2022 YUKON MINERAL EXPLORATION PROGRAM (YMEP) REPORT AND GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL ASSESSMENT REPORT ON

THE RAINBOW PROJECT

2022 Yukon Mineral Exploration Program
Hard Rock: Target Evaluation
Project #22-032

With work performed on:

Claim Names	Grant Numbers
End of the 3--End of the 6	YE51694--YE51697
RB 20—RB 22	YD151320--YD151322
RB 24	YD1511324
RB 28	YD1511328
RB 30—RB 35	YD1511330--YD1511335
RB 42	YD1511342
RB 44—RB 48	YD1511344--YD51348

NTS Map Sheet: 105N12
Latitude 63.6298° N, Longitude 133.64262° W

Located in the
Mayo Mining District, Yukon Territory

Prepared by:
Shane Carlos, B.Sc.

Claims owned by:
Senoa Gold Corp. 100%

Work Carried out by:

SNOWLINE GOLD CORP.
Work performed:

July 26th to 27th, August 11th to 13th,
September 5th to September 10th, 2022.

Date Submitted: April 3rd, 2023.

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1 Summary

The Rainbow Property is located east of the town of Mayo, beside the Stewart River, in the Mayo Mining District and is accessible by helicopter or float plane. The project constitutes a Reduced Intrusion Related Gold target, hosted in hornfelsed argilltes and calcareous sandstones of the Jones Lake and Mount Christie Formations, in Yusezyu Formation grit units and Keno Hill quartzites. A biotite-quartz granitoid intrudes these units and may also host mineralization. The claim block consists of 146 claims with ground work conducted in 2022 on twenty-six claims with the aim of advancing an historic gold in soils anomaly, anomalous gold in rocks samples and expanding the soil grid. The 2022 exploration program lasted six days in early September with a crew of two geologists and two soil samplers gathering 37 rock samples, 75 soils, 34 humus samples and producing a geology map. A gold and copper manto was discovered with a mapped strike length of 50 m by approximately ten meters in addition to some gold bearing quartz-limonite veins in proximity to a large 330/70 trending apparent dextral strike-slip fault.

An airborne magnetics and radiometrics survey was flown in July with 92 new claims staked in August.

2 Introduction

This report has been prepared for the joint purpose of fulfilling the requirements of the Yukon Mineral Exploration Program (YMEP) funding and the requirements of the Certificate of Work filings for work conducted in 2022 on the Rainbow property.

Precision Geophysics flew 379 line km of magnetics and radiometrics over the Cliff Property on July 26th and 27th, 2022. Additional detail about the program can be found in Precision GeoSurvey's report in Appendix M-Geophysics. Three days was spent by the contractor Coureur De Bois staking an additional 92 claims to cover the margins of the magnetic anomalies and extending coversge over the Robert Service Thrust.

Snowline Gold Corp. employees left Whitehorse on the morning of September 5th, 2022, driving to the town of Mayo, Yukon for a float plane departure from the local airport. Employees, Emily Mervyn, Reanna Newsome, Jean Pautler and Shane Carlos loaded and transported supplies and ourselves via float plane in one trip to the Rainbow Property some 110 km away at a bearing of 087 Azimuth.

The float plane was unloaded on the swampy shore of a small lake to the eastern side of the property and loaded into a soon to arrive Astar B2 helicopter tasked from Snowline Gold Corporation's summer camp some 100 km to the east at the Forks airstrip. Three short trips (3.445 km one way) were needed from the lake side to camp which was set-up that morning at a high point above the valley with wired poles from the nearby forest and plastic tents set-up for sleeping.

That afternoon and through to the 10th of September personal began rock sampling, prospecting, soil sampling, and geological mapping. One area targeted was the highest gold value core of a 1.5 km long historical gold in soil anomaly and at least seven historical gold in rock samples ranging from 1 ppm Au to 8 ppm Au, (Berdahl, 2016). The core area basically straddles and

covers the Rainbow Creek and southwest facing cliffs. Soil and humus samples were taken around this core area for more detailed infill of existing sample sites and soil lines were extended to the east.

On the 10th of September an AStar B2 helicopter was again tasked from Snowline Gold Corp.'s Forks camp and the samples and gear were transported to a nearby gravel bar on the Stewart River in two round trips. In the early afternoon an Alkan Air float plane arrived for transportation back to Mayo, followed by the drive back into Whitehorse arriving that evening.

