Summary Report
Geoscience Research, Compilation and Site Visits
Benjamin Mills Wind Project
Hants County, Nova Scotia, Canada

Prepared For:
Natural Forces Development LP

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Executive Summary

This report summarizes the research, compilation and site visit work completed to date for Natural Forces Development LP (Natural Forces) by Mercator Geological Services Limited (Mercator) for the Proposed Benjamin Mills Wind Project site in Hants County, Nova Scotia. This project has been registered as a Class 1 undertaking under Nova Scotia's Environment Act and is described in an Environmental Assessment (EA) Registration document previously filed with the provincial Department of Environment and Climate Change. Natural Forces is currently addressing additional items requested from the Minister as part of the EA process. Mercator's scope of work to address some of these additional items included the following items:

1. A review of archived reporting and creation of a detailed digital compilation of historical geoscience data for the Project Development Area (PDA), including bedrock uranium distribution information.
2. Completion of initial field visits to select wind turbine sites to assess current background levels of radioactivity and to record geological data, including documentation of any evidence of uranium mineralization present or presence of alteration commonly known to accompany uranium mineralization in this area of Nova Scotia.
3. Site visits to select proposed turbine locations that have undergone exploratory geotechnical investigations to assess levels of radioactivity and determine concentrations of potassium (K), uranium(U), and thorium (Th) using a hand-held spectrometer. Geological site data and photographs of important site features were also collected.
4. A review, quick log, and spectrometer assessment of drill core from the geotechnical drill program at the PDA, including documentation of any evidence of uranium mineralization and alteration and creation of a record of drill core photography
5. Preparation of a summary report of findings that describes workflow, controls on uranium mineralization known to be present in the area, conclusions based on the field and compilation studies, and recommendations for future work.

The work program described in this report includes a review of an independent, third-party consulting report completed for Natural Forces on uranium in groundwater in the PDA, a description of the geoscience compilation workflow for construction of data compilation and interpreted uranium distribution maps, an interpretation of publicly available LiDAR data and a multi-day site visit ground-truthing program. The first site visits were conducted at selected areas of proposed work to measure background gamma radiation levels with a handheld scintillometer. Subsequent site visits were conducted in areas of recent activity and development by Natural Forces (i.e., drill sites at proposed turbine locations, access trails and proposed substation test pits) to measure radiation levels with a handheld spectrometer. The final site visit was conducted to obtain spectrometer readings in areas identified earlier as having elevated scintillometer readings. The geoscience data compilation and interpretation for the PDA identified both geological structures and historical geoscience information associated with discovery and delineation of the Millet Brook U-Cu-Ag deposit (Millet Brook Deposit).

The main portion of this deposit consists of vein and fracture-filling style uranium mineralization hosted by granodiorite and is located approximately 600 meters (m) south of the southern boundary of the PDA. In addition, other bedrock uranium occurrences and areas of historical exploration work (i.e., Powerline and Bennet Lake North grid areas) were identified within the western portion of the PDA during the compilation exercise. Specifically, the T25 and T27 proposed wind turbine sites are located within a radius of approximately 500 to 800 m of the Millet Brook Deposit's F1 occurrence and the proposed turbine T15 site is located in the vicinity of the historical Powerline exploration grid. Various associated exploratory trenches, drill holes and radiometric anomalies, plus several minor occurrences of bedrock uranium mineralization also occur in general proximity to the above-mentioned proposed turbine sites.

Site visits by Mercator staff to 10 proposed turbine locations did not identify any exposed bedrock uranium mineralization or related host-rock alteration at the sites themselves. However, anomalous (i.e., many times (>50x) above background) gamma radiation levels were detected at several locations within or adjacent to the PDA. Aside from the readings taken in the Millet Brook Deposit C1 and C2 Zones, outside of the PDA, all anomalous readings were located along the main forestry access road system. Notably, high radioactivity levels were detected at several locations along the existing forestry access road to the southern PDA area that begins at Pioneer Drive, near Falls Lake. This includes four areas in the PDA with gamma radiation levels ranging from 7,234-10,292 counts per second (cps). These areas have corresponding spectrometer-defined ranges of 499 to 692.4 parts per million (ppm) U and 4.8 to 21.6 ppm Th. Additionally, there are areas along the forestry access road to the proposed T27 turbine site with gamma radiation levels ranging from 4,500 to 8,674 cps that have corresponding spectrometer-defined ranges of 431.4 to 609.4 ppm U and 15.4 to 18.4 ppm Th. Above background radioactivity levels (~3x) were also detected along the main forestry road near the T15 turbine site, in an area identified from the compilation project as having enhanced radioactivity levels. Gamma radiation levels at this location ranged from 293 to 650 cps and have spectrometer-defined uranium and thorium ranges of 5.6 to 8.4 ppm U and 10.4 to 13.4 ppm Th. As noted, these levels give an indication of relative radioactivity of the material scanned in comparison to the baseline background radiation levels in the South Mountain Batholith (SMB) geological complex (i.e., 100-180 cps; O'Reilly, 2009). Further field studies are being conducted under a separate scope of work to determine Naturally Occurring Radioactive Material (NORM) concentrations on site. It is important to note that Mercator staff visited only 10 of the 28 proposed turbine sites. These were selected on the basis of being either closest to the Millet Brook Deposit, spatially associated with historical uranium exploration work areas, or locations subject to current exploratory geotechnical investigations.

Based on combined interpreted results of the compilation study and site visits, it is recommended that Natural Forces continue their systematic assessment of gamma radiation levels at all turbine sites and road access routes at each stage of site assessment and development. This can be safely and effectively completed using a hand-held spectrometer utilized by appropriately trained personnel. This will provide early identification of any zones of bedrock uranium mineralization or radioactive overburden that may be present at the sites of interest. If highly anomalous radiation

levels are identified, appropriate mitigation plans should be developed by suitably qualified professionals to allow construction activities at the PDA to safely proceed.

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1.0 Introduction

This report summarizes the work completed to date by Mercator Geological Services Limited (Mercator) on the Benjamin Mills Wind Project proposed by Natural Forces Development LP (Natural Forces) in Hants County, Nova Scotia. It is understood that results of this work may be submitted to the Government of Nova Scotia as part of additional information requested by the Minister of Environment and Climate Change with respect to the Project Environmental Assessment Registration. Items for which Mercator is responsible, and for which a scope of work was developed, include subsections a and b, plus parts of subsection c, which appear below in text extracted from the Minister's March 9, 2022, decision letter to Natural Forces. Bold font identifies components investigated by Mercator.

"In consultation with Natural Resources and Renewables (NRR) Geological Survey Division Mineral and Management Division, provide a comprehensive review and presentation of all historical geoscience data for the project footprint. This includes but is not limited to:

a. Detailed geological map(s) of the development footprint and project area.

b. Uranium distribution map layer(s) based on geological, geophysical, and geochemical data.

c. A technical summary that:

i. Identifies and describes known occurrences of uranium

ii. Describes geological controls related to primary occurrences, and potential secondary distribution of uranium

iii. Identifies and describes common benchmark standards for naturally occurring uranium mineralization and human health and safety considerations; and

iv. Identifies and describes the local health and safety risk to known and potential occurrences of uranium mineralization."

The proposed wind energy project consists of 28 wind turbine generators capable of producing up to 150 MW of renewable energy that will be connected to the existing Nova Scotia Power transmission grid via overhead transmission lines. The Project will be located on a mix of privately-owned and provincial Crown lands within the West Hants Regional Municipality in Hants County. This undertaking will be permitted, constructed, owned, operated, and maintained by Natural Forces Developments Limited Partnership (referred to herein as Natural Forces).

Mercator's scope of work for this project included the following items:

- A review of the preliminary uranium compilation in the Project Development Area (PDA) completed by WSP which Natural Forces provided to Mercator.
- A review of archived reporting and creation of a detailed digital compilation of historical geoscience data for the PDA, including bedrock uranium distribution information.

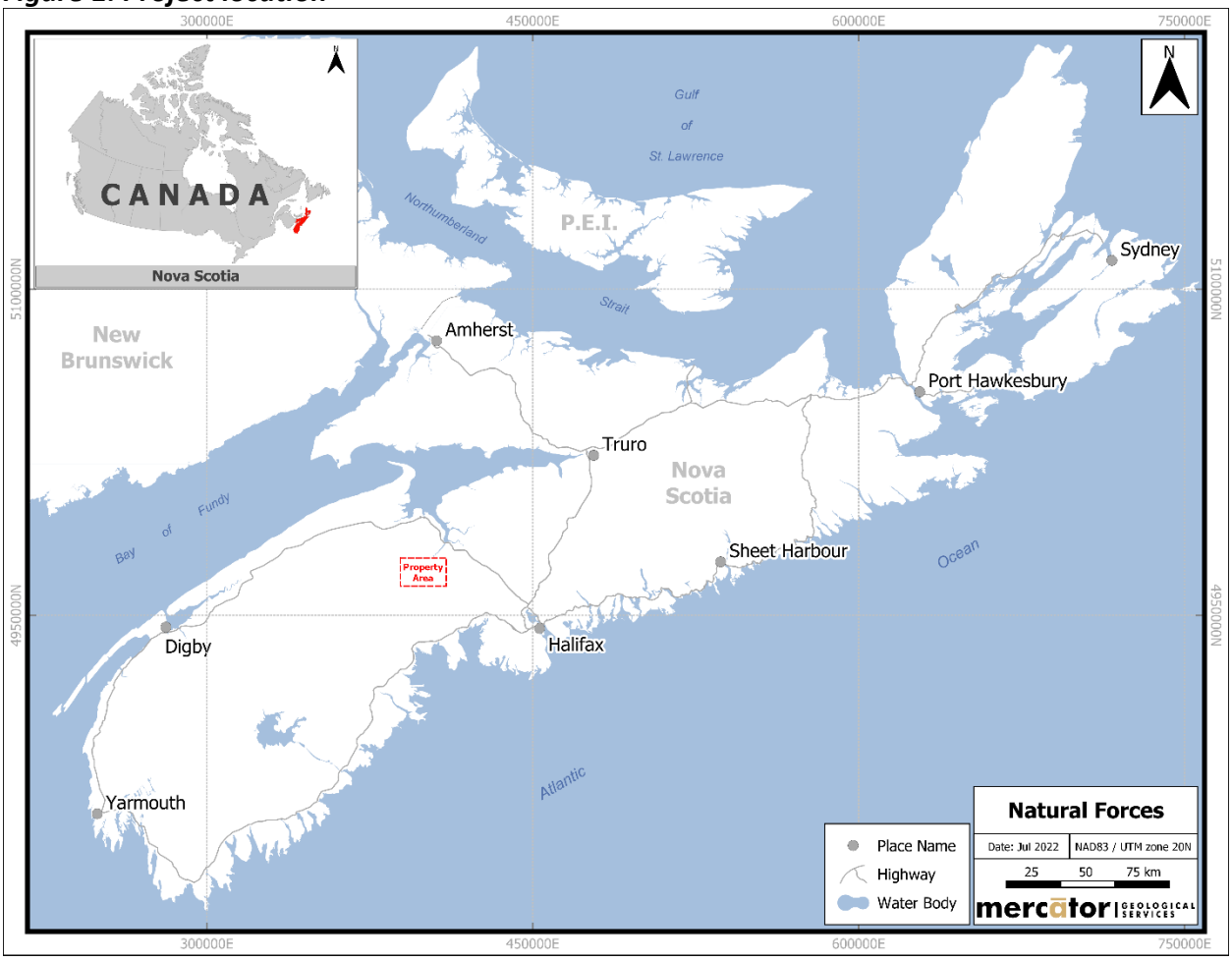
- Site visits to select proposed wind turbine locations to assess current background levels of radioactivity and to record geological site data, including documentation of any evidence of uranium mineralization or presence of alteration commonly known to accompany uranium mineralization in this area of Nova Scotia.
- Site visits to select turbine sites undergoing preliminary geotechnical investigations to assess levels of radioactivity and to acquire spectrometer-sourced concentrations of potassium (K), uranium (U), and thorium (Th) in the direct vicinity. Geological site data, evidence of uranium mineralization and alteration if present, and photos were recorded.
- A review, quick log, and spectrometer-sourced assessment of geotechnical drill core and test pit soil samples obtained for certain sites, including documentation of any evidence of uranium mineralization and alteration and collection of relevant photographs.

Preparation of a summary technical report of findings that describes workflow, controls on uranium mineralization known to be present in the PDA area, conclusions based on the field and compilation studies, and recommendations for future work.

2.0 Location and Access

The proposed project site is located in the West Hants Regional Municipality area of Hants County, approximately 13 km southwest of Windsor, Nova Scotia (Figure 1). Road access to the PDA field site studied by Mercator is via Highway No. 101 for approximately 70 kilometers from the Halifax area to Windsor, Nova Scotia and via Highway No. 14 for approximately 20 kilometers to the intersection with the New Ross Road at Vaughn. The PDA is accessed by a forestry road network developed north of the New Ross Road from a point approximately 5 km west of Vaughn. This intersection of this road system with the highway is marked by signage for the Pioneer Drive recreational land development on nearby Falls Lake.

Figure 1: Project location



3.0 Previous Work

The following bulleted items summarize the major components of geoscience and uranium exploration work that have been conducted on or near the PDA, primarily since 1970. This information was compiled from archived Nova Scotia government assessment reporting files sourced from NovaScan, The Nova Scotia Geoscience Maps and Publications Database administered by the Geoscience & Mines Branch of the Nova Scotia Government Department of Natural Resources and Renewables. Most notably, the well documented Millet Brook Deposit of vein and fracture-filling uranium mineralization hosted by granodiorite occurs within the southern extent of the PDA and several lesser occurrences of bedrock uranium mineralization are present in the south-central portion of the PDA. In addition, several zones of anomalous radioactivity and/or bedrock uranium levels were identified in the western portion of the PDA during the compilation exercise. The last-mentioned areas are not in close proximity to any currently proposed turbine sites.

3.1 Chronological Summary of Exploration and Geoscience Surveys in the Project Area

- In 1976, the Geological Survey of Canada flew an airborne gamma ray spectrometer survey over the Shelburne and Annapolis areas to collect total count, potassium, equivalent uranium, and equivalent thorium concentrations (GSC, 1977).
- In 1978, Aquitaine Company of Canada Limited carried out an exploration program to determine the uranium potential of the Millet Brook property. The work performed consisted of establishing a grid, taking scintillometer readings, collecting soil and stream sediment samples for geochemical analysis, making radon gas in soil measurements, and digging pits to determine the causes of anomalous surface radiation. This exploration program successfully located uranium bearing soil and uranium mineralization in bedrock (Wilson, 1978), ultimately leading to the discovery of the Millet Brook U-Cu-Ag deposit.
- From November 1978 to January 1979, Aquitaine Company of Canada Limited drilled and radiometrically probed eight diamond drill holes totalling 851.7 meters (m) (Robertson et al., 1980).
- In 1979, Aquitaine Company of Canada Limited completed extensive field work on the Millet Brook Property. The field work consisted of an airborne DIGEM^{II} electromagnetic/ resistivity/ magnetic/ very low frequency electromagnetic (VLF-EM) survey, two airborne radiometric surveys and ground follow-up geological mapping and radiometric surveys, lake bottom sediment sampling, ground resistivity and VLF-EM surveys and trenching of uranium occurrences. Several new uranium showings/occurrences were found in the Falls Lake area. The most promising new occurrence was at Upper Salter Lake (Robertson et al., 1980).

- A second drill program consisting of eighteen diamond drill holes totaling 1,248 m was conducted by Aquitaine Company of Canada Limited in spring of 1980 in the Millet Brook Deposit area (Robertson and Duncan, 1981a).
- Aquitaine Company of Canada Limited conducted field work in 1980 which included geological mapping, ground and airborne radiometric surveys, extensive backhoe trenching, 115 kilometers (km) of ground resistivity and chargeability surveying, soil geochemistry and biogeochemistry. This field work culminated in a third diamond drilling program of 94 diamond drill holes in the main Millet Brook Deposit area, totaling 7,952.6 m during winter 1980-1981. It was concluded from this work that there as a potentially mineable uranium deposit present near Upper Salter Lake, that there was uranium mineralization in most of the drill target areas on the Millet Brook Grid, and that several new showings worthy of further investigation are present, particularly the Powerline area, Hemlock Hill area, and Bennet Lake area (Robertson and Duncan, 1981b).
- In 1981, Aquitaine Company of Canada Limited continued field work on the Millet Brook Property and periphery, this included geological mapping, geophysics, ground and airborne radiometric surveys, an induced polarization (IP) survey, skidder/backhoe trenching and soil geochemistry surveying. The company also completed two simultaneous drilling programs from April to September 1981. One program was carried out to evaluate the uranium mineralization potential of several structures identified by previous field work on the main Millet Brook grid area. The second program was a Pilot Project involving percussion drilling equipment. This work concluded with calculation of a tonnage and grade estimation for the “Upper Salter Lake Deposit” (USLD), which is referred to in this report as the Millet Brook Deposit. It also included discovery of two significant zones of uranium mineralization in the Powerline and Bennet Lake South areas and identification of 7 new drill targets through trenching and the prospecting of radioactivity anomalies in adamellite, leuco-adamellite and alaskite bodies beyond the Millet Brook Deposit area. These include discovery of uraniferous fractures in bedrock as well as radon-bearing swamps in the South Canoe Lake, Lake Lewis, Panuke Lake and Walker Road areas (Robertson et al., 1981).
- In 1990, the Nova Scotia government completed geological mapping of the Windsor area bedrock geology map sheet at a 1:50,000 scale which includes the Project area (Ham, 1990).
- In 1994, the Nova Scotia government compiled a 1:250,000 scale geological map that includes the Project area (MacDonald et al., 1994).
- In 2007, Tripple Uranium Resources Inc. preformed aeromagnetic and gamma-ray spectroscopic surveys on exploration licences 07096, 07097 and 07098 within the PDA. Base metals were the targets of exploration interest at that time. Survey analytical data showed no significant indications of base metal mineralization, but radiometric survey data define a pronounced potassium anomaly on the fringes of a granitic intrusion,

indicating a possible potassic alteration zone having interpreted exploration potential (Cole and Janes, 2007).

- In 2007, Tripple Uranium Resources Inc. preformed aeromagnetic and gamma-ray spectroscopic surveys on licences 7118-7130, 7133-7170 and 7752. Survey results were interpreted to indicate that primary zones of prospecting and evaluation should be dilational areas occurring NW-SE of the apparent intrusive in the central portion of the exploration holding (Titus A block). Additional surveys using EM methods or detailed geochemical sampling were recommended to provide insights into further exploration in the area (Cole and Janes, 2008).
- In 2008, Tripple Uranium Resources Inc. drilled one diamond drill hole totalling 264 m. No indications of base or precious metal mineralization were observed and no zones of anomalous radioactivity were defined (Cole et al., 2008).

4.0 Regional Geology

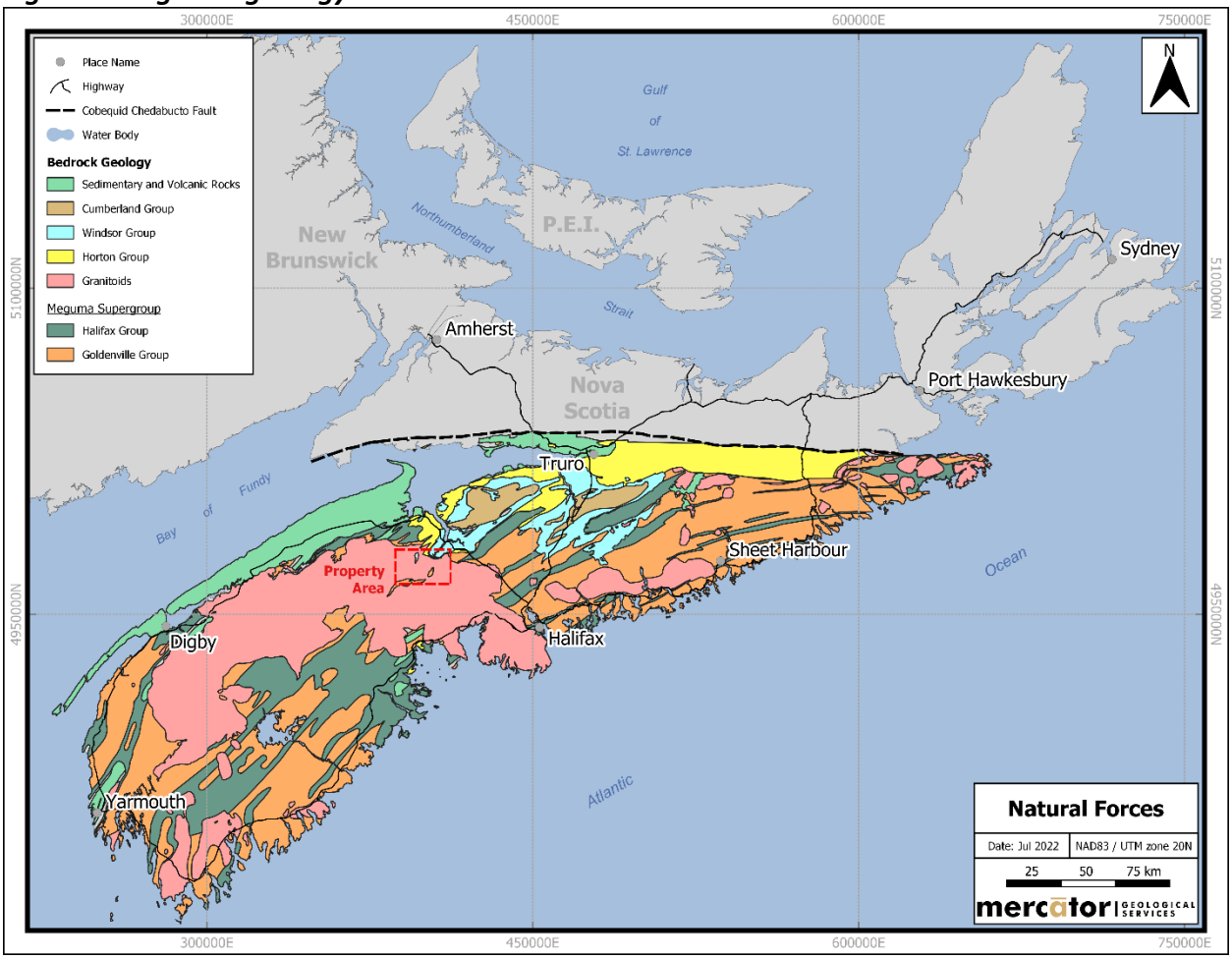
The Benjamin Mills Project is located fully within the Devono-Carboniferous age South Mountain Batholith (SMB), a spatially expansive intrusive complex comprised predominantly of granodioritic to granitic lithologies (Figures 2 and 3). Published results of geological mapping of the SMB carried out by the Nova Scotia government define the interpreted spatial distribution of these phases. The PDA includes three mapped phases of the SMB, these being (1) the Salmontail Lake Monzogranite (SLM), (2) New Ross Pluton granodiorite, and (3) a small area of mafic porphyry. The SLM is a whitish-grey, fine to coarse-grained variable textured dominantly megacrystic monzogranite, which is biotite-rich, with trace muscovite and cordierite and common xenoliths. The New Ross Pluton is a bluish-grey, medium to coarse-grained megacrystic granodiorite that is biotite-rich, with trace muscovite and numerous xenoliths. The mafic porphyry is very small in spatial extent and comprised of a light brown to dark brownish-grey, fine-grained porphyritic rock with quartz, plagioclase, and alkali feldspar phenocrysts. It is biotite-rich with trace muscovite and abundant xenoliths (Ham, 1990).

The SMB is host to several metallic mineral deposits plus several historical, past-producing mines of significance. These include the East Kemptville (Sn-Zn-Cu- Ag) mine, the New Ross manganese (Mn-Fe-P) mines, the Millet Brook Deposit (U-Cu-Ag) and numerous polymetallic prospects and occurrences (MacDonald, 2001). The Millet Brook Deposit and several bedrock uranium occurrences occur within, or are peripheral to, the PDA.

The first reported mineral occurrences in the batholith were mainly in the New Ross area and were found by early settlers. The discovery of polymetallic tin deposits in the early 1980's in the southwestern part of the SMB near Yarmouth touched off a major base metal exploration 'boom' that continued for several years. Concurrent with this burst of base metal and tin exploration was a major exploration 'boom' for uranium. This activity was partially in response to the energy crisis of the 1970s. One of the principal catalysts for uranium exploration was the completion of airborne gamma-ray spectrometric surveys (5 km spacing) over the Meguma Zone that includes the SMB (Geological Survey of Canada, 1977). These surveys enabled exploration companies to focus particular attention on highly evolved or 'specialized' leucomonzogranite and leucogranite rock units of the SMB that are similar to such phases that commonly host uranium deposits worldwide. Spectrometric surveys also proved useful for delineating uranium concentrations in lesser evolved granitic rocks.

As described earlier in this report, exploration activities by Aquitaine Company of Canada Ltd. led to the discovery of the Millet Brook Deposit in 1978 (Chatterjee et al., 1982). Results of subsequent diamond-drilling programs were used to support estimation of a "reserve" for the deposit of approximately 1.0 million pounds of U_3O_8 within a bedrock zone having an average insitu grade of 0.15 - 1.20% U_3O_8 over an average 2.0 m width (Chatterjee et al, 1985). Mercator

Figure 2: Regional geology



cautions that this estimate is historical in nature within the context of Canada's National Instrument 43-101 (NI 43-101) and that use of the term "reserve" is not consistent with current usage defined under the CIM Definition Standards for Mineral Resources and Mineral Reserves.

All uranium exploration activities in the SMB, including development-related work at Millet Brook, were terminated by a province-wide uranium moratorium announced by the Government of Nova Scotia on September 21, 1981. The moratorium was still in effect at the time this report was prepared.

5.0 Project Area Geology

5.1 Bedrock Geology and Mineralization

As noted in the previous report section, the bedrock geology of the PDA consists of three intrusive phases of the SMB. These phases include granodiorite of the New Ross Pluton, the Salmontail Lake Monzogranite (SLM) and a single small zone of mafic porphyry. Most bedrock uranium occurrences in the area, including the Millet Brook Deposit, occur along the geological contact between the SLM and New Ross Pluton units in the south-central portion of the PDA. Mineralization occurs in both major intrusive units, but the deposit is hosted primarily by altered, sheared, and fractured granodiorite of the New Ross Pluton.

The Millet Brook Deposit consists of mineralized veins in steeply-dipping, northeast-trending, en-echelon fracture zones (Figures 3 and 4). Although the main mineralized zones that define the deposit occur south of the PDA, there are several lesser mineralized zones and exploration work areas (i.e., exploration drill core shed facility) located within the PDA that have associated historical exploration datasets (Figure 3). Pitchblende is the dominant uranium-bearing mineral in drilling-defined mineralized zones below 50 m depth, whereas the U-phosphate minerals torbernite and autunite are dominant above that depth. This zonation is attributed to surface weathering processes. Other mineralized zone phases present in minor amounts at all depths include chalcopyrite, bornite, covellite, chalcocite, proustite, galena, sphalerite, and wolframite. Gangue minerals include quartz, feldspars, micas, illite-smectite, andalusite, hematite, kaolinite, tourmaline, chlorite, calcite-ankerite, pyrite, Mn-oxides and anatase. Alteration of the host biotite granodiorite is mainly confined to approximately a 30 m radius around mineralized fractures and consists of albitization, muscovitization, biotitization, chloritization, K-feldspathization and carbonatization. Widespread hematization, consisting mainly of turbid or cloudy plagioclase and K-feldspar are also associated with some mineralized areas (Corey, 1988b). Episyenite (de-silicification) and/or silicified zones are associated with some zones as well (Clarke and Chatterjee, 1988).

Figure 3: Project Development Area geology map with bedrock uranium occurrences

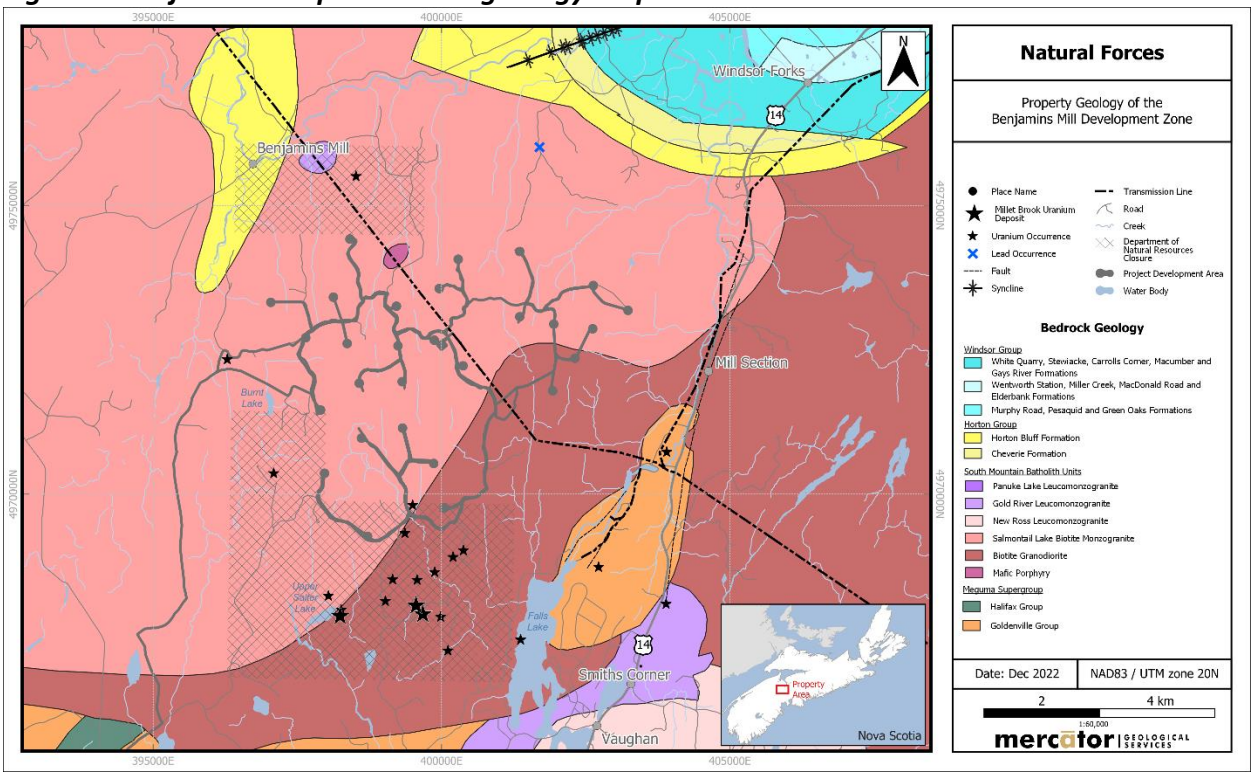
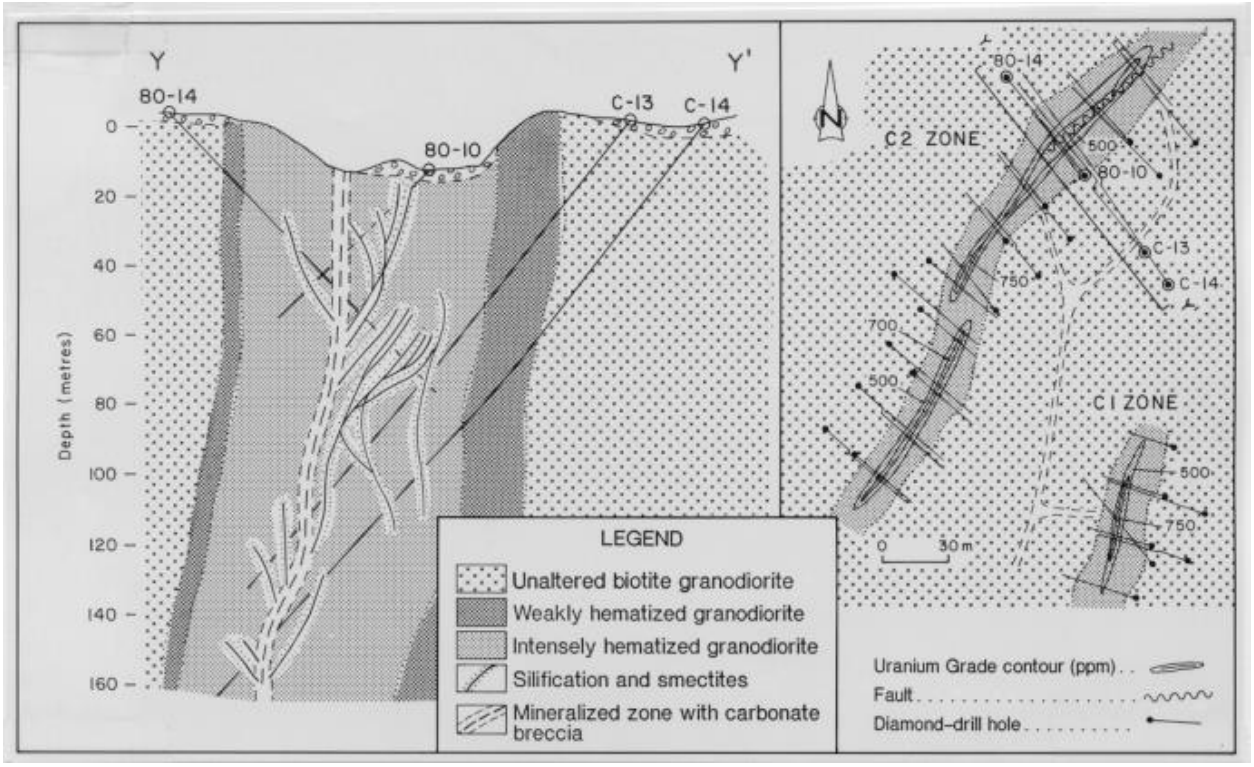


Figure 4: Plan map and cross section from the Millet Brook Deposit displaying styles of mineralization and associated alteration (taken from MacDonald, 2001)



5.2 Surficial Geology

The surficial geology of the PDA generally consists of a thin and discontinuous till veneer dominated by granitic bedrock lithologies and ages that occurs across glacially scoured basins and knobs (Stea, Conley and Brown, 1992). To the south of the PDA, a stony till plain with a stony, sandy matrix with material (i.e., pebbles and boulders) derived from local bedrock sources is present. Shallow till thicknesses, predominance of boulder till, and glacial striations on bedrock surfaces were verified at numerous locations during the Mercator site visits to the PDA. These are further explored upon below in report section 6.0 - Work Performed.

6.0 Work Performed

Work completed by Mercator for the geological assessment of the PDA includes:

(1) A review of the Environmental Assessment Registration Document prepared for the Project;
(2) A detailed review of publicly available historical mineral exploration reporting relevant to the PDA;
(3) A digital compilation mapping exercise of assembled data for the PDA;
(4) Site visits to verify findings of the compilation program and to assess areas of preliminary geotechnical investigations and conducting investigations to assess levels of radioactivity and to acquire spectrometer-sourced concentrations of K, U and Th in the direct vicinity; and
(5) A review, quick log, survey and spectrometer-sourced assessment of drill core and test pit soil samples from a geotechnical work program at the PDA. Measurements of background radioactivity levels were made at all site visit locations and the specific type of uranium mineralization documented to date in and near the PDA was further investigated through a limited literature search.

6.1 Data Compilation

The data compilation program included detailed review of government assessment reports, government and industry technical reports, digital government data, published maps, soil sample survey data, water sample survey data, ground geophysical survey data and airborne geophysical data. All of this information was reviewed and compiled, and locations and sample records were cross-checked to the degree considered necessary.

As a preliminary step, base layers including roads, water bodies, contours, bedrock geology, etc. were brought together in the QGIS software platform to create a digital compilation base upon which further data compilation was based.

Historical geochemical data for the property was downloaded and/or georeferenced into a QGIS project. Outcrop, soil, and water sampling survey results were examined, and their U values were input into the project database for further review. Values for U and triuranium octoxide (U_3O_8) less than 50 parts per million (ppm) in soil were not displayed on the compilation map for clarity purposes and to keep focus on elevated concentrations. Samples less than 50 ppm U or U_3O_8 did not clearly define the areas of historical exploration work, while the most elevated concentrations (i.e., 250-2000 ppm U_3O_8) are present near the interpreted surface expression of the Millet Brook Deposit bedrock uranium zones and associated occurrences. Historical geological data (i.e., diamond and auger drill hole results in and around the PDA) were reviewed and their locations were downloaded and/or georeferenced into the project. Finally, geophysical

survey results were downloaded and/or georeferenced into the project and examined to identify areas of anomalous radiometric values and trends that were subsequently digitized.

The following digital compilation layers were created from available assessment reports filed with the Nova Scotia government (Table 1). The result after the respective datasets were integrated into the QGIS project is two historical data compilation maps encompassing the Northern and Southern halves of the PDA, respectively. These are found as Maps 1 and 2 in Appendix IV and supporting digital files are included as current project deliverables.

Table 1: List of Compiled Geoscience Data for Benjamin Mills Project Development Area

Compiled Data	Company	Report Reference
Drill Hole Location, Geophysics Grids, Airborne Vertical Magnetic Gradient surveying	Tripple Uranium Resources	AR_ME_2008-200
Airborne Radiometric (potassium, uranium, thorium) and Vertical Magnetic Gradient surveying, Geophysics Grids	Tripple Uranium Resources	AR_ME_2008-031
Airborne Radiometric (potassium, uranium, thorium) and Vertical Magnetic Gradient surveying, Geophysics Grids	Tripple Uranium Resources	AR_ME_2007-184
Uranium Occurrences, Bedrock Geology, Faults – 1:50,000 scale	Nova Scotia Department of Natural Resources	Map ME 1990-10
Surficial Geology – 1:500,000 scale	Nova Scotia Department of Natural Resources	Map ME 1992-3
Uranium Occurrence, Bedrock Geology, Fault – 1:250,000 scale	Nova Scotia Department of Natural Resources	Map ME 1994-001
Drill Hole Location	Aquitaine Company of Canada Limited	AR_ME_1981-025
Uranium Occurrence, Drill Hole Location, Ground Radiometric Anomaly, Trench Geochemistry	Aquitaine Company of Canada Limited	AR_ME_1981-026
Drill Hole Location, Soil Geochemistry, Lake Sediment Geochemistry, Uranium Occurrences, Geophysics Grids, Ground Radiometric Anomalies, EM Conductors	Aquitaine Company of Canada Limited	AR_ME_1981-038
Geophysics Grids, Ground Resistivity, Ground Radiometric Surveys, Airborne Radiometric Surveys, Airborne	Aquitaine Company of Canada Limited	AR_ME_1980-008

Compiled Data	Company	Report Reference
Electromagnetic, Resistivity, Magnetic and VLF-EM Surveys, Trench Geochemistry		

6.2 LiDAR Interpretation

The LiDAR interpretation is a photogeological interpretation that was undertaken for the PDA and is based on publicly available data sourced from the GEONOVA website (2014 dataset). Georeferenced hill shade images of the LiDAR datasets were imported into the QGIS platform and surficial features, bedrock lineaments, etc. were identified, interpreted, digitally traced, and checked against the NSDNRR Surficial Geology map (Stea, Conley & Brown, 1992). They were then incorporated into the compilation PDA geoscience map. The LiDAR interpretation completed for the PDA is found in Maps 1 and 2 in Appendix III.

The LiDAR lineament interpretation was carried out on the basis of relief and continuity of features in the hill shaded LiDAR digital elevation model (DEM). One type of lineament was digitized for simple incorporation into the compilation map and is summarized in Table 2.

Table 2: Criteria for Bedrock Lineament Interpretation

Type	Order	Continuity	Relief	Occurrence	Trend
Bedrock	First	100 m	High	Parallel sets	North, North-East

Bedrock lineaments have high relief and locally include visible patches of bare rock in satellite photos. They occur along convex, raised topography and along discrete ridges and knobs. Bedrock lineaments are typically straight or arcuate and continuous over hundreds of meters. They primarily occur as parallel sets that follow bedrock trends in the SMB rocks and show a predominant north to northeast orientation. The northeast trend is particularly important in the PDA, because fracture and shearing zones that control documented uranium mineralization in this area of the SMB, including the Millet Brook Deposit, are similarly oriented.

6.3 Interpreted Uranium Distribution Layer

Once all historical and modern geoscience data deemed relevant to this exercise was compiled and placed into the QGIS project, and the LIDAR interpretation was completed, a uranium distribution layer was developed for the project. Geological, geochemical, and geophysical data sets were considered for this interpreted layer, but emphasis was placed on geological and geochemical data (i.e., samples with assay or scintillometer data) to develop an interpretation of areas in which uranium mineralization was either historically documented or considered to have

a high probability of occurring. The uranium distribution interpretation completed for the PDA is found in Map 3 in Appendix III.

The following data sets were considered for the interpreted uranium distribution layer and are listed in sequence below from highest weighting (top) to lowest weighting (bottom).

- Documented uranium deposits (i.e., Millet Brook Deposit).
- Documented uranium occurrences (from government databases and historical reports).
- Historical drill holes within and adjacent to the PDA containing uranium mineralization or elevated radiometric readings observed from the core logging process.
- Ground radiometric anomalies (those above 180 counts per second (cps) that are often indicative of bedrock uranium mineralization or of bedrock alteration in close proximity to a uranium mineralization system. For reference, the surface area over the C2 Zone at the Millet Brook Deposit generally has a radiation level between 3,000 to 5,000 cps as measured on a scintillation counter, with sporadic patches up to 26,500 cps (O'Reilly and Mills, 2009).
- Geochemical data (i.e., rock, soil, till, lake sediment data) containing above detection limit concentrations of uranium (U or U_3O_8). Trends were interpreted within soil datasets that displayed greater than 50 ppm U or U_3O_8. (50 ppm U equals approximately 60 ppm U_3O_8)
- Geophysical (magnetic, electromagnetic, radiometric) trends and directions.
- LIDAR interpretation of interpreted bedrock lineament structures and directions in the area of the PDA.

6.4 Site Visits to Benjamin Mills Project Development Area

6.4.1 July and August 2022

Two site visits were completed by Mercator staff to the PDA to ground-truth geological information at proposed turbine sites T15, T25 and T27. The visits were carried out on July 7th and August 10th, 2022, and two Natural Forces staff accompanied Mercator staff on the July 7th site visit. The three turbine sites were selected because they are most proximal to areas of historical mineral exploration interest such as drill holes, uranium showings, geochemical data anomalies and radiometric anomalies. Historical showings and remains of the storage facilities associated with the Millet Brook Deposit uranium exploration drilling in the late 1970's to early 1980's were also visited, since they are located adjacent to, but outside, the southern PDA limit.

A Super-Scint RS-120 gamma-ray scintillometer was used in the field to measure gamma radiation levels present at the various sites visited. This is a "total count" instrument that measures gamma radiation in cps and does not discriminate between potential radioactivity sources. In contrast, spectrometers can determine the relative proportions of contributing K, U and Th radiometric responses. Comparison of field measurements to average background values has been shown in

Nova Scotia and elsewhere to be an effective method of identifying areas of potential uranium mineralization in either bedrock or overburden. A typical SMB granite, when measured by most gamma-ray scintillometers would have background radiation levels in the order of 100 to 180 cps (O'Reilly et al., 2009). A background alarm threshold on the scintillometer used during the site visits was set to 160 cps, which is within the upper portion of this range.

On July 7th, 2022, the site visit team consisting of three Mercator staff and two Natural Forces staff carried out vehicle-based scintillometer surveying while traversing the area's access roads. They also surveyed with this instrument while carrying out geological ground-truthing traverses at the T15 proposed turbine site and it's associated proposed access road. The existing forestry access roads to the T25 and T27 sites were surveyed in the same manner, but due to time constraints the sites themselves were not visited until the following site visit. On August 10, 2022, two Mercator staff geologists visited the PDA and completed traversing of main access roads and geological ground-truthing at the T25 and T27 proposed turbine sites and their associated proposed access routes. Aside from some minor hematization of the granodiorite bedrock and similarly altered nearby boulders, no visible alteration or mineralization typical of proximity to uranium deposits identified to date in this area of the SMB were observed at any of the proposed turbine sites.

In addition to the proposed turbine sites and access roads, Mercator staff visited one of the historical Millet Brook Deposit uranium showings (the F1 occurrence) and several historical exploration drill hole locations. The F1 mineralized location is marked by a black star on Map 2 (Appendix III) and located between the T25 and T27 proposed turbine sites. No physical evidence of the mineralized zone or the historical drill holes was observed during the visit.

At each of the proposed turbine locations and at various other geological sites of interest in the PDA, scintillometer readings were taken, geological observations were made, and photos were taken, including observations of any alteration or mineralization of the local bedrock and boulders at each site. Observation notes and associated scintillometer readings are included in Table 3 below, the locations of fieldwork scintillometer readings can be found in Figure 5 and selected site photos appear in Figures 6 to 10. No uranium mineralization was observed at any of the sites, but weakly developed feldspar and hematite alteration that could be associated with fracture-type uranium mineralization were observed at a couple of the sites. Highly elevated scintillometer readings that measured more than an order of magnitude above background levels were observed outside of the PDA at 2 locations along the forestry road network used to access the T25 and T27 sites. Values at or near background levels were observed along the remainder of the road network at the site. The highly anomalous values occur in the general vicinity of the Millet Brook Deposit and could represent presence of mineralized road construction materials or mineralized local till or bedrock incorporated in the roadbed.

Table 3: Geological Observations Within or Along Access Roads to the PDA

Location of Interest	Scintillometer Reading Range (counts per second)	Geological Observations	Uranium Mineralization
T15	180-200	(Outcrop) Coarse-grained biotite-rich granodiorite bedrock and boulders (leucomonzogranite). No alteration observed	None observed
T25	220	(Outcrop) Biotite-rich monzogranite bedrock and well-rounded boulders with abundant plagioclase and quartz. Bleaching and minor amount of hematization observed	None observed
T27	250	(Outcrop) Coarse-grained biotite and plagioclase rich granodiorite bedrock and boulders; some bleaching and minor hematization observed	None observed
Former Millet Brook Core Storage Area	250 – on pad 4000-6000 – on road adjacent to concrete pad of now-removed exploration drill core logging facility	(Pad) Concrete (Road) Grey, medium to coarse grained granitic gravel	None observed
Forestry access road near T15	200 to 650 – road	(Road) Highest values are in the roadbed, but elevated values also occur in adjacent till; this is an area of compilation study elevated radioactivity and may be related to local bedrock material or till	None observed
Forestry access road to T25	250 – outcrop adjacent to road 4500 – road	(Outcrop) Coarse-grained biotite rich granodiorite bedrock (Road) Grey, medium to coarse grained granitic gravel	None observed
Millet Brook F1 Showing	200	(Outcrop) Coarse-grained biotite-rich granodiorite boulders and bedrock. No alteration observed.	None observed

Figure 5: Summary of 2022 Ground Radiometric Field Work.

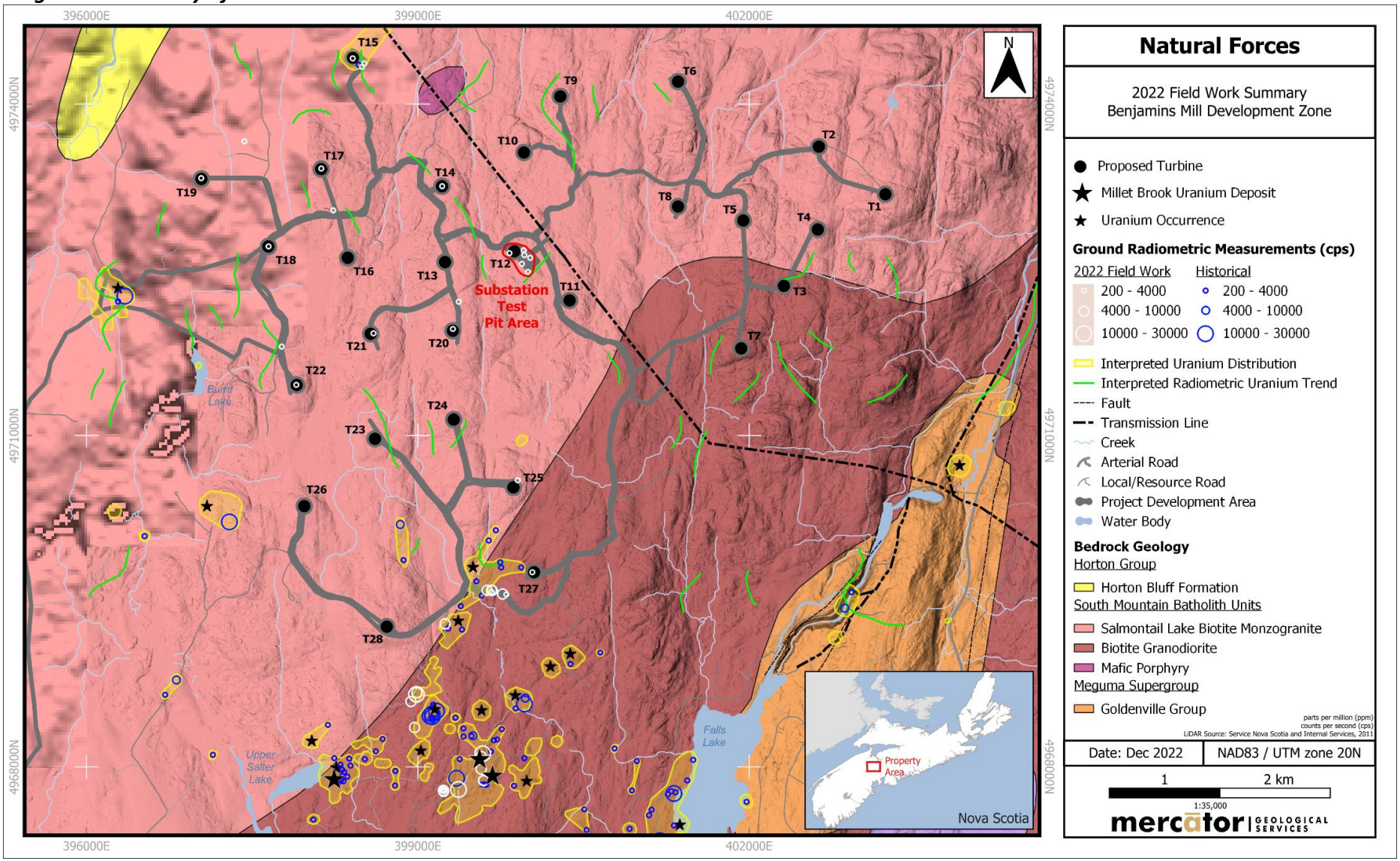


Figure 6: View looking north at the proposed T15 turbine site. Moderately well-rounded boulders and unaltered biotite-rich granodiorite were observed with slightly above background radiation levels around 220 cps.

Figure 7: View looking west at concrete pad of former exploration drill core logging facility for the Millet Brook uranium deposit.

Figure 8: View of the typical surficial and bedrock geology of the PDA – moderately well-rounded large granodiorite boulders with a relatively shallow overburden profile.

Figure 9: Weathered granodiorite outcrop with glacial striae and gamma radiation level of 350 cps, about double background; other than minor bleaching, no alteration or mineralization was observed.

Figure 10: Subcrop of biotite-rich monzogranite with the hand-held scintillometer for scale in the vicinity of the proposed T25 site. Minor bleaching and possible hematization were observed here, but scintillometer readings were only slightly above the 160 cps background level.

6.4.2 October 2022

Three site visits were completed by Mercator staff to the PDA in October of 2022. The first two of these were to ground-truth geological information and to visit areas of recent Natural Forces intrusive activity on preliminary geotechnical core drilling sites at proposed turbine locations T14(borehole BH3), T15(borehole BH4), T17(Borehole H5), T18(Borehole H6), T19(Borehole BH7), T20(Borehole BH2), T21(Borehole H1), T22(Borehole BH8) and substation soil test pits 1 to 6. The visits were carried out on October 13th and 18th, 2022.

During these two site visits, a RS-125 Super-SPEC Handheld Gamma Ray Spectrometer was used in the field to measure gamma radiation present and to obtain associated concentrations of K, U and Th. This instrument has multiple modes of operation: Survey, Scan and Assay. For the purposes of this project, the spectrometer was used in Survey and Assay modes. Survey mode measures gamma radiation in cps and does not discriminate between potential radioactivity sources. Assay mode provides calculated concentrations of K, U and Th associated with the radiometric responses. This unit has the ability to acquire and set the background alarm threshold at any time/location by averaging 3 x 1 second samples, this avoids problems caused by local background changes. As mentioned in section 6.5.1, typical SMB granite has a background gamma radiation level in the order of 100 to 180 cps (O'Reilly et al., 2009), and during these visits the unit acquired background values ranging from 150-190 cps.

Table 4: RS-125 Super-SPEC Handheld Gamma Ray Spectrometer System settings

Parameters	Value	Note
Date and Time	2022-10-13/2022-10-18	Set for data validation
Audio: Volume	ON	Essential operational requirement
Audio: Filter Length	9	Recommended for geophysical applications
Audio: Threshold	1x Sigma	Recommended
Measurement: Total Scan Period	1	Default
Measurement: Total Averaging	1	Recommended for Geo users
Measurement: Assay Time	120 secs	Medium data quality- maximum data for an area in a short period of time

On October 13th, 2022, the site visit team consisted of two Mercator geologists who visited 12 of the 14 sites. While traversing the PDA, continual vehicle-based spectrometer surveying was preformed along access roads with anomalous areas being investigated further. Newly cleared access trails to the proposed turbine, borehole and test pit sites were also surveyed and anomalous areas (soil, boulders, bedrock) were assessed using the spectrometer's Assay mode for concentrations of K, U, and Th. Additionally, sites T14(Borehole BH3), T15(Borehole BH4), T18(Borehole BH6), T20(Borehole BH2), T21(Borehole BH1), T22 (Borehole BH8) and substation test pits 1 through 6 were surveyed and assessed using the spectrometer for concentrations of K, U, and Th. Sites T19(Borehole BH7) and T17(Borehole BH5), were surveyed in the same manner, but due to time constraints the sites themselves were not inspected until the following visit. On October 18th, 2022, two Mercator geologists visited the PDA and completed traversing, surveying and spectrometer assessment of access roads, newly cleared trails, and proposed turbine sites T19(Borehole BH7) and T17(Borehole BH5). Again, no visible alteration or mineralization typical of uranium deposits was identified at any of the visited sites.

As mentioned in section 6.5.1, spectrometer surveys were carried out at each field location, geological observations were recorded, and photos were taken, including photos of any alteration or mineralization of the local bedrock and boulders present. Observation notes and associated spectrometer survey results are included in Table 5 below. Selected site photos appear in Figures 11 to 13, and the locations of fieldwork spectrometer surveys can be found in Figure 5. During these site visits no anomalous spectrometer survey results were returned. The highest U determination was 46.9 ppm and was sourced in road fill material. Other sites returned U values of less than 9 ppm.

Table 5: Geological Observations and Spectrometer Survey Values Within or Along Access Trails to Borehole and Test Pit Sites (see Map 1 Appendix IV for locations)

Location of Interest	Geological Observations	Uranium Mineralization	cps	K (%)	U (ppm)	Th (ppm)
T14	(Outcrop) Coarse grained biotite granite, massive, large white plagioclase megacrysts; No alteration or mineralization	None observed	301	3.6	3.2	10.7
T15	(Boulder) ~1m wide coarse grained biotite granite boulder, massive, no alteration or mineralization	None observed	293	3.7	5.6	10.4
T15 Rd	(Boulder) ~3m wide coarse grained biotite granite boulder (Road) Compact brown clayey soil with granite gravel	None observed	431 872	5.7 1.7	8.4 46.9	13.4 4.0
T17	(Subcrop) Coarse grained biotite granite, large plagioclase megacrysts with visible pyrite; many boulders around drill pad	None observed	229	3.3	2.8	6.8
T18	(Boulder) ~0.5-1 m wide coarse grained biotite granite boulders	None observed	269	3.3	3.4	10.9
T19	(Outcrop) 6-7m outcrop exposure very coarse-grained biotite granite, pinkish abundant plagioclase	None observed	290	4.3	5.2	11.6
T19 Rd	(Outcrop) Weathered, fractured coarse grained biotite granite with large plagioclase phenocrysts; otherwise massive	None observed	245	2	4	10.2
T20	(Boulder) Coarse grained biotite granite, massive, with abundant >1cm plagioclase megacrysts	None observed	169	1.2	2.5	4.8
T20 Rd	(Subcrop) Coarse grained biotite granite, biotite and plagioclase rich	None observed	255	2.6	5.2	11.3
T21	(Boulder) Coarse grained biotite granite	None observed	163	1.5	1.1	8.4
T21 Rd	(Outcrop) 3m wide weathered biotite granite outcrop, massive, large plagioclase	None observed	249	3.3	3.3	8.5

Location of Interest	Geological Observations	Uranium Mineralization	cps	K (%)	U (ppm)	Th (ppm)
	megacrysts, no fractures and no visible alteration					
T22	(Boulder) Coarse grained biotite granite >1cm plagioclase megacrysts	None observed	230	1.5	0.7	5.7
T22 Rd	(Boulder) Coarse grained biotite granite >1cm plagioclase megacrysts, no alteration present	None observed	247	3.1	2.9	9
Test Pit 1	Backfilled-excavated test pit filled with brown soil and large granite cobbles; Adjacent boulder coarse grained biotite granite	None observed	272	3	2.5	13
Test Pit 2	Backfilled-excavated test pit filled with greyish-brown soil and granite boulders	None observed	306	3.7	3	15.2
Test Pit 3	Large granite outcrop with shallow test pit on top; brown soil with small granite cobbles	None observed	233	2.9	3.4	12.5
Test Pit 4	Backfilled-excavated test pit filled with brown-grey soil and small granite cobbles	None observed	283	2.9	7	11.9
Test Pit 5	Backfilled-excavated test pit filled with brown-grey soil and small to large granite cobbles	None observed	234	2.9	3.3	9.5
Test Pit 6	Backfilled-excavated test pit filled with greyish-brown soil and granite boulders	None observed	315	3.9	5	12.2
Quarry	(Outcrop) Coarse grained biotite granite with abundant quartz and plagioclase megacrysts, weathered	None observed	283	3.2	3.5	13.7

Figure 11: View of existing quarry looking south-east. Exposed granodioritic bedrock has a background gamma radiation level of 283 cps, which is consistent with the measurements collected at other surrounding sites.

Figure 12: Photograph of a backfilled-excavated test pit filled with brown soil and large granite cobbles. Adjacent boulders can be seen and are comprised of coarse-grained biotite granite. This site had a background gamma radiation level of 234 cps.

Figure 13: View of borehole site BH3 at potential turbine location T14. An outcrop of coarse-grained biotite granite is pictured to the left and the drill hole casing to the right. White silica sand used to seal the bore hole can be seen below the casing. The entirety of the borehole pad was surveyed, and the outcrop was used to obtain the spectrometer assay. This site has a background gamma radiation level of 180 cps.

The third site visit on October 28th, 2022, was to revisit, survey and further assess with the spectrometer the anomalous radioactivity areas found during the July/August site visits. Again, the RS-125 Super-SPEC Handheld Gamma Ray Spectrometer was used to measure gamma radiation present and to obtain concentration values for K, U and Th. In this southern portion of the PDA, background values ranging from 150-375 cps were identified, which are in part higher than those observed earlier in the vicinity of the Millet Brook Deposit C1 and C2 Zones. Vehicle-based spectrometer surveying was preformed along local access roads and all anomalous radiation areas identified were investigated further and tested with the spectrometer. Mercator geologists also visited the historical Millet Brook Deposit C1 and C2 Zones at this time, which are not within the PDA, as well as the F1 and F2 uranium showings that are within the PDA.

Several areas of highly anomalous (~one order of magnitude above background or more) spectrometer survey readings were identified, with the highest being around the Millet Brook Deposit C1 and C2 Zones. At that location, gamma radiation levels measuring more than an order of magnitude above background levels were recorded. Lower, but still highly elevated radiation levels were also locally encountered in a few small areas along the forestry road network used to access the PDA. As noted earlier in this report, the association of anomalous radioactivity levels with roadbed materials may indicate that a mineralized source area of the materials exists, such as a quarry or pit, or the incorporation of mineralized, locally derived till or bedrock within the roadbed has occurred. No visible signs of alteration or mineralization typical of uranium deposits was identified at any of the visited roadbed sites. As mentioned in both section 6.5.1 and 6.5.2, spectrometer surveying was carried out at each field location, geological observations were made, and photos were taken, particularly of any alteration or mineralization of the local bedrock and boulders present. Observation notes and associated spectrometer survey results are included in Table 6 below. Selected site photos appear in Figures 14 to 15 and the locations of fieldwork spectrometer surveys can be found in Figure 5.

Table 6: Geological Observations and Spectrometer Survey Values Along Access Roads to Borehole and Test Pit Sites

Location of Interest	Geological Observations	Uranium Mineralization	cps	K %	U (ppm)	Th (ppm)
Pioneer Dr	(Road) Brown gravel	None observed	1208	0.8	75.9	9.4
	(Road) Grey gravel	None observed	4995	0.0	346	7.3
	(Road) Brown gravel	None observed	8587	0.0	532.3	16.5
	(Road) Brown-grey gravel	None observed	9692	0.0	597	17.3
	(Road) Brown-grey gravel	None observed	10425	0.0	652.4	14.8
	(Road) Brown-grey sandy gravel	None observed	7234	0.0	499	21.6
Access Road to T27	(Road) Brown-grey sandy gravel, greywacke fragments in road material	None observed	6470	0.0	450.3	16.6
	(Road) Brown-grey sandy gravel with granitic pebbles	None observed	8674	0.0	431.4	18.4

Location of Interest	Geological Observations	Uranium Mineralization	cps	K %	U (ppm)	Th (ppm)
	(Road) Brown, clayish road material with granitic pebbles	None observed	8303	0.0	609.4	15.4
	(Outcrop) Bleached weathered monzogranite, biotite rich and large feldspar clasts	None observed	324	3.7	4.4	6.3
Core Storage Pad	(Outcrop) Coarse granodiorite, abondant plagioclase	None observed	754	2	39.5	8.9
	(Outcrop) Weathered granodiorite	None observed	587	2.6	26	10.2
	(Concrete) Grey, flat concrete pad	None observed	287	1.5	2.8	6.5
	(Road) Brown gravel	None observed	6939	0	435.2	11.8
Access Road to Millet Brook C1 and C2 Zones	(Road) Road over culvert, grey-brown gravel, flowing stream beneath	None observed	14292	0	1257	28
	(Road) Grey gravel	None observed	5954	0	388.9	17.2
Millet Brook C2 Zone	(Outcrop) Granite exposure along upper section of C2 Quarry, coarse grained biotite and very coarse plagioclase, abundant hematite staining along fractures in quarry	None observed	12672	0	768.1	32.0
	(Outcrop) Lower section of C2 Quarry - Granite boulders, cobble and gravel found in abundance, all coarse-grained granite as mentioned above.	None observed	8881	0	557.1	22.4
Millet Brook C1 Zone	(Forest) Forest floor measurement along south-east mound, potential remnants of historic C1 Zone	None observed	5699	0	280	15.2
	(Forest) Forest floor measurement along west east-west trending water filled subsidence feature - potential historic workings in C1 Zone	None observed	9575	0	518.8	12.5
F1 Showing	(Boulder) Coarse-grained biotite granite boulder beside water filled subsidence feature - possible overgrown F1 workings	None observed	215	2.5	3.7	7.8

Figure 14: RS-125 Hand-held Gamma Ray Spectrometer reading of 14,761 cps; this measurement was taken along the access road to the Millet Brook Deposit C1 and C2 Zones.

Figure 15: View of possible road construction quarry near the Millet Brook Deposit C2 Zone - looking north. The area has a background gamma radiation level of 375 cps.

Figure 16: RS-125 Handheld Gamma Ray Spectrometer survey reading of 10,425 cps. This survey measurement was taken within the PDA along the main access road approximately 650 m south-east and 1.5 km south-west of the proposed T28 and T27 turbine sites, respectively.

6.4.3 Review of Geotechnical Program Drill Core and Soil Samples

In coordination with Natural Force's geotechnical consultant, DesignPoint Engineering (DesignPoint), on October 20th, 2022, two Mercator geologists visited DesignPoint's core storage facility in Bedford, NS to conduct a review of the drill core from the 2022 geotechnical drill program and soil samples from the 2022 geotechnical test pit program. A total of 8 boreholes were drilled and account for a total of 429 feet(ft) (130.76 m) of drilling carried out to collect geotechnical data for the proposed turbine installations. A total of 6 soil test pits for the proposed substation were also completed, with samples collected from each of these by DesignPoint for future laboratory analysis. The eight boreholes (Borehole BH1 to Borehole BH8) were quick-logged by Mercator staff (i.e., geology recorded, and any alteration or mineralization present noted) and core gamma radiation levels were assessed using the RS-125 Super-SPEC Hand-held Gamma Ray Spectrometer.

To carry out the review, drill core boxes were first laid out and organized from top to bottom for each hole. Photos were then taken of the core from each hole, both dry and wet, to clearly identify lithologies. Areas of particular interest were photographed further, selected examples of which appear below in Figures 17 to 22. Holes were systematically quick-logged and then surveyed top to bottom with the spectrometer. Highest and lowest gamma radiation values (cps) for cores were recorded and averages were calculated. K, U and Th concentrations were then determined for the intervals of highest gamma ray response using the spectrometer. Additionally, Mercator surveyed 20 soil samples (Figure 23) taken by DesignPoint from 6 substation test pit locations (Figure 5). All samples were surveyed, highest and lowest gamma radiation levels (cps) were recorded, and an average value determined. Concentration values for K, U and Th were obtained for the soil sample with the highest radiation level using the spectrometer. Drill logs and spectrometer survey results for the drill core appear in Appendix IV and a summary of the soil sample spectrometer results are presented in section 7.5.

Figure 17: (Top)Photograph of dry borehole BH3 core from proposed turbine location T14, with core boxes organized by depth – top in upper left. (Bottom) Duplicate photograph of BH3 core, wet. Light grey, coarse-grained biotite monzogranite with large plagioclase megacrysts predominates.

Figure 18: (Top)Photograph of dry borehole BH6 core from proposed turbine site T18, with core boxes organized by depth – top to upper left. (Bottom) Duplicate photograph of wet BH6 core. The contact between the light grey, very coarse-grained biotite granite and dark grey, fine grained biotite granite is clearly seen in the last few meters of BH6.

Figure 19: Weak alteration around fracture in the upper portion of borehole BH2 from proposed turbine site T20 - ~4.5 m (14.7 ft) depth.

Figure 20: Weathering and alteration along a fracture zone in borehole BH4 at proposed turbine site T15 - ~ 6.7 m (22 ft) depth.

Figure 21: Sharp contact between Salmontail Lake Monzogranite and the greyish-pink Gold River Leucomonzogranite in borehole BH4 at proposed turbine site T15 - ~14.5m(47.5 ft) depth

Figure 22: Example of a 3-5mm weakly magnetic pyrrhotite grain in Salmontail Lake Monzogranite - ~ 2.5m (8.2 ft) depth.

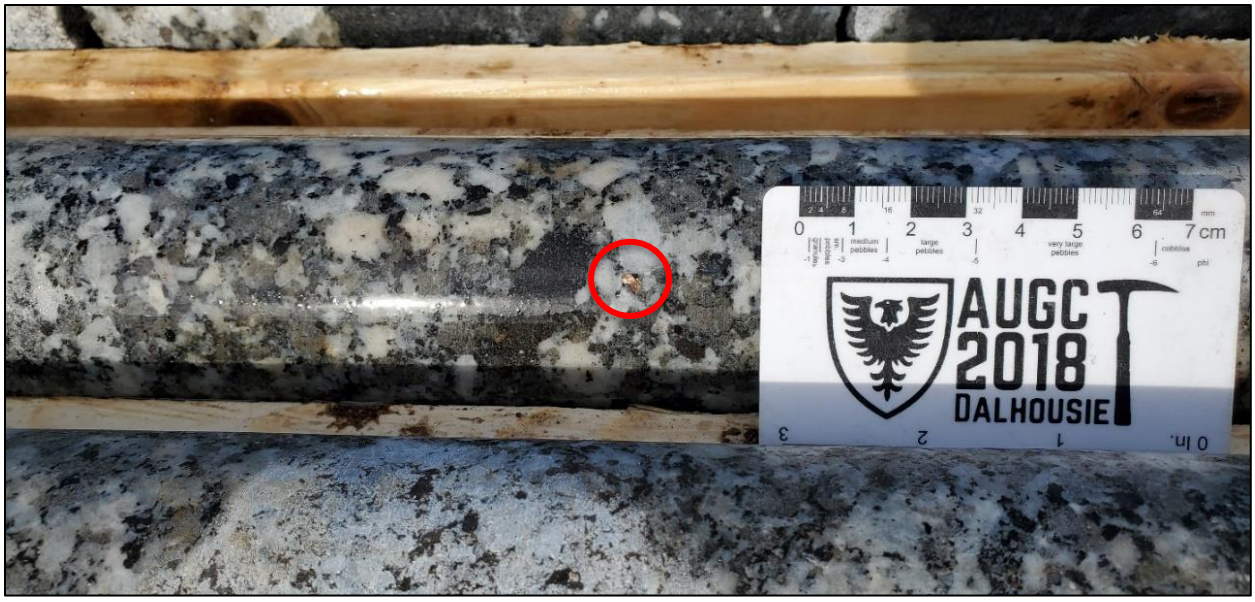


Figure 23: Photograph of the soil samples taken by DesignPoint during the test pit component of the PDA geotechnical program

7.0 Discussion of Program Results

7.1 Data Compilation

The data compilation covered a 10.5 x 11 km area extending over the PDA and includes the area of the well documented Millet Brook Deposit. There were 3,051 historical geochemical sample data points compiled for this map. Of these, 3,016 are soil sample points, 6 are lake or stream sediment sample points, 21 are till sample points, and 8 are rock sample points. Geochemical samples were reviewed for anomalous uranium concentrations and two main areas of anomalous uranium occurrence within the PDA were defined. The first and largest noted area is defined by the extent of the Millet Brook Exploration Grid that surrounds the Millet Brook Deposit (specifically, the C1, C2, and A9 uranium zones). This grid is located slightly south of the PDA's south boundary (see previous Figure 3 and Map 2 in Appendix III). Within the Millet Brook Grid there is a centrally located, north-easterly trending zone of anomalous uranium values that is interpreted as marking the contact between the Salmontail Lake Leucomonzogranite and granodiorite of the New Ross Pluton, both of which are phases of the SMB. The second distinctly anomalous area occurs within the Bennet Lake North Grid, located 2 km north-west of the Millet Brook Grid, and within 1.3 to 2 km of nearest proposed turbine sites T19, T18 and T22 (see Map 1, Appendix III).

There were 142 historical ground radiometric sample stations compiled. Of those, 124 had above background levels of gamma radiation that range from 240 to 40,000 cps. Where historical surveys overlap, it is noted that areas of anomalous radiation often coincide with areas of

elevated uranium concentration seen in laboratory results for associated soil geochemical samples. In addition to the areas mentioned above, a zone of anomalous radioactivity was noted in the southeast corner of the Millet Brook Grid that extends to Falls Lake and then into the Murphy Lake Grid. There also are anomalous radioactivity levels defined in the historical Hemlock Hill Grid, Bennet Lake South Grid and Powerline Grid areas. All grid locations are identified in Maps 1 and 2 in Appendix III. The Millet Brook grid, Bennet Lake North and South grids, Powerline Grid and Benjamin Mills grid fall within the PDA.

Two types of high resolution, modern era airborne geophysical surveys were flown over the PDA and surrounding areas, these being radiometrics and magnetics. Lower resolution surveys of the same types were also carried out during the 1970's uranium exploration period. The most recent radiometric survey was flown by Tripple Uranium Resources in 2007 and associated reporting provides calculated uranium and potassium concentration (ppm) maps. The second, also flown by Tripple Uranium in the same year, consists of a high-resolution magnetometer survey for which the vertical magnetic gradient was calculated and mapped. The associated maps for the 2007 programs were accessed and generally interpreted by Mercator staff, with resulting trend lines digitized.

In summary, 2007 radiometric survey data define presence of a pronounced potassium abundance on the fringes of the granite/granodiorite contact that trend north-easterly immediately south and southeast of the PDA. This may indicate presence of potassic alteration associated with known bedrock uranium mineralization in this area, possibly associated with the Millet Brook Deposit. Calculated uranium levels are elevated in proximity to the provincial government's Uranium Exploration Closure Area in the northern section of the PDA, as well as in its eastern section in the vicinity of Falls Lake (Cole and Janes, 2007). Map 2 in Appendix III identifies these areas of elevated background radiometric values and provides calculated uranium levels.

It is certainly possible that secondary dispersion mechanisms like surface water and groundwater movement, earthquakes, dust, and glaciers, among other phenomena mobilized near-surface uranium mineralization associated with the Millet Brook Deposit into surface media such as till, soil, and lake and stream sediments in and around the PDA. However, a full geomorphological study of the PDA, including (but not limited to) an analysis of glacial flow directions, would be required for further understanding of how this might have occurred. This type of study is not currently being recommended as part of this scope of work as uranium distribution zones have been effectively mapped using available datasets.

7.2 LiDAR Interpretation

The PDA is located entirely within the mapped limits of two intrusive phases of the SMB. Both of these have numerous north-south and northeast-southwest trending bedrock lineaments that were identified by the LiDAR interpretation. Numerous outcrops, subcrops, boulders and cobbles as well as sand and gravel of granitic origin (i.e., granodiorite and monzogranite) were observed in the PDA during the site visits and these generally confirm publicly available bedrock and surficial mapping data. The northeast lineament trends are important because the main sites of bedrock uranium mineralization identified in the area, including the Millet Brook Deposit and its associated mineral occurrences, tend to be concentrated along similar north to northeast trending bedrock structural zones within either the granodiorite or monzogranite. This is especially true along the interpreted contact between these units in the Millet Brook Deposit area.

Site visit observations determined that first-order bedrock lineaments that were interpreted across the PDA were found mostly to be prominent topographic ridges where outcrop, subcrop and float were observed. Adjacent and parallel low-lying areas may represent zones where fracturing and faulting in bedrock sequences has resulted in preferential glacial erosion in these areas of weaker bedrock. These topographically recessive zones could also mark areas of enhanced potential for occurrence of uranium mineralization similar in style to the vein and fracture associated style that characterizes the Millet Brook Deposit.

7.3 Interpreted Uranium Distribution

The results of the uranium distribution interpretation identified uranium in several areas either within or adjacent to the PDA. The largest of such interpreted areas corresponds with the main Millet Brook Deposit trend that is located approximately 600 m south of the PDA's southeast boundary, of which some associated historical bedrock uranium occurrences are mapped on the PDA. Substantially less significant zones are located in the north and northwest sectors of the PDA and adjoining the PDA to the southeast. These are associated with the 1970-80s era Bennet Lake North, Murphy Lake, Hemlock Hill, Bennet Lake South, and Powerline exploration grid areas that are identified on Maps 1 and 2 in Appendix III. However, except for very anomalous scintillometer readings taken by Mercator staff along the access roads through the main Millet Brook Deposit area and along the access road to proposed turbine site T27, most readings taken during the 2022 site visits were only slightly elevated above background levels.

7.4 Site Visits to Proposed Turbine Areas and Historical Sites of Interest

During a program period that extended from July to October 2022, Mercator staff assessed a total of 50 locations in and around the PDA using scintillometer or spectrometer equipment. In total, 10 proposed turbine locations were visited (T14, T15, T17, T18, T19, T20, T21, T22, T25 and

T27) and their respective access trails and borehole sites (where present) were traversed and assessed using the spectrometer. In addition to this, all of the project's existing access roads used to complete the field program were surveyed using the continual vehicle-based spectrometer surveying technique. Of the 50 field sites assessed, the majority did not contain any evidence of uranium mineralization, uranium associated alteration, or highly anomalous radiation levels in either bedrock exposures or overburden materials. At 8 sites within the PDA (See Figure 5), highly anomalous levels of radioactivity, defined as an order of magnitude higher than background levels, were recorded from material comprising the base of the main forestry access road system. These areas have field radiometric results ranging from 4,500 to 10,272 cps, with associated calculated metal concentrations ranging from 431.4 to 652.4 ppm U and 14.8 to 21.6 ppm Th, respectively. At this time, the source of material used in construction of the access road system is not known.

There were 9 anomalously radioactive locations identified outside the PDA boundary (See Figure 5). Five of these occur on roadways and were discovered using the vehicle-based method mentioned above. The remaining sites were discovered while traversing in the Millet Brook C1 Zone and C2 Zone areas. Spectrometer survey results ranged from 5,000 to 14,292 cps and associated metal concentrations ranged from 280 to 1,257 ppm U and 11.6 to 32 ppm Th.

Anomalous readings taken in the PDA directly correlate with the areas identified as having underlying uranium levels as mapped in the compilation study's interpreted uranium distribution layer (See Appendix III, Map 1 and 2). Specifically, along the access road to the proposed T27 site and also at the proposed turbine location itself, the anomalous uranium distribution trend follows an interpreted northeast-southwest oriented bedrock lineament with a till veneer. This same trend extends to the south-west, where it includes the Millet Brook Deposit area. It is also noted that the areas of historic soil geochemical samples within the PDA showing elevated uranium concentrations often coincide with areas of anomalous gamma radiation (See Appendix III, Map 2). This suggests that both bedrock and overburden materials could be sources of elevated uranium levels in this area.

7.5 Drill Core and Test Pit Soil Sample Review

Mercator geologists reviewed 429 ft (130.76 m) of HQ (63.5 mm diameter) drill core from 8 drill sites to create geological quick logs for each site and to measure the amount of gamma radiation present using a handheld spectrometer. Borehole sites are located at the T14, T15, T17, T18, T19, T20, T21 and T22 proposed turbine locations. Quick logs for these holes and associated spectrometer data appear in Appendix IV.

The geology was consistent in all eight of the holes. The Salmontail Lake Monzogranite was the dominant unit present but varied slightly in appearance based on colour and grain size. In its most common form, it was observed as a very coarse grained, light grey, biotite monzogranite

with large plagioclase megacrysts and minor local amounts of disseminated pyrite and pyrrhotite. This lithology commonly exhibits iron staining along fractures and a 5cm zone of feldspar alteration was observed around fractures in the upper portion of BH2. The Salmontail Lake Monzogranite was also observed as a dark grey, fine grained, biotite monzogranite with sparse plagioclase phenocrysts and 1-3% disseminated sulphides. Notably, hole BH4, which was drilled at proposed turbine location T15, crossed a contact between the Salmontail Lake Monzogranite and an interval of Gold River Leucomonzogranite. The Gold River Leucomonzogranite occurs as a greyish-pink, medium grained, granitic lithology with sharp contacts represented in this hole.

None of the 8 boreholes displayed evidence of any significant hydrothermal alteration, uranium mineralization or anomalous gamma radiation levels. Spectrometer readings on core ranged from 116 to 228 cps and averaged 143.5 to 188 cps. Associated elemental concentrations ranged from 2 to 5% K, 2.3 to 4.1 ppm U and 5.8 to 9.4 ppm Th.

In addition, 20 soil samples from previously excavated turbine site test pits were surveyed using the spectrometer. These consisted predominantly dark brown, sand and clay-rich material that returned readings ranging from 130 to 224 cps. The sample with the highest reading (TP3 BH2 26”) returned elemental concentrations of 2.1 % K, 2.9 ppm U and 6.6 ppm Th.

8.0 Conclusions

Combined results of the desktop compilation study and subsequent field studies carried out by Mercator support the following conclusions with respect to the defined scope or work:

1) Most bedrock uranium occurrences in this area of Nova Scotia occur primarily within altered, sheared, and fractured granodiorite of the New Ross Pluton, in proximity to the contact with the Salmontail Lake Monzogranite. Anomalous levels of gamma radiation detectable by hand-held spectrometer or scintillation counter instruments typically occur in association with the currently documented areas of bedrock uranium mineralization, the most prominent being the Millet Brook Deposit, located approximately 600 m south of the PDA‘s southern boundary, near Falls Lake.
2) Most of the proposed turbine sites occur within mapped limits of the Salmontail Lake Monzogranite, which typically shows low background radioactivity levels in the 150 cps to 250 cps range, as defined by 2022 site visit results.
3) The highest radioactivity levels detected during the 2022 site visits occur at locations restricted to the bases of forestry access roads that comprise the transportation network leading to the PDA from Pioneer Drive and the New Ross Road, near Leminster. This road system crosses the main Millet Brook Deposit area and includes four sites within the PDA

that show gamma radiation levels ranging from 7,234 to 10,292 cps, with associated metal concentrations ranging from 499 to 692.4 ppm U and 14.8 to 21.6 ppm Th.

4) Four areas along the forestry access road to the proposed T27 turbine site show strongly anomalous gamma radiation levels ranging from 4,500 to 8,674 cps, with associated metal concentrations ranging from 431.4 to 609.4 ppm U and 15.4 to 18.4 ppm Th.
5) Above background radioactivity levels ranging from 293-650 cps, with associated metal concentrations ranging from 5.6 to 8.4 ppm U and 10.4 to 13.4 ppm Th were detected along the main forestry road near the T15 turbine site.
6) Borehole sites located at eight of the proposed turbine locations (T14, T15, T17, T18, T19, T20, T21 and T22) were assessed and none of these sites, or drill core or soil samples associated with these sites, displayed any evidence of uranium mineralization, uranium associated alteration, or anomalous radiation levels. Core radioactivity levels ranged from 116 to 228 cps, with associated metal concentrations ranging from 2.3 to 4.1 ppm U and 5.8 to 9.4 ppm Th.

9.0 Recommendations

Based on interpreted results summarized above, it is recommended that Natural Forces continue to include systematic assessment of gamma radiation levels at all turbine sites and road access routes at each stage of site assessment, disturbance, and development. This can safely and effectively be completed using a handheld spectrometer and appropriately trained personnel. It should provide early identification of any zones of uranium mineralization hosted by bedrock or overburden materials present in these areas. If highly anomalous radiation levels are identified, appropriate mitigation plans should be developed by suitably qualified professionals to allow construction to safely proceed. The following specific recommendations addressing this approach are offered:

1) Scan all remaining planned access road routes and turbine pad locations with a spectrometer to identify any zones of above background radioactivity that could indicate proximity to bedrock and/or overburden containing uranium mineralization. This should be carried out prior to completion of any substantial amount of site preparation work.
2) Scan with a spectrometer all disturbed ground areas at turbine sites, as well as any test pit soil samples or geotechnical or other drill core samples recovered at the sites. This should identify zones of possible uranium mineralization and associated alteration, especially in the southern portion of the PDA, which is closest to the known Millet Brook Deposit, and at areas that have not yet been fully investigated during historical or present day earthworks or mineral exploration programs.
3) Carry out laboratory analysis of sample materials collected from any anomalously radioactive core intervals, bedrock zones or overburden zones identified using the spectrometer. Resulting data could be used in any future human health risk assessments, completed as part of EA or project activities.

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Appendix I: Statement of Qualifications

Michael J. Power, P.Geo.

I Michael J. Power, of Halifax, Nova Scotia, hereby certify that:

1. I currently reside in Dartmouth, Nova Scotia and I am currently employed as Director, Business Development and Senior Geologist with Mercator Geological Services Limited.

2. I am a graduate of the University of Ottawa, from which I received a Master of Science Degree (Earth Sciences) in 2014 and a graduate of Memorial University of Newfoundland, where I received a Bachelor of Science (Honours, Geology) in 2011.

3. I am a registered member in good standing of the Association of Professional Geoscientists of Nova Scotia, registration number 246.

4. I have worked as a geologist in Canada for over 10 years since my graduation from university in 2011. I have commodity experience including uranium, copper, gold, heavy oil and offshore oil and gas, including the mineralization of the type discussed in this report.

5. I have actively worked as a geologist since 2014 in the Province of Nova Scotia.

6. I am the Qualified Person responsible for the preparation of all items in this report.

7. The accompanying report is based on the independent study of the referenced geological, geophysical, and geochemical reports and maps for the properties and surrounding areas discussed therein.

Dated this 2nd Day of December 2022 in Dartmouth, Nova Scotia, Canada

"Original Signed and sealed by"

_____

Michael J. Power, P.Geo.

Haley LeBlanc, B. Sc.

I Haley LeBlanc, of Lake Echo, Nova Scotia, hereby certify that:

I currently reside in Lake Echo, Nova Scotia and I am currently employed as a geologist and GIS Specialist with Mercator Geological Services Limited.

I am a graduate of Saint Mary's University, from which I received a Bachelor of Science (Honours) degree in 2016. I also received an Advanced Diploma in GIS from the Nova Scotia Community College in 2017.

I have worked in the field of geoscience in Canada since 2018. I have field and desktop study experience with respect to the geology of mainland Nova Scotia that is pertinent to the information presented in this report.

I have actively worked in the field of geoscience since 2018 in the Province of Nova Scotia.

I contributed to the compilation project discussed in this report under the supervision of senior author, Michael Power, P. Geo.

The accompanying report is based on the independent study of the referenced geological, geophysical, and geochemical reports and maps for the properties and surrounding areas discussed therein.

Dated this 2nd Day of December 2022 in Dartmouth, Nova Scotia, Canada

"Original Signed by"

_____

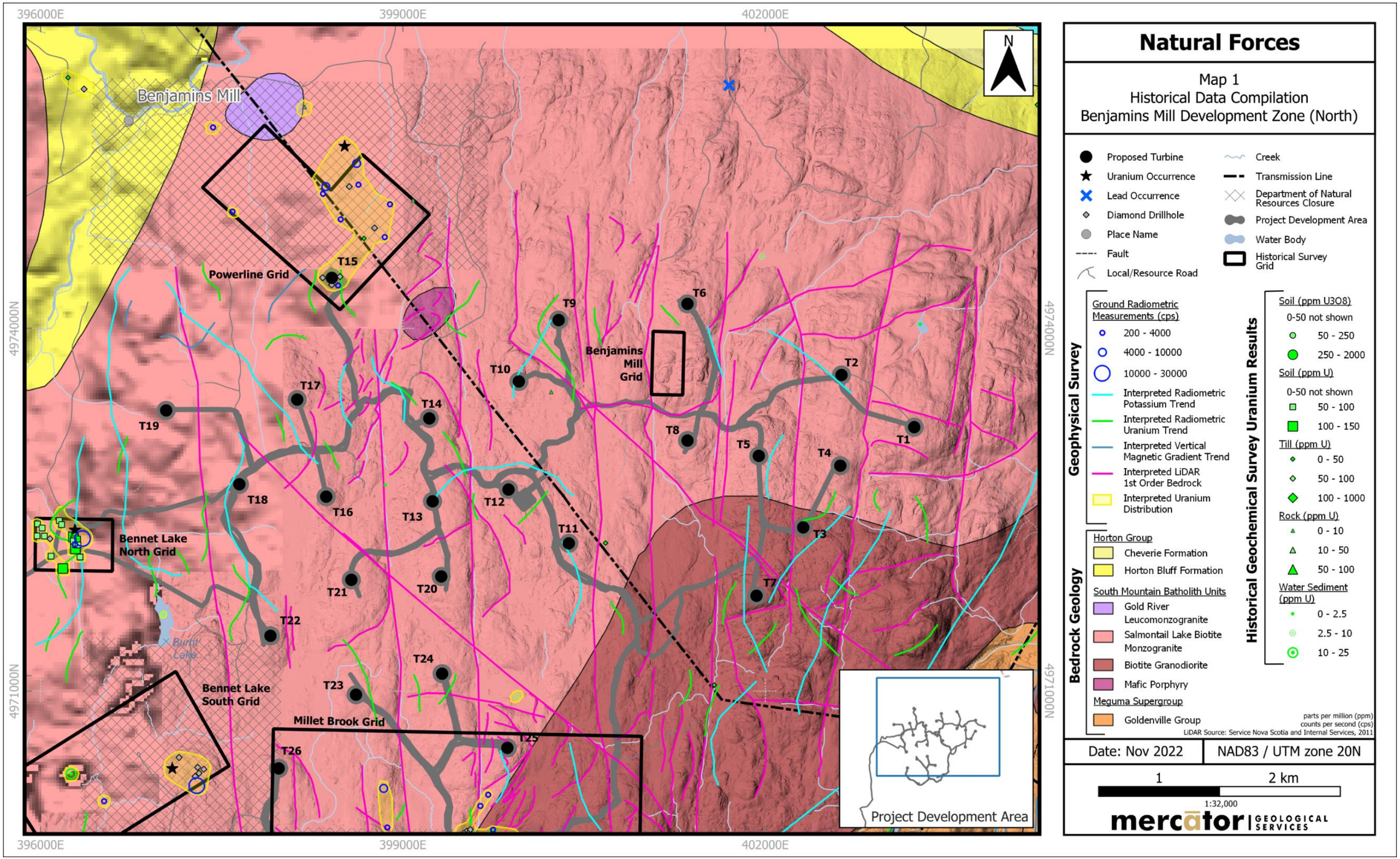
Haley LeBlanc, B. Sc.

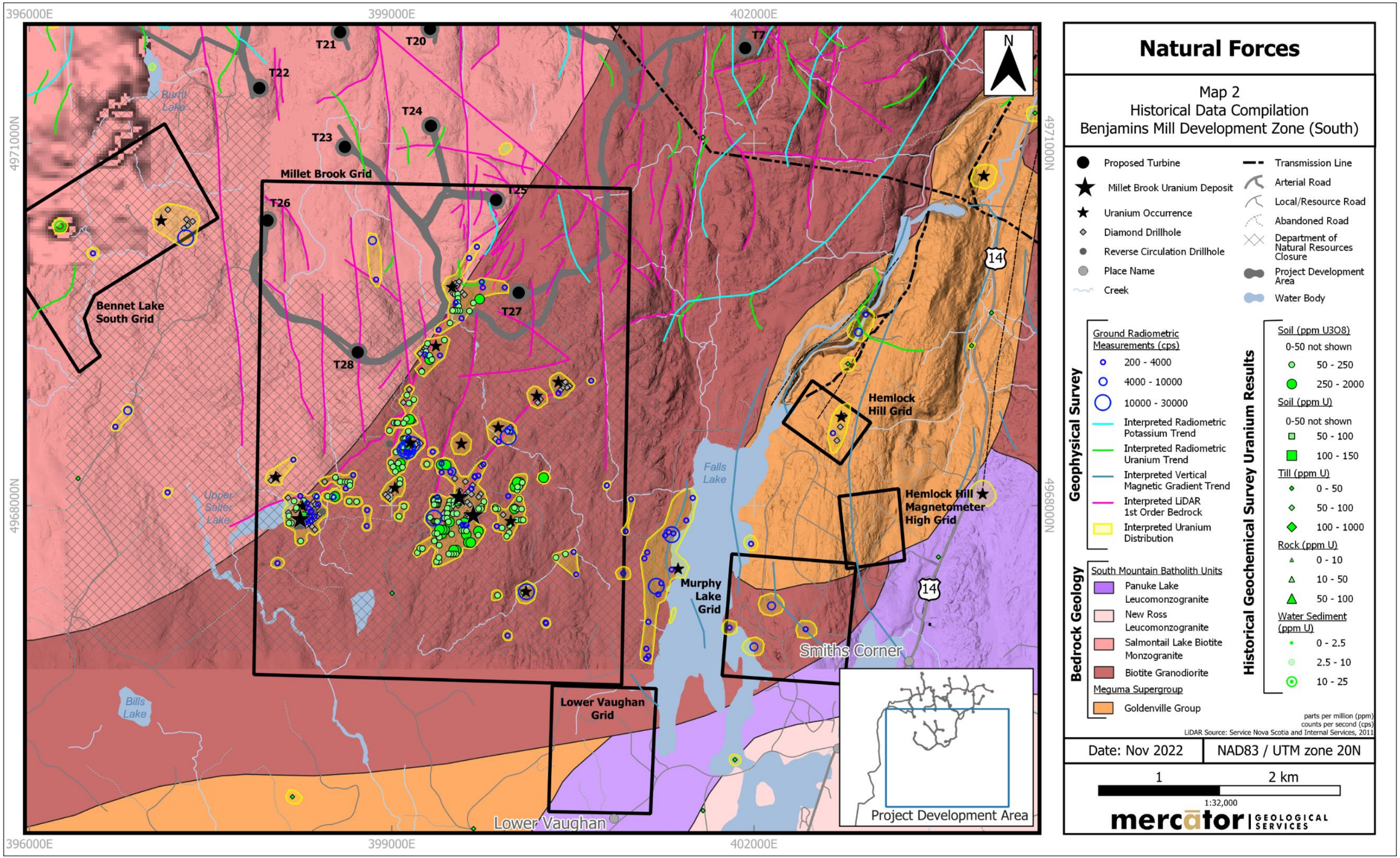
Appendix II: List of Personnel

Mercator Geological Services Personnel

Michael Power – Senior Geologist and Report Author
Haley Leblanc – GIS Geologist and Report Assistance
Courtney Fry – GIS Review and Management
Michael Cullen – Chief Geologist and Report Review

Appendix III: Geoscience Data Compilation Maps of Project Development Area


396000E
399000E
402000E
4974000N
4971000N
N
Benjamins Mill
Powerline Grid
Benjamins Mill Grid
Bennet Lake North Grid
Bennet Lake South Grid
Millet Brook Grid
Burnt Lake
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
T13
T14
T15
T16
T17
T18
T19
T20
T21
T22
T23
T24
T25
T26
Project Development Area
Natural Forces
Map 1
Historical Data Compilation
Benjamins Mill Development Zone (North)
Proposed Turbine
Uranium Occurrence
Lead Occurrence
Diamond Drillhole
Place Name
Fault
Local/Resource Road
Creek
Transmission Line
Department of Natural Resources Closure
Project Development Area
Water Body
Historical Survey Grid
Geophysical Survey
Ground Radiometric Measurements (cps)
200 - 4000
4000 - 10000
10000 - 30000
Interpreted Radiometric Potassium Trend
Interpreted Radiometric Uranium Trend
Interpreted Vertical Magnetic Gradient Trend
Interpreted LiDAR 1st Order Bedrock
Interpreted Uranium Distribution
Bedrock Geology
Horton Group
Cheverie Formation
Horton Bluff Formation
South Mountain Batholith Units
Gold River Leucomonzogranite
Salmontail Lake Biotite Monzogranite
Biotite Granodiorite
Mafic Porphyry
Meguma Supergroup
Goldenville Group
Historical Geochemical Survey Uranium Results
Soil (ppm U3O8)
0-50 not shown
50 - 250
250 - 2000
Soil (ppm U)
0-50 not shown
50 - 100
100 - 150
Till (ppm U)
0 - 50
50 - 100
100 - 1000
Rock (ppm U)
0 - 10
10 - 50
50 - 100
Water Sediment (ppm U)
0 - 2.5
2.5 - 10
10 - 25
parts per million (ppm)
counts per second (cps)
LiDAR Source: Service Nova Scotia and Internal Services, 2011
Date: Nov 2022
NAD83 / UTM zone 20N
1
2 km
1:32,000
mercator GEOLOGICAL SERVICES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399000E
402000E
4971000N
4968000N
N
T20
T21
T22
T23
T24
T25
T26
T27
T28
T7
Burnt Lake
Millet Brook Grid
Bennet Lake South Grid
Hemlock Hill Grid
Hemlock Hill Magnetometer High Grid
Murphy Lake Grid
Lower Vaughan Grid
Upper Salter Lake
Falls Lake
Bills Lake
Smiths Corner
Lower Vaughan
14
Project Development Area
Natural Forces
Map 2
Historical Data Compilation
Benjamins Mill Development Zone (South)
Proposed Turbine
Millet Brook Uranium Deposit
Uranium Occurrence
Diamond Drillhole
Reverse Circulation Drillhole
Place Name
Creek
Transmission Line
Arterial Road
Local/Resource Road
Abandoned Road
Department of Natural Resources Closure
Project Development Area
Water Body
Geophysical Survey
Ground Radiometric Measurements (cps)
200 - 4000
4000 - 10000
10000 - 30000
Interpreted Radiometric Potassium Trend
Interpreted Radiometric Uranium Trend
Interpreted Vertical Magnetic Gradient Trend
Interpreted LiDAR 1st Order Bedrock
Interpreted Uranium Distribution
Bedrock Geology
South Mountain Batholith Units
Panuke Lake Leucomonzogranite
New Ross Leucomonzogranite
Salmontail Lake Biotite Monzogranite
Biotite Granodiorite
Meguma Supergroup
Goldenville Group
Historical Geochemical Survey Uranium Results
Soil (ppm U3O8)
0-50 not shown
50 - 250
250 - 2000
Soil (ppm U)
0-50 not shown
50 - 100
100 - 150
Till (ppm U)
0 - 50
50 - 100
100 - 1000
Rock (ppm U)
0 - 10
10 - 50
50 - 100
Water Sediment (ppm U)
0 - 2.5
2.5 - 10
10 - 25
parts per million (ppm)
counts per second (cps)
LiDAR Source: Service Nova Scotia and Internal Services, 2011
Date: Nov 2022
NAD83 / UTM zone 20N
1
2 km
1:32,000
mercator GEOLOGICAL SERVICES

Appendix IV: Core Review - Quick Logs, Survey and Assay Data

DRILL HOLE REPORT

Turbine ID: T14 **Drillhole Number:** BH3 **Project:** Natural Forces

Drilling

Dip: 90
Length(ft): 54.2
Started: 05/10/2022
Completed: 06/10/2022
Geotech Log completed: 06/10/2022
Quick Log completed: 20/10/2022

Core

Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing

Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location

Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate

East: 399220
North: 4973256
Elev.: 237.1
Zone: 20N **NAD:** NAD83

Other

Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey

Survey Instrument: Scintillometer
CPS Range: 125-179
CPS Average: 152

Scintillometer Assay

K (%): 2.5
U (ppm): 3.8
Th (ppm): 5.8

LITHOLOGY REPORT

Turbine ID: T14 Drillhole Number: BH3 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
2.1	6	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: N/A	N/A
		Grain Size: Very Coarse Grained (100-200 um)	
		Colour: Light grey	
		Alteration: Iron staining surrounding fractures	
		Comment: Light grey, very coarse grained (massive),biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout	

Turbine ID: T14 Drillhole Number: BH3 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
6	54.2	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: Conformable	Graduational
		Grain Size: Coarse Grained (50-100 um)	
		Colour: Light grey	
		Alteration: Iron staining surrounding fractures	
		Comment: Light grey, coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout	
		EOH	

DRILL HOLE REPORT

Turbine ID: T15 **Drillhole Number:** BH4 **Project:** Natural Forces

Drilling
Dip: 90
Length(ft): 55.1
Started: 06/10/2022
Completed: 06/10/2022
Geotech Log completed: 06/10/2022
Quick Log completed: 20/10/2022

Core
Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing
Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location
Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate
East: 398410
North: 4974413
Elev.: 238.9
Zone: 20N **NAD:** NAD83

Other
Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey
Survey Instrument: Scintillometer
CPS Range: 125-193
CPS Average: 159

Scintillometer Assay
K (%): 2
U (ppm): 3.9
Th (ppm): 7.5

LITHOLOGY REPORT

Turbine ID: T15 Drillhole Number: BH4 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*
1.3	48.1	**Salmontail Lake Monzogranite** — **Biotite Monzogranite**

Upper Contact: N/A — N/A
Grain Size: Very Coarse Grained (100-200 um)
Colour: Light grey
Alteration: Iron staining increases downhole along fracture with intense alteration occuring @22ft
Comment: Light grey, coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout

Structure Maj. :		*Type/Angle to Core Axis*	*Comment*
22	23	Fractured	Local fracture zone, intense weathering and alteration

Turbine ID: T15 Drillhole Number: BH4 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*

48.1 50.5 **Gold River Leucomonzogranite** **Medium-Grained Leucomonzogranite**

Upper Contact:	Conformable	Sharp
Grain Size:	Medium Grained (25-50 um)	
Colour:	Pink	
Alteration:	N/A	
Comment:	Greyish-pink, medium grained, granitic intrusion with sharp contacts on either sides	

50.5 55.1 **Salmontail Lake Monzogranite** **Biotite Monzogranite**

Upper Contact:	Conformable	Sharp
Grain Size:	Very Coarse Grained (100-200 um)	
Colour:	Light grey	
Alteration:	N/A	
Comment:	Light grey, coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout	

EOH

DRILL HOLE REPORT

Turbine ID: T17 **Drillhole Number:** BH5 **Project:** Natural Forces

Drilling

Dip: 90
Length(ft): 53.8
Started: 07/10/2022
Completed: 07/10/2022
Geotech Log completed: 07/10/2022
Quick Log completed: 20/10/2022

Core

Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing

Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location

Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate

East: 398125
North: 4973416
Elev.: 256.5
Zone: 20N **NAD:** NAD83

Other

Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey

Survey Instrument: Scintillometer
CPS Range: 143-215
CPS Average: 179

Scintillometer Assay

K (%): 2.1
U (ppm): 4.1
Th (ppm): 9

LITHOLOGY REPORT

Turbine ID: T17 Drillhole Number: BH5 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
1.11	53.8	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: N/A	N/A
		Grain Size: Very Coarse Grained (100-200 um)	
		Colour: Light grey	
		Alteration: N/A	
		Comment: Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts and xenoliths present - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout, Broken Rock - Fracture zone? @ 6.8ft	
		EOH	

DRILL HOLE REPORT

Turbine ID: T18 **Drillhole Number:** BH6 **Project:** Natural Forces

Drilling

Dip: 90
Length(ft): 52.7
Started: 11/10/2022
Completed: 11/10/2022
Geotech Log completed: 11/10/2022
Quick Log completed: 20/10/2022

Core

Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing

Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location

Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate

East: 397648
North: 4972711
Elev.: 238.5
Zone: 20N **NAD:** NAD83

Other

Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey

Survey Instrument: Scintillometer
CPS Range: 148-228
CPS Average: 188

Scintillometer Assay

K (%): 2.5
U (ppm): 2.3
Th (ppm): 9.1

LITHOLOGY REPORT

Turbine ID: T18 Drillhole Number: BH6 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
2	25.3	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: N/A	N/A
		Grain Size: Very Coarse Grained (100-200 um)	
		Colour: Light grey	
		Alteration: N/A	
		Comment: Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout - potassium concentration decreasing downhole (highest first 2m)	

Turbine ID: T18 Drillhole Number: BH6 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*		
25.3	26.3	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**	
		Upper Contact:	Conformable	Graduational
		Grain Size:	Fine Grained (12.5-25 um)	
		Colour:	Dark gray	
		Alteration:	N/A	
		Comment:	Dark grey, fine grained, biotite monzogranite sparse plagioclase phenocrysts - disseminated pyrite	
26.3	40	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**	
		Upper Contact:	Conformable	Sharp
		Grain Size:	Very Coarse Grained (100-200 um)	
		Colour:	Light grey	
		Alteration:	N/A	
		Comment:	Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts	
40	52.7	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**	
		Upper Contact:	Conformable	Sharp
		Grain Size:	Fine Grained (12.5-25 um)	
		Colour:	Dark gray	
		Alteration:	N/A	
		Comment:	Dark grey, fine grained, biotite monzogranite sparse plagioclase phenocrysts - 1-3% disseminated sulphides (pyrr-py)	

EOH

DRILL HOLE REPORT

Turbine ID: T19 **Drillhole Number:** BH7 **Project:** Natural Forces

Drilling

Dip: 90
Length(ft): 53.4
Started: 17/10/2022
Completed: 17/10/2022
Geotech Log completed: 17/10/2022
Quick Log completed: 20/10/2022

Core

Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing

Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location

Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate

East: 397038
North: 4973329
Elev.: 237.3
Zone: 20N **NAD:** NAD83

Other

Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey

Survey Instrument: Scintillometer
CPS Range: 116-171
CPS Average: 143.5

Scintillometer Assay

K (%): 2
U (ppm): 3
Th (ppm): 9.4

LITHOLOGY REPORT

Turbine ID: T19 Drillhole Number: BH7 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
2.8	17.3	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: N/A	N/A
		Grain Size: Very Coarse Grained (100-200 um)	
		Colour: Light grey	
		Alteration: Iron staining surrounding fractures	
		Comment: Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout	

Turbine ID: T19 Drillhole Number: BH7 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*
17.3	18.8	**Salmontail Lake Monzogranite** — **Biotite Monzogranite**

Upper Contact: Conformable — Sharp
Grain Size: Fine Grained (12.5-25 um)
Colour: Dark gray
Alteration: N/A
Comment: Dark grey, fine grained, biotite monzogranite sparse plagioclase phenocrysts - disseminated pyrite

18.8	53.4	**Salmontail Lake Monzogranite** — **Biotite Monzogranite**

Upper Contact: Conformable — Sharp
Grain Size: Very Coarse Grained (100-200 um)
Colour: Light grey
Alteration: N/A
Comment: Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout, large sulphide @ 22.3 ft - increasing potassium concentration (pinkish-white plagioclase)

EOH

DRILL HOLE REPORT

Turbine ID: T20 **Drillhole Number:** BH2 **Project:** Natural Forces

Drilling

Dip: 90
Length(ft): 52.6
Started: 04/10/2022
Completed: 04/10/2022
Geotech Log completed: 04/10/2022
Quick Log completed: 20/10/2022

Core

Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing

Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location

Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate

East: 399315
North: 4971953
Elev.: 253.3
Zone: 20N **NAD:** NAD83

Other

Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey

Survey Instrument: Scintillometer
CPS Range: 123-197
CPS Average: 160

Scintillometer Assay

K (%): 2
U (ppm): 3.1
Th (ppm): 8.1

LITHOLOGY REPORT

Turbine ID: T20 Drillhole Number: BH2 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
3.4	11	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: N/A	N/A
		Grain Size: Very Coarse Grained (100-200 um)	
		Colour: Red-brown	
		Alteration: Iron staining extensive throughout first metre and along fractures	
		Comment: Brownish red to grey, biotite monzogranite with large plagioclase megacrysts and xenoliths present - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout	

Turbine ID: T20 Drillhole Number: BH2 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*
11	38	**Salmontail Lake Monzogranite** — **Biotite Monzogranite**

Upper Contact: Conformable — Graduational

Grain Size: Very Coarse Grained (100-200 um)

Colour: Light grey

Alteration: 5cm saussuritization? banding on either side of fractures within this section of granite

Comment: Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout

Structure Maj. :		*Type/Angle to Core Axis*	*Comment*
17	38	Fault	Fault and fracture zone, broken core - rubble in some areas, hematite staining along fractures

38	52.6	**Salmontail Lake Monzogranite** — **Biotite Monzogranite**

Upper Contact: Conformable — Graduational

Grain Size: Very Coarse Grained (100-200 um)

Colour: Light grey

Alteration: N/A

Comment: Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout

EOH

DRILL HOLE REPORT

Turbine ID: T21 **Drillhole Number:** BH1 **Project:** Natural Forces

Drilling

Dip: 90
Length(ft): 54.9
Started: 03/10/2022
Completed: 04/10/2022
Geotech Log completed: 04/10/2022
Quick Log completed: 20/10/2022

Core

Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing

Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location

Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate

East: 398575
North: 4971923
Elev.: 255.5
Zone: 20N **NAD:** NAD83

Other

Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey

Survey Instrument: Scintillometer
CPS Range: 143-203
CPS Average: 173

Scintillometer Assay

K (%): 2.4
U (ppm): 2.8
Th (ppm): 7.9

LITHOLOGY REPORT

Turbine ID: T21 Drillhole Number: BH1 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
3.7	54.9	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: N/A	N/A
		Grain Size: Coarse Grained (50-100 um)	
		Colour: White	
		Alteration: Iron staining surrounding fractures	
		Comment: White-light grey speckled (salt and pepper) appearance, coarse grained, biotite monzogranite with xenoliths present - silicification band occuring @ 14 ft, disseminated pyrite throughout	

Structure Maj. :		*Type/Angle to Core Axis*	*Comment*
49.1	49.43	Dike	Dark grey 10cm dike containing 2-5% magnetite

Turbine ID: T21 Drillhole Number: BH1 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*
		EOH

DRILL HOLE REPORT

Turbine ID: T22 **Drillhole Number:** BH8 **Project:** Natural Forces

Drilling

Dip: 90
Length(ft): 52.7
Started: 12/10/2022
Completed: 13/10/2022
Geotech Log completed: 13/10/2022
Quick Log completed: 20/10/2022

Core

Dimension: HQ
Storage: Bedford
Hole Type: DDH

Casing

Length:
Pulled: no
Capped: no
Cemented: no
Casing: Left in
Making water: no

Location

Township: Benjamins Mill
Claim No.:
NTS: NTS Sheet
Hole: SURFACE

UTM Coordinate

East: 397899
North: 1971458
Elev.: 255.3
Zone: 20N **NAD:** NAD83

Other

Contractor: Nova Drilling
Geotech Log by: Leif Mattson
Quick Log by: Michael Power and Haley LeBlanc

Scintillometer Survey

Survey Instrument: Scintillometer
CPS Range: 143-203
CPS Average: 173

Scintillometer Assay

K (%): 2.4
U (ppm): 2.8
Th (ppm): 7.9

LITHOLOGY REPORT

Turbine ID: T22 Drillhole Number: BH8 Project: Natural Forces

From (ft)	*To (ft)*	*Lithology*	
1	52.7	**Salmontail Lake Monzogranite**	**Biotite Monzogranite**
		Upper Contact: N/A	N/A
		Grain Size: Very Coarse Grained (100-200 um)	
		Colour: Light grey	
		Alteration: N/A	
		Comment: Light grey, very coarse grained, biotite monzogranite with large plagioclase megacrysts - Minor euhedral pyrrhotite (~0.5-1cm) and disseminated pyrite throughout - some sub-vertical fracturing near bottom of hole	
		EOH	