Graphite Creek Project – Technical Advances

Alaska Miners Association Conference - Anchorage

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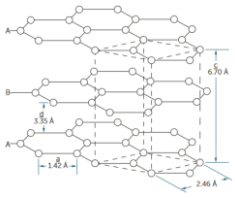
Forward looking statements

All statements in this presentation, other than statements of historical facts, including those related to the timing and completion of the anticipated Feasibility Study, future production, establishment of a processing plant and a graphite manufacturing plant, establishment of a battery materials recycling facility, and events or developments that the Company intends, expects, plans, or proposes are forward-looking statements. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "proposes", "expects", "is expected", "scheduled", "estimates", "projects", "plans", "is planning", "intends", "assumes", "believes", "indicates", "to be" or variations of such words and phrases that state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". The Company cautions that there is no certainty that tests of the Company's material will be successful or that such tests will result in the development of successful products. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, exploitation and exploration successes, continuity of mineralization, uncertainties related to the ability to obtain necessary permits, licenses and title and delays due to third party opposition, changes in government policies regarding mining and natural resource exploration and exploitation, and continued availability of capital and financing, and general economic, market or business conditions. Readers are cautioned not to place undue reliance on this forward-looking information, which is given as of the date it is expressed in this press release, and the Company undertakes no obligation to update publicly or revise any forward-looking information, except as required by applicable securities laws. For more information on the Company, investors should review the Company's continuous disclosure filings that are available at www.sedar.com.



Graphite 101 Basics

- Graphite occurs naturally in the Earth (natural graphite) and can also be manufactured from coal and petroleum products (synthetic graphite)
- Two years ago, the #1 consumer of graphite shifted from heating elements to anodes for the electric battery industry
- Synthetic graphite is preferred for Electric Vehicle (EV) battery anodes
- Natural graphite is preferred for Energy Storage System battery anodes. (solar and wind grids)

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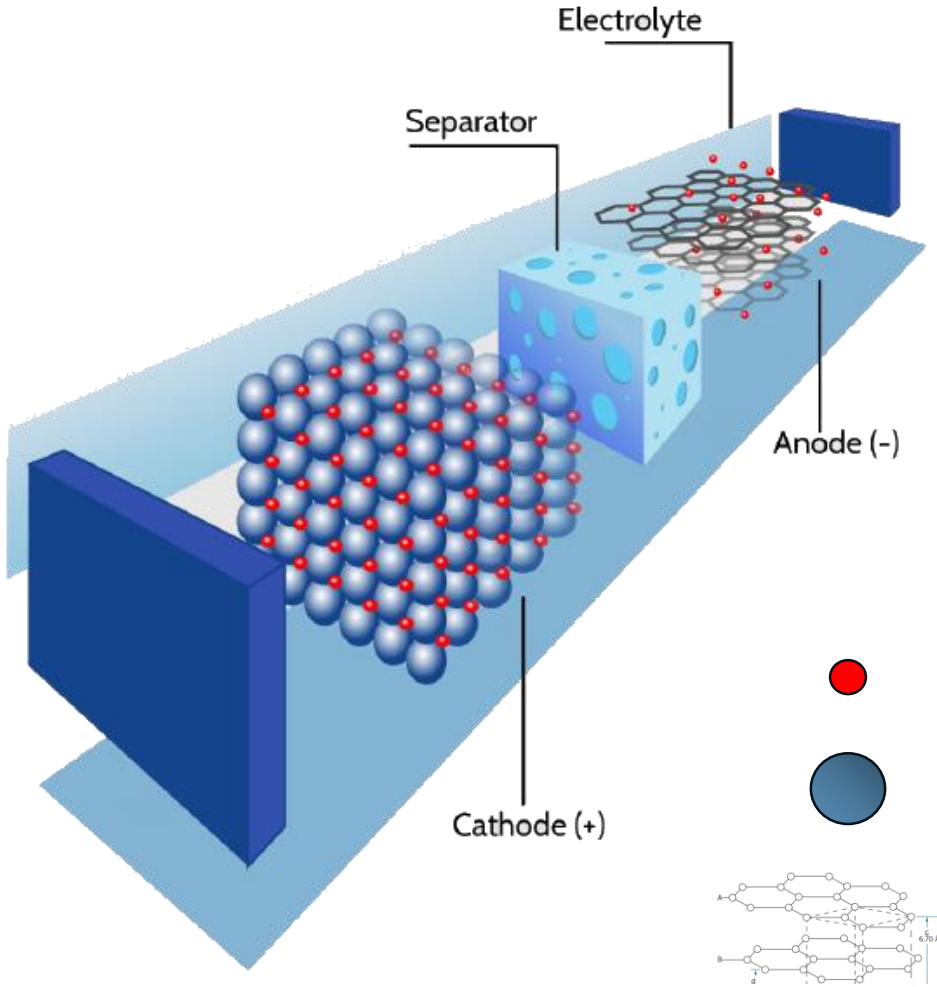
Lithium-Ion Battery Basics



Li^+

Ni, Mn, Co Oxides

Graphite

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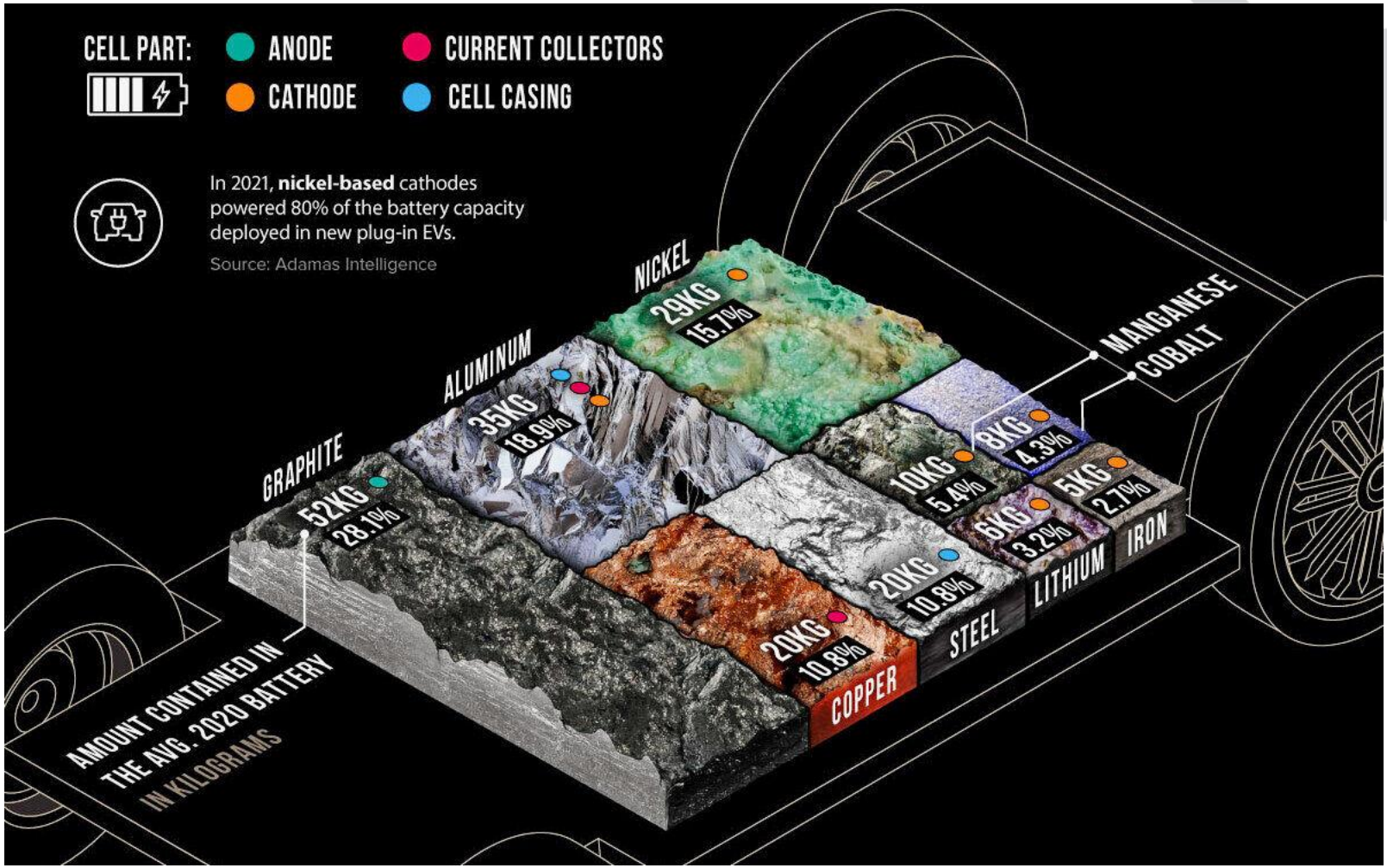
Critical Battery Elements



Source: Elements.visualcapitalist.com

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America's Graphite Challenge

100%

U.S. import reliance on China as primary graphite import source

U.S. GEOLOGICAL SURVEY

70%

of the world's graphite supply comes from China

REUTERS

95%

of anode materials in lithium-ion batteries is based on graphite

EUROPEAN CARBON & GRAPHITE ASSOCIATION

494%

Expected growth of the graphite market by 2050

WORLD BANK GROUP

15:1

Ratio of graphite to lithium in electric car batteries

LOMIKO METALS[1]

Oct 20, 2023 – China's Ministry of Commerce announces that it would require companies to apply for licenses to export Natural/Synthetic graphite.

May 14, 2024 – U.S. tariff on imported natural graphite increasing from 0 to 25% in 2026.

[1] The Need for Graphite - Lomiko Metals Inc.

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Graphite One's Objective

- **To become an integrated producer of natural and synthetic graphite used in the electric vehicle (EV) and electric battery storage systems (ESS).**

- **We will achieve this by:**
  - Developing the largest graphite deposit in North America
  - Operating a secondary treatment plant to refine natural graphite into Anode material
  - Operating a Synthetic Graphite facility which produces Anode Active Material (AAM)

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Company Structure

Graphite One

Graphite One Inc.
Vancouver, BC Headquarters

Graphite One (Alaska) Inc.

- Graphite Creek Project
- Office in Anchorage
- Graphite Creek Deposit -the largest natural flake graphite deposit in North America
- 200+ jobs created in rural Alaska

NATURAL GRAPHITE FACILITY

- Natural Graphite (NG) Facility will treat concentrate from the Graphite Creek Mine
- Location currently planned for Ohio
- Needs low-cost green power
- Purifies natural graphite
- Will send product to AG-AAM for finishing

ARTIFICIAL GRAPHITE FACILITY

- Will manufacture synthetic graphite
- Located in Warren, Ohio
- Will produce Anode Active Material for battery production
- 400+ est. high-tech jobs created in the US

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Graphite One (Alaska) Inc.

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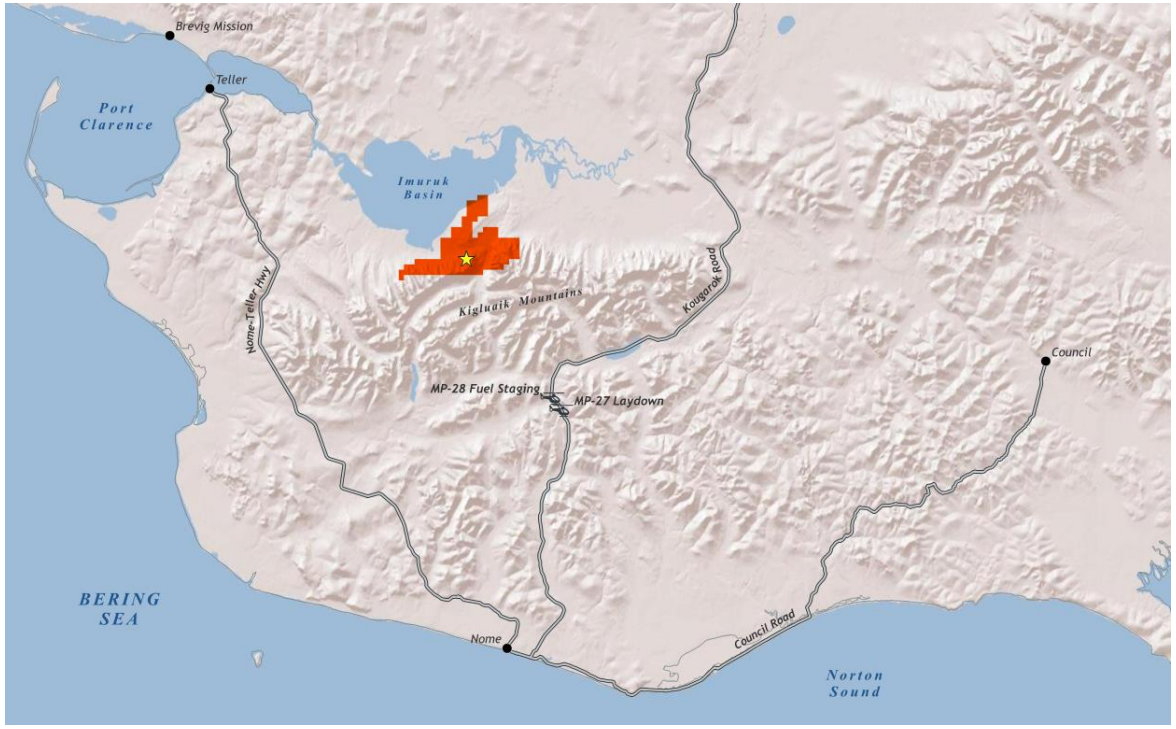
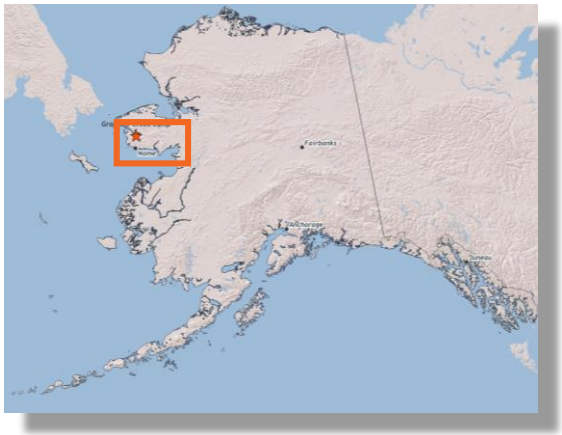
Graphite Creek Project



- 38 miles north of Nome
- Between the Imuruk Basin and the Kigluaik Mountains
- 176 State Mining Claims



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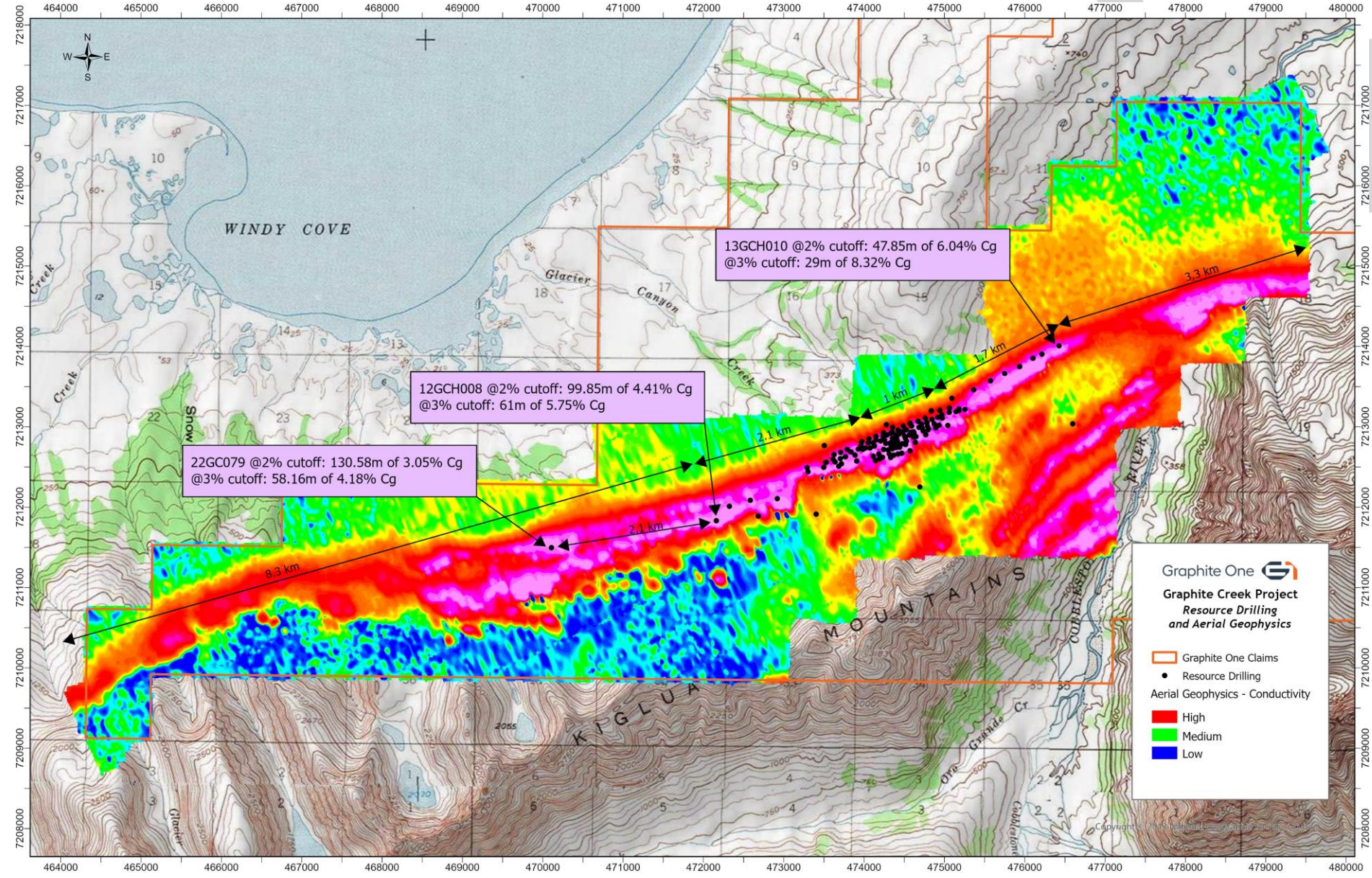
Graphite Creek Deposit



Project Stage

2022 Prefeasibility Study

- 2,800 tpd mill
- 9,436 tpd mine
- 53,000 tpy graphite concentrate
- STP 26-year annual production 75,026 tpy including 49,624 tpy anode materials

More Drilling

Feasibility Study

- 10,000 tpd mill
- 33,700 tpd mine
- 175,000 tpy graphite concentrate
- ~20-year mine life

Feasibility Study targets improving economics

- Significantly lowers the operating cost per tonne of graphite concentrate produced
- Minimal increase in headcount but with up to 3.6 x increased throughput

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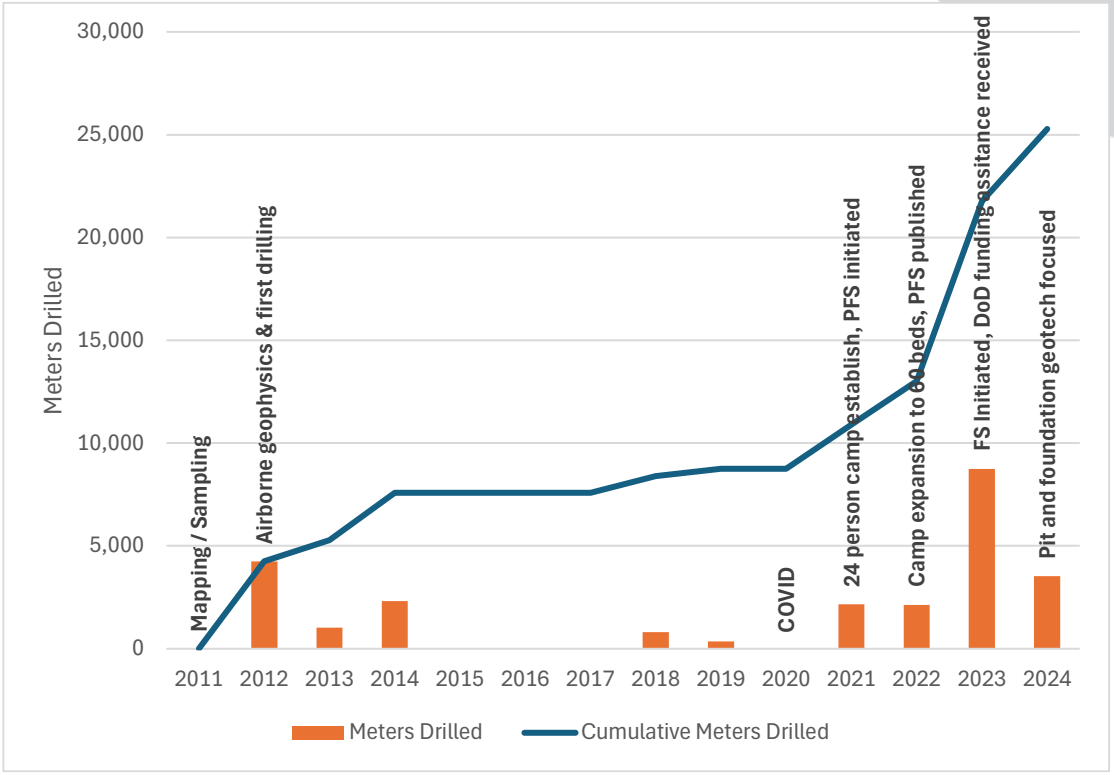
Graphite Creek Project Exploration History

Year	# Holes Drilled	Meters Drilled	Feet Drilled
2011	0	0	0
2012	18	4,249	13,940
2013	10	1,024	3,359
2014	22	2,314	7,592
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	6	801	2,627
2019	3	358	1,174
2020	0	0	0
2021	19	2,153	7,062
2022	16	2,125	6,971
2023	57	8,736	28,661
2024	31	3,525	11,563
Total	**182**	**25,283**	**82,949**



Drilling for resource, geotechnical, hydrology, metallurgy

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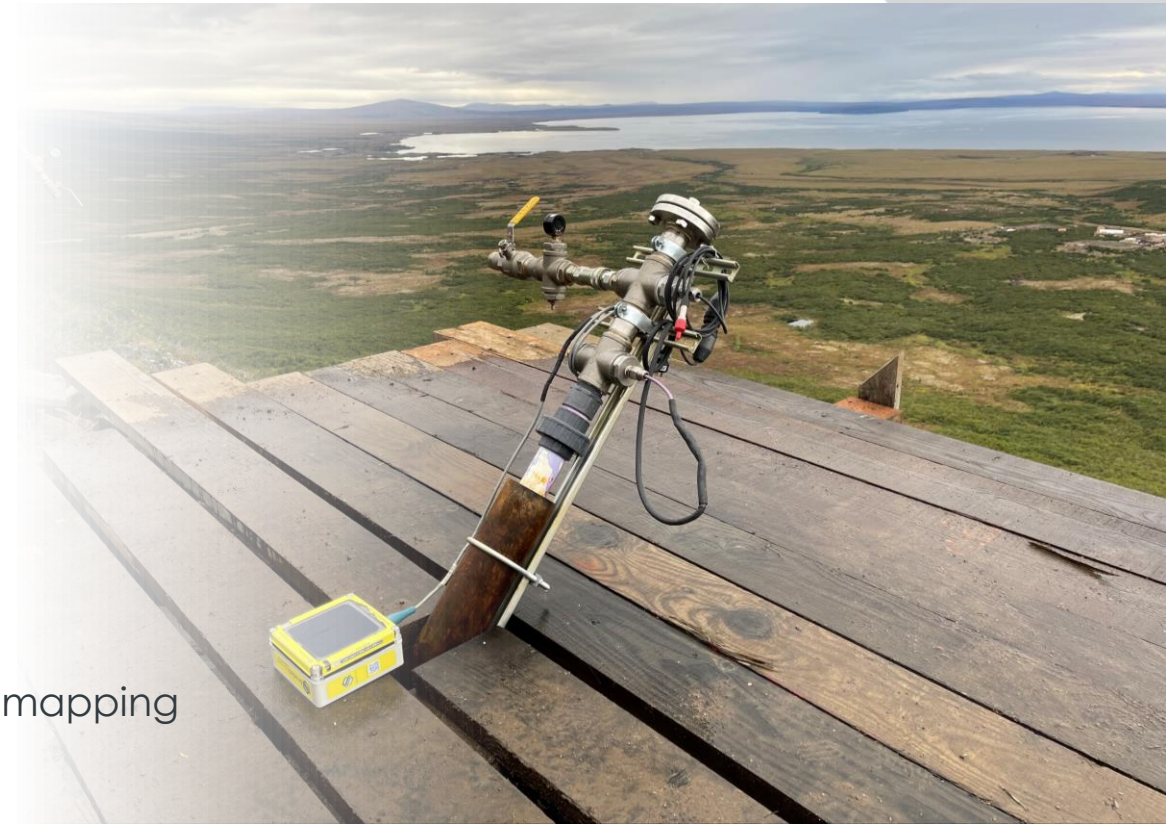
Feasibility Study Activities

- 2023-2024 Season activities
  - Drilling
    - Resource in-fill
    - Pit wall design
    - Facility foundations
    - Permafrost investigation
  - Hydrogeology
    - Monitoring wells
    - Packer testing
    - Downhole installations
  - Geology
    - Roadcut mapping
    - Lowlands surficial geologic mapping
    - Geologic Model
    - Hydrogeologic Model



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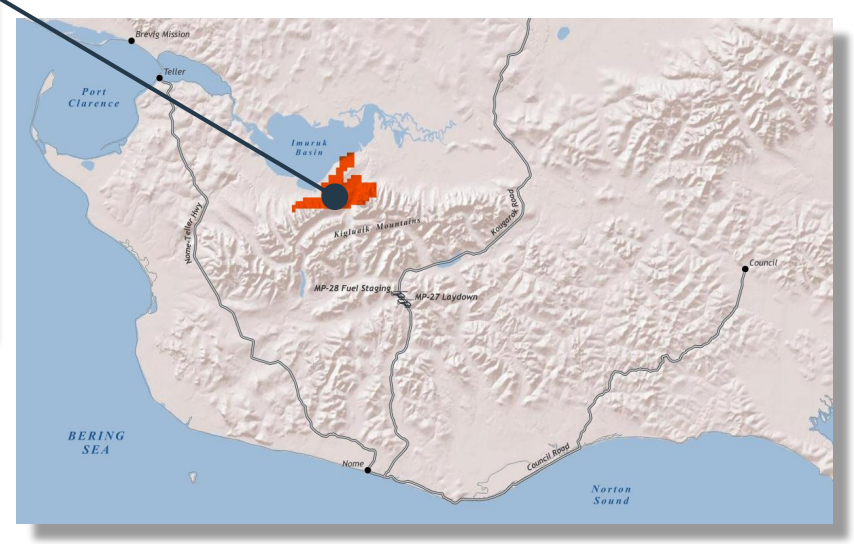
Graphite Creek Camp

Graphite Creek Camp Facing NW

- 60-person capacity, supporting
  - Drilling
  - Helicopter support
  - Environmental baseline monitoring



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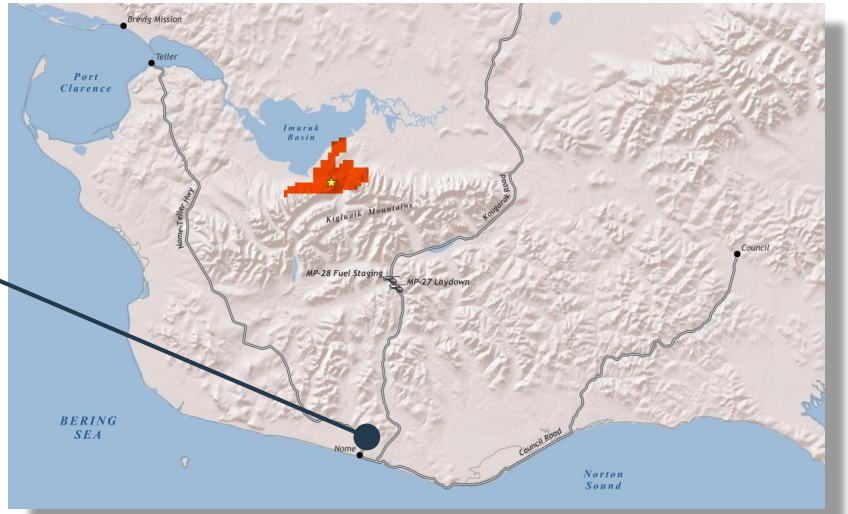
Nome Camp

Nome Camp Facing WNW

- 24-person capacity, supporting
  - Core logging
  - Core cutting
  - Sample preparation
  - Expediting
  - Transitional housing



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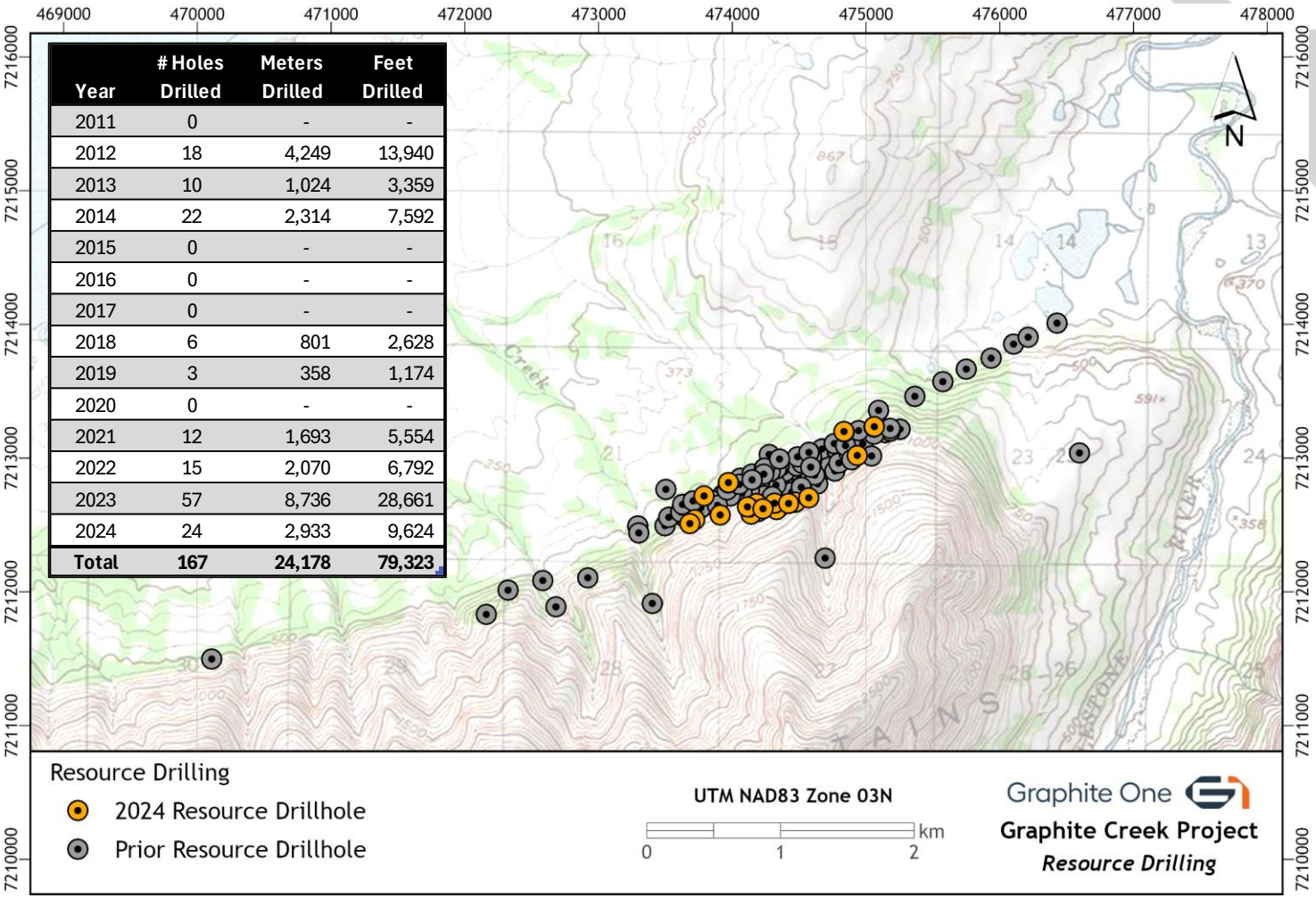
Graphite Creek Resource Drilling

Year	# Holes Drilled	Meters Drilled	Feet Drilled
2011	0	-	-
2012	18	4,249	13,940
2013	10	1,024	3,359
2014	22	2,314	7,592
2015	0	-	-
2016	0	-	-
2017	0	-	-
2018	6	801	2,628
2019	3	358	1,174
2020	0	-	-
2021	12	1,693	5,554
2022	15	2,070	6,792
2023	57	8,736	28,661
2024	24	2,933	9,624
Total	**167**	**24,178**	**79,323**



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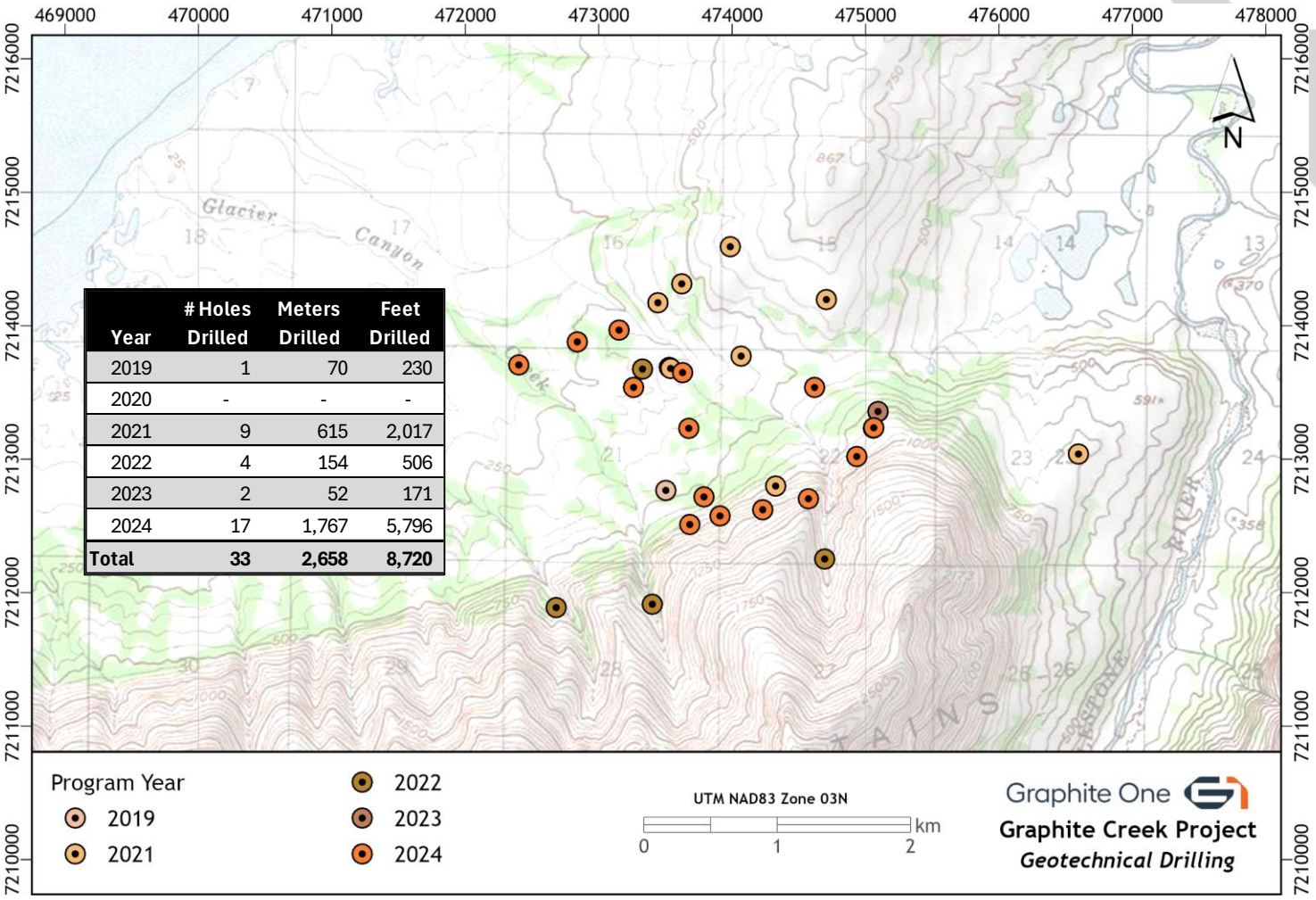
Geotechnical Drilling – Pit Wall Design and Mine Facility Foundations



Year	# Holes Drilled	Meters Drilled	Feet Drilled
2019	1	70	230
2020	-	-	-
2021	9	615	2,017
2022	4	154	506
2023	2	52	171
2024	17	1,767	5,796
Total	**33**	**2,658**	**8,720**

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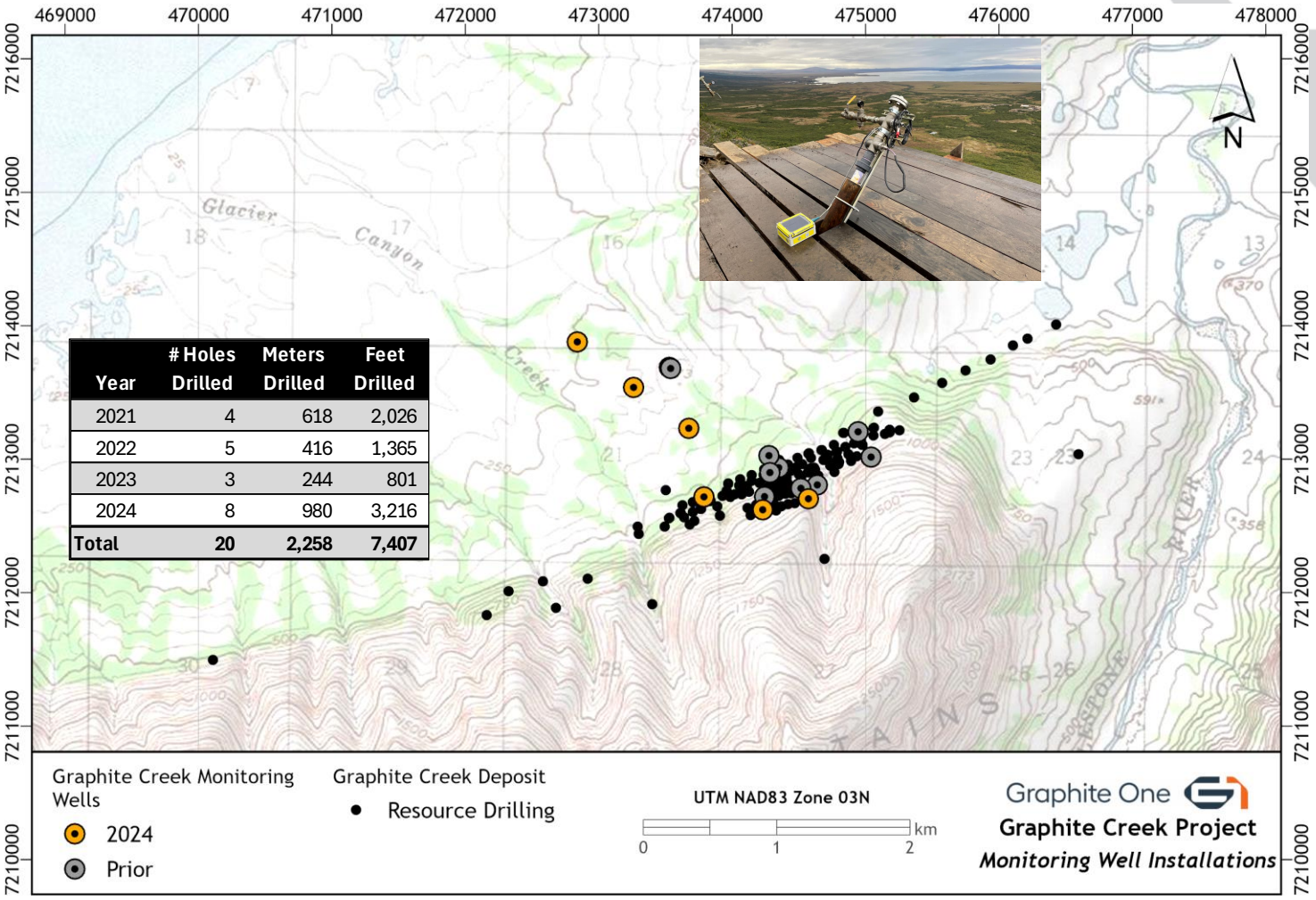
Hydrogeology Drilling – Monitoring wells



Year	# Holes Drilled	Meters Drilled	Feet Drilled
2021	4	618	2,026
2022	5	416	1,365
2023	3	244	801
2024	8	980	3,216
Total	**20**	**2,258**	**7,407**

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Graphite Creek Geology

- Hosted in high-grade pelitic metasediments.
- Graphite occurs as disseminated crystalline flake graphite and in high-grade graphite segregations and lenses.
- Graphite grades range from a few percent when disseminated to 60% in high-grade lenses.
- Host units outcrop over 5 km of strike length, commonly have a thickness of 100 meters
- Cut off to the north by the Kigluaik Fault, open to east, west, and depth.

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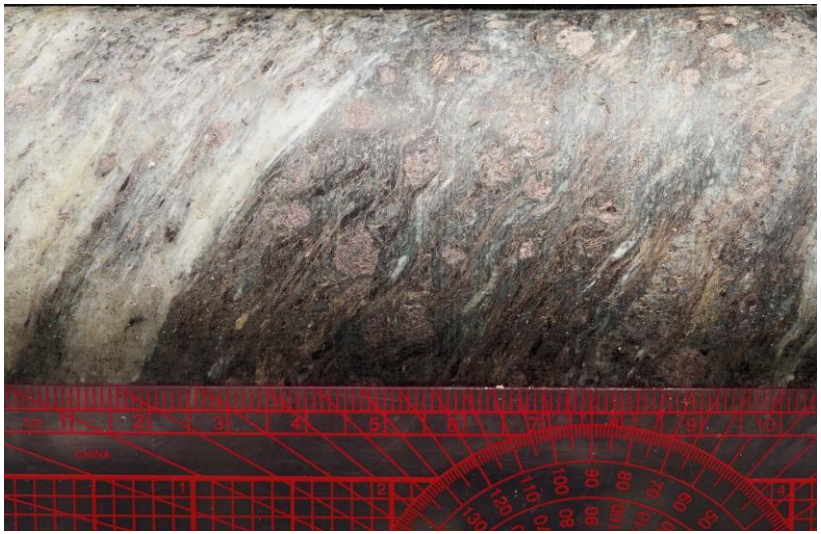
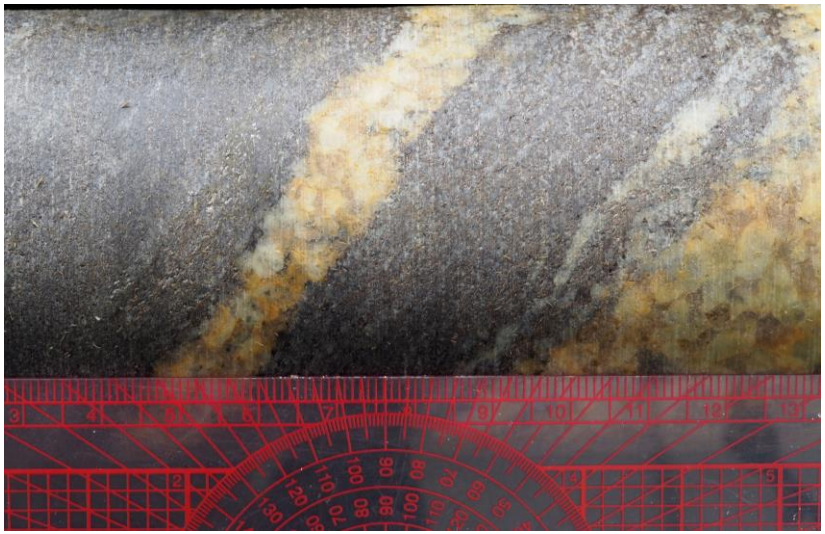
Primary Rock Units

Quartz Biotite Garnet Sillimanite Schist (QBGSS)



Quartz Biotite Schist (QBS)



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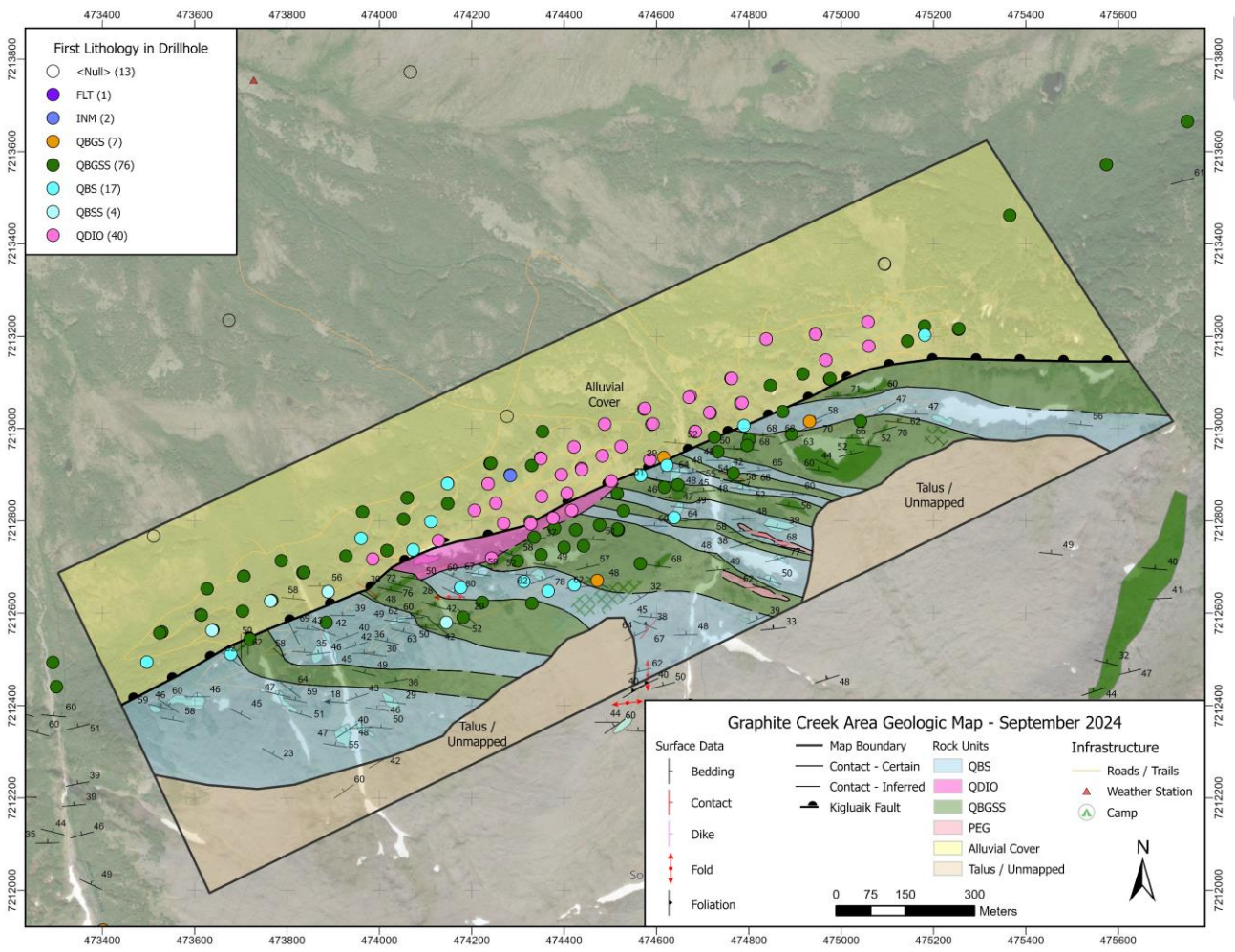
2024 Geologic Mapping in Proposed Pit Area



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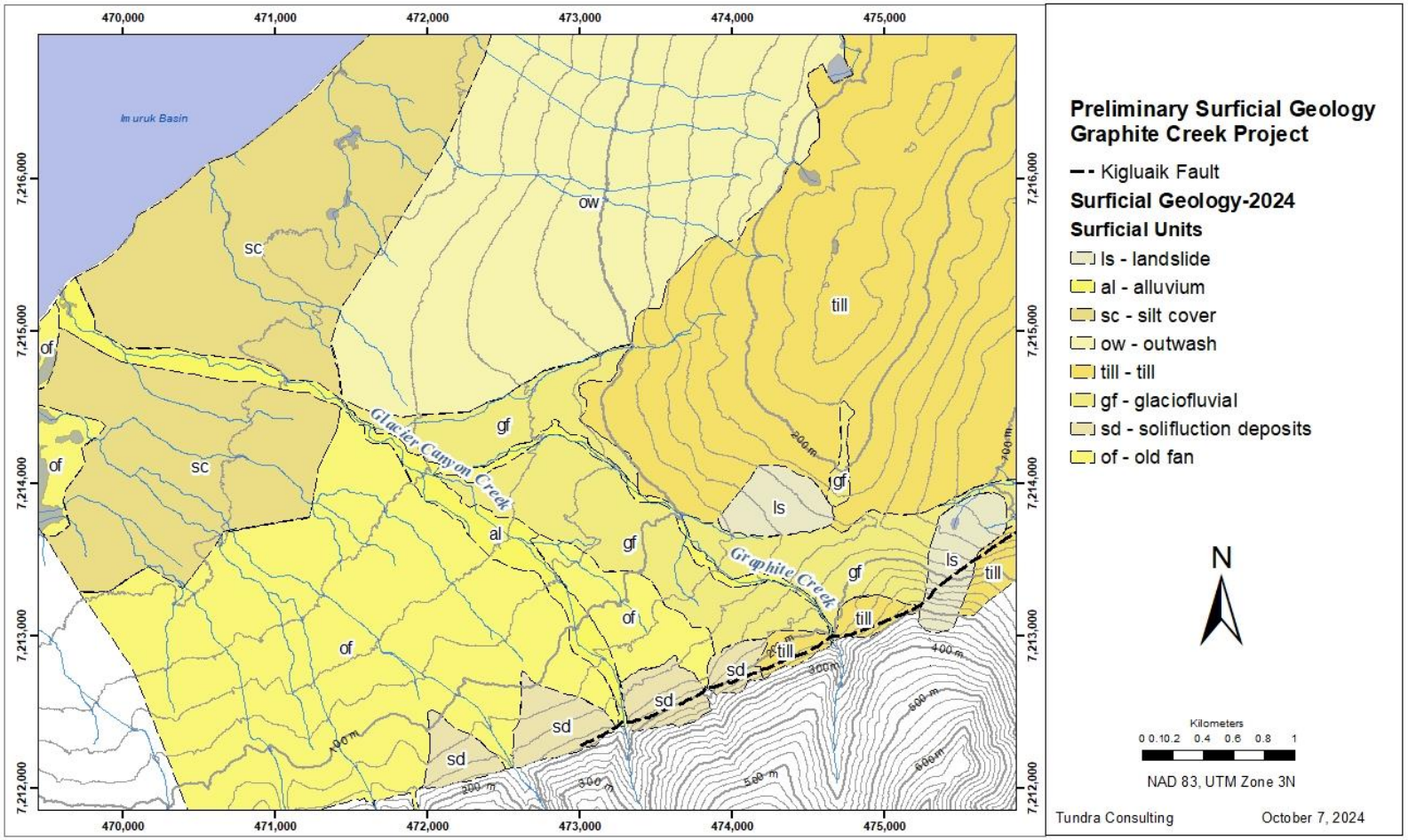
Surficial Geology Map Updates



Tundra Consulting

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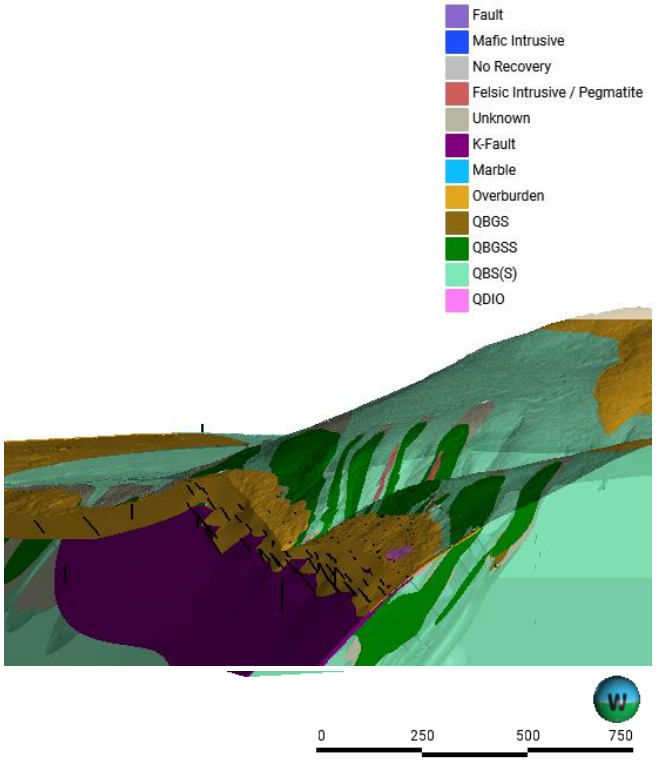
Geologic Models

Bedrock Geology



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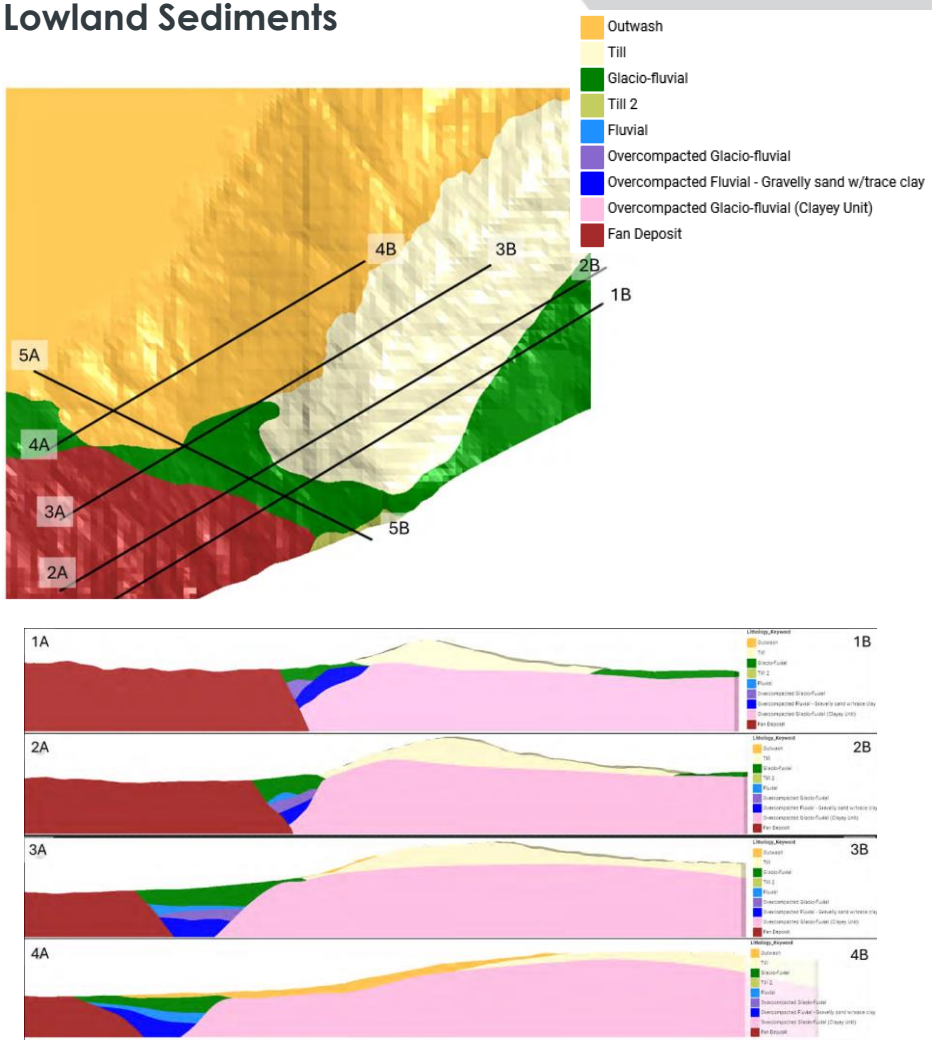
Lowland Sediments



G Baldwin via Tundra Consulting

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Environmental Baseline Monitoring

- Various levels of environmental baseline monitoring since 2014.
- 2023-2024 Season activities
  - Cultural
  - Surface & ground water
  - Raptor surveys
  - Aquatic species
  - Imuruk Basin & Tuksuk Surveys
  - Geochemical
  - Hydrogeologic
  - Wetlands mapping
  - Meteorological

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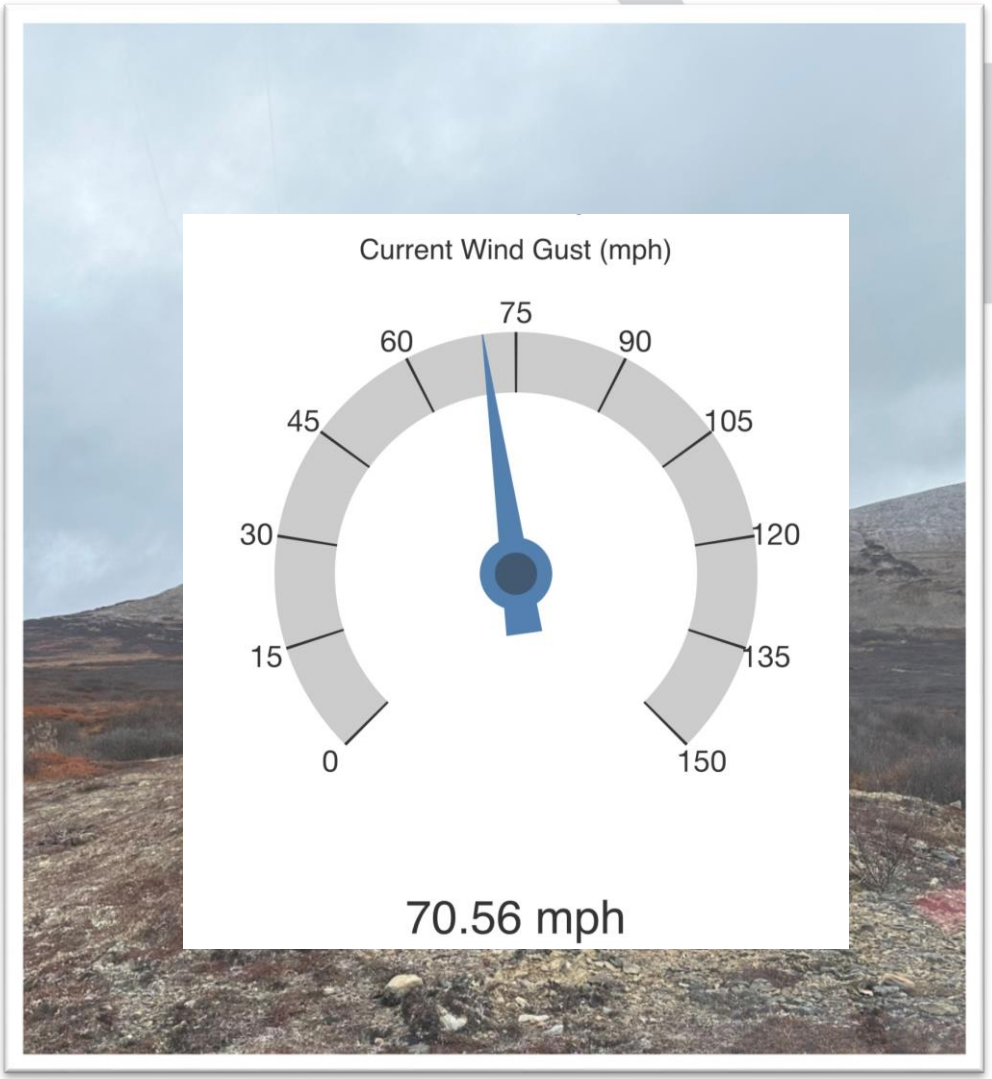
Meteorological Monitoring Stations

- EPA-standard monitoring stations to support NEPA and other permit applications
  - Seasonal stations in Mosquito Pass and Tuksuk Channel to support area navigation
- Prevention of Significant Deterioration (PSD) at GCC established May 2024
- Ambient Air Quality Monitoring Station (AQMS) in Nome established October 2024
  - Stations must collect data for minimum of 12 consecutive months, including:
  - Wind velocities and direction
  - Temperature, humidity, solar radiation, pressure and precipitation



PSD station at GCC, Fall 2024

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Looking Forward

1

Preliminary economic assessment completed in 2017

2

Preliminary Feasibility Study completed in August 2022

3

Awarded US$37.5 Million Department of Defense Grant in July 2023

4

Accelerated feasibility study schedule planned for completion by Q1 2025

5

Permitting to start following completion of feasibility study 2025-2026

6

Start of construction planned for 2027 with production in 2029

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Questions?

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