3 Property Description and Location

3.1 Location and Access

Figure 1 below shows the property location in relation to the Yukon boundary, roads and human settlements. The property is located about 20 km to the northeast of the junction of the Stewart and Hess Rivers and about 110km east of the village of Mayo, Yukon. The location by latitude and longitude for the center of the claim block are, 63.6298° N, 133.64262° W, respectively.

As mentioned in the introduction the property was accessed via float plane to a local lake which is within the eastern boundary of the claim block.



Figure 1. Rainbow Property Location. The yellow star indicates the location of the Rainbow Property in relation to Yukon roads and settlements.

Lake access is difficult however because all the shoreline is a floating boggy swamp. A few trees were placed in the bog that facilitated unloading and for the helicopter to at least rest on the bog while under power. This makeshift dock is located on the eastern side of the lake at coordinates 569720E, 7055835N in NAD83Z8 UTM.

The location of the camp for this past season is at an elevation of 1112 m above sea level and at coordinates 566306E, 7056267N in NAD83 Zone 8, (see Figure 2). The camp was refurbished with new poles wired together under a large tree.

Camp was accessed by helicopter from the local lake and is the site of a small clearing for helicopter access as there are few places to land due to the thick vegetative cover even at the highest elevations.

3.2 Claim Tenure

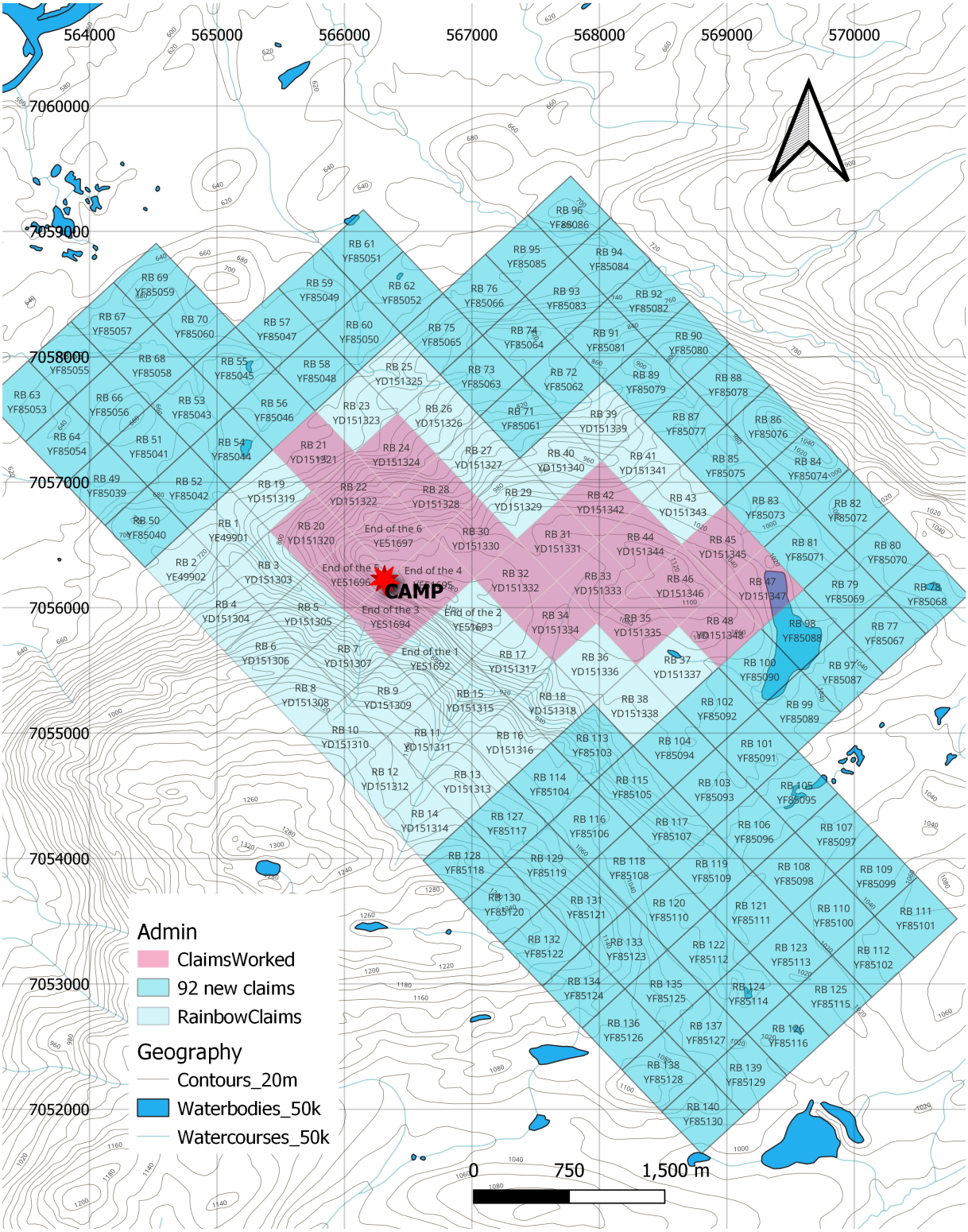


Figure 2. Rainbow Property claims in blue and red, labelled with claim names and grant numbers. Red indicates all the claims upon which ground work was conducted and all claims were worked by the airborne survey. The camp location is labelled and marked by the red star. Grid system is in meters, NAD83 Z8 UTM and elevations are labelled in meters above sea level.

The RainbowProperty includes 146 contiguous quartz claims covering 3052 hectares. The claim ownership is listed as Senoa Gold Corp. which is a subsidiary of Snowline Gold Corp., the current operator. A complete list of active claims is provided in Table 1 below and shown graphically in Figure 2, above.

Nearby competitors are Goldstrike Resources which holds claims 20 km to the south.

Table 1. List of property claims.

Count	GRANT_NUM	TENURE	STATUS	LABEL	OWNER	Operator
46	YD151336 to YD151348	Quartz	Active	RB3 to RB48	Senoa Gold Corp - 100%	Snowline Gold Corp
2	YE49901 to YE49902	Quartz	Active	RB1 to RB2	Senoa Gold Corp - 100%	Snowline Gold Corp
6	YE51692 to YE51697	Quartz	Active	End of the 1 to End of the 6	Senoa Gold Corp - 100%	Snowline Gold Corp
92	YF85039 to YF85130	Quartz	Pending	RB 49 to RB 140	Senoa Gold Corp - 100%	Snowline Gold Corp

3.3 Physiography and Vegetation

The following physiographic description in quotations is taken from Scott Berdhal's and Bill Manns 2016 Geological Assessment Report on the Rainbow Property with minor additions in [] by the author:

"[The] Rainbow property is located on the Stewart Plateau, a region of subdued, glacially sculpted, subalpine to alpine mountains between Stewart and Hess rivers, to the east of their confluence."

"The Rainbow Property straddles Rainbow Creek, which occupies a steep, linear NW-SE trending canyon 320 m deep, lined by large cliffs and active scree and talus slopes. Outside of the canyon, much of the property covers an undulating plateau (1100 m elevation), truncated along its northwestern edge by a steep drop into the Stewart River valley (to 680 m elevation). A large portion of the Rainbow Property is covered by buckbrush (dwarf birch) ingrown after a several decades old burn. Spruce-dominated boreal forest occurs elsewhere on the property, and on north facing slopes thick moss and permafrost are common. Geological exposure is generally poor outside of Rainbow Canyon, though outcropping cliffs and talus frost boils can be found."

3.4 Climate

The following climate description in quotations is taken from Scott Berdhal's and Bill Manns 2016 Geological Assessment Report on the Rainbow Property:

"The local climate is relatively dry, with nearby Mayo receiving some 31 cm of precipitation annually, mostly as rain during the summer months (May to September)."

“Temperatures range from daily highs of 10 to 30°C in the summer and can drop well below -40°C in the winter, with a high degree of variability at any time of year. The region is accessible for regular surface exploration from late May through September, though permafrost is prevalent on north-facing slopes throughout the year. The first winter snows can begin at high altitude as early as late August. Streams generally freeze around October.”

During the period of work in early September, conditions were favourable though we experienced very strong wind gusts which required the camp to be very securely fastened.

4 Exploration History

4.1.1 Prior to 2022

The following exploration history in quotations is taken from Scott Berdhