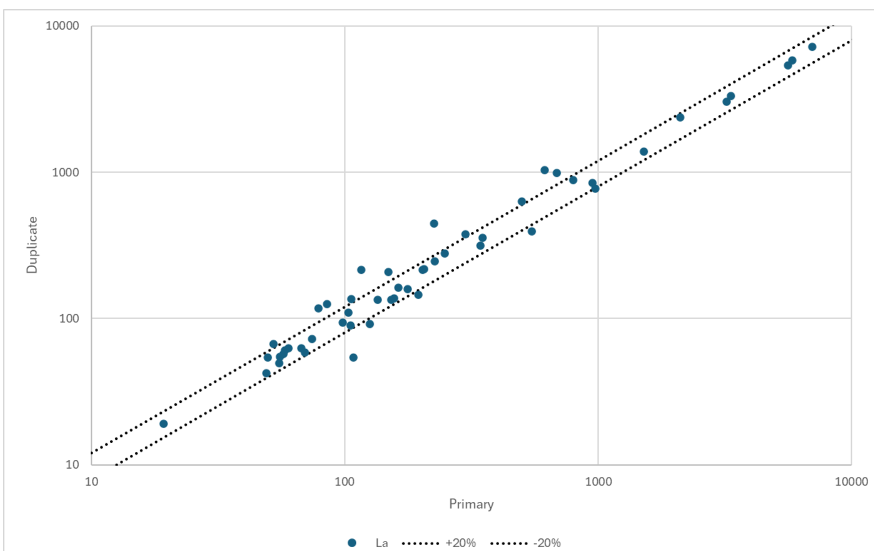


Figure 9-5 Field Duplicates: Lanthanum Variance

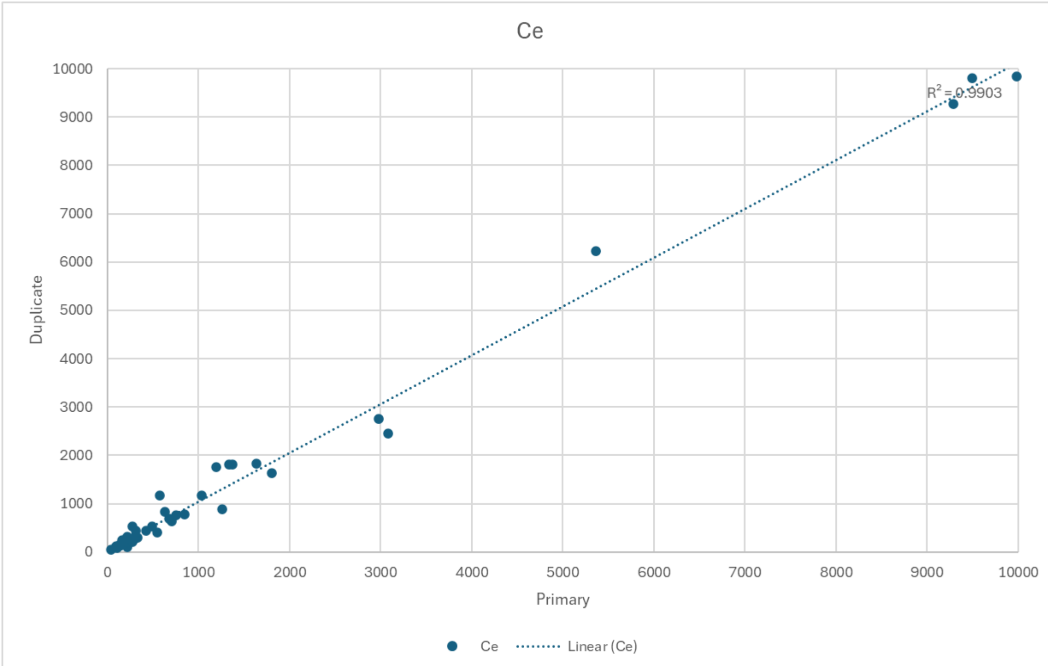


Figure 9-6 Field Duplicates: Cerium Duplicates

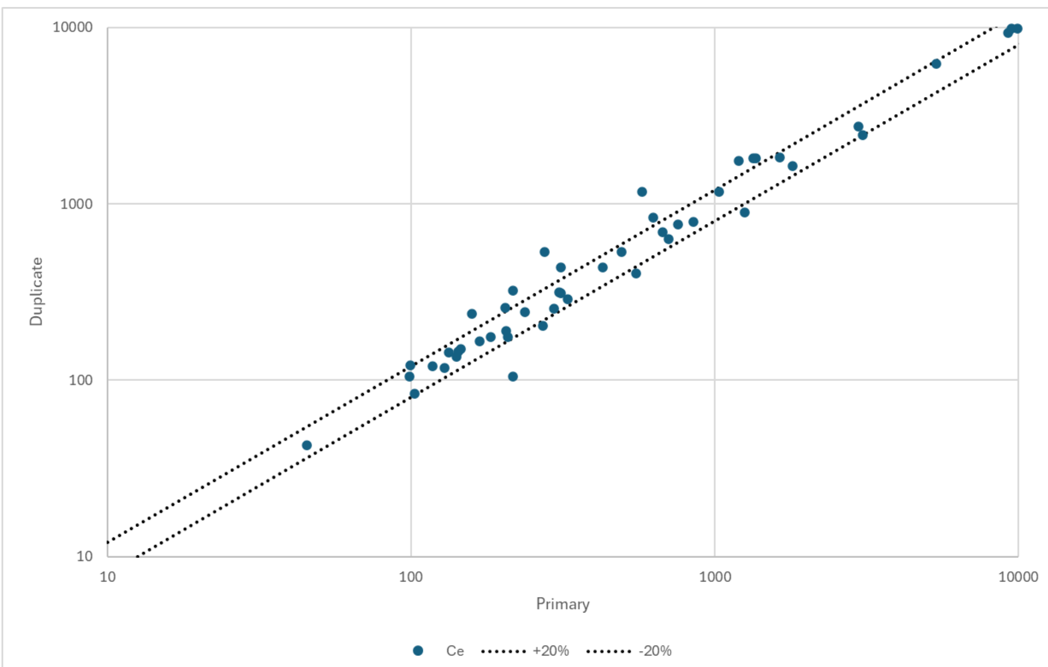


Figure 9-7 Field Duplicates: Cerium Variance

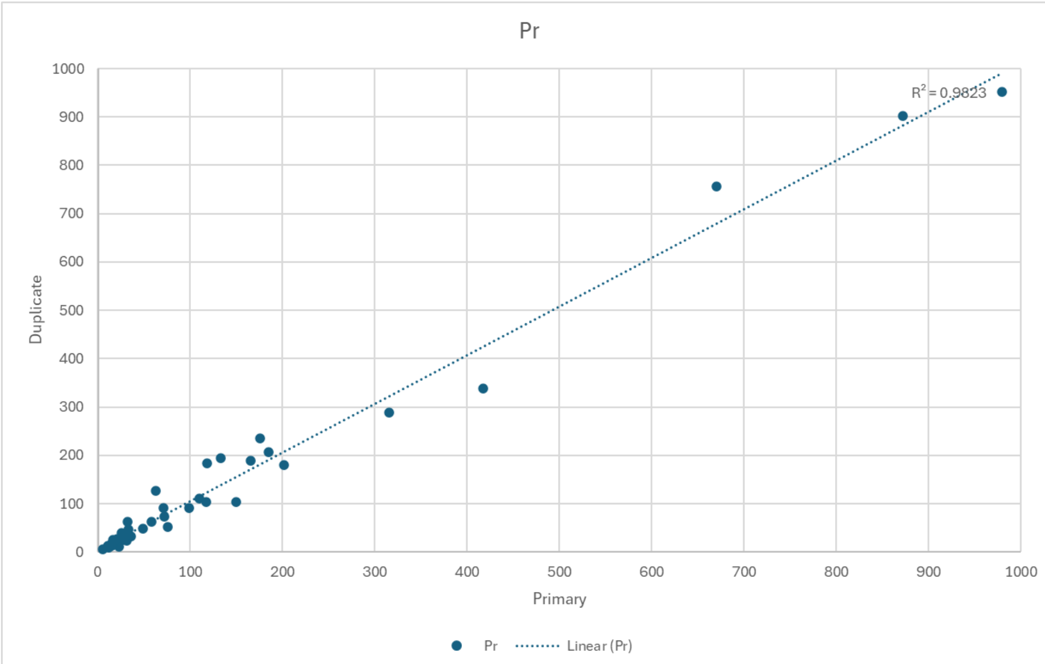


Figure 9-8 Field Duplicates: Praseodymium Duplicates

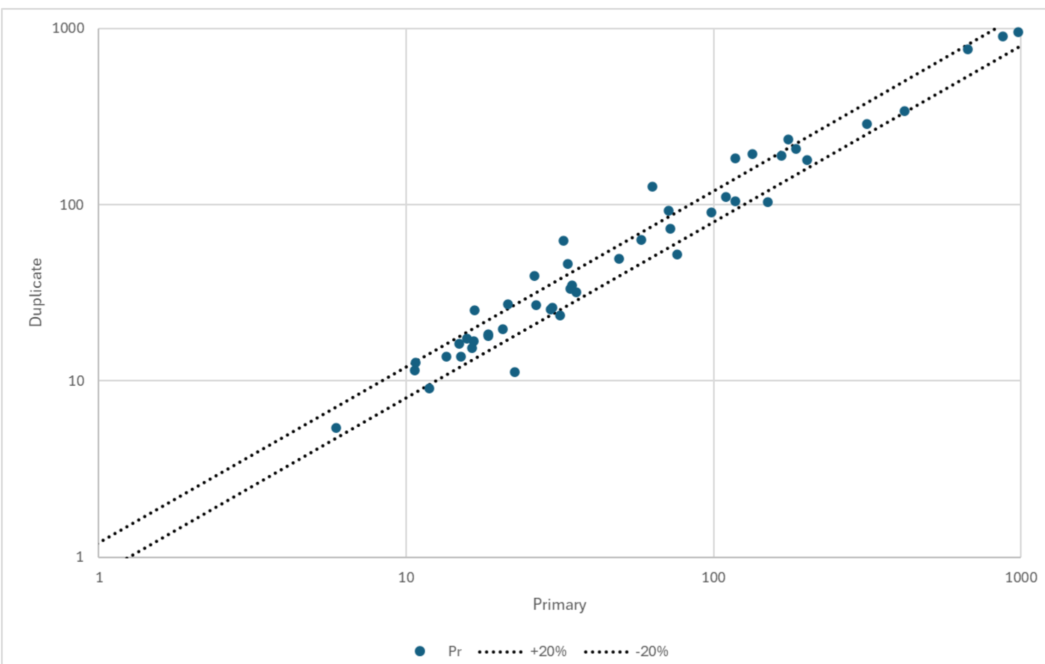


Figure 9-9 Field Duplicates: Praseodymium Variance

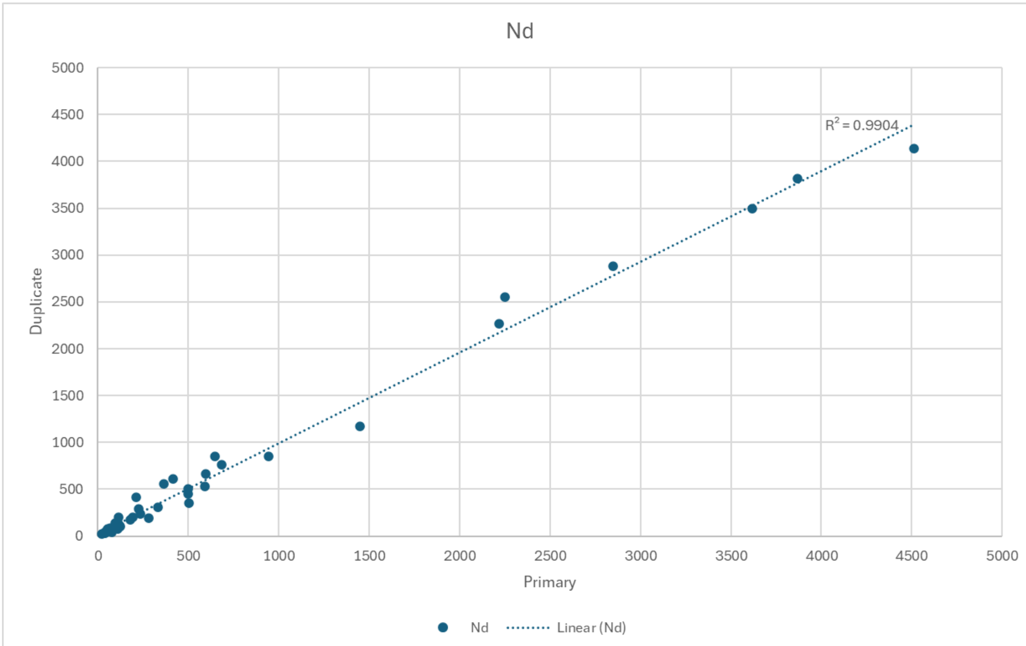


Figure 9-10 Field Duplicates: Neodymium Duplicates

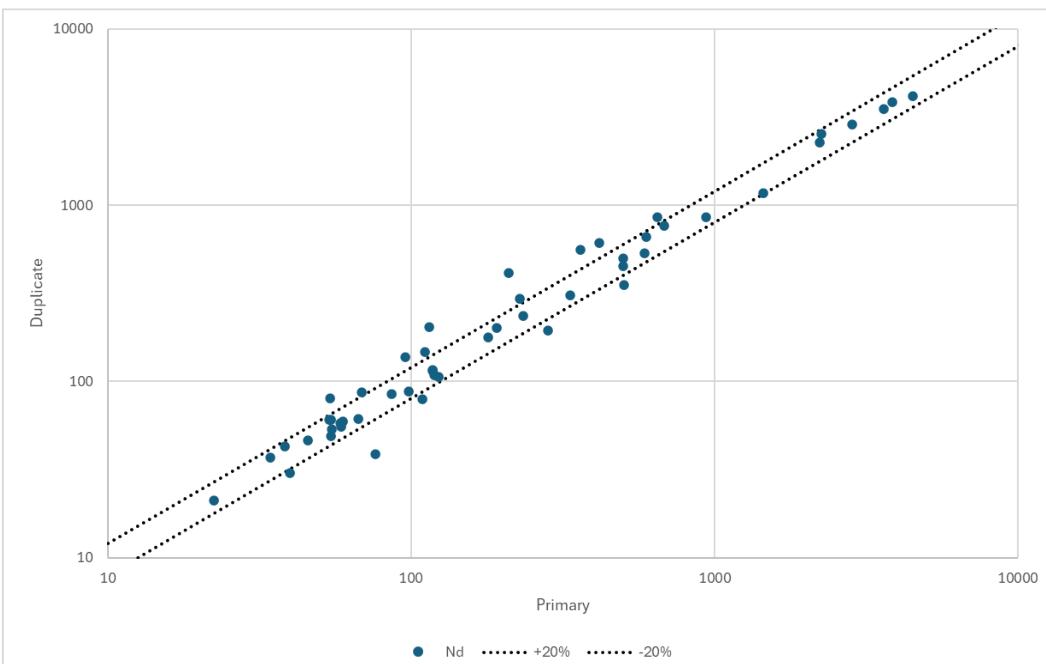


Figure 9-11 Field Duplicates: Neodymium Variance

9.4 Check Assays

In 2009, as part of the QA/QC program, Hudson Resources employed one check lab to which duplicate pulps were sent to confirm the primary lab accuracy. From this program, 18 pulps were sent to ACME Analytical in Vancouver.

Results show that the ALS Chemex lab was in most cases lower than ACME Lab for almost all of the REE. Some of these samples were rerun at ALS Chemex and yielded very similar results to the first run. Because the results from the first and the second run at ALS Chemex were very similar, the higher values from ACME were discounted. It is not known why there was a difference between labs in some of the samples.

In 2023, check analyses were performed on 102 samples, including 6 duplicates, 5 SARF-1 standards, and 5 quartz blanks. The primary lab was ALS and the secondary lab was Activation Laboratories.

Correlation of results is very good for La, Ce, Pr, Nd, and Y. These elements represent the bulk of the REE budget of Sarfartoq mineralization and the economic value of the potential resources on the license. The full suite of REE was evaluated by check analysis. Correlation becomes poorer with increasing atomic number and decreasing abundance. This is of little concern, as Sarfartoq is decidedly a LREE enriched system, and HREE are not likely to have any significant impact on project economics. Relative to Actlabs, ALS consistently overestimates REE concentrations, though by a small amount. This is most pronounced at high grades, where correlation between the labs decreases. This warrants further investigation, as lab selection could impact project economics.

Numerous results below detection limits were excluded from the plots in Figure 9-12 to Figure 9-20, as they would skew the statistics. In general, the excluded samples were Actlabs underlimits, as Actlabs generally has higher minimum detection limits than ALS. In many cases, the underlimit Actlabs results were from samples that were also reported as below detection at ALS. In every other case, ALS results confirm concentrations near the Actlabs detection limit. The samples most commonly reported as below detection with respect to REE were the blanks.

Blanks: Due to the abundance of REE results below detection, variance between the labs can only be evaluated in terms of La, Ce, Pr, and Nd. The variance averaged 64%, ranging from -62% to +400%. This is of no concern, as both labs confirm that the quartz blank material contains very low concentrations of REE (<150 ppm TREE).

Standards: Five SARF-1 standards were included in the check analysis program. The standard evaluation is not ideal, as ALS consumed all of the material during primary analysis, and new sachets of SARF-1 reference material were submitted to Actlabs. The data are valid for evaluating the labs and the reference material but cannot be considered true check analyses.

Drill Core: Variance from the ALS results in the complete REE suite ranged from -75% to +178% at Actlabs, averaging -2%. When only considering La, Ce, Pr, and Nd, variance ranged from -18% to +15%, with an average of -3%. Variance exceeds 10% in 7 cases for La, 6 for Ce, 26 for Pr, and 13 for Nd. Variance does not exceed 20% for any check analysis of drill core for La to Nd.

Thorium and U were also evaluated and results correlate very well between the two labs (Figure 9-22 and Figure 9-23). Four samples have Th reported as above detection by ALS. Results from Actlabs confirm that Th concentrations are near the ALS upper detection limit, in these 4 samples.

Niobium is a potentially economic element of interest at Sarfartoq and was also evaluated in the check analysis program (Figure 9-21). Results correlate very well between ALS and Actlabs. For ALS, ME-MS81h is preferred over ME-MS81, and ME-XRF15c is preferred over ME-MS-81h. For Actlabs, FUS-XRF is preferred over FUS-MS.

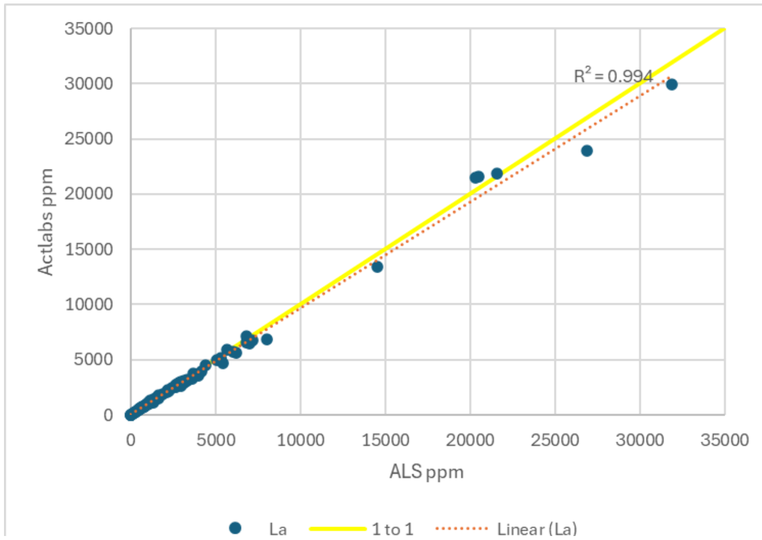


Figure 9-12 Check Analyses: Lanthanum Correlation

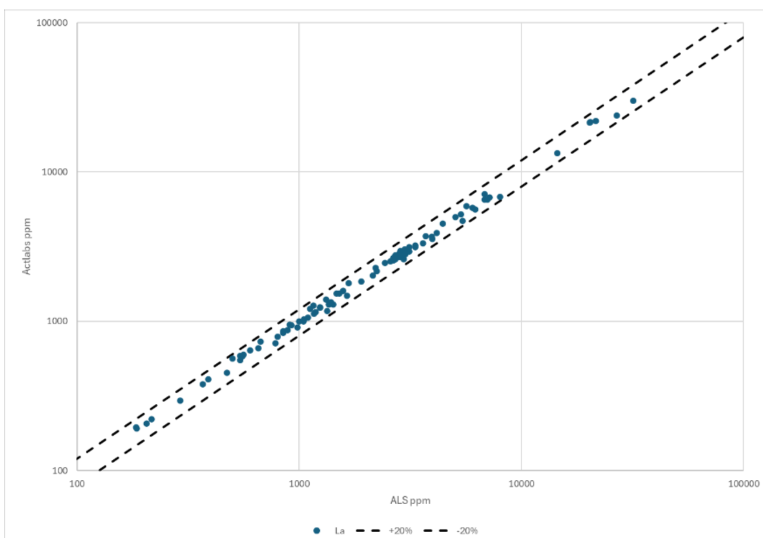


Figure 9-13 Check Analyses: Lanthanum Variance

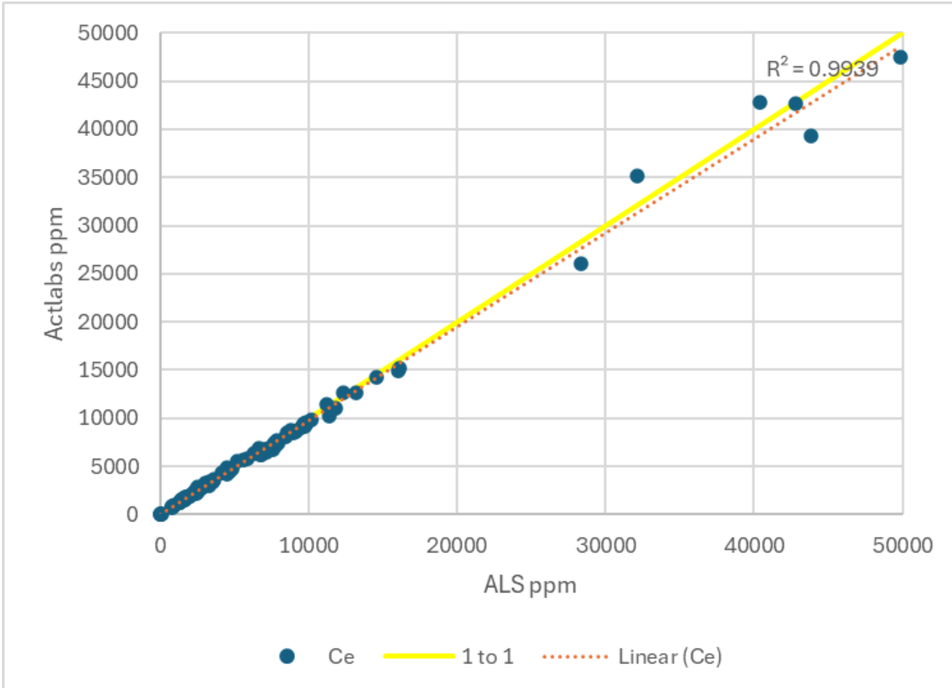


Figure 9-14 Check Analyses: Cerium Correlation

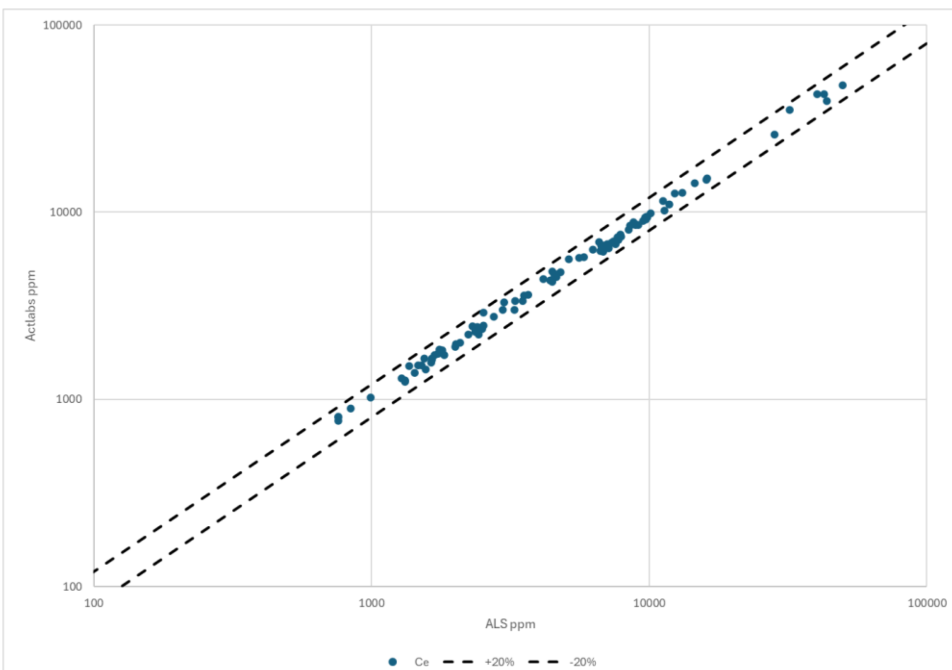


Figure 9-15 Check Analyses: Cerium Variance

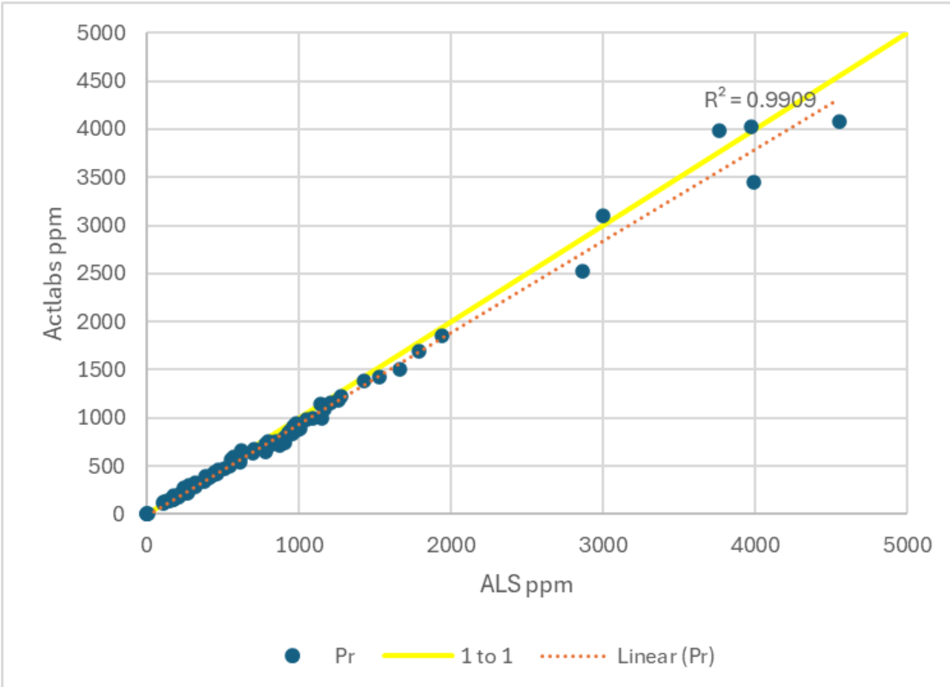


Figure 9-16 Check Analyses: Praseodymium Correlation

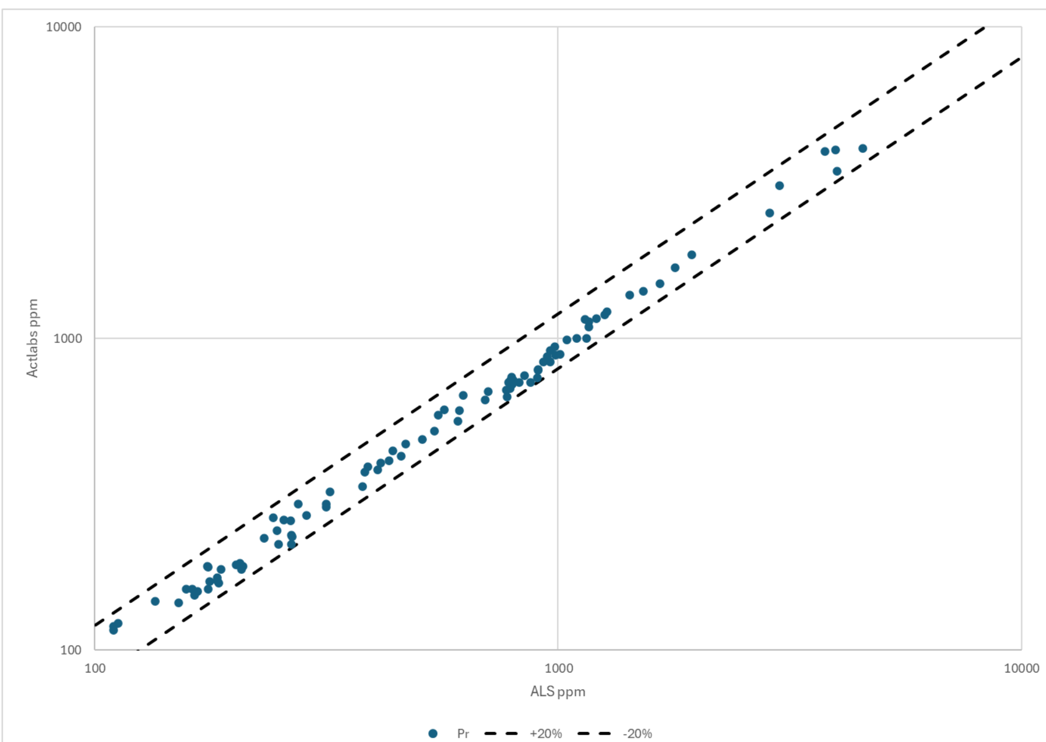


Figure 9-17 Check Analyses: Praseodymium Variance

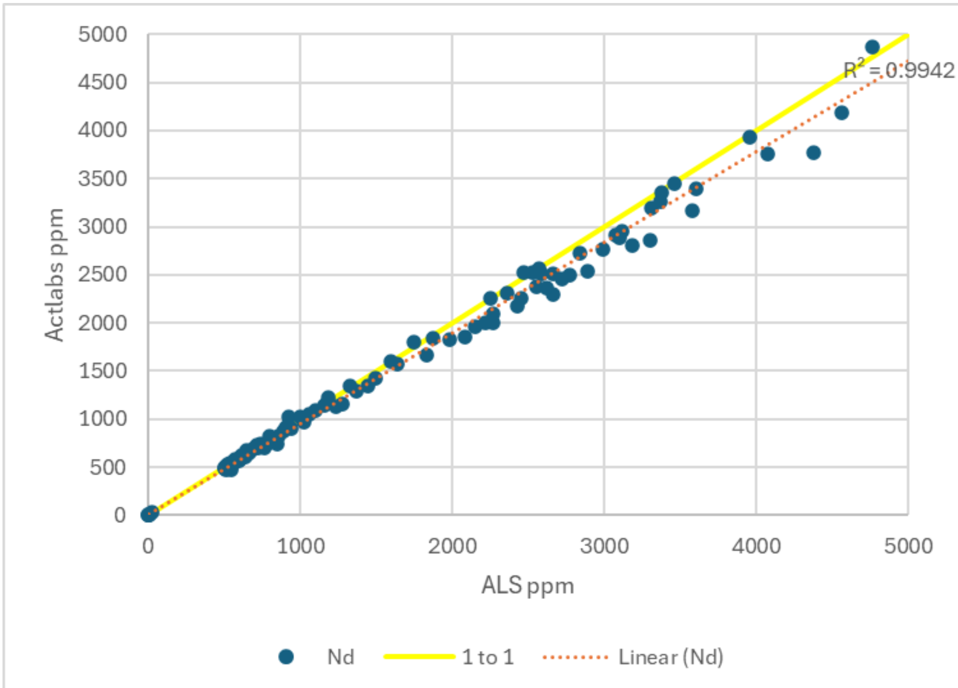


Figure 9-18 Check Analyses: Neodymium Correlation

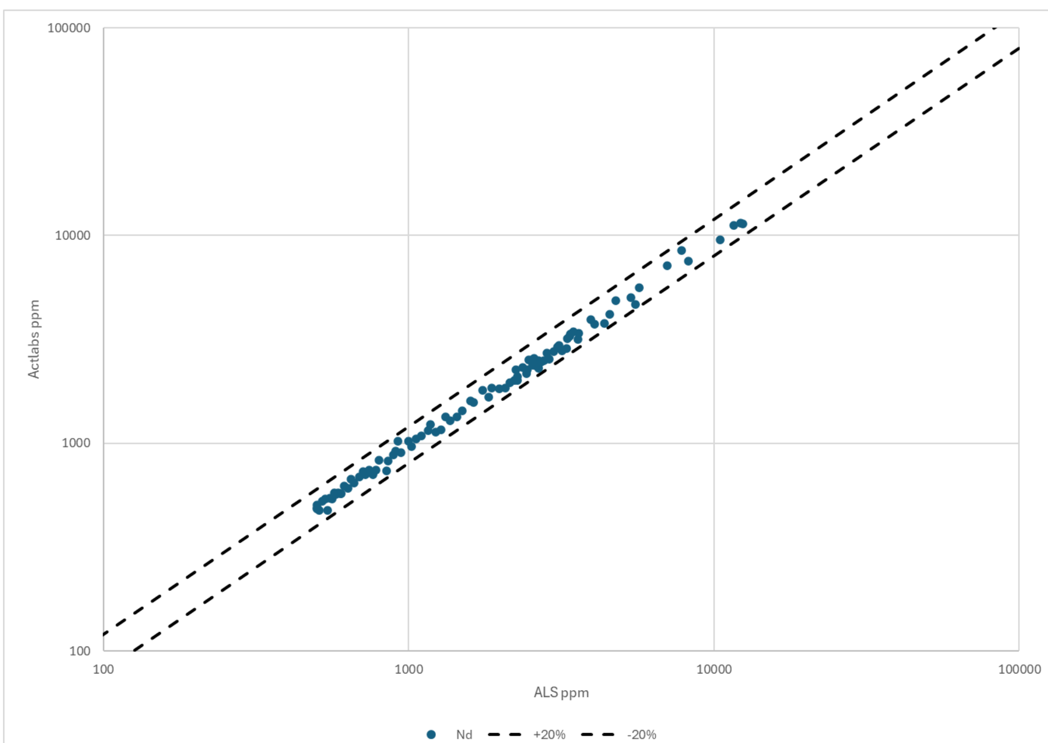


Figure 9-19 Check Analyses: Neodymium Variance

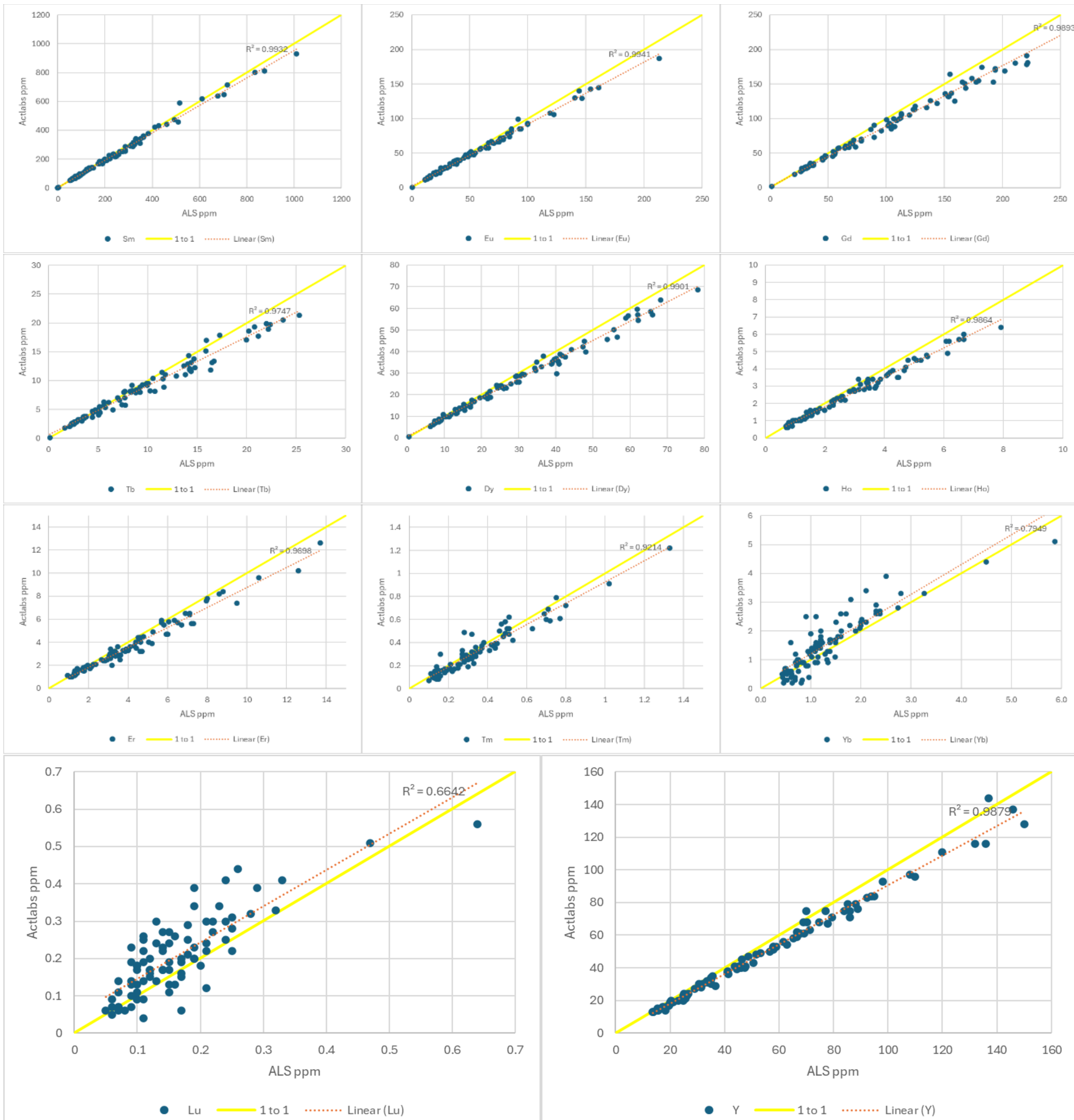


Figure 9-20 Check Analyses: Sm to Lu and Y

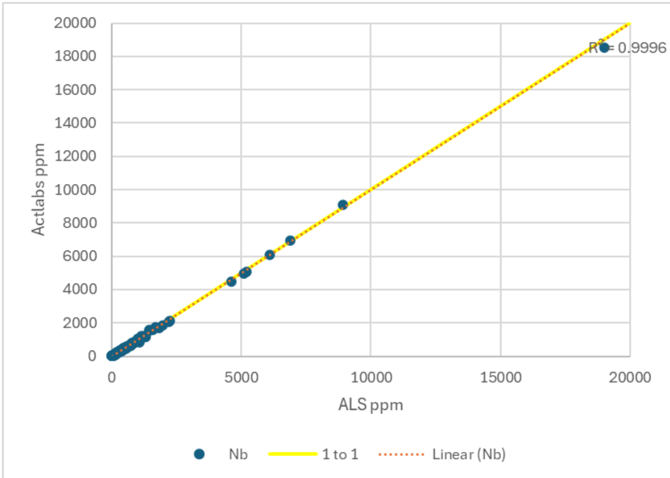


Figure 9-21 Check Analyses: Niobium

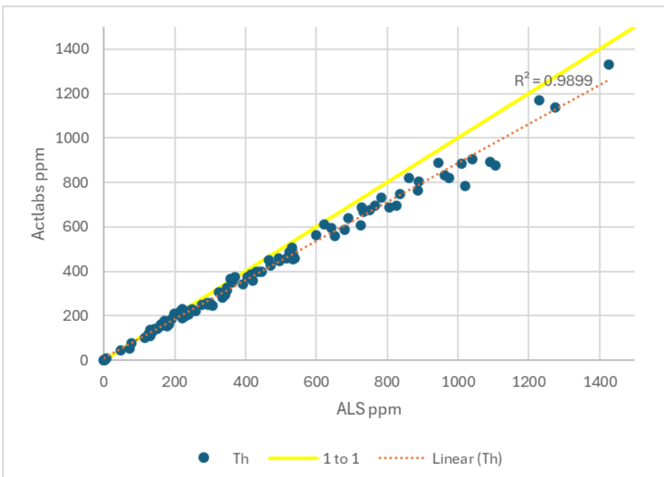


Figure 9-22 Check Analyses: Thorium

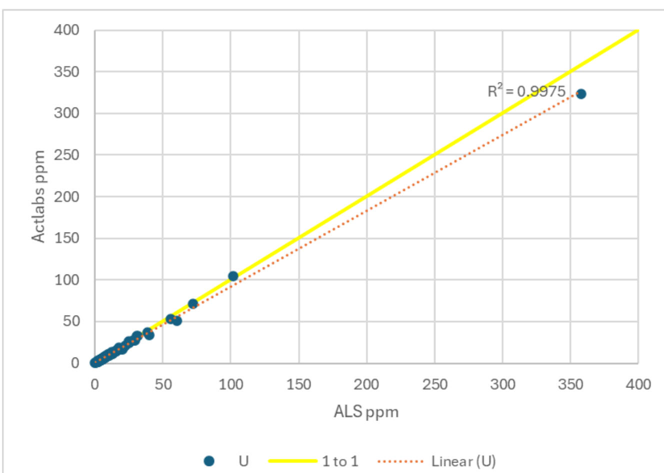


Figure 9-23 Check Analyses: Uranium

9.5 Core Recovery

Median core recovery was >99.5%, with a mode of 100%. Overall recovery was just over 95%, because most drill holes start with up to 10 m of near zero recovery in overburden and unconsolidated sediments. Overburden as thick as 27 m was observed at ST1, where core holes were oriented parallel to colluvium/ drift covered valley walls. A few drill holes encountered small zones of broken, fractured rock over one meter or less that dropped recovery slightly, but these sections were mostly in the fenetized granites and not the main carbonatite bodies.

9.6 Site Visits

The QP (R. Simpson) visited the Project from September 7-9, 2010. The purposes of the visit was to review the geology and mineralization encountered in the drill holes completed to date. Core logging, sample preparation, and QAQC procedures were also reviewed. Drill core from several holes was examined in and found to be consistent with drill logs. Sample intervals were correctly marked and identified. Drill core examined included sections of the following holes:

- SAR09-06
- SAR10-08
- SAR10-16
- SAR10-22
- SAR10-25
- SAR10-32

Three samples of core from two drill holes were collected and submitted to ACME Laboratories for analysis. Results for REE's were consistent with the reported values of the intervals from which they were collected (Table 9-7).

Table 9-7 September 2010 Site Visit Check Sample Results

Sample	Dhole	Depth	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
SAR-1	SAR10-08	344.5	4443	15399	1859	7048	793.4	172.6	446.6	30.32	74.83
	Assay Interval	343-345	1775	6000	880	3120	355	78	287	20.6	35.4
SAR-2	SAR10-08	295.7	1566	6030	900.6	3611	397.3	75.84	160.8	9.69	25.6
	Assay Interval	295-297	4350	12350	1635	5680	622	150	488	35.1	67.5
SAR-3	SAR10-16	283.5	843.9	2048	257.7	900.2	113.6	29.7	75.14	5.58	13.26
	Assay Interval	282-284	1535	3890	462	1530	190	51.6	165	12.7	24.3

Sample	Dhole	Depth	Ho	Er	Tm	Yb	Lu	Y	Nb	Ta
SAR-1	SAR10-08	344.5	2.59	2.6	0.57	5.29	0.43	119.9	61.2	<0.1
	Assay Interval	343-345	3.25	15	0.33	2.7	0.26	55	28	<0.5
SAR-2	SAR10-08	295.7	0.25	0.63	0.2	2.21	0.15	36.5	77.9	0.2
	Assay Interval	295-297	5.65	26	0.67	4.1	0.41	108	60	<0.5
SAR-3	SAR10-16	283.5	0.76	0.89	0.21	1.87	0.21	24.6	204.1	4.6
	Assay Interval	282-284	2.3	7.5	0.14	2.1	0.24	39	55	1.3

Seven drill hole collars were verified hand-held GPS readings.

9.7 Database Verification

The database has been independently audited by the author for location accuracy, down hole survey errors, transcription errors, interval errors, and missing sample intervals. Lithologic and mineralization descriptions have been compared to drill core and found to be accurate.

9.8 Conclusions

Both ALS and Actlabs laboratories provided Hudson and NNSR with consistent quality assays over the history of the REE project and will continue to be used in the future. Results for the standards, blanks and duplicates are rarely incongruous and there have been no sample mix-ups or loss of samples.

The QP author has confirmed that the data has been generated with proper procedures, has been accurately transcribed from the original source and is suitable to be used in a Mineral Resource Estimate.

10.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The metallurgical test work completed on Sarfartoq mineralized material is presented in the following sections, presented from the most recent to the earliest program:

- 2026 SGS Mineral Beneficiation Test Work
- 2023 Mineralogical Characterization of Sarfartoq Samples
- 2019 SGS Scoping Rare Earth Leaching Test Work
- Early Test Work

10.1 2026 SGS Mineral Beneficiation Test Work

Two sample lots were submitted to SGS for mineral beneficiation test work. The first lot comprised 110 kg of drill core material, from which three composites (ST1, ST40, and ST19) were prepared. The second lot comprised approximately 350 kg of drill core material collected from seven drill holes. A master composite was prepared from this material and used for the beneficiation test program.

10.1.1 Head Minerology

Head mineralogical characterization was conducted on the ST1, ST40, and Master Composite samples, as well as 15 variability samples, using TIMA-X, with selected samples further analyzed by electron probe micro-analysis (EPMA). The rare earth mineral assemblage comprised bastnaesite, synchysite/parisite, monazite, burbankite, ancylite, and kukharenkoite, with significant variability observed among both the composite and variability samples.

The mineralogical compositions of the composites differed considerably. While the ST1 Composite was dominated by burbankite, ancylite, bastnaesite, synchysite/parisite, and monazite, the Master Composite contained only trace amounts of burbankite and ancylite and was dominated by monazite and bastnaesite/synchysite/parisite. The principal gangue minerals identified were calcite, siderite, ankerite, and dolomite.

Liberation analysis indicated that burbankite was generally well liberated in the ST1 and ST40 composites, whereas most other rare earth minerals exhibited poor liberation at the coarser -106/+45 µm size fraction but showed substantially improved liberation at finer particle sizes (-45 µm). The degree of rare earth mineral liberation also varied significantly among the variability samples.

EPMA results showed considerable variation in the chemical composition and TREO content of the rare earth minerals. Monazite contained approximately 50-60% TREO, ancylite contained approximately 35-43% TREO, and burbankite contained approximately 15% TREO. Analysis of apatite in the Master Composite indicated only trace rare earth content (approximately 0.5% TREO), suggesting that apatite was not a significant host of REE.

10.1.2 Grindability Test

Three selected variability samples, SAR 11-17, SAR 11-19, and SAR 11-42, were submitted for Bond Ball Mill Work Index (BWi) grindability testing. The test results are summarized in Table 10-1. Samples SAR 11-17 and SAR 11-42 exhibited similar grindability characteristics and were classified as moderately soft, whereas SAR 11-19 was classified as moderately hard.

Table 10-1 Bond Ball Mill Grindability Test Results

Sample ID	Bond Ball Mill Work Index kWh/t
SAR 11-17	12.8
SAR 11-19	16.1
SAR 11-42	13.2

10.1.3 Sorting Amenability Test Work

For the sorting amenability test work, radioactivity measurements were collected using a Syclone handheld gamma-ray spectrometer on three particle size fractions: +19 mm, -19 mm +5.6 mm, and -5.6 mm. Five variability samples, designated Var 1A, Var 6B, Var 7A, Var 8, and Var 10, were evaluated.

The test results indicated that Var 1A, Var 8, and Var 10 exhibited potential for sensor-based sorting based on their radiometric response, whereas Var 6B and Var 7A showed limited sorting potential under the conditions tested.

10.1.4 Magnetic Separation Test Work

Preliminary magnetic separation testing was conducted to evaluate the potential for concentrating rare earth (RE) minerals using a wet high-intensity magnetic separator (WHIMS). The sample was processed sequentially at magnetic field strengths of 1,000, 2,000, 5,000, and 10,000 Gauss. The test results indicated a limited amenability to magnetic separation and did not achieve significant upgrading or concentration of RE minerals in the samples evaluated.

10.1.5 Bench Scale Flotation Test Work

Batch flotation testing was conducted on four composite samples to evaluate flotation performance and optimize the flotation conditions. The program comprised 57 tests on the ST1 composite, 20 tests on the Master Composite, eight tests on the ST40 composite, and two tests on the ST19 composite. The impacts of different operating parameters in the flowsheet were evaluated, including primary grind size, collector and depressant type/dosage, pulp temperature, pulp density and pre-flotation strategies on rare earth mineral recovery and concentrate grade.

10.1.5.1 Evaluation of Collector Scheme

For ST1 composite, the collector optimization represented a key component of the flotation test program. Early tests using hydroxamate and fatty acid collectors produced either low concentrate grades or reduced recoveries. The REEC5 collector system demonstrated the best performance among the initial collector schemes; however, subsequent testing showed that a collector mixture of PAM200 and AM810 significantly improved flotation performance. Further optimization of collector dosage, conditioning pH, and collector ratios resulted in the most favourable results at a PAM200:AM810 ratio of 1:3 to 1:5, producing final cleaner concentrates grading approximately 19-20% TREO at recoveries of approximately 57-58%. These results established the PAM200-AM810 collector system as the preferred flotation reagent scheme for subsequent test work.

The preferred collector scheme was subsequently evaluated using the Master Composite sample. Baseline testing using the collector regime established during earlier optimization studies produced a 2nd cleaner concentrate grading approximately 10.7% TREO at 45% recovery. Subsequent increases in collector dosage and adjustments to pH control improved recovery to approximately 60% while maintaining a similar concentrate grade. WHIMS treatment of the cleaner concentrate did not provide additional upgrading or recovery benefits. Testing also demonstrated that separate addition of PAM200 and AM810 collectors had little effect on flotation performance relative to the baseline reagent scheme. Higher collector dosages increased concentrate grade but resulted in lower recoveries. Alternative collectors, including Aero6493 and Florrea 7088, exhibited poor flotation performance, producing low concentrate grades and recoveries. Overall, the PAM200-AM810 collector system remained the preferred reagent scheme for the Master Composite sample.

10.1.5.2 Effect of Primary Grind Size

For ST1 composite, the effect of primary grind size on flotation performance was evaluated at P_{80} values ranging from approximately 27 µm to 81 µm. Results demonstrated that flotation performance improved with decreasing grind size, while the coarsest grind size (P_{80} of 81 µm) resulted in poor flotation response, likely due to insufficient liberation of rare earth minerals. The best performance was achieved at a primary grind size of P_{80} of 27 µm, which produced a 2nd cleaner concentrate grading 17.8% TREO at 32.4% recovery. Based on these results, a primary grind size of P_{80} of 27 µm (P_{100} passing 38 µm) was selected for subsequent flotation test work.

For the master composite, the effect of primary grind size on flotation performance was evaluated at P_{100} values of 25 µm, 38 µm, and 53 µm. Results indicated that the coarsest grind size (P_{100} of 53 µm) produced the poorest flotation performance, yielding a 2nd cleaner concentrate grading 9.3% TREO at 32.7% recovery. Improved flotation performance was observed at finer grind sizes, with the best overall response achieved at P_{100} of 38 µm. Additional testing at P_{100} of 25 µm demonstrated that acceptable concentrate grades and recoveries could be obtained with optimized collector dosages, suggesting that the finer grind size may provide an appropriate balance between selectivity and recovery. However, further bench-scale flotation testing was recommended to confirm the optimum grind size and reagent regime.

10.1.5.3 Effect of Pulp Temperature

For the ST1 Composite, the effect of pulp temperature on flotation performance was evaluated at temperatures ranging from 50°C to 70°C. Initial rougher flotation tests indicated that increasing the pulp temperature from 60°C to 70°C resulted in a higher rougher concentrate grade but slightly lower recovery. Subsequent testing confirmed that flotation performance improved at the elevated temperature of 70°C. Under otherwise identical operating conditions, a pulp temperature of 70°C produced a 2nd cleaner concentrate grading 19.4% TREO at 57.0% recovery, compared to a concentrate grading 16.0% TREO at 39.2% recovery at 50°C. The higher temperature also improved rougher flotation performance, resulting in both higher rougher concentrate grade and recovery. Based on these results, a pulp temperature of 70°C was selected for subsequent flotation test work.

10.1.5.4 Effect of Pulp Density

For the ST1 Composite, rougher flotation performance was strongly influenced by pulp density. At 19% solids, rare earth mineral recovery to the combined rougher concentrate was only 31.3%, compared to 70.7% at approximately 35% solids. Consequently, a rougher flotation pulp density of approximately 35% solids was adopted for subsequent test work.

10.1.5.5 Evaluation of Depressant Scheme

For the ST1 Composite, depressant testing included both depressant selection and dosage optimization. Results demonstrated that sodium fluorosilicate played a critical role in maintaining flotation selectivity, as partial replacement with CMC resulted in poor flotation performance. Increasing the sodium fluorosilicate dosage above the optimum level adversely affected both concentrate grade and recovery, with the most favourable results obtained at dosages of approximately 500-600 g/t. Higher F220 dosages in the rougher flotation stages improved both TREO grade and recovery in the final concentrate. Alternative reagent schemes using F250 as the depressant or sodium silicate with hydroxamate collectors produced inferior flotation performance. Based on these results, a depressant scheme comprising F220 and sodium fluorosilicate was selected for subsequent test work.

For the Master Composite, depressant testing focused on depressant selection and dosage optimization. Similar to the ST1 Composite, sodium fluorosilicate was required to maintain flotation selectivity, with the most favourable performance achieved at dosages of approximately 600-650 g/t. Increasing the dosage to 750 g/t adversely affected flotation performance. Alternative reagent schemes incorporating CMC, citric acid, or Calgon produced inferior results. Evaluation of alternative depressants indicated that F500 provided slightly better flotation performance than F220, while F200 performed similarly to F500 in the rougher and scavenger stages but yielded poorer cleaner flotation performance. Overall, sodium fluorosilicate remained a key component of the preferred depressant scheme, while F500 was identified as a potential alternative depressant warranting further investigation.

10.1.5.6 Apatite Pre-flotation

For the Master Composite, apatite pre-flotation was evaluated to assess the potential for removing apatite, the principal gangue mineral, prior to rare earth flotation. Testing using both Berol 8305 and FA-2 apatite collectors demonstrated poor selectivity between apatite and rare earth minerals. Although apatite recovery was achieved during pre-flotation, significant rare earth mineral losses to the apatite concentrate were also observed. Consequently, apatite pre-flotation was not considered a viable pre-treatment step for improving rare earth flotation performance.

10.1.5.7 Bench Scale Flotation Results of ST40 Composite Sample

For the ST40 Composite, eight flotation tests were conducted to evaluate rare earth flotation performance using various collector and depressant schemes, as well as the potential for barite pre-flotation. Collectors evaluated included SHA, REEC5, Aero6493, PAM200, and AM810, while F500 and sodium fluorosilicate were tested as depressants.

Rougher flotation tests demonstrated that the fatty acid collectors REEC5 and Aero6493 were less selective than hydroxamate-based collector schemes. The best rougher flotation results were obtained using SHA and Aero6493, producing combined rougher concentrates grading approximately 1.21-1.26% TREO at recoveries of 85.7-87.0%. Variations in F500 and sodium fluorosilicate dosages had only a minor impact on flotation performance.

Cleaner flotation testing evaluated both rare earth flotation and barite pre-flotation. Barite pre-flotation using S72 and Aero845 produced a high-purity barite concentrate grading approximately 52-53% Ba (about 90% barite purity) with 43.1% barium recovery, indicating potential for by-product recovery. However, subsequent rare earth flotation performance remained poor, with cleaner concentrate grades of less than 1.0% TREO. The best rare earth flotation result was achieved using REEC5, Aero6493, and F500, producing a first cleaner concentrate grading 1.44% TREO at approximately 40% recovery. Testing with the PAM200-AM810 collector system was unsuccessful, yielding a 2nd cleaner concentrate grading only 1.20% TREO at 5% recovery.

Overall, the ST40 Composite demonstrated a substantially poorer flotation response than the ST1 and Master Composite samples.

10.1.5.8 Bench Scale Flotation Results of ST19 Composite Sample

For the ST19 Composite, two flotation tests were conducted to evaluate rare earth flotation performance using different collector schemes and operating conditions. Test F23 utilized a mixture of SHA and Aero6493 at a pulp temperature of 50°C, while test F44 employed a PAM200-AM810 collector mixture at 70°C and incorporated two cleaner flotation stages. The SHA-Aero6493 collector system produced a combined rougher concentrate grading 1.56% TREO at 75.4% recovery. In comparison, the PAM200-AM810 collector system generated a rougher concentrate grading 3.81% TREO at 55.9% recovery and a 2nd cleaner concentrate grading 7.63% TREO at 45.4% recovery. Although the PAM200-AM810 collector system improved concentrate grade, the flotation performance of the ST19 Composite remained inferior to that achieved for the ST1 and Master Composite samples, indicating a more limited response to beneficiation by flotation under the conditions evaluated.

10.1.5.9 Mineralogical Analysis of Selected Flotation Products

Mineralogical characterization of selected flotation products from the ST1 Composite (tests F8 and F37) and Master Composite (test F105) was conducted using TIMA-X and semi-quantitative XRD to evaluate mineral deportment, concentrate composition, and rare earth mineral liberation.

In the ST1 Composite, progressive rougher flotation concentrates from test F8 contained between 21.7% and 41.9% rare earth minerals, with the principal gangue minerals consisting of ankerite, apatite, siderite, and calcite. The optimized flotation test (F37) produced a 2nd cleaner concentrate containing 53.5% rare earth minerals, with residual gangue comprised primarily of carbonates (20.7%), apatite (16.8%) and sulphides (4.7%), indicating that carbonate and apatite rejection remained the principal limitation to further concentrate upgrading. Rare earth losses to rougher tailings were low, with only approximately 1.4% rare earth minerals reporting to tailings.

For the Master Composite, the optimized flotation test (F105) produced a 2nd cleaner concentrate containing approximately 21.3% rare earth minerals, representing an upgrade of approximately five times relative to the head sample. The dominant gangue minerals in the concentrate were apatite (42.3%) and carbonates (33.6%), suggesting that improved depression of these minerals could further enhance concentrate grade. Rare earth mineral losses to rougher tailings were also low, with approximately 0.5% rare earth minerals reporting to tailings.

Liberation analysis indicated that the major rare earth minerals were generally well liberated in the final flotation concentrates. Burbankite and monazite exhibited the highest liberation, while bastnaesite/synchysite/parisite and ancylite showed higher liberation in the ST1 Composite than in the Master Composite. The results also indicated that rare earth mineral losses to tailings were largely associated with poorly liberated particles, highlighting the importance of adequate grinding and mineral liberation for flotation performance. Apatite was highly liberated in the Master Composite concentrate, confirming that limitations in flotation selectivity, rather than mineral locking, were responsible for its reporting to the rare earth concentrate.

10.1.6 Conclusions

The following conclusions were drawn from the beneficiation test work completed on samples from the Sarfartoq deposit:

- The TREO grades of the samples evaluated were highly variable, ranging from approximately 0.6% to 6.4% TREO. The four principal composites tested, ST1, ST19, ST40, and Master Composite, contained 3.21%, 1.05%, 1.10%, and 1.77% TREO, respectively.
- Mineralogical characterization of the composite and variability samples identified bastnaesite, synchysite/parisite, monazite, burbankite, ancylite, and kukharenkoite as the principal rare earth minerals. The relative abundance of these minerals varied significantly among the samples. Notably, the ST1 Composite was the only composite containing a significant proportion of burbankite, which contributed to its distinct mineralogical characteristics and flotation response.

- Flotation was identified as the most effective beneficiation method for concentrating rare earth minerals from the Sarfartoq samples. Neither magnetic separation nor ore sorting consistently achieved significant rejection of gangue minerals or upgrading of rare earth mineralization.
- Among the collector systems evaluated, a mixture of PAM200 and AM810 provided the most favourable flotation performance. For depressants, the combination of sodium fluorosilicate and F220 lignosulfonate achieved the highest selectivity and concentrate grades. The depressant F500 showed potential as an alternative reagent and warrants further investigation.
- Flotation performance was highly sensitive to reagent selection and dosage, particularly the collector and depressant schemes employed. It was found that the final REO grade was very sensitive to the collector and depressant dosages.
- High-intensity conditioning and relatively high pulp densities during conditioning and rougher flotation were found to be important for achieving acceptable flotation performance.
- Optimum flotation performance was generally achieved at elevated pulp temperatures in the range of 60°C to 70°C.
- Finer primary grind sizes resulted in improved flotation response, with the most favourable results generally obtained at grind sizes of approximately P_{100} = 25-38 µm.

10.2 2023 Mineralogical Characterization of Sarfartoq Samples

10.2.1 2023 Mariano Preliminary Mineralogical Analysis

Two composite samples from the Sarfartoq Deposit, Greenland, designated ST1 and ST40, were submitted for REE mineralogical characterization in 2023 to Mariano Consulting Geologists. Previous studies had suggested that burbankite may be an important REE-bearing mineral in these samples.

Burbankite, with the chemical formula $(Na,Ca)_3(Sr,Ba,REE)_3(CO_3)_5$, exhibits significant compositional variability. Published studies indicate that its total REE_2O_3 content typically ranges from approximately 2.5 wt.% to 23 wt.%, with rare earth distributions dominated by light rare earth elements (LREEs).

The objective of the study was to identify and characterize the REE mineral assemblages, evaluate their distribution within the samples, and confirm the presence of burbankite. The investigation was conducted as a preliminary assessment to provide rapid mineralogical information, with more detailed characterization recommended for definitive mineralogical evaluation.

The head composite samples contained 3.13% TREO (ST1) and 1.07% TREO (ST40).

SEM-EDS analyses indicated similar gangue mineralogy in both samples, dominated by siderite with minor calcite and apatite. ST40 also contained minor ferroan dolomite, while accessory minerals included barite, strontianite, alstonite, and trace sphalerite. ST1 contained accessory barite and witherite.

Rare earth minerals occurred as fine-grained intergrowths with barium- and strontium-bearing minerals. The dominant REE-bearing phase in ST1 was an unidentified Fe-Ba-Sr-Ca-REE-Th mineral, whereas the principal REE minerals in ST40 were calcioancylite-(Ce) and calcioancylite-(Nd).

The study did not confirm the presence of burbankite in either ST1 or ST40. The complex and fine-grained nature of the REE mineralization indicated that further mineralogical characterization, including X-ray diffraction and electron microprobe analysis, was required to definitively identify the REE-bearing phases.

10.2.2 2023 XPS Mineralogical Analysis

Mineralogical characterization was subsequently conducted by XPS Expert Process Solutions on the ST1, ST40, and Master Composite samples. The study incorporated TIMA (Tescan Integrated Mineral Analyser), Electron Microprobe Analysis (EMPA), and X-ray diffraction (XRD) techniques to provide a detailed assessment of the rare earth mineral assemblages and to confirm the presence or absence of burbankite. The investigation was undertaken following earlier mineralogical studies that suggested burbankite may be an important REE-bearing mineral phase at Sarfartoq.

10.2.2.1 Mineralogical Analysis Results

The modal mineralogy and normalized REE mineral content of the ST1, ST40, and Master Composite samples as determined by TIMA analysis are presented in Figure 10-1..

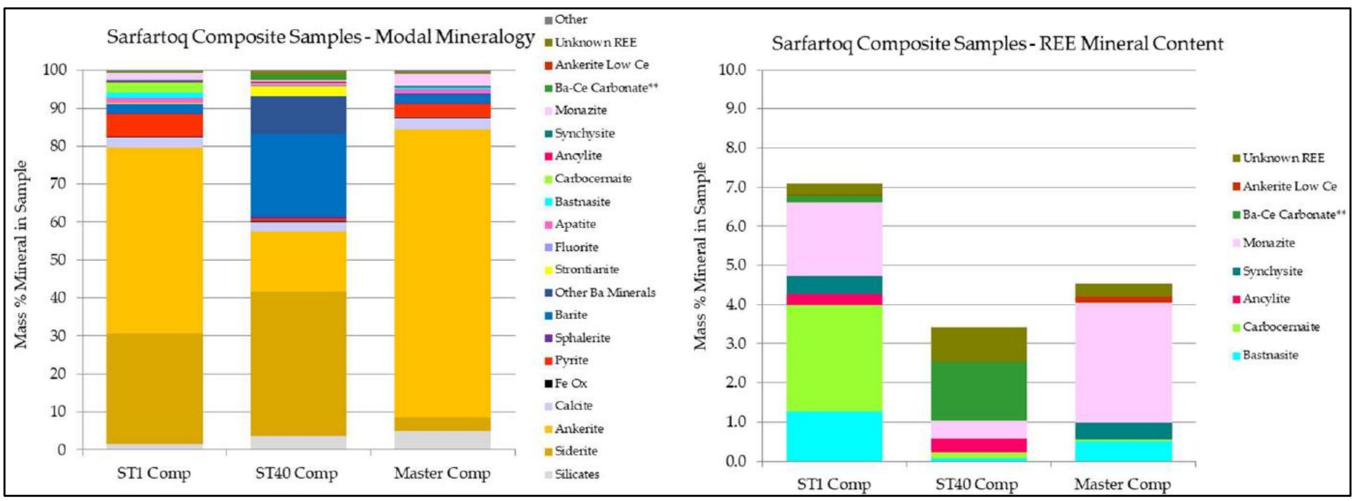


Figure 10-1 Modal Mineralogy and REE Mineral Content Comparing Three Samples

TIMA and EMPA analyses identified significant mineralogical variability among the composite samples. The ST1 Composite was dominated by ankerite (48.9%) and siderite (15.9%), while the Master Composite was predominantly ankerite (75.9%). In contrast, the ST40 Composite was characterized by high proportions of siderite (38.1%), barite (21.9%), ankerite (15.9%), and alstonite (10.1%).

The dominant REE-bearing minerals also varied between the composites. In the ST1 Composite, the principal REE minerals were carbocernaite (2.7%), monazite (1.9%), and bastnaesite (1.3%). The Master Composite was dominated by monazite (3.1%), with lesser amounts of bastnaesite and synchysite. In the ST40 Composite, the primary REE-bearing phase was a Ba-Ce carbonate mineral identified as Qaqarssukite/Huanghoite (1.5%), accompanied by minor monazite, ancylite, carbocernaite, and bastnaesite. An unresolved REE-bearing phase was identified in all composites and was most abundant in ST40.

These results demonstrated substantial variability in both gangue and REE mineral assemblages across the Sarfartoq composites, indicating that mineralogical differences may significantly influence beneficiation and flotation performance

An unresolved REE-bearing phase was identified in all three composites. Due to its low abundance and complex textural characteristics, XPS recommended additional TIMA and EMPA analyses on REE concentrate samples to facilitate definitive mineral identification.

10.2.2.2 Concentrate XRD Analysis

Three REO concentrate samples were submitted for X-ray diffraction (XRD) analysis. Following phase identification, Rietveld refinements were completed to estimate the modal abundance of the identified minerals. The results are summarized in Table 10-2. XRD analysis identified several REE-bearing minerals, including calcioburbankite, carbocernaite, bastnaesite, and monazite, together with carbonate gangue minerals such as ankerite, calcite, and siderite. Notably, calcioburbankite was identified in all three concentrate samples, while carbocernaite was particularly abundant in Concentrates 1 and 3. These results indicate that although burbankite was not identified in the composite samples by TIMA/EMPA, burbankite-group minerals were detected in the flotation concentrate products by XRD.

Table 10-2 XRD Reitveld Analysis Results for all three REO Concentrates

Mineral	REO Concentrate 1 Abundance (%)	REO Concentrate 2 Abundance (%)	REO Concentrate 3 Abundance (%)
Ankerite	45.50	49.00	68.63
Calcite	13.49	16.45	7.89
Siderite	9.49	9.14	7.77
Calcioburbankite	3.34	0.45	0.42
Monazite	1.55	0.88	0.55
Baryte	9.05	5.20	4.74
Apatite	4.84	12.71	3.66
Bastnaesite	4.65	3.90	3.38
Ce-Oxide	0.04	1.50	0.16
Carbocernaite	8.05	0.77	2.79

10.2.3 Conclusions

XPS mineralogical investigations demonstrated that the REE mineralogy of the Sarfartoq composites is more complex than previously recognized. TIMA and EMPA analyses identified carbocernaite, monazite, bastnaesite, synchysite, ancylite, and Ba-Ce carbonate minerals as the principal REE-bearing phases and did not confirm the presence of burbankite in the composite samples. However, subsequent XRD analysis of flotation concentrates identified both carbocernaite and calcioburbankite, indicating the presence of burbankite-group minerals in the beneficiation products. The study also highlighted significant mineralogical variability among the ST1, ST40, and Master composites, which may explain differences observed during beneficiation and flotation testing.

10.3 2019 SGS Scoping Rare Earth Leaching Test Work

Various flotation concentrates generated during previous metallurgical studies were used in the leaching test program. In addition, a series of tests was conducted using whole-ore samples. Head assay results are summarized in Table 13-X, which also identifies the flotation test from which each concentrate was derived and the corresponding leaching tests in which it was used. The flotation concentrates were tested as received, with no additional size reduction or sample preparation applied prior to leaching.

Table 10-3 Summary of Feed Samples and Head Assays for Leaching Test Work

Feed	Ro Conc (F 1,2,5,7, 9, 15,16)	Ro Conc (F 21, 22, 26, 27, 30)	Ro Conc (F 39, 43)	Ro Conc (F 39, 41, 42, 43, 45, 50)	Whole ore Master Comp 4 (-400 mesh)
Test	**AL 1,2,4 R 1 AB 1 & 3 and PL 1**	**R 2 to 6 AB 4 & 5 PL 2**	**PL 3**	**PL 4 and 5.1 AL 15**	**AL 16.1 PL 6**
Al (%)	0.18	0.22	0.24	0.16	0.31
Fe (%)	10.50	12.20	14.80	11.10	10.10
Mg (%)	4.00	4.40	4.28	4.15	6.05
Ca (%)	17.22	16.94	14.70	17.20	17.70
F (%)	0.56	0.42		0.46	0.15
CO_3 (%)	38.20	39.40	37.60	37.00	-
TREE (%)	8.22	4.94	6.24	6.11	1.92

10.3.1 Atmospheric Acid Leaching (AL) of Flotation Concentrate

10.3.1.1 Dilute Acid Pre-Leaching (PL) of Flotation Concentrate

A preliminary dilute acid leach test (PL1) was conducted on a composite flotation concentrate to evaluate the potential for selectively removing acid-soluble gangue minerals prior to downstream leaching. The test was performed at pH 4, 50°C, and a residence time of 3 hours using hydrochloric acid. Results indicated that the pre-leach selectively dissolved acid-soluble gangue elements, achieving extractions of approximately 52% Ca, 52% Mg, and 43% Mn, while REE dissolution remained negligible. Although gangue removal was achieved, the overall reduction in impurity content was limited and only a minor upgrade in REE grade was realized. Consequently, the dilute acid pre-leach was considered ineffective as a standalone pre-treatment step for significantly upgrading the flotation concentrate or reducing impurity levels ahead of concentrated acid leaching.

10.3.1.2 Strong Acid Leaching of Flotation Concentrate

Direct leaching of a flotation concentrate was evaluated using hydrochloric acid (HCl) and sulphuric acid (H_2SO_4) under atmospheric conditions. Three tests were completed to assess the effects of lixiviant type, acidity, temperature, and residence time on rare earth extraction. Test AL1 utilized 100 g/L HCl for 6 hours at 50°C, while tests AL2 and AL4 employed 50 g/L and 75 g/L H_2SO_4, respectively, with AL4 extending the leach duration to 48 hours. Acid consumption for AL1, AL2 and AL4 tests were found to be 566 kg/t, 828 kg/t and 1512 kg/t, respectively.

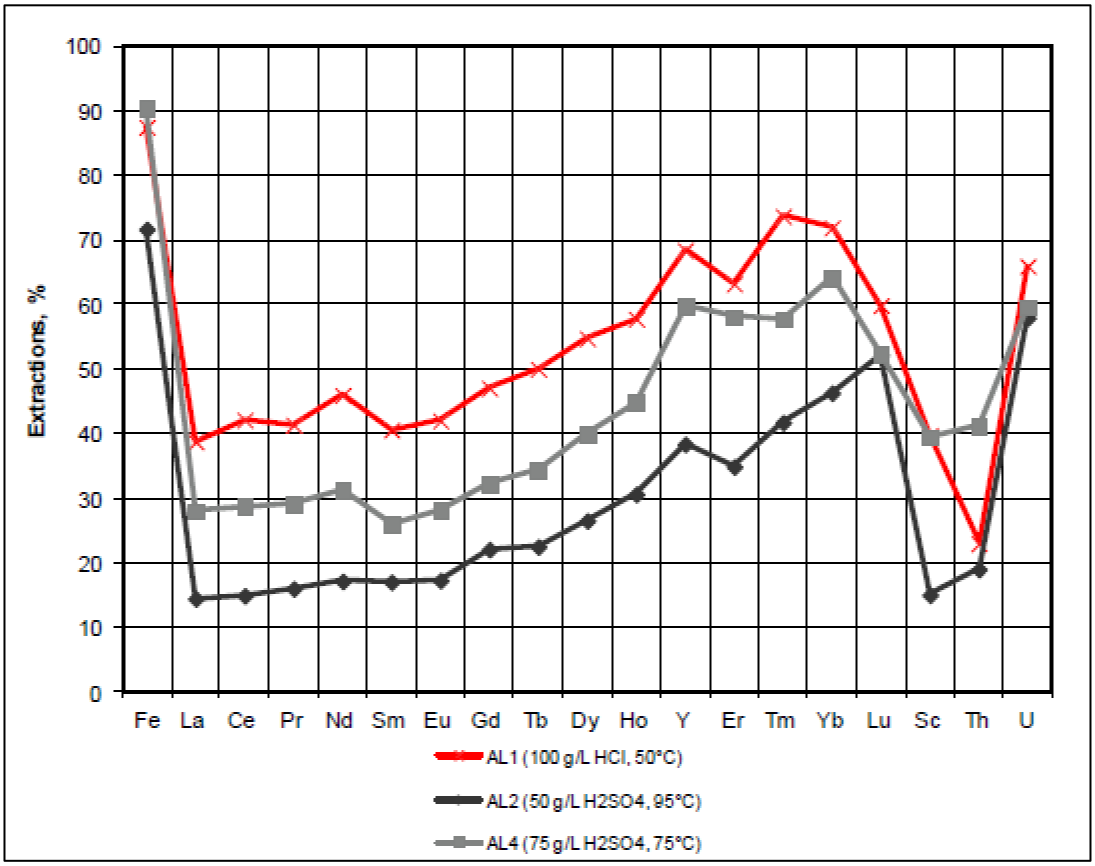


Figure 10-2 Extraction Results of AL1, AL2 and AL4 Tests

Results showed that the 100 g/L HCl leach (AL1) achieved the highest REE extractions, whereas the 50 g/L H_2SO_4 leach (AL2) produced the lowest recoveries (Figure 10-2). Increasing sulphuric acid concentration and leach residence time improved extraction by approximately 10-15%, although overall recoveries remained moderate. Heavy rare earth elements (HREEs) consistently exhibited higher extraction than light rare earth elements (LREEs), which was attributed to possible precipitation of REE fluorides during leaching. Under the conditions tested, individual REE extractions generally remained below 75%, indicating that direct atmospheric acid leaching of the flotation concentrate was not sufficient to achieve high rare earth recoveries.

10.3.1.3 Concentrated Acid Leaching of Calcined Flotation Concentrate

To improve rare earth extraction, flotation concentrates were first roasted at 750-900°C to decompose carbonate and fluorocarbonate minerals prior to hydrochloric acid leaching in a six-roast test (R1 to R6). Roasting resulted in near-complete removal of carbonate minerals (>97% CO_3 removal) and upgraded the REE content of the calcines through mass reduction. Subsequent series of atmospheric leaching of the calcines (AL3, AL5 to AL14) was conducted using 50-150 g/L HCl at 50°C.

The roast-leach process achieved substantially higher recoveries than direct acid leaching of flotation concentrates. Increasing roast temperature improved REE extraction, with the best results obtained from calcines roasted at 900°C. Likewise, higher leach acidities improved extraction, although only marginal gains were observed above 100 g/L HCl. Under optimum conditions, approximately 95% Nd and 95% Dy extraction were achieved using a concentrate roasted at 900°C followed by leaching in 100 g/L HCl. Acid consumption was relatively high, ranging from approximately 420 to 960 kg HCl/t concentrate depending on test conditions.

The results demonstrated that roasting prior to hydrochloric acid leaching significantly enhanced REE recovery by reducing carbonate content and mitigating the effects of fluoride-related REE losses observed during direct acid leaching. However, substantial dissolution of gangue elements also occurred, indicating that downstream impurity removal would be required prior to rare earth product recovery

10.3.2 Acid Baking (AB) followed by Water Leaching (WL)

10.3.2.1 Acid Baking (AB) of Flotation Concentrate

Acid baking tests were conducted on flotation concentrate samples to evaluate the extraction of REEs using sulphuric acid bake followed by water leaching. The program investigated the effects of acid dosage (1,500-2,000 kg/t H_2SO_4) and bake temperature (250-350°C) on REE recovery.

The tests achieved relatively high extraction of light rare earth elements (LREEs), with optimum recoveries of approximately 88% Nd and 94% Ce, while heavy rare earth element (HREE) extraction remained significantly lower, with recoveries ranging between 29-37% Dy. Increasing the acid dosage from 1,500 kg/t to 2,000 kg/t H_2SO_4 improved REE extraction, whereas increasing the bake temperature above 250°C resulted in little additional benefit and increased reagent consumption.

The results indicated that sulphuric acid baking was effective in liberating and solubilizing the LREE-bearing minerals, likely through successful monazite cracking. However, the comparatively low HREE recoveries suggested either incomplete dissolution or re-precipitation of HREE-bearing species during the process. Consequently, while acid baking achieved higher LREE extraction than direct atmospheric acid leaching, it was less effective for HREE recovery and was therefore not considered the optimum stand-alone process route.

10.3.2.2 Acid Baking (AB) of a Calcined Flotation Concentrate

A flotation concentrate was first roasted at 800°C and subsequently subjected to sulphuric acid baking followed by water leaching to evaluate the effect of roasting on acid bake performance. The objective was to determine whether decomposition of fluorocarbonate minerals prior to acid baking would enhance rare earth extraction.

Roasting prior to acid baking significantly improved HREE extraction compared with direct acid baking of flotation concentrate. Under the test conditions evaluated, the roast-acid bake-water leach process achieved extractions of approximately 90% La, 93% Ce, 89% Nd, 66% Dy, and 77% Y. In comparison, direct acid baking under similar conditions achieved only 36% Dy and 44% Y extraction (Test ID: AB3).

The results demonstrated that pre-roasting enhanced the effectiveness of the acid bake process, particularly for HREE recovery, likely by decomposing fluorocarbonate minerals and reducing fluoride-related losses that were observed in some direct leaching and acid baking tests. Although LREE extraction was already high in the direct acid bake tests, roasting provided a substantial improvement in HREE extraction and overall rare earth recovery.

10.3.2.3 Acid Baking (AB) of Pre-Leached Flotation Concentrate

Pre-leaching followed by sulphuric acid baking and water leaching was evaluated as a means of removing acid-soluble gangue minerals and carbonates prior to rare earth extraction. Flotation concentrates were pre-leached under dilute acidic conditions before the residues were subjected to acid baking at varying temperatures, acid dosages, and retention times followed by water leaching. The pre-leach stage was conducted at relatively mild conditions (50-75°C, pH 1.5 - 2.0, and 1.5 - 2 hours retention time)

Results demonstrated that incorporating a pre-leach step significantly improved overall REE recovery, particularly for HREEs. As shown in Figure 10-3, the combined pre-leach and acid bake process achieved approximately 93% Nd extraction and 66% Dy extraction, compared with 84% Nd and 29% Dy obtained through direct acid baking alone. The improvement was most pronounced for the HREEs, indicating that pre-leaching enhanced the effectiveness of subsequent acid baking and water leaching.

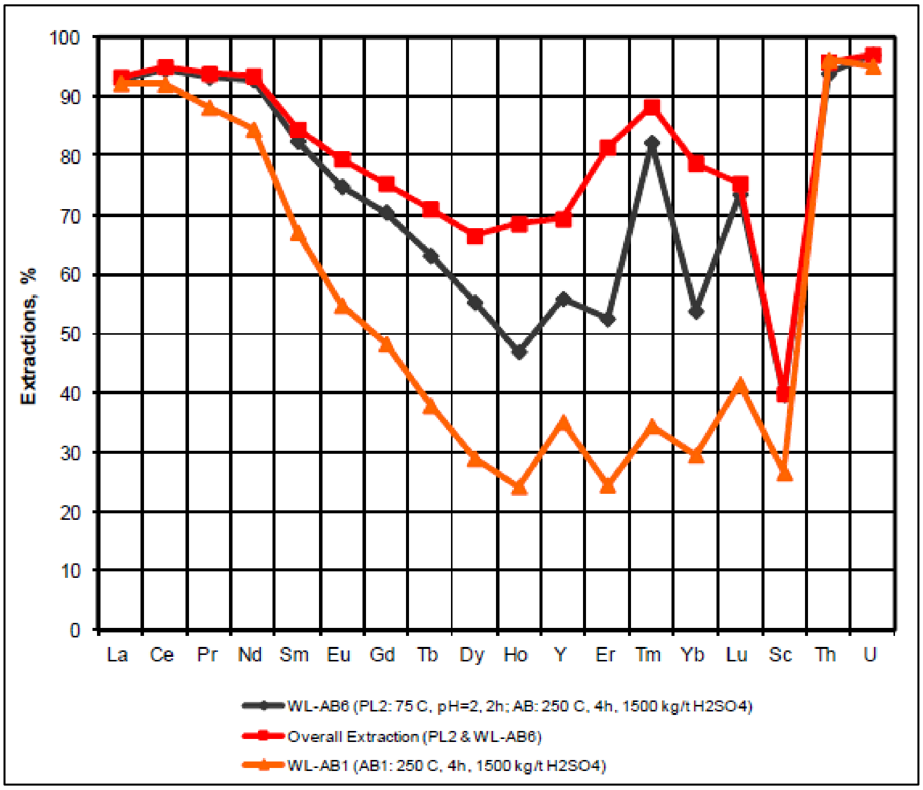


Figure 10-3 Comparison of REE Extraction from Direct Acid Bake and Pre-leach Followed by Acid Bake

Additional testing examined the effects of acid bake temperature, bake time, and acid dosage. Increased acid dosage generally improved REE extraction, whereas extending bake time or increasing bake temperature above approximately 220-250°C provided limited additional benefit. The best overall performance was achieved with a pre-leach followed by acid baking at 220°C using 1,200 kg/t H_2SO_4, yielding recoveries of approximately 89% Nd and 61% Dy.

A counter-current pre-leach configuration utilizing recycled acid bake liquor was also investigated. However, significant REE re-precipitation occurred during pre-leaching, likely due to gypsum formation, resulting in substantial soluble REE losses. Consequently, the recycle pre-leach configuration was not considered viable under the conditions evaluated and would require further optimization.

10.3.2.4 Acid Baking of Pre-Leached Whole Ore

In addition to flotation concentrate testing, a pre-leach and acid bake process was evaluated using whole-ore material. The process consisted of a dilute acid pre-leach followed by sulphuric acid baking of the pre-leach residue and subsequent water leaching. The objective was to assess whether acceptable rare earth recoveries could be achieved without prior flotation concentration.

The pre-leach stage (50°C, pH 1.8-, and 1.5-hours retention time) effectively dissolved carbonate minerals and other acid-soluble gangue components but extracted only minor amounts of REEs. The pre-leached residue was subsequently acid baked at 200°C using sulphuric acid dosages of 900 kg/t and 1,200 kg/t, followed by water leaching. Overall REE extractions were substantially improved compared to the pre-leach stage alone.

The best results were achieved at an acid dosage of 900 kg/t H_2SO_4, resulting in overall recoveries of approximately 78% Nd and 41% Dy. Increasing the acid dosage to 1,200 kg/t H_2SO_4 did not improve recovery and may have promoted additional gypsum formation, leading to increased rare earth losses.

Although the pre-leach and acid bake process demonstrated the ability to extract a significant proportion of the rare earths directly from whole ore, the recoveries achieved were lower than those obtained from equivalent treatment of flotation concentrates.

10.3.3 Two-Stage Leaching

Several two-stage leaching approaches were evaluated to recover REEs remaining in residues generated from primary leaching and acid baking tests. The test work investigated treatment of (i) acid bake-water leach residues from flotation concentrates, (ii) atmospheric hydrochloric acid leach residues from flotation concentrates, and (iii) atmospheric hydrochloric acid leach residues from whole ore samples. In these flowsheets, the primary leach residues were subjected either to an alkaline metathesis treatment followed by hydrochloric acid re-leaching, or to roasting (calcination) followed by hydrochloric acid re-leaching. The objective was to convert refractory REE-bearing compounds, particularly fluoride-bearing phases, into more soluble forms and thereby improve overall REE recovery.

Metathesis involved treatment of the leach residue with NaOH or Na_2CO_3 prior to re-leaching. This step was intended to convert poorly soluble rare earth fluoride compounds formed during primary leaching into more soluble hydroxide or carbonate phases that could subsequently be dissolved during hydrochloric acid re-leaching.

The most successful results were achieved when metathesis was applied to acid bake-water leach residues from flotation concentrates. Treatment with 10% NaOH or 10% Na_2CO_3, followed by hydrochloric acid re-leaching, produced overall recoveries of approximately 98-99% Nd and 92-98% Dy, demonstrating that the metathesis step was highly effective at recovering rare earths remaining in the acid bake residue.

Metathesis followed by hydrochloric acid re-leaching was also applied to residues generated by direct atmospheric HCl leaching. For flotation concentrate residues, overall recoveries of approximately 58% Nd and 63% Dy were achieved, indicating that this approach was less effective than treatment of acid bake residues.

For whole ore samples, atmospheric HCl leaching followed by 50% NaOH metathesis and hydrochloric acid re-leaching achieved overall recoveries of approximately 92% Nd and 94% Dy. Although technically successful, this process required substantial NaOH consumption due to reactions with gypsum and barium sulphate present in the leach residues.

A separate route involving calcination and re-leaching of atmospheric HCl leach residues from whole ore was also evaluated. This approach achieved only approximately 49% Nd and 67% Dy recovery and did not provide the improvements observed with metathesis treatment.

Overall, the results demonstrated that fluoride-bearing phases were a significant constraint on REE recovery and that alkaline metathesis was an effective method for liberating rare earths from these phases. However, the high reagent consumption associated with the process indicated that further optimization and economic evaluation would be required before advancement of the flowsheet.

10.3.4 Conclusions

The following conclusions were drawn from the leaching test work completed on samples from the Sarfartoq deposit:

- Dilute acid pre-leaching selectively dissolved carbonate gangue minerals but resulted in minimal REE extraction and only limited upgrading of flotation concentrates.
- Direct atmospheric acid leaching of flotation concentrates achieved only moderate REE recoveries, with hydrochloric acid performing better than sulphuric acid. Rare earth extractions generally remained below 75%, with HREEs showing higher recoveries than LREEs.
- Roasting flotation concentrates prior to hydrochloric acid leaching significantly improved REE extraction, achieving up to approximately 96% Nd and 97% Dy recovery. This was identified as one of the most promising process routes evaluated.
- Sulphuric acid baking produced high LREE recoveries, and incorporation of a pre-leach stage improved HREE extraction. The best pre-leach and acid bake flowsheet achieved approximately 93% Nd and 66% Dy recovery.
- Two-stage leaching using alkaline metathesis followed by hydrochloric acid re-leaching was highly effective in recovering REEs remaining in leach residues, achieving overall recoveries of up to 98-99% Nd and 92-98% Dy. However, reagent consumption was high and further optimization was recommended.

10.4 Early Test Work

Metallurgical test work completed in support of the 2012 Updated Mineral Resource (Technical Report on the Sarfartoq Project, West Greenland) reported that early beneficiation and hydrometallurgical testing was conducted at the Saskatchewan Research Council (SRC) on material from the ST1 Zone, which was interpreted at the time to host rare earth mineralization primarily within bastnaesite and monazite. The objective of the work was to evaluate preliminary beneficiation and extraction flowsheets for the Sarfartoq rare earth mineralization.

Early hydrometallurgical testing demonstrated that acid baking followed by leaching could achieve rare earth recoveries exceeding 90%. Preliminary flotation and gravity separation testing also demonstrated the potential to upgrade the mineralization prior to hydrometallurgical treatment, while additional beneficiation and leaching studies were recommended.

Further metallurgical testing completed in support of the 2011 Preliminary Economic Assessment (PEA) by Hazen Research Inc and SRC confirmed the potential of an acid bake-water leach processing route. In parallel, flotation, gravity separation, and magnetic separation were evaluated as potential pre-concentration methods.

Pre-leaching followed by acid bake-water leach testing achieved high rare earth recoveries under a range of baking conditions. TREO) recoveries ranged from approximately 87% to 92%, with the best result obtained at 200°C for 2 hours, achieving 92.4% TREO recovery, including 92.5% LREO and 78.0% HREO recovery. These early studies demonstrated the technical potential of acid baking as a hydrometallurgical extraction route for Sarfartoq rare earth mineralization.

Overall, the 2012 metallurgical studies identified acid baking and leaching as a promising extraction route and demonstrated the potential for flotation-based pre-concentration of Sarfartoq rare earth mineralization.

11.0 MINERAL RESOURCE ESTIMATES

11.1 Key Assumptions/Basis of Estimate

The ST1 zone is at an intermediate stage of exploration. This section describes the most recent mineral resource estimate update prepared with the latest drilling results and geological interpretation. The primary economic items are rare earth oxides.

The expanded ST1 drill hole database consists of 94 BTW core holes drilled on the deposit between 2009 and 2023. Core recovery has been excellent, averaging close to 100%. A summary of the drilling and sampling is presented in Table 11-1.

Table 11-1 ST1 Drilling Summary

Year	Holes	Metres	Assay Intervals	Metres Sampled	Core Size
2009	4	573.40	216	392.55	BTW
2010	15	4162.90	3001	3790.10	BTW
2011	44	10550.92	5578	11171.82	BTW
2012	14	3578.17	1612	3230.42	BTW
2023	17	4228.90	1692	3455.75	BTW
Total	94	23094.29	12099	22040.64	BTW

The database includes interval tables for lithology, alteration, degree of oxidation, mineralogy/veining. Lithologic codes used for ST1 are listed in Table 11-2.

Table 11-2 ST1 Lithologic Codes

Code	Description
AMGN	Amphibolite Gneiss
BX	Breccia
CARB	Carbonatite
DIA	Diabase
FLT	Fault
FLT ZN	Fault Zone
GAB	Gabbro
GGN	Granitic Gneiss
KD	Kimberlitic dike
OVB	Overburden
PEG	Pegmatite
Q	Quartz
UNK	Unknown
VN	carbonatite vein

11.2 Deposit Modelling

Lithology was interpreted from drill hole intercepts and limited surface sampling data. Leapfrog3d© software was used to assist in the development of sol models with subsequent manual modifications in the form of control strings to further modify the wireframes. A solid model was created for the main intrusive carbonatite bodies and everything beyond these was coded as part of the gneiss complex (Figure 11-1).

Within the gneiss complex, indicator kriging was used to define isosurfaces corresponding to a grade of 0.5% TREO in order to constrain the estimate to mineralized areas (Figure 11-2).

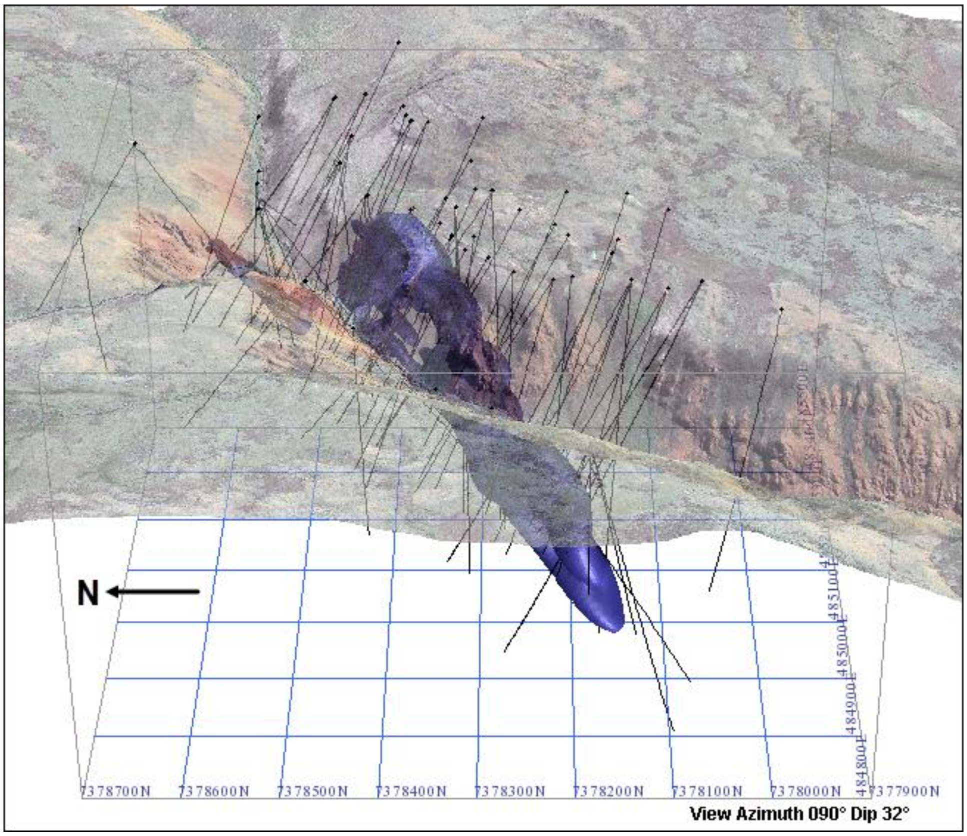


Figure 11-1 Lithologic Model of Carbonatite

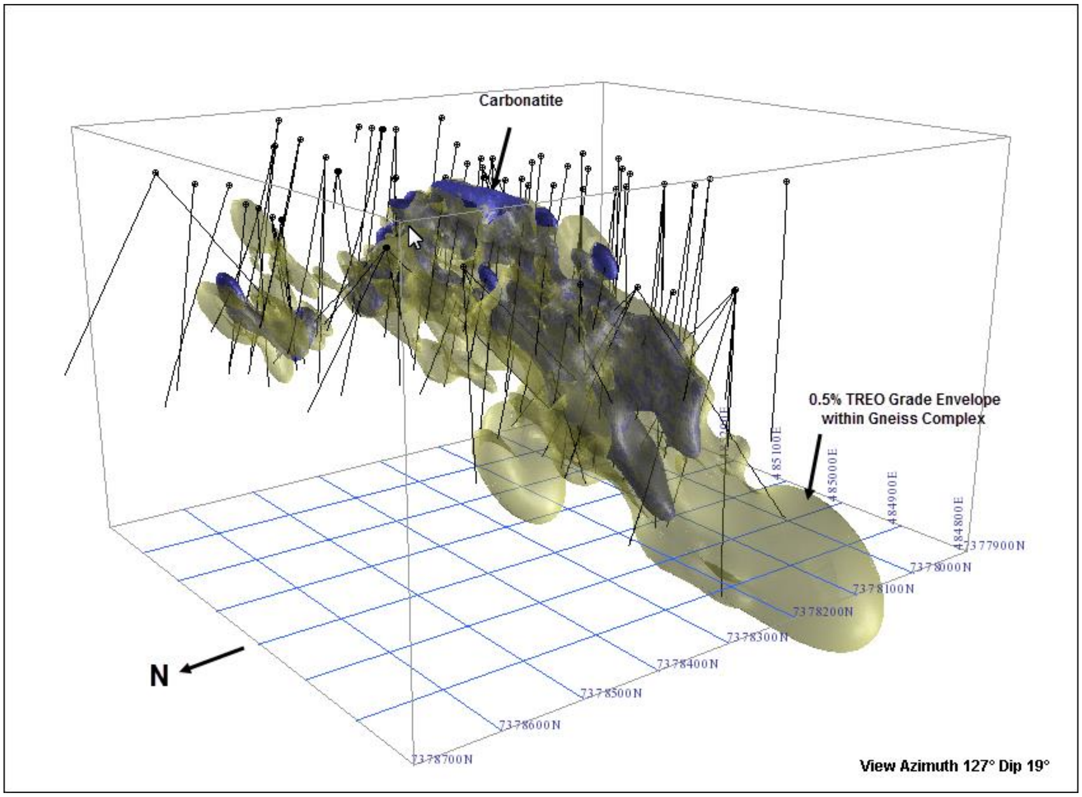


Figure 11-2 Carbonatite Model and 0.5% TREO Grade Shell in Gneiss Complex

11.3 Exploratory Data Analysis

Drill hole sampling was carried out on 2.0 m nominal widths and ranged between 0.28 and 6 m with a median width of 2.0 m. For statistical analysis and grade estimation it was decided to first composite the grades on 2 m intervals.

REO grades were composited using the 'best fit' method for the mineralized domains within the main carbonatite unit and the surrounding gneiss complex grade shell. This procedure produces samples of variable length, but of equal length within a contiguous drill hole zone, ensuring the composite length is as close as possible to the nominated composite length. In this case, the nominated length was set at 2 m. Intervals within the domains that were not sampled were assumed to have zero grade and diluted accordingly.

Statistical analysis was carried out both within the carbonatite domain and within the gneiss complex using grade shell domains defined by indicator kriging with a threshold of 0.5% TREO. The main carbonatite domain hosts the bulk of the significant TREO levels and averages1.68% TREO. Elevated levels in the surrounding gneiss generally occur in close proximity to the carbonatite contact and average 0.65% TREO within the grade envelope.

Statistics for the individual rare earth oxides within the carbonatite and gneiss domains are shown in the following tables.

Table 11-3 Composite Statistics – Carbonatite Domain

	Treo %	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Eu_2O_3 ppm	Dy_2O_3 ppm	Y_2O_3 ppm
n	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
Min	0.05	91	221	26.2	93	13.4	9.5	0.75	4	2.7	10
Max	10.15	28567	50216	4733.9	14421	1510.5	967.2	80.35	414	213.1	442
Median	1.47	2886	7263	863.3	2828	279.2	145.4	11.88	64	30.8	62
Mean	1.68	3650	8414	964.9	3147	306.4	169.5	13.25	68	33.1	67
Variance	1.19	8392733	31083083	329632	3330667	28104	11761	58	1337	294	1146
Std Dev	1.09	2897.02	5575.22	574.14	1825.01	167.64	108.45	7.63	36.57	17.15	33.85
COV	0.65	0.79	0.66	0.60	0.58	0.55	0.64	0.58	0.53	0.52	0.51

Table 11-4 Composite Statistics – Gneiss Domain

	Treo %	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Eu_2O_3 ppm	Dy_2O_3 ppm	Y_2O_3 ppm
n	2055	2055	2055	2055	2055	2055	2055	2055	2055	2055	2055
Min	0.00	0	0	0	0	0.0	0.0	0.00	0	0.0	0
Max	7.70	20917	39444	3809	11079	855.1	396.5	35.58	194	151.7	647
Median	0.45	876	2211	273	929	100.0	50.4	4.31	23	12.4	31
Mean	0.65	1358	3202	379	1263	128.6	67.0	5.57	29	15.6	38
Variance	0.39	2545634	10149329	113949	1151231	9541.4	2743.8	17.28	454	132.8	806
Std Dev	0.63	1596	3186	338	1073	97.7	52.4	4.16	21	11.5	28
COV	0.97	1	1	1	1	0.8	0.8	0.75	1	0.7	1

11.4 Analysis of Outliers

Before compositing, the grade distribution in the raw sample data was examined to determine if grade capping or special treatment of high outliers was warranted. Log probability plots were examined for outlier populations and decile analyses were performed for La_2O_3, Ce_2O_3, Pr_2O_3 and Nd_2O_3 within the carbonatite domain. As a general rule, the cutting of high grades is warranted if:

- the last decile (upper 10% of samples) contains more than 40% of the metal; or
- the last decile contains more than 2.3 times the metal of the previous decile; or
- the last centile (upper 1%) contains more than 10% of the metal; or
- the last centile contains more than 1.75 times the next highest centile.

It was found that none of these criteria applied to any of the principal REO components. The last decile values ranged from 20.5 to 29.9% and the last centiles ranged from 2.2 to 5.3%.

Probability plots for the major oxides showed no significant outlier populations (Figure 11-3).

It was concluded that no grade capping or special treatment of outliers was warranted.

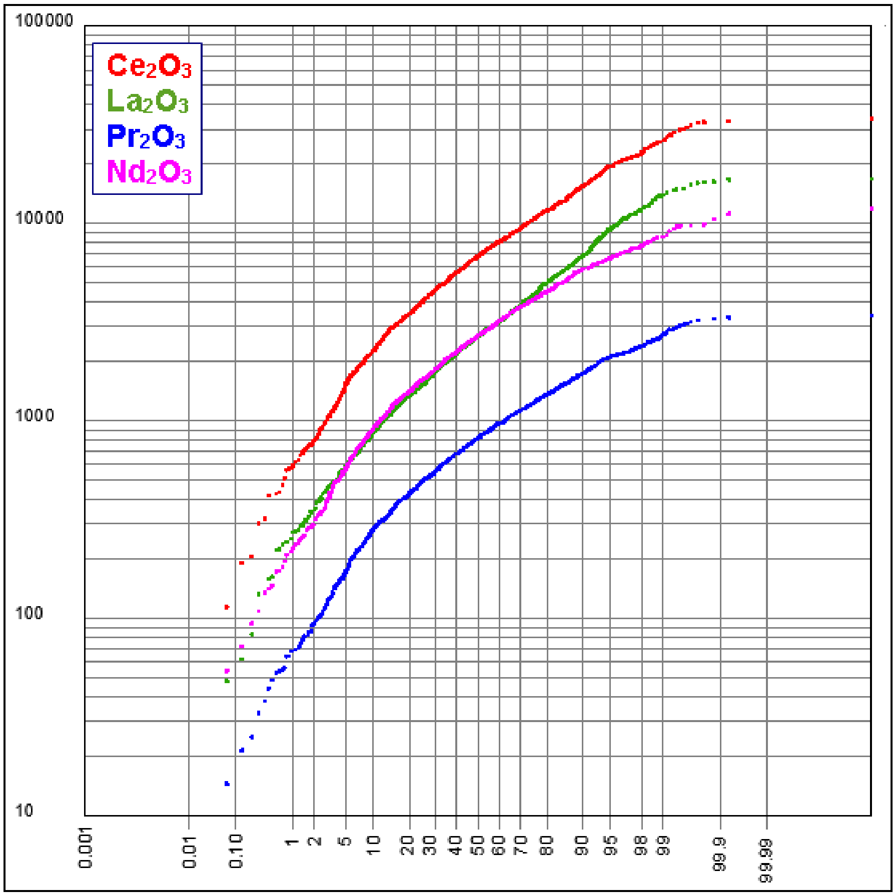


Figure 11-3 Cumulative Probability Plots

11.5 Density

In 2010 and 2011, 1785 core samples of the various lithologies, alteration and mineralization styles were measured for specific gravity ("SG") mainly at the Hudson campsite during drill core logging of rock properties, with several checks done by Aurora Geosciences Ltd., Yukon, Canada. Model blocks within the carbonatite solid were assigned a density value of 3.02 based on the median value of 385 density measurements. Model blocks within the gneiss domain were assigned a value of 2.72 which was the mean value of 1105 measurements representing the principle lithologies represented in the gneiss complex.

11.6 Variogram Analysis

Due to restrictions imposed by topography and equipment it was not possible to drill the zone in the preferred orientation across the structure. Many of the holes intersected the mineralized zone at shallow angles supplying little in the way of data to model directional variograms in other orientations. Normalised semi-variogram models for Nd_2O_3 were interpreted using data within the carbonatite unit with maximum ranges of 90 m (Figure 11-4).

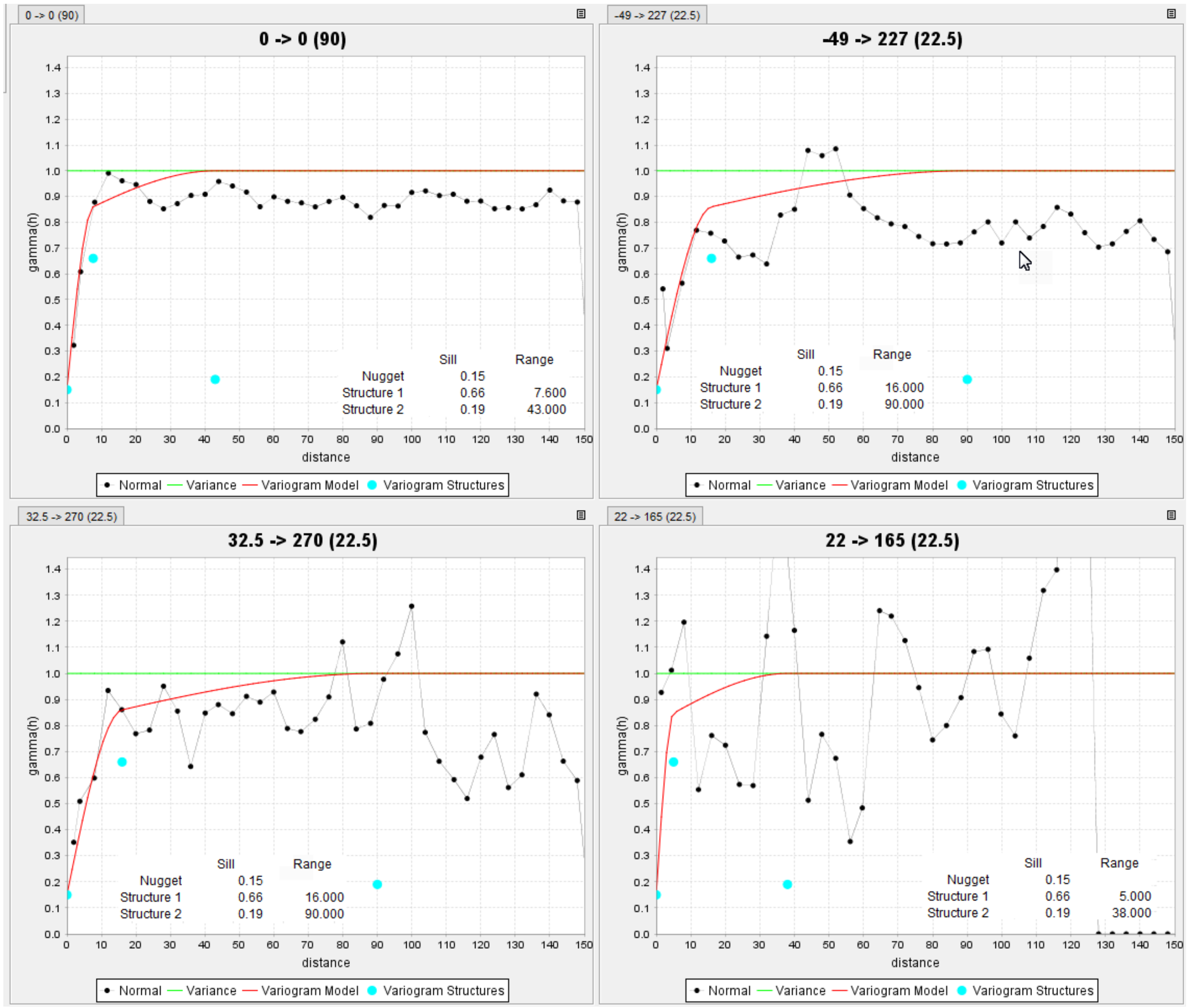


Figure 11-4 Variogram Models - Nd2O3 Carbonatite Domain

11.7 Block Model and Grade Estimation Procedures

A block model was created in Surpac Vision software using a block size of 5x5x5 metres, sub-blocked to 1.25m. The parameters of the model are summarized in the following table.

Table 11-5 Block Model Parameters

	Min	Max	Extent	Size	Subcell Size	# Parent blocks
X	484,550	485,700	1,150	5	1.25	230
Y	7,377,650	7,378,900	1,250	5	1.25	250
Z	200	800	600	5	1.25	120

Model blocks were assigned a lithologic code based on the majority of each block within the solid model of the carbonatite unit. All remaining unassigned blocks below surface were then categorized as gneiss. Block density values were assigned as described in Section 16.5.

Hard boundaries were imposed between the lithologic domain constraints. An anisotropic search ellipse was oriented paralleling the trend of the carbonatite plunging -49° towards an azimuth of 227° with a tilt of 55° (Axes of rotation using ZXY LRL of 227°, -49°, 55°). Block grades were estimated for REOs using the inverse distance squared method (ID^2) in two passes. The first pass used a maximum anisotropic search of 60 m and the second pass used a maximum search distance of 150 m. Composites from at least two drill holes were required to estimate a block. This was accomplished by limiting the number of composites per hole to 4 and specifying the minimum number of composites as 5. Block grades were also estimated using the Nearest Neighbor method (NN) and Ordinary Kriging (OK) for validation purposes.

Details of the block estimation parameters are summarized in Table 11-6.

Table 11-6 ID^2 Grade Estimation Parameters

Domain	Pass	Search Distances		Min # Composites	Max # Composites	Max per hole
		Major/Semi-major Axis	Minor Axis			
Carbonatite	1	60	25	5	15	4
	2	150	62.5	5	20	4
Gneiss/Gabbro	1	60	25	5	15	4
	2	150	62.5	5	20	4

The following set of figures illustrates the TREO block grade distribution in plan, section and perspective views.

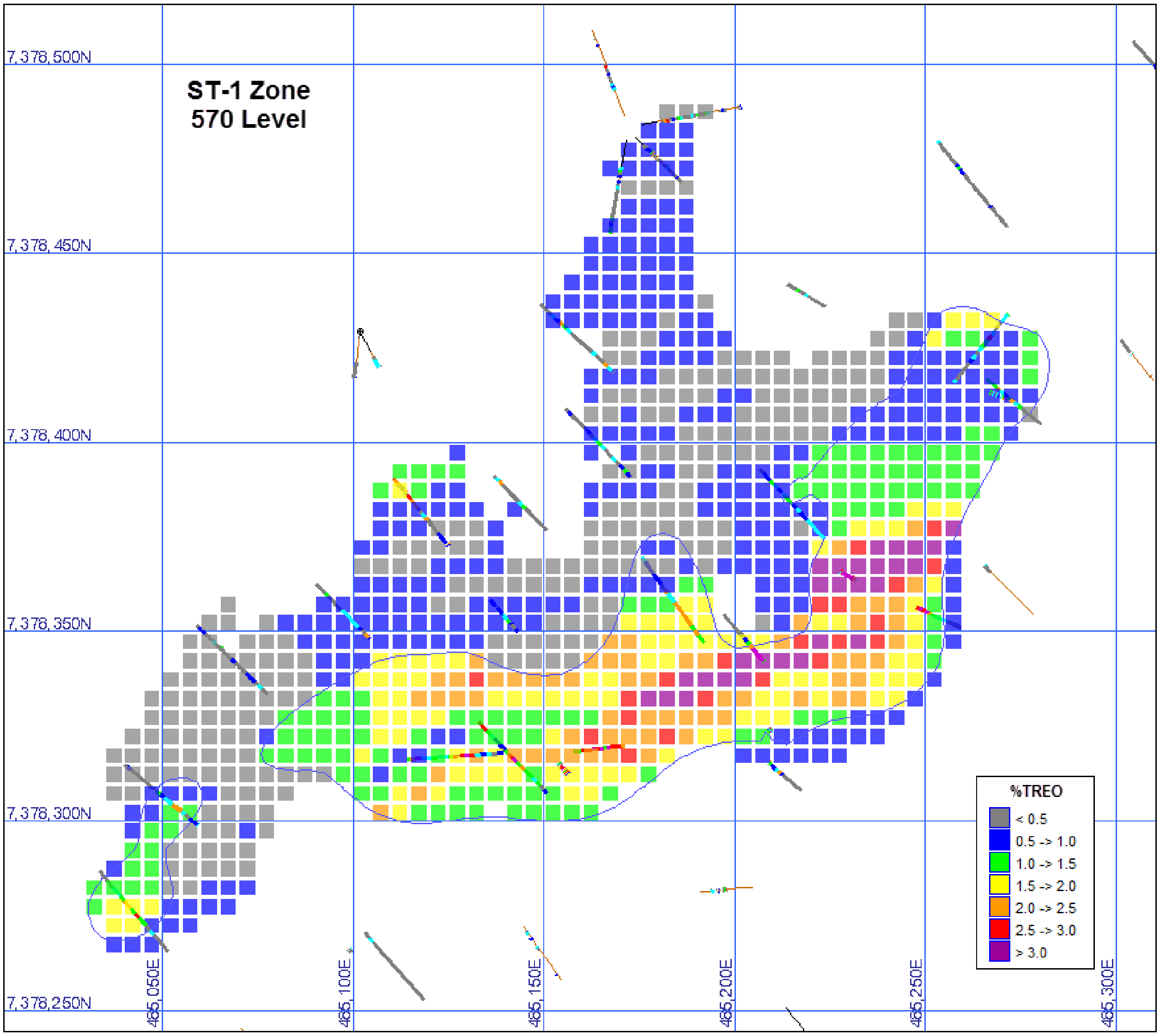


Figure 11-5 TREO Block Grades - 570 Level

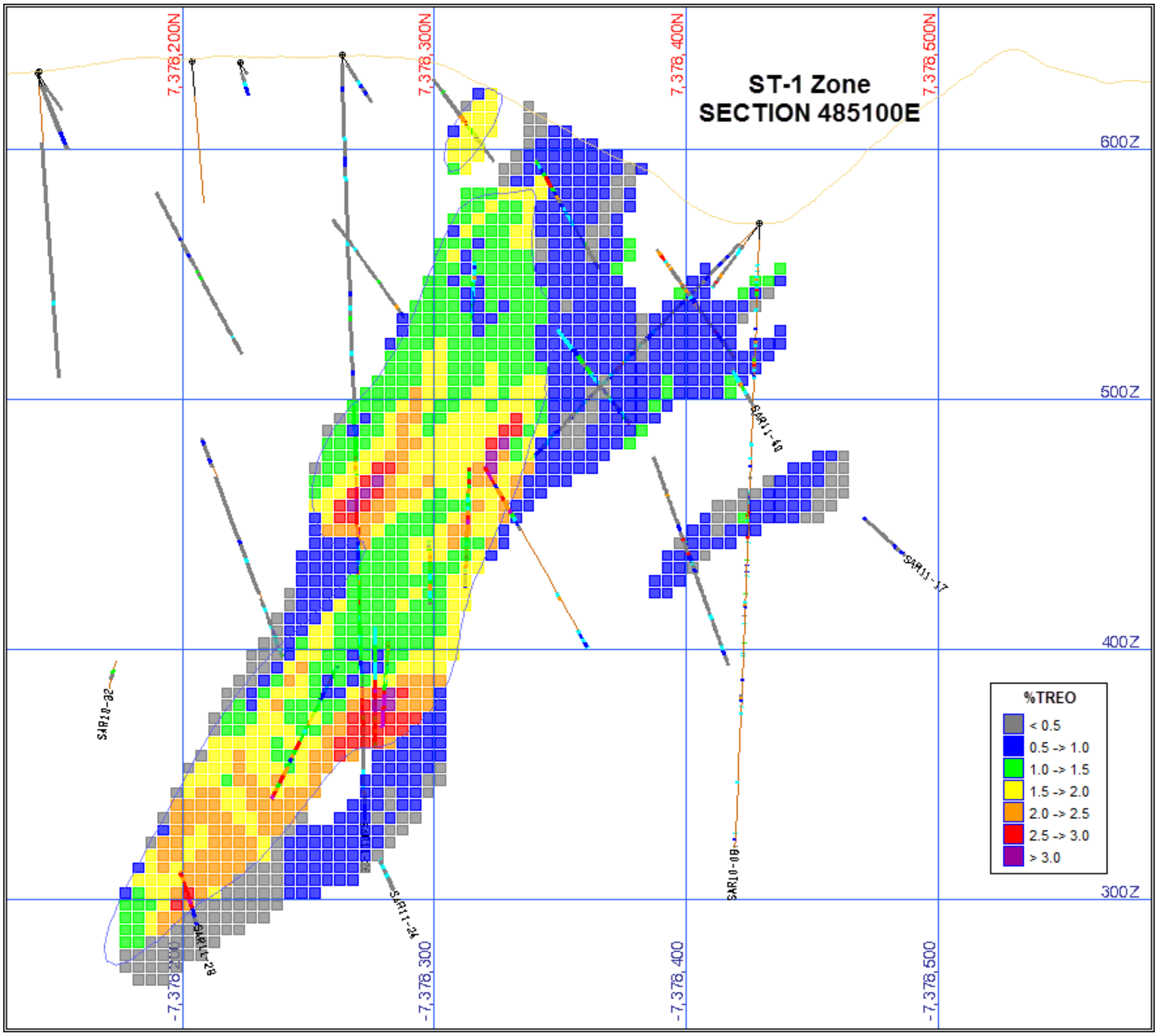


Figure 11-6 TREO Block Grades - Section 485100

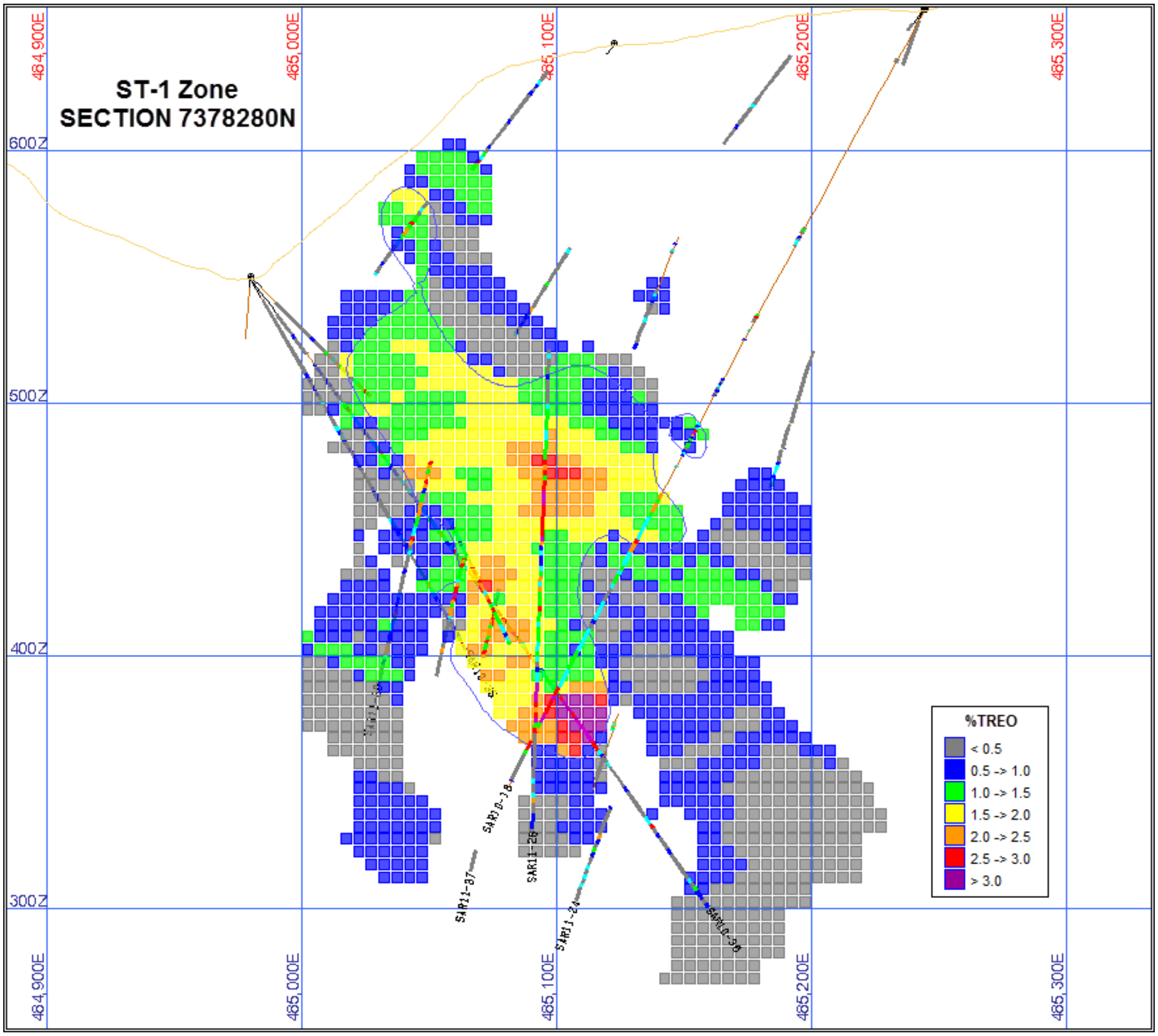


Figure 11-7 TREO Block Grades - Section 7378280N

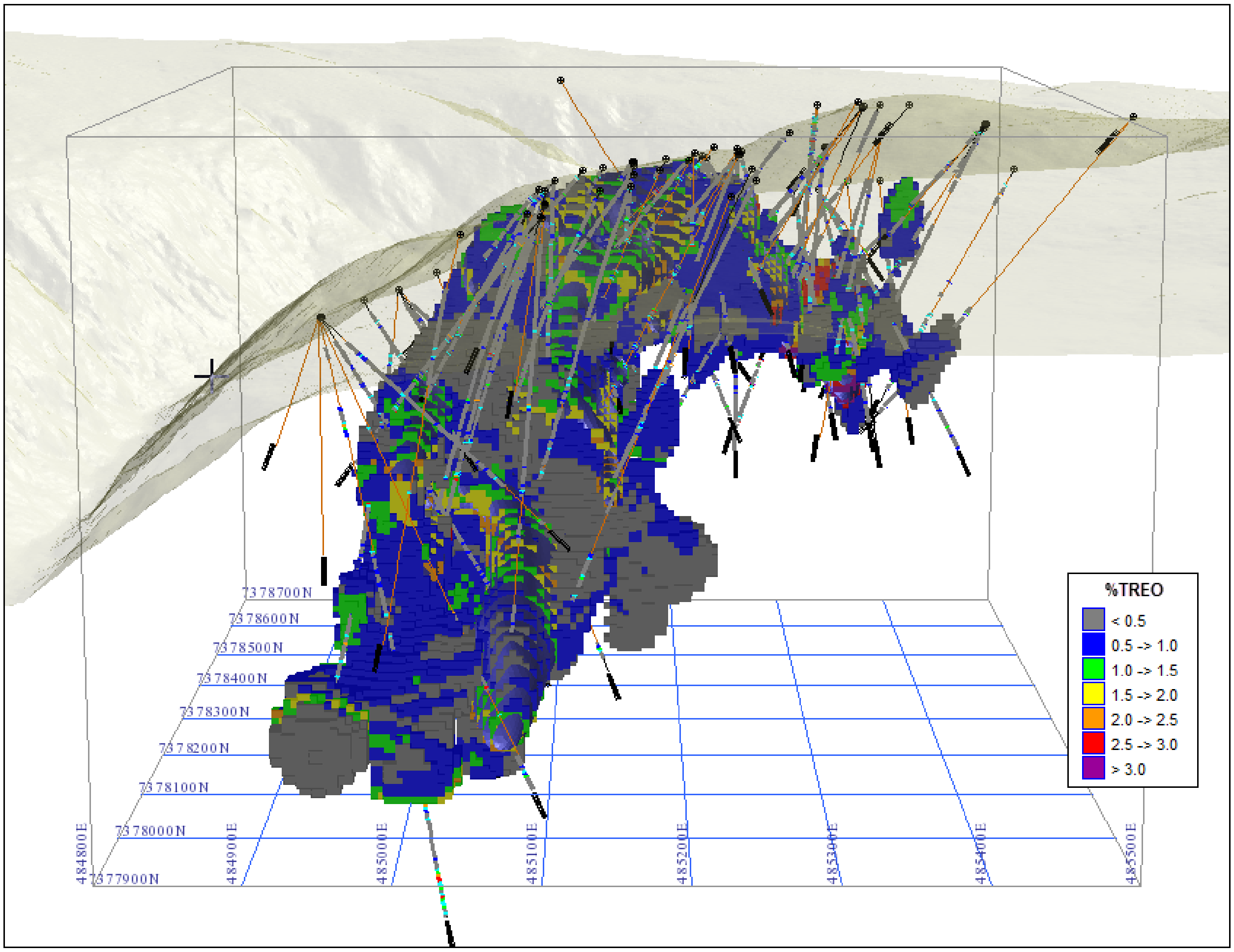


Figure 11-8 TREO Block Grades - Perspective View Looking North

11.8 Mineral Resource Classification

The following resource classification definitions are used:

Mineral Resource

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

Measured Mineral Resource

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, 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.*

Indicated Mineral Resource

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.

Inferred Mineral Resource

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.

Blocks were classified as 'Indicated' if they were within the main carbonatite domain and were estimated in the first pass using a maximum search distance of 60 m. All other estimated blocks were classified as 'Inferred'.

11.9 Block Model Validation

Block model validation included visual inspection, global bias check and a check for local bias. Each of these is summarized below.

Model verification was initially carried out by visual comparison of blocks and sample grades in plan and section views. The estimated block grades showed reasonable correlation with adjacent composite grades.

A comparison of global mean values within the carbonatite domain shows a reasonably close relationship with samples, composites and block model values (Table 11-7 and Table 11-8).

Table 11-7 Global Mean Grade Comparison – Carbonatite Domain

REO	Composites	ID^2 Blocks	OK Blocks	NN Blocks
Pr_6O_{11} ppm	1003	1003	991	1001
Nd_2O_3 ppm	3163	3172	3136	3162
Tb_4O_7 ppm	13.6	13.7	13.4	13.7
Dy_2O_3 ppm	33.1	33.5	33.1	33.5

Table 11-8 Global mean grade comparison – Gneiss Domain

REO	Composites	ID^2 Blocks	OK Blocks	NN Blocks
Pr_6O_{11} ppm	388	391	386	393
Nd_2O_3 ppm	1291	1264	1250	1272
Tb_4O_7 ppm	5.7	5.6	5.6	5.6
Dy_2O_3 ppm	15.9	15.5	15.4	15.5

The local bias check was done with swath plots that were generated to compare OK, ID3 and nearest neighbour estimates on panels through the Deposit. Results show a reasonable comparison between the methods, particularly in the main portions of the deposit indicated by the bar charts.

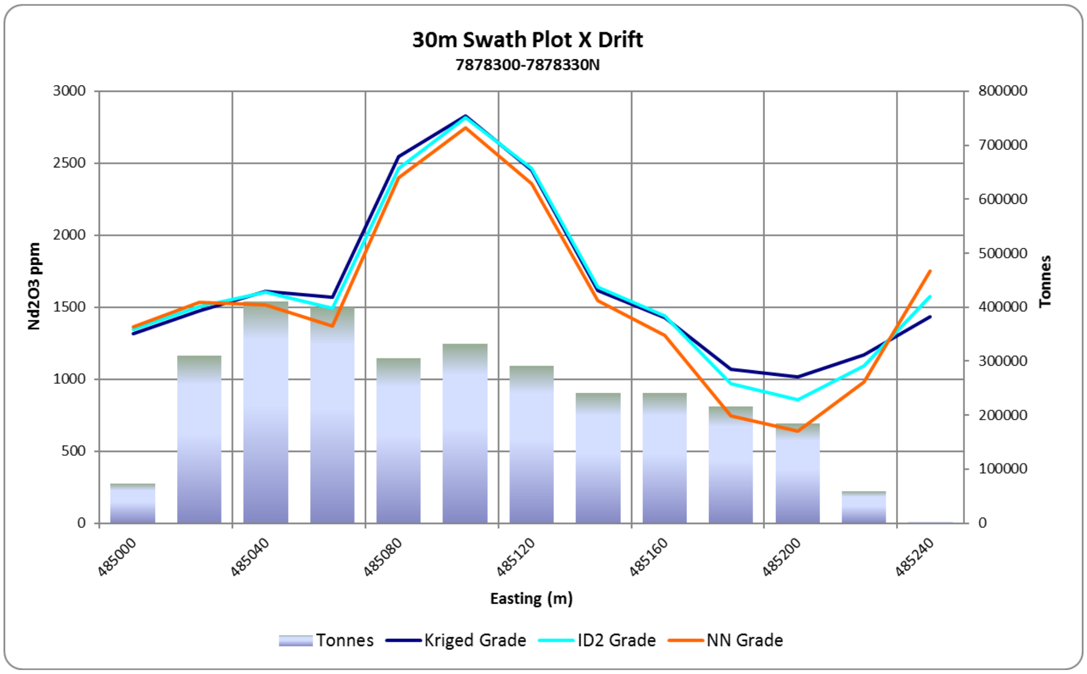


Figure 11-9 30 m Swath Plot X Drift – Nd_2O_3

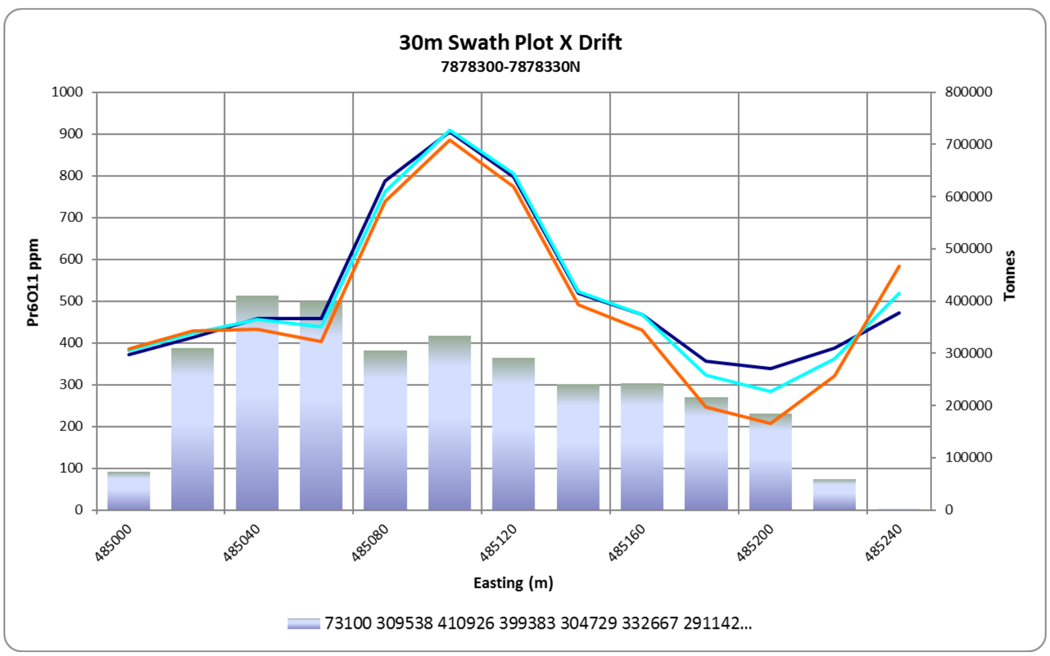


Figure 11-10: 30 m Swath Plot X Drift – Pr_6O_{11}

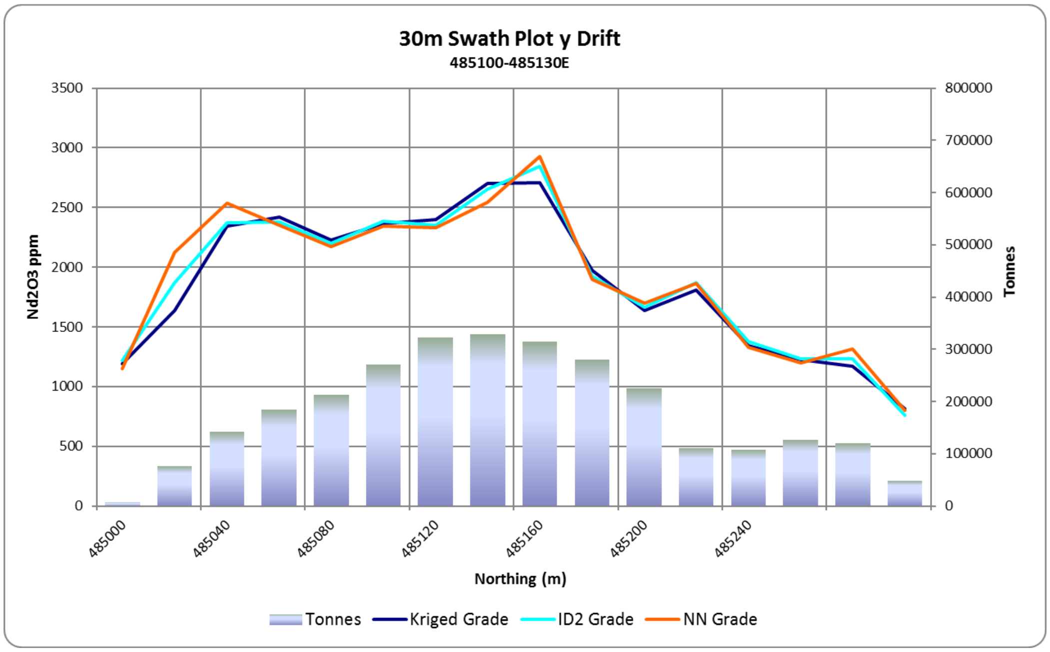


Figure 11-11: 30 m Swath Plot Y Drift – Nd_2O_3

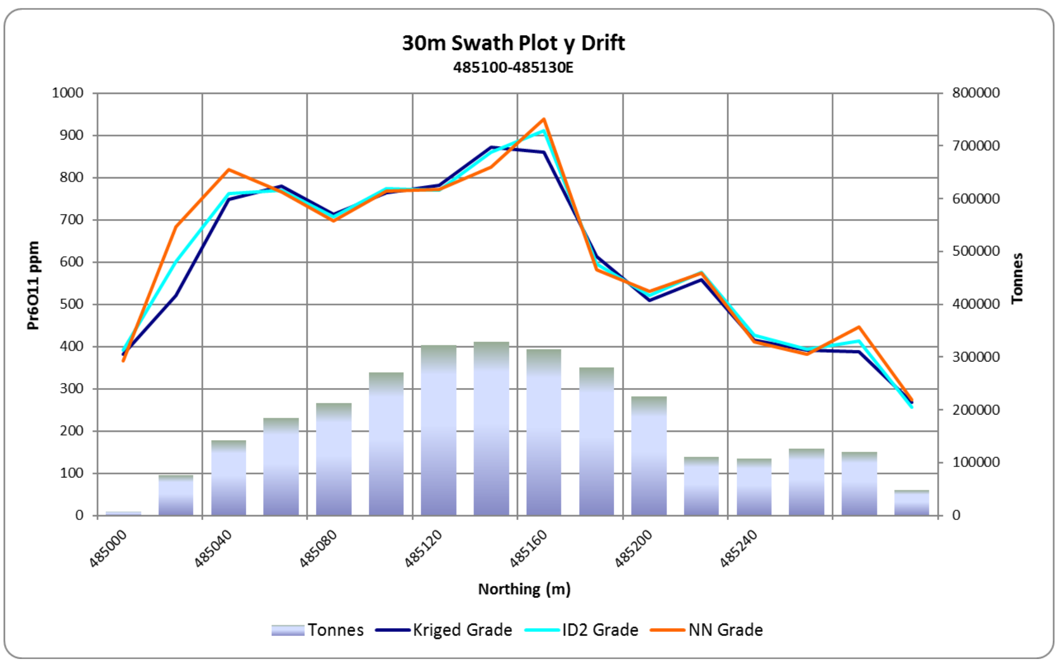


Figure 11-12: 30m Swath Plot Y Drift – Pr_6O_{11}

11.10 Reasonable Prospects of Economic Extraction

Mineral resources for Sarfartoq are reported independently for an underground, scenario, a surface open pit scenario and a hybrid open pit, underground scenario.

In the rare earth industry, the terms "magnet basket" and "full basket" are commonly used in economic evaluations because not all REE have the same value or demand. The full basket refers to all of the recoverable REO contained in a deposit. The magnet basket includes only those REEs used in manufacturing high-performance permanent magnets. In this case, the magnet basket contains:

- Nd_2O_3 (A major component of NdFeB magnets)
- Pr_6O_{11} (Often substitutes for Nd as a magnet component)
- Dy_2O_3 (Improves high-temperature performance)
- Tb_4O_7 (Improves coercivity at very high temperatures)

11.10.1 Price Deck

The REOs used for reporting purposes are Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, and Y_2O_3. The other REOs (La_2O_3 and Ce_2O_3) contained in the deposit were estimated but considered to have no significant value. Price assumptions are presented in Table 11-9. Prices were based on an independent pricing memorandum prepared for Greenland Mines Corp. by Agricola Mining Consultants Pty Ltd. (Agricola 2026).

Table 11-9 REO Price Assumptions

REE oxide	Price US$/kg
Pr_6O_{11}	$145.00
Nd_2O_3	$150.00
Sm_2O_3	$10.00
Eu_2O_3	$30.00
Gd_2O_3	$225.00
Tb_4O_7	$3,500.00
Dy_2O_3	$750.00
Y_2O_3	$16.00

11.10.2 Recovery Assumptions, Royalty, and Other Deductions

The value model used for NSR calculations was developed within the optimization block model. The NSR calculations incorporated assumptions regarding metallurgical recovery, product payability, royalty obligations, and other deductions required to estimate the in-situ value of mineralized material for resource reporting purposes.

The assumptions adopted for the current MRE were based on available metallurgical test work, project-specific information, engineering judgement, and discussions completed during the MRE update process. The royalty reflects the applicable Government of Greenland mineral royalty framework and was adopted for the purposes of the current RPEEE assessment. Royalties are a percentage of sales but for NSR calculations they were applied to revenue. More accurate deductions would be applied in further studies.

The assumptions applied during NSR calculations are summarized in Table 11-10.

Table 11-10 NSR Parameters

Parameter	Value
Metallurgical recovery	64%
Payability	60%
Royalties on Revenue	5.00%
Insurance on Revenue	0.50%

11.10.3 NSR Calculation Methodology

NSR values were calculated for each block within the optimization model using the Agricola 2026 guidance together with the recovery, payability, royalty, and deduction assumptions described above. The resulting NSR values were used as the primary economic parameter for cut-off grade determination, pit optimization, underground stope optimization, and resource reporting evaluations.

Two value fields were developed within the resource block model: NSR_FULL and NSR_MAGNET. The NSR_FULL field represents the estimated payable value of the selected rare earth oxides included in the full economic value model. The NSR_MAGNET field was developed to estimate value associated only with the principal magnet rare earth oxides.

The NSR_FULL value model was used for optimization and reporting of both the open pit and underground resource scenarios. The NSR_MAGNET value model was calculated for comparison and sensitivity purposes but was not used as the basis for the reported open pit or underground results.

NSR_FULL

The following oxides were included within the NSR_FULL calculation:

- Pr_6O_{11}
- Nd_2O_3
- Sm_2O_3
- Eu_2O_3
- Gd_2O_3
- Tb_4O_7
- Dy_2O_3
- Y_2O_3

La_2O_3 and Ce_2O_3 were excluded as they were not considered primary value drivers for the purposes of the current economic evaluation and RPEEE assessment because of current low market value of these two oxides.

NSR_MAGNET

The magnet rare earth oxides included within the calculation are:

- Pr_6O_{11}
- Nd_2O_3
- Tb_4O_7
- Dy_2O_3

The NSR_MAGNET field was developed primarily for sensitivity and comparison purposes.

General NSR Formula

The NSR value for each resource block was calculated using the following relationship:

$$NSR = \sum (Grade_i \times 0.001 * Price_i \times Process\ Recovery_i \times Payability_i) \times (1 - Royalty - Insurance)$$

Where:

Variable	Description
$Grade_i$	Estimated oxide grade (ppm)
$Price_i$	Long-term oxide price assumption (US$/kg)
Process $Recovery_i$	Metallurgical recovery factor (%)
$Payability_i$	Payability factor (%)
Royalty	Applicable royalty deduction (%)
Insurance	Insurance cost factor (%)

11.10.4 TREO % Calculation Methodology

TREO values were calculated and added to the optimization model to provide a consistent reporting metric for resource reporting, reconciliation, and comparison of optimization scenarios.

TREO values were calculated using the rare earth oxide grades contained within the resource block model.

The TREO calculation includes the following oxide species:

- La_2O_3
- Ce_2O_3
- Pr_6O_{11}
- Nd_2O_3
- Sm_2O_3
- Eu_2O_3
- Gd_2O_3
- Tb_4O_7
- Dy_2O_3
- Y_2O_3

TREO was calculated using the following equation:

Formula:

$$TREO(\%) = \frac{La_2O_3 + Ce_2O_3 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3}{10000}$$

where all oxide grades are reported in parts per million (ppm).

The TREO field was utilized as the primary grade reporting metric throughout the resource evaluation process and was used for validation, reporting, and comparison of open pit and underground resource scenarios.

11.10.5 Cost Assumptions

Cost assumptions were developed to support cut-off grade determination, pit optimization, and underground stope optimization. The assumptions are intended solely to support the evaluation of RPEEE and should not be considered detailed operating cost estimates.

Open pit and underground mining costs from recent and publicly available technical studies related to the Sarfartoq Project were compiled and reviewed. Adjustments were made to reflect potential changes in cost conditions since completion of the referenced studies using relevant mining industry inflation indicators and Greenland-specific inflation data to establish cost assumptions considered reasonable for Mineral Resource reporting purposes.

Processing and General & Administrative (G&A) costs were independently developed using available project information, benchmarking against comparable REE projects, engineering judgement, and experience with similar development-stage projects. G&A was adjusted to incorporate feedback from Greenland Mines Ltd. considering their other projects and local expertise.

The NSR cost assumptions for both mining scenarios are presented in Table 11-10.

Table 11-11 Cost Assumptions – Underground and Open Pit Mining

Operating Cost Assumptions – Underground Mining Scenario			Operating Cost Assumptions – Open Pit Mining Scenario		
Parameter	**Value**	**Unit**	**Parameter**	**Value**	**Unit**
Mining	$55.00	US$/t mined*	Mining	$6.00	US$/t mined*
Processing	$69.72	US$/t processed	Processing	$69.72	US$/t processed
G&A	$16.50	US$/t processed	G&A	$16.50	US$/t processed
UG Breakeven Cut-off	$141.22	US$/t	OP Breakeven Cut-off	$92.22	US$/t

**US$/t mined is mined tonnes without dilution*

The resulting cost assumptions were adopted for the development of reporting cut-offs and optimization studies for both the open pit and underground resource scenarios.

11.10.6 Underground Optimization Methodology

Conceptual underground mine design was carried out using Deswik software. Stope design parameters are shown in Table 11-12.

Table 11-12 Stope Optimization Parameters

Parameters	Min	Max
Stope Height (m)	20	20
Stope Length (m)	10	10
Stope Width (m)	3	10
Sub-Stoping Factor	0.5	0.5
Dilution	0	0

The 2026 Sarfartoq resource model was converted into a sub-celled underground optimization model to provide improved definition of mineralized boundaries and reduce the impact of block discretization during stope optimization. The minimum sub-cell size was set at 1.25x1.25x1.25 m.

No crown pillar was utilized during underground optimization. Stope shapes were subsequently clipped to the topographic surface prior to resource reporting. Isolated mineralized blocks and discontinuous areas that could not reasonably support underground extraction were excluded from the reported inventory.

11.10.7 Open Pit Optimization Methodology

Open pit optimization was carried out using Datamine's Studio NPVS software version 3.0. Parameters are presented in Table 11-13.

Table 11-13 Open Pit Optimization Parameters

Parameter	Value	Unit
Overall Slope Angle	45	degrees
Mining Cost	6	US$/t mined
Plant Recovery	64	%
Plant Feed Rate	700,000	tpa
Processing Cost	69.22	US$/t
G&A Cost	16.5	US$/t
Payability	60	%
Royalties on Revenue	5	%
Insurance on Revenue	0.5	%
NPV Discount Rate	8	%

11.10.8 Hybrid Optimization Methodology

The conceptual hybrid optimization was carried out using Datamine's Studio NPVS software. Parameters are identical to the other two independent methods with the addition of an underground development cost to account for the transition between open pit and underground. An exclusion zone was also included to represent the non-recoverable ore that lies between the open pit and the underground resources. Cost assumptions are summarized in Table 11-11. The hybrid parameters are presented in Table 11-14.

Table 11-14 Hybrid Optimization Parameters

Parameter	Value	Unit
Overall Open Pit Slope Angle	45	degrees
Plant Recovery	64	%
Plant Feed Rate	700,000	tpa
NPV Discount Rate	8	%
Underground Development Cost	1	US$/t mined
Exclusion Zone	20	m

An isometric view of the hybrid open pit and underground stopes are shown in Figure 11-13.

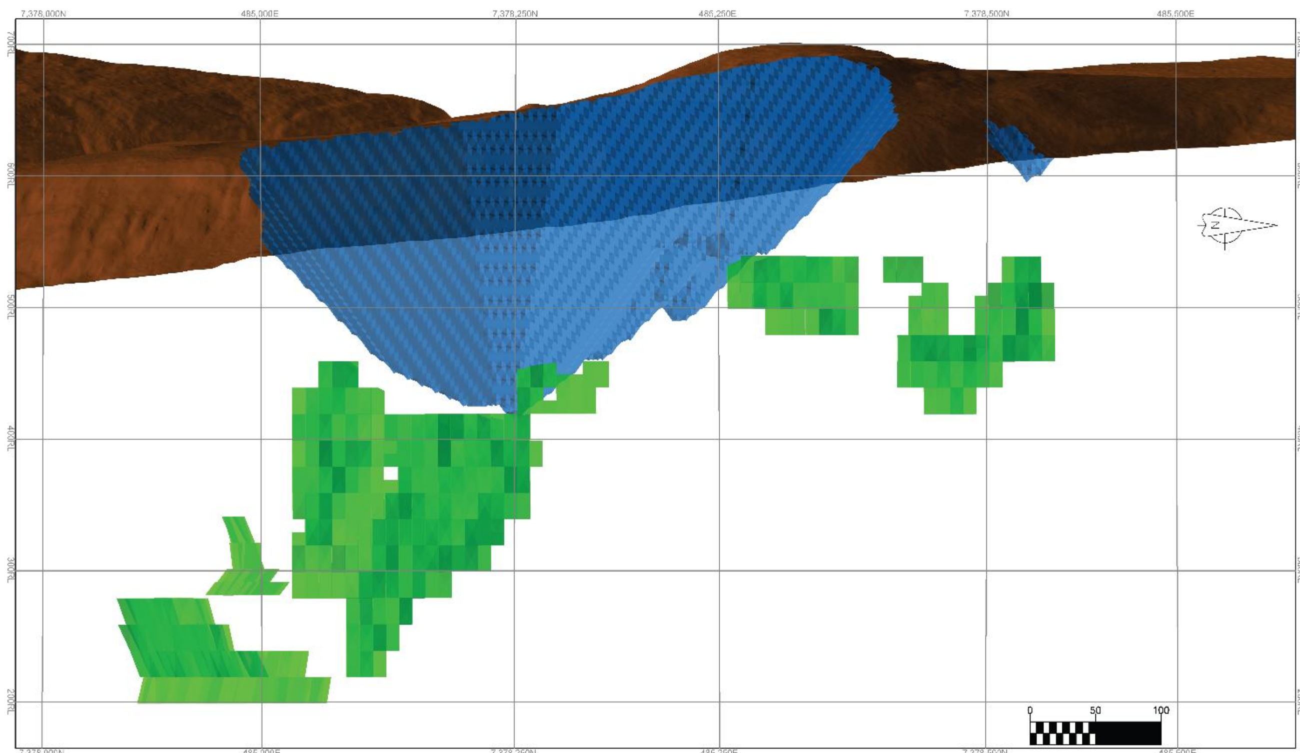


Figure 11-13 : Isometric Long Section looking NW Perpendicular to Deposit Strike

11.11 Mineral Resource Summary

Mineral resources for Sarfartoq are reported independently for three mining scenarios:

- an underground scenario
- surface open pit scenario
- hybrid open pit and underground scenario

The following subsections summarise each individual mining scenario.

11.11.1 Underground Mining Scenario

Table 11-15 presents the mineral resource estimate for the ST1 zone assuming an underground mining scenario. Table 11-9 and Table 11-11 present the price and cost assumptions used to determine the base case NSR cut-off of $141.22/t.

Table 11-15 Underground Mineral Resource

Class	Ore Tonnes (000's)	TREO %	Magnet Basket				Full Basket					
			TREO %									
			Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Sm_2O_3 ppm	Y_2O_3 ppm	Ce_2O_3 ppm	La_2O_3 ppm
Indicated	7,475	1.56	944	3,009	13.0	31.8	66.9	160	298	63.7	7,784	3,268
Inferred	2,603	1.36	774	2,443	9.3	25.9	51.6	113	231	57.0	6,764	3,092
Total	10,078	1.51	900	2,863	12.1	30.3	62.9	148	281	62.0	7,520	3,222

Notes:

1. Mineral resource estimate prepared by Ronald G. Simpson of GeoSim Services Inc. with an effective date of July 31st, 2026.
2. Mineral Resources are estimated consistent with CIM Definition Standards and reported in accordance with S-K 1300.
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
4. Mineral resources are stated using the following assumptions: REO prices as listed in Table 11-9; assumed deductions of metallurgical recovery of 64%, payability of 60%, royalties of 5%, and insurance of 0.5%; underground mining costs of US$55 per tonne; processing costs of US$69.72 per tonne; G&A of US$16.50/t and using the full basket NSR optimization.
5. The base case NSR cut-off of $141.22/t is believed to provide a reasonable margin over operating costs for underground mining and processing
6. Totals may not sum due to rounding.

11.11.2 Open Pit Mining Scenario

Table 11-16 presents the mineral resource estimate for the ST1 zone assuming an open pit mining scenario. Table 11-9 and Table 11-11 list the price and cost assumptions used to determine the base case NSR cut-off of $92.22/t.

Table 11-16 Open Pit Mineral Resource

Class	Ore Tonnes (000s)	TREO %	Magnet Basket									
			Full Basket									
			TREO %									
			Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Sm_2O_3 ppm	Y_2O_3 ppm	Ce_2O_3 ppm	La_2O_3 ppm
Indicated	6,608	1.63	979	3,114	13.5	32.9	69.0	168	307	65	8,108	3,444
Inferred	6,015	0.88	516	1,648	6.9	18.9	36.3	82	164	44	4,304	1,893
Total	12,623	1.27	758	2,415	10.4	26.2	53.4	127	239	55	6,295	2,705

Notes:
1. Mineral resource estimate prepared by Ronald G. Simpson of GeoSim Services Inc. with an effective date of July 31st, 2026.
2. Mineral Resources are estimated consistent with CIM Definition Standards and reported in accordance with S-K 1300.
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
4. Mineral resources are constrained by an optimized pit shell using the following assumptions: REO prices as listed in Table 11-9; assumed deductions of metallurgical recovery of 64%, payability of 60%, royalties of 5%, and insurance of 0.5%; open pit mining costs of US$6 per tonne; processing costs of US$69.72 per tonne; G&A of US$16.5/t and using the full basket NSR optimization.
5. The base case NSR cut-off of $92.22/t is believed to provide a reasonable margin over operating costs for open pit mining and processing
6. Totals may not sum due to rounding.

11.11.3 Hybrid Mining Scenario

Table 11-17 presents the mineral resource estimate for the ST1 zone assuming a hybrid, combined open pit and underground scenario. Table 11-9 and Table 11-11 list the price and cost assumptions used to determine the base case NSR cut-off of $92.22/t for the open pit component and $141.22/t for the underground component.

Table 11-17 Hybrid Mineral Resource

Class	Ore Tonnes (000s)	TREO %	Magnet Basket									
			Full Basket									
			TREO %									
			Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Sm_2O_3 ppm	Y_2O_3 ppm	Ce_2O_3 ppm	La_2O_3 ppm
Indicated	6,900	1.60	963	3,070	13.2	32.3	67.9	163	304	65	7,972	3,355
Inferred	5,341	0.96	572	1,850	7.4	20.4	39.7	89	181	47	4,761	2,053
Total	12,240	1.32	792	2,538	10.7	27.1	55.6	131	250	57	6,571	2,787

Notes:
1. Mineral resource estimate prepared by Ronald G. Simpson of GeoSim Services Inc. with an effective date of July 31st, 2026.
2. Mineral Resources are estimated consistent with CIM Definition Standards and reported in accordance with S-K 1300.
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
4. Mineral resources are constrained by an optimized pit shell using the following assumptions: REO prices as listed in Table 11-9; assumed deductions of metallurgical recovery of 64%, payability of 60%, royalties of 5%, and insurance of 0.5%; open pit mining costs of US$6 per tonne; processing costs of US$69.72 per tonne; G&A of US$16.5/t and using the full basket NSR optimization.
5. The base case NSR cut-off of $92.22/t is believed to provide a reasonable margin over operating costs for the open pit mining and processing component. The base case NSR cut-off of $141.22/t is believed to provide a reasonable margin over operating costs for underground mining and processing component.
6. Totals may not sum due to rounding.

11.12 Factors That May Affect the Mineral Resource Estimate

Areas of uncertainty that may materially impact the Mineral Resource Estimate include:

- Commodity price assumptions
- Mining engineering assumptions such as dilution and mining losses
- Geotechnical engineering assumptions such as open pit slopes
- Assumptions that all required permits will be forthcoming
- Metallurgical recoveries
- Mining and process cost assumptions
- Ability to meet and maintain permitting and environmental license conditions and the ability to maintain the social license to operate.

There are no other known factors or issues that materially affect the estimate other than normal risks faced by mining projects in Greenland in terms of environmental permitting, taxation, socio economic, marketing, and political factors. GeoSim is not aware of any known legal or title issues that would materially affect the Mineral Resource estimate.

12.0 MINERAL RESERVE ESTIMATES

This section is not applicable.

13.0 MINING METHODS

This section is not applicable.

14.0 PROCESS AND RECOVERY METHODS

This section is not applicable.

15.0 INFRASTRUCTURE

This section is not applicable.

16.0 MARKET STUDIES

This section is not applicable.

17.0 ENVIRONMENTAL STUDIES, PERMITTING, AND PLANS, NEGOTIATIONS, OR AGREEMENTS WITH LOCAL INDIVIDUALS OR GROUPS

The Sarfartoq Rare Earths Project is at the exploration and pre-development stage under MEL 2020-32. No exploitation license has been applied for, and no formal Environmental Impact Assessment (EIA) or Social Impact Assessment (SIA) has been submitted.

The environmental and social work completed to date consists of a two-year environmental baseline programme (first year 2023, second year underway in 2026), preliminary characterisation of the radiological setting of the ST1 deposit, and initial engagement with the Government of Greenland regulators and the Qeqqata municipality. The Qualified Person is not aware of any environmental, cultural-heritage or social factor identified to date that would prevent the future development of the Project, subject to completion of the outstanding baseline, impact-assessment and consenting work described below.

17.1 Environmental Setting

The Project is located approximately 60 km south-west of Kangerlussuaq on the north side of the Kangerlussuaq Fjord (Søndre Strømfjord), in a continental sub-arctic setting characterised by ice-scoured gneiss, broad glacial valleys with steeply incised streams and creeks, and elevations from sea level in the fjord to approximately 700 m in the Sarfartoq Valley.

The Sarfartoq exploration camp sits at approximately 600 m elevation. Ground within the core of the carbonatite complex is less rugged and locally more vegetated, reflecting phosphate enrichment in the underlying rocks. The climate is polar continental, with recorded temperatures ranging from approximately −35 °C to +20 °C and generally sparse precipitation; the area is typically ice- and snow-free from May to late part of September, and the coast is ice-free for most of the year. Continuous permafrost underlies the Project area.

The Project area drains into two principal catchments: the Arnangarnup Qoorua (also known as "Paradis Valley") catchment to the south and the Robinson Valley catchment to the north. Surface-water and groundwater regimes are strongly seasonal, dominated by summer snow-melt and rainfall runoff. Intermittent streams are numerous.

17.2 Environmental Baseline Programme (2023 & 2026)

Greenland Mines Ltd, and its predecessor NNSR, have engaged WSP Danmark A/S to design and execute a multi-year environmental baseline programme at Sarfartoq. The programme is conducted in accordance with the Greenland *Guidelines for Preparing an Environmental Impact Assessment Report for Mineral Exploitation in Greenland* (2nd edition, MRA 2015) and the *Guideline for collection of environmental samples to the Greenland mineral resources environmental sample bank* (DCE / Bach et al., 2023, updated 2026), with all samples submitted to the Danish Centre for Environment and Energy (DCE) sample bank for the Government of Greenland. Analytical work is undertaken by Eurofins in Denmark.

Environmental Baseline First year - 2023: The 2023 field programme was carried out from 31 July to 8 August 2023 and comprised: (i) 12 terrestrial lichen (*Flavocetraria nivalis*) sampling stations, including three reference stations outside the project footprint; (ii) five freshwater sampling stations covering the Paradis Valley and Robinson Valley catchments, with filtered and unfiltered water samples and suspended-matter measurements; (iii) two marine/intertidal stations (Kangerlussuaq Fjord, in the vicinity of the proposed port and a reference station), with sampling of bladderwrack (*Fucus vesiculosus*) and blue mussels (*Mytilus edulis*); (iv) freshwater fish sampling of

Arctic char (*Salvelinus alpinus*) from two lakes, one in each principal catchment; (v) botanical, bird, mammal and insect surveys; and (vi) installation of one continuous water-flow gauging station (OTT ecoLog 1000).

Key findings from the 2023 programme include:

- **Vegetation.** A total of 93 species of vascular plants were recorded across the Project area. Only one Greenland Red List (2018) species - Serrate gentian (*Gentianopsis detonsa*, Near Threatened, NT) - was recorded, and it lies just outside the south-eastern corner of the license area.
- **Birds.** Bird abundance was low; snow bunting, northern wheatear and long-tailed duck are common and widespread. Red-listed species observed comprised Common Loon (*Gavia immer*, NT) with behaviour indicating possible breeding at the northern Arctic-char lake, Common Sea Eagle (*Haliaeetus albicilla*, VU) with a possible breeding site on cliffs south of Paradis Valley, and Greenland White-fronted Goose (*Anser albifrons flavirostris*, EN) resting at a lake north-east of the camp. A larger lake west of the Project area is designated as a protected white-fronted goose area.
- **Mammals.** Four terrestrial mammal species - muskox (*Ovibos moschatus*), Arctic fox (*Alopex lagopus*), Arctic hare (*Lepus arcticus*) and West Greenland caribou / reindeer (*Rangifer tarandus groenlandicus*) - occur regularly in the area; all are of Least Concern status. The Kangerlussuaq region hosts one of Greenland's principal caribou and muskox populations of significant subsistence and cultural importance.
- **Freshwater fish.** Arctic char were present in the larger lakes of both catchments; only three-spined stickleback (*Gasterosteus aculeatus*) was recorded in smaller lakes. The distribution is consistent with a 2012 electro-fishing survey.
- **Marine.** Blue mussels and bladderwrack were sampled successfully; short-horn sculpin (*Myoxocephalus scorpius*) was not caught, and only Greenland cod (*Gadus ogac*) was observed at the intertidal stations.

Environmental Baseline Second year - 2026: A second field campaign is scheduled for August/September 2026 and comprises: 15 terrestrial lichen stations (including three reference stations); five freshwater stations distributed in the Paradis and Robinson Valley catchments in proximity to the proposed pit, tailings and process-plant footprints; three marine stations covering the proposed port area and a reference station; renewed Arctic char sampling in both catchments; service of the existing water-flow gauging station and installation of the second station (deferred from 2023 owing to high summer flows); and broader vegetation, bird and mammal observation.

The 2026 programme extends the seasonal record and increases spatial coverage to support the future EIA baseline. A field report will be issued after the 2026 site visit and will form part of the EIA baseline dataset held by GRML.

17.3 Radiological Setting

Available composite head assays from the ST1 mineralised zone indicate uranium concentrations of the order of 5 ppm, well below the 100-ppm threshold of the Greenland Uranium Act (Inatsisartut Act No. 20 of 1 December 2021).

This is a favourable outcome for permitting and distinguishes Sarfartoq from a number of rare earth deposits where uranium content constrains development. The sub-threshold status should nonetheless be confirmed across the whole Mineral Resource as further data are released.

Thorium is present as a naturally occurring radioactive material (NORM), hosted in the rare earth and accessory mineral phases. Thorium partitions in part to the flotation concentrate - with implications for product specification and the regulation of radioactive material in transport - and in part to the tailings, requiring a NORM management plan covering occupational exposure, product radioactivity, and tailings storage and closure. A radiological baseline is being developed in parallel with the WSP environmental programme.

17.4 Protected Areas and Cultural Heritage

Two designations are material to the Project:

- **Arnangarnup Qoorua ("Paradis Valley") protected area.** A protected area of approximately 96 km² lies within, and is excluded from, the license area. Access is governed by the *Rules for field work and reporting regarding mineral resources (excluding hydrocarbons) in Greenland* (Government of Greenland, Ref. No. 69.03.20+01, November 2000), which prohibit collection of vegetation, antlers, skulls and relics, disturbance of ruins, graves and antiquities, use of vegetation as solid fuel, open fire within 50 m of scrub vegetation, and traffic and loitering within the designated area, and require aircraft to maintain a minimum of 500 m above ground level (except where aviation regulations or weather require otherwise); fixed-wing landings inside the area require MLSA approval. The MLSA customarily imposes additional restrictions on field-activity approvals within and adjacent to the protected area.

- **Aasivissuit–Nipisat UNESCO World Heritage Site.** The wider Kangerlussuaq region includes the UNESCO World Heritage cultural landscape "Aasivissuit–Nipisat: Inuit Hunting Ground between Ice and Sea," inscribed in 2018, which extends approximately 235 km east–west from Nipisat Island south of Sisimiut to the Greenland Ice Sheet near Kangerlussuaq (with its eastern key locality, Aasivissuit, approximately 20 km north-west of Kangerlussuaq) and includes the living settlement of Sarfannguit. Recognised values include more than 4,000 years of Palaeo-Inuit and Inuit hunting heritage, integrity of the landscape and unimpeded views. Any future infrastructure design and shipping arrangements will need to demonstrably respect these values.

17.5 Waste Rock, Tailings, Water and Closure

The current development concept contemplates a conventional open-pit or underground operation – or a hybrid with an initial open-pit transitioning to underground mining, with a flotation concentrator producing a mixed rare earth concentrate for shipment through a proposed port on the north side of Kangerlussuaq Fjord.

Flotation tailings are carbonate-dominated and will carry NORM; together with waste rock and overburden, they will require engineered storage designed for continuous permafrost and Arctic climatic conditions. Water management will address contact water, tailings supernatant, seasonal meltwater and any authorised discharge, with treatment as required to meet Greenland regulatory limits.

Mine closure, progressive reclamation and long-term management of tailings and waste facilities - including their radiological aspects - must be planned from the outset; an exploitation license requires an approved Closure Plan and the posting of financial security prior to the commencement of mining. Detailed engineering of these facilities, cost estimation and closure-cost provisioning will be advanced in subsequent study stages.

17.6 Permitting Framework and Status of Approvals

Mineral activities in Greenland are governed by the Mineral Resources Act (Inatsisartut Act No. 7 of 7 December 2009, as amended). The Mineral License and Safety Authority (MLSA) administer licensing and mine-safety matters; the Environmental Agency for Mineral Resource Activities (EAMRA) administers environmental matters; and the Mineral Resources Authority (MRA) administers social matters.

Under the Standard Terms for Exploration Licenses for Minerals (Excluding Hydrocarbons), the licensee may conduct low-impact activities without specific approval - geological and geochemical investigations and sampling using handheld equipment (subject to per-site and annual weight limits), hand-held drilling, and non-explosive geophysical surveys. Pre-approval from the MLSA is required for, among other activities, mechanical drilling, use of explosives, sampling in excess of the standing limits, use of radioactive sources, use of vehicles, terrain levelling, and construction of installations, shafts, drifts, or ramps. The MLSA customarily imposes additional site-specific conditions on annual field-activity approvals.

Approvals and permits held or applied for at Sarfartoq to the effective date of this report comprise: (i) Mineral Exploration License MEL 2020-32 (Section 3.2), current, with a license-area expansion (to include the proposed access road corridor and port area) approved on 13 June 2024; (ii) annual field-activity approvals granted by the MLSA under the standard exploration terms, most recently for the 2023 NNSR programme, and for which GRML anticipates seeking approval for the 2026 camp re-opening and continuing baseline work; (iii) the application for indirect transfer of MEL 2020-32 to GRML under Section 69 of the Mineral Resources Act, submitted and under review by the Government of Greenland (Section 3.2). No exploitation-license application has been submitted, and no EIA or SIA has been formally lodged.

Following an amendment to the Mineral Resources Act effective 1 January 2024, an exploitation license may be applied for and granted in parallel with - rather than after - the final approval of the Environmental Impact Assessment (EIA), Social Impact Assessment (SIA) and Impact Benefit Agreement (IBA). This so-called "parallel-track" (or "fast-track") route has been applied on a number of recent Greenland projects, including GreenRoc Mining's Amitsoq graphite project (2024) and Greenland Strategic Minerals' SILA rare earth project (2026), and it is the pathway Greenland Mines Ltd intends to pursue for Sarfartoq.

Under Sections 41 and 43 of the Mineral Resources Act, the holder of an exploration license that has substantiated and delineated a viable mineral deposit which it intends to exploit - and that has complied with the terms of the exploration license - is entitled to be granted an exploitation license, subject to the Company meeting the corporate-form requirements of Sections 45–46 of the Mineral Resources Act (a Greenland-registered public limited company with its management seated in Greenland) and the technical-and-financial-capacity requirements of Sections 66–67 of the Mineral Resources Act.

Under Section 44 of the Mineral Resources Act, before an exploitation license is granted the applicant must submit a project Terms of Reference (ToR) which is published for a statutory 35-day public pre-consultation; consultation on the ToR must be completed no earlier than 24 months before the grant of the license.

Under Section 106 and the Government of Greenland EIA/SIA guidelines, draft EIA and SIA reports must subsequently be published in Greenlandic, Danish and English for a minimum eight-week public consultation with in-town and settlement hearings, followed by a White Paper addressing all comments and the submission of revised, final EIA and SIA reports for approval.

An Impact Benefit Agreement (IBA) is negotiated in parallel between the Company, the Qeqqata municipality and the Government of Greenland. Following the granting of the exploitation license and prior to the commencement of development and production, a Mine Plan and a Closure Plan (including financial security for closure and rehabilitation) must be approved by the MLSA.

Recent exploitation-license grants - Greenland Resources' Malmbjerg molybdenum project (2025) and GreenRoc Mining's Amitsoq graphite project (December 2025) - indicate that the parallel-track process is functional and reasonably timely when advanced-stage geological and resource data support entry to the process.

Greenland Mines Ltd intends to enter the exploitation-license process on the parallel track.

17.7 Social Baseline, Community Engagement and Impact Benefit Agreement

The Project lies within the Qeqqata municipality; the closest communities are Kangerlussuaq (a logistics and airport town) and Sisimiut (a regional centre approximately 150 km to the north). Sarfannguit, a living settlement within the Aasivissuit–Nipisat World Heritage area, and other Qeqqata communities use the region for subsistence caribou and muskox hunting and for fjord fishing. Protection of subsistence use, of the World Heritage cultural landscape, and of the caribou, muskox and fjord fisheries is expected to be central to community acceptance of the Project.

A structured social baseline programme, aligned with the Greenland SIA guidelines (www.govmin.gl), will be developed in parallel with the EIA baseline to support the exploitation-license application and the subsequent negotiation of an Impact Benefit Agreement (IBA) between the Company, the Qeqqata municipality and the Government of Greenland.

Consistent with GRML's intention to pursue the parallel-track exploitation-license process (Section 17.6), the SIA baseline, the EIA baseline (Section 17.2) and the IBA negotiation are being planned and sequenced to advance concurrently, rather than sequentially.

The main objectives of a Greenland SIA process, and therefore of the Sarfartoq social baseline programme, are:

- to engage all relevant stakeholders in consultations and public hearings;
- to describe and analyse the pre-project social baseline as a basis for development planning, mitigation and future monitoring;
- to identify positive and negative social impacts at both local and national level, using the baseline data;
- to optimise positive impacts and mitigate negative impacts throughout the Project lifetime; and
- to develop a Benefit and Impact Plan to support implementation of the IBA.

GRML anticipates that the IBA will include commitments on local hiring, training, contracting and procurement, including the use of Greenlandic and other Nordic contractors where practicable, and on community-benefit sharing consistent with recent Greenland exploitation-license precedents.

17.8 Qualified Person's Opinion

In the opinion of the Qualified Person, based on the WSP 2023 baseline report, the WSP 2026 baseline programme design, the Company's radiological screening of the ST1 mineralization, and the regulatory framework outlined above, the environmental and social baseline work completed and planned is appropriate to the current pre-development stage of the Project, and no environmental, cultural-heritage or social factor has been identified to date that would preclude access to the Mineral Resource or the future development of the Project.

Key risks and workstreams to be advanced ahead of a Pre-Feasibility Study include: completion of the 2026 baseline field season; a project-specific radiological baseline and NORM management plan; engineering-level design of the tailings storage facility and water-management system for permafrost/Arctic conditions; a formal SIA baseline and structured community engagement in Kangerlussuaq, Sisimiut and Sarfannguit; and initiation of the formal EIA/SIA Terms-of-Reference process with EAMRA and the MRA once the Section 69 license transfer is closed and Company development plans have been consolidated.

18.0 CAPITAL AND OPERATING COSTS

This section is not applicable.

19.0 ECONOMIC ANALYSIS

This section is not applicable.

20.0 ADJACENT PROPERTIES

The Sarfartoq Project (MEL 2020-32) is located in a lightly licensed area of southern West Greenland (Figure 20-1). The Government of Greenland maintains a public register of all active mineral exploration, exploitation and small-scale licenses through the Mineral Resources Authority (MRA) portal (Greenland Mineral Resources Portal). The information summarised in this section is based on that register as retrieved on 23 July 2026, cross-checked against the MRA §16 Exploitation License list (Exploitation license (§16), Mineral Resources Authority).

Only one active exploitation license (§16 mining license) lies within 200 km of the Sarfartoq camp — the White Mountain (Qaqortorsuaq) anorthosite mine held by Lumina Sustainable Materials A/S. All other adjacent tenements are exploration or small-scale (§33) licenses held by unrelated third parties. None of the adjacent licenses is contiguous with MEL 2020-32.

20.1 Active Adjacent Licenses

Table 20-1 lists all active mineral licenses within a 200 km radius of the Sarfartoq base camp (approximately 66.68° N, 51.30° W). Distances are measured from the camp to the closest license boundary. License status, holder, area and expiry dates are from the MRA register as of July 2026.

Table 20-1 Overview of Active Adjacent Licenses to Sarfartoq

Active adjacent licenses							
License	**Type**	**Holder**	**Area (km²)**	**Grant date**	**Expiry date**	**Distance from Sarfartoq**	**Target commodity**
MIN 2015-39	Exploitation (§16)	Lumina Sustainable Materials A/S	95.8	22-Sep-2015	22-Sep-2045	≈41 km north	Anorthosite (calcium feldspar)
MEL 2024-128	Exploration	Arcticulture ApS	29.1	28-Aug-2024	31-Dec-2028	≈50 km northeast	Industrial minerals / glacial rock flour
NATS 2025-13	Small-scale (§33)	Greenland Minerals and Gems	1.1	01-Jan-2025	31-Dec-2029	≈118 km southwest	Ornamental / gem minerals
MEL 2026-41	Exploration	Xploration Services Greenland A/S	63.8	25-Mar-2026	31-Dec-2030	≈124 km southwest	Critical / base metals
NATS 2026-20	Small-scale (§33)	Firefly Gems	1.0	11-May-2026	31-Dec-2030	≈135 km southwest	Ornamental / gem minerals

Source: Government of Greenland Mineral Resources Authority, active mineral licenses register, retrieved 23 July 2026; Exploitation license (§16) register.

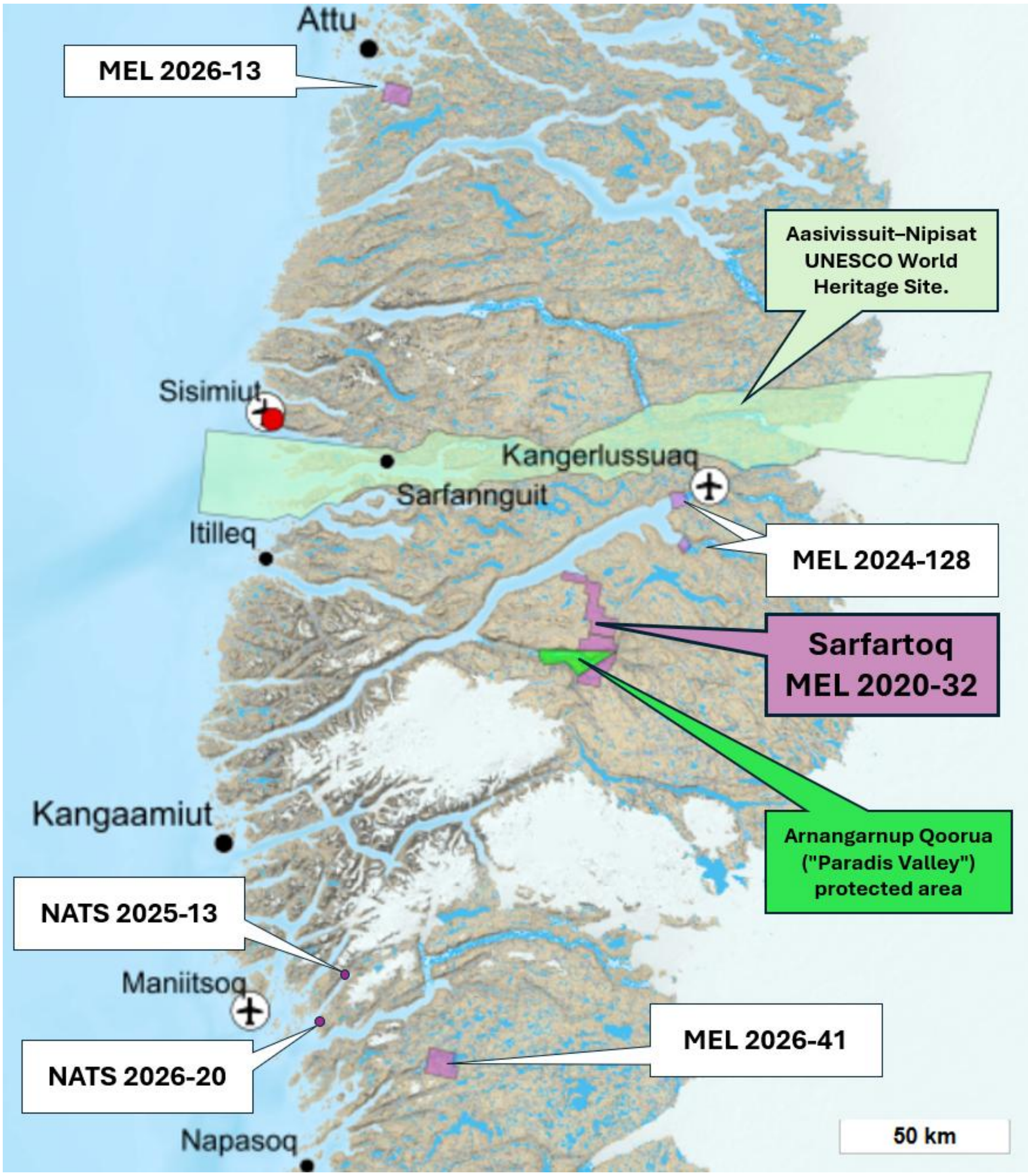


Figure 20-1 Overview of Adjacent Exploitation and Exploration Licenses to the Sarfartoq Project. Small-scale Mining Licenses are also Indicated Together with Protected Areas

Source: Mineral License and Safety Authority Greenland, Online Applications Portal (accessed 2026/07/23)

20.2 White Mountain Anorthosite Mine (Lumina Sustainable Materials A/S) - Closest Operating Mine (MIN 2015-39)

The closest operating mine to the Sarfartoq Project, and the only exploitation license within the 150 km radius, is the White Mountain (Qaqortorsuaq) anorthosite mine held by Lumina Sustainable Materials A/S (formerly Hudson Greenland A/S) under Mineral Exploitation License 2015-39. The mine is located on the north side of Kangerlussuaq Fjord approximately 80 km southwest of Kangerlussuaq airport, some 37 km north of ST1 at Sarfartoq.

Lumina is one of only two active mining operations in Greenland as of mid-2026 (the other being the Nalunaq gold mine operated by Amaroq Minerals A/S in South Greenland). The company is owned by Cordiant Capital (Montréal) and Apex Asset Management (Switzerland), with corporate management based in Nuuk. The exploitation license was granted on 22 September 2015 for an initial 30-year term, extendable by an additional 20 years under the Mineral Resources Act.

Anorthosite is a calcium-rich feldspar mined for use in fibreglass manufacture, industrial paints and as a substitute alumina feedstock. Reported production is approximately 200,000 t/year, exported by bulk carrier from a dedicated ship-loading facility on Kangerlussuaq Fjord to customers in North America, Europe and Mexico. The White Mountain operation is directly relevant to the Sarfartoq Project as a regional precedent because:

- it operates in the same fjord system that GRML has identified for potential product export logistics, providing a documented operating precedent for winter/summer shipping windows, ice management and port operation in Kangerlussuaq Fjord;
- it is the only anorthosite mine in West Greenland and demonstrates that a §16 exploitation license in the region has proceeded through the full permitting cycle (EIA, SIA and Impact Benefit Agreement) under the Mineral Resources Act; and

The White Mountain deposit is a Palaeoproterozoic anorthosite intrusion and is not geologically analogous to the carbonatite-hosted REE mineralization at Sarfartoq; its commodity, mineralogy and processing route are unrelated.

20.3 Immediate Neighbour - Arcticulture ApS (MEL 2024-128)

The nearest exploration license to Sarfartoq is MEL 2024-128 held by Arcticulture ApS, granted on 28 August 2024 and covering approximately 29 km² at the head of Kangerlussuaq Fjord, some 36 km east of the ST1 zone. Arcticulture is a Danish–Greenlandic company established to develop industrial minerals in Greenland; the Kangerlussuaq license is being investigated in parallel with the company's separate licenses for glacial rock flour (kaolinitic silt) at Marraq in Nuuk Fjord.

The Arcticulture license lies outside the Sarfartoq drainage basin and is separated from MEL 2020-32 by ice-free terrain. There is no known geological, hydrological or logistical interaction between the two projects; Arcticulture's target commodity is industrial minerals for civil and agricultural end uses, with no reported REE or critical-metal potential.

20.4 Regional Exploration License (Nuuk Region) (MEL 2026-41)

One further active exploration license lies within 150 km of ST1: MEL 2026-41 — Xploration Services Greenland A/S (63.8 km², granted 25 March 2026), a reconnaissance-stage license approximately 124 km southwest of ST1 in the Nuuk region. Xploration Services is a Nuuk-based logistics and exploration services company that has historically supported field programs for Anglo American, North American Nickel, Greenland Anorthosite Mining and others. MEL 2026-41 is held in Xploration Services Greenland A/S its own name. The target commodities have not been publicly disclosed.

20.5 Small-scale (§33) Licenses (NATS 2025-13 and NATS 2026-20)

Two active small-scale licenses (NATS 2025-13 and NATS 2026-20) lie within 150 km of ST1. Each covers a fixed area of approximately 1 km² under section 33 of the Mineral Resources Act (MRA §33 guidelines) and is held by a Greenlandic resident for ornamental and semi-precious mineral collection. Small-scale licenses do not confer any right to industrial mineral exploitation and, by law, cannot be granted for radioactive minerals. They have no bearing on the Sarfartoq Project.

21.0 OTHER RELEVANT DATA AND INFORMATION

Greenland Mines Ltd. views the Sarfartoq Rare Earths Project as a material Nd-Pr-focused rare earth asset within its portfolio and as a key element of its strategy to develop critical mineral projects in the North Atlantic region.

This Technical Report Summary has been prepared in connection with Greenland Mines Ltd.'s acquisition of the mineral exploration license MEL 2020-32 covering the Sarfartoq project from Neo North Star Resources Inc., through which the registrant will hold 100% of the exploration mineral rights to the Sarfartoq Project, subject to customary regulatory approvals as described in Section 3 and Section 25.

The qualified persons are not aware of any additional relevant technical data or information that is material to the value of the Sarfartoq Project and that is not disclosed in this Technical Report Summary. In their opinion, all scientific and technical information necessary to provide a complete and balanced presentation of the property, in accordance with subpart 1300 of Regulation S-K, is contained in Sections 1 through 20 and 22 through 25 of this report.

22.0 INTERPRETATION AND CONCLUSIONS

Geosim has prepared a Mineral Resource Estimate update for the ST-1 Zone of the Sarfartoq Project. The following observations and conclusions were drawn:

- The ST1 Zone is associated with coarse grained ferrocarbonatite bodies composed mostly of ankerite, ferrodolomite, siderite, K feldspar, barite and pyrite. The REE are associated with hematite and ankeritic-calcitic masses containing complex aggregates of fine-grained barite, apatite, strontianite, and REE minerals including bastnäsite, synchysite, and monazite identified with various microanalytical techniques.
- The adequacy of sample preparation, security and analytical procedures are sufficiently reliable to support an indicated and inferred mineral resource estimation, and that sample preparation, analysis, and security are generally performed in accordance with exploration best practices.
- The ST-1 resource estimate is based on analytical data from 94 core holes representing 23,094 m of drilling carried out between 2009 and 2023.
- Statistical analysis of REO grade distribution indicates that cutting or capping of high grades is not warranted.
- The SCC is mineralized across the entire extent of the complex and large areas remain to be drill tested. It is possible that there will be additional bodies discovered similar to the ST1 Zone found as exploration activities continue.

Metallurgical testing completed to date indicates that Sarfartoq rare earth mineralization is amenable to beneficiation by flotation followed by hydrometallurgical extraction. Mineralogical studies identified a complex and variable assemblage of REE-bearing minerals, which was found to be a primary factor influencing metallurgical performance. Flotation was identified as the most effective beneficiation method evaluated. The best flotation performance was achieved using hydroxamate-based collector systems, elevated pulp temperatures, fine grind sizes, and sodium fluorosilicate-based depressant schemes. Under optimized conditions, the ST1 Composite produced concentrates grading approximately 19-20% TREO at recoveries of approximately 57-58%.

Hydrometallurgical test work demonstrated that high REE recoveries can be achieved from flotation concentrates. Roasting followed by hydrochloric acid leaching and acid baking followed by leaching were identified as the most promising extraction routes, with recoveries exceeding 90% for both LREEs and HREEs under selected test conditions. Although the results are encouraging, the test work remains at a bench-scale and scoping level. Further variability testing, flowsheet optimization, and pilot-scale evaluation are recommended to confirm metallurgical performance across the range of mineralization represented by the current Mineral Resource.

Areas of uncertainty that may materially impact the Project’s potential economic viability or continued viability include:

- Commodity price assumptions
- Assumptions that all required permits will be forthcoming
- Metallurgical recoveries
- Mining and process cost assumptions
- Ability to obtain regulatory approvals to construct and operate a mine

There are no other known material factors or issues that materially affect the Project other than normal risks faced by mining projects in Greenland in terms of environmental permitting, taxation, socio economic, marketing, and political factors. The author is not aware of any known legal or title issues that would materially affect potential economic viability.

23.0 RECOMMENDATIONS

Based on the exploration work conducted in 2023 and on the conclusions presented above, the main recommendations are as follows:

- Conduct a mineralogy study to create a three-dimensional mineralogical variation model across the ST1 resource to direct continued metallurgical test work and provide a framework for the mineralogical characterization of ST1 resource expansions and of other targets.
- Continue bench scale metallurgical studies on the ST1 resource with a focus on increasing the grade and recovery of REE mineral concentrates and adapting to mineralogical variations of the system.
- Continued drilling at ST1 to expand the resource and delineate higher REE grades and more favorable REE distributions.
- Continued drilling between the ST1 and ST40 Zones to delineate higher grade REE mineralization there, either as a satellite resource or an extension of the ST1 resource.
- Complete additional exploration drilling on other REE targets around the 32 km outer ring structure of the SCC.
- Current underground mining cost parameter is conceptual and requires refinement based on a underground mining method preferred for this orebody and site conditions. It is recommended to conduct an underground mining method evaluation to refine the underground mining costs and revise both the underground mining scenario and the hybrid mining scenario.
- Conduct a revised technical assessment, including updated resource estimates, metallurgical test work, cost estimates, forecasted REE prices, geotechnical stability analysis, hydrogeology, water management and a comparative assessment of open pit, underground, and combined mining development scenarios to identify the preferred development option.
- Begin Prefeasibility Studies as soon as possible.
- Continue Environmental Impact Assessment studies necessary to apply for an exploitation license.
- Continue Social Impact Assessment studies necessary to apply for an exploitation license.
- Begin Archeological Studies in conjunction with local experts.

In addition, the following work is recommended to further advance the understanding of the Sarfartoq rare earth mineralization and its processability, and to support future engineering and project development studies:

- Additional comminution characterization and grinding optimization are recommended to support development of the crushing and grinding circuit.
- Conduct additional mineralogical characterization of flotation concentrates and process streams to improve understanding of REE-bearing mineral occurrence, deportment, and losses to tailings
- Complete additional variability flotation testing on representative samples across the Mineral Resource to better define the impact of mineralogical variability on beneficiation performance.
- Continue optimization of the flotation flowsheet, with particular emphasis on improving rejection of carbonate and apatite gangue minerals and increasing concentrate grade while maintaining acceptable rare earth recoveries.

- Advance hydrometallurgical investigations on flotation concentrates, focusing on the most promising flowsheets identified to date, including roast-leach and acid bake-leach processing routes.
- Evaluate opportunities to reduce reagent consumption and improve process economics through optimization of roasting, acid baking, leaching, and residue treatment conditions.
- Complete integrated beneficiation and hydrometallurgical test work programs to establish overall rare earth recovery and support future process design and engineering studies.
- Conduct precipitation test work to evaluate the production of a mixed rare earth carbonate (MREC) product from leach solutions and to determine rare earth recovery, impurity rejection, and final product quality
- Consider pilot-scale testing of the preferred beneficiation and hydrometallurgical flowsheets following completion of bench-scale optimization and variability test work.

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25.0 RELIANCE ON INFORMATION PROVIDED BY THE REGISTRANT

In preparing this Technical Report Summary, the qualified persons have relied, to the extent permitted under Item 1302(f) of Regulation S-K, on information and documentation provided by Greenland Mines Ltd. (the registrant) in respect of certain matters that are outside the qualified persons' areas of expertise.

The qualified persons have relied on information provided by the registrant regarding:

- **Corporate transactions and ownership:** Details of Greenland Mines Ltd.'s definitive agreement to acquire Neo North Star Resources Inc., the structure of the transaction, and the registrant's expectation that, upon completion of customary closing conditions and approval by the Government of Greenland, it will indirectly hold 100% of the mineral rights to the Sarfartoq Project through Qaasuitsup Ulloriaa.

- **License status and legal/title matters:** The current status of exploration license MEL 2020-32, including grant and transfer dates, license expansion, expiry and renewal rights, and confirmation that the license is in good standing under the Greenland Mineral Resources Act, together with the registrant's confirmation that there are no undisclosed encumbrances, liens, or material disputes affecting the mineral rights other than those described in Sections 3 and 20.

- **Permitting framework and regulatory approvals:** The description of the applicable regulatory framework, including the requirements for environmental and social impact assessments, public consultation, and Government of Greenland approvals under Section 69 for indirect transfer of mineral rights, and the status of the registrant's applications and approvals as of the effective date.

- **Commercial arrangements and market context:** The existence and principal terms, as publicly disclosed by Greenland Mines Ltd., of the memorandum of understanding providing for a potential offtake arrangement covering a significant portion of future concentrate production from the Sarfartoq Project, together with the registrant's description of its broader corporate strategy for critical mineral development and potential downstream processing.

The qualified persons have reviewed this information for internal consistency and reasonableness but have not independently verified legal, title, corporate, or contractual matters, nor have they conducted legal due diligence in respect of permitting or regulatory approvals. The qualified persons are not experts in law, permitting, or corporate finance and, therefore, express no opinion on the legal validity or enforceability of licenses, agreements, or approvals described in this Technical Report Summary.

Except as explicitly noted above, the qualified persons have not relied on information provided by the registrant for the scientific and technical data, including geological information, exploration results, metallurgical test work, and mineral resource estimates, which have been obtained from primary technical sources and independently reviewed by the qualified persons. Subject to these limitations, the qualified persons consider the information provided by Greenland Mines Ltd. to be reasonable for the purposes of this Technical Report Summary and appropriate to rely upon under Item 1302(f).

26.0 DATE AND SIGNATURE PAGES

This TRS titled "S-K 1300 Technical Summary Report: Sarfartoq Rare Earths Project, West Greenland" with the date issues of July 31, 2026, was prepared and signed by the following authors:

QP/Consulting Firm	Responsible Sections	Signature	Date
Tetra Tech Canada Inc.	Sections 1.4, 10.0 and parts of 1.6, 1.7, 22, 24 related to mineral processing and metallurgy.	"signed" Hassan Ghaffari, P.Eng., M.A.Sc.	July 31, 2026
GeoSim Services Inc.	All other sections of the report not listed above.	"signed" Ronald G. Simpson, P.Geo	July 31, 2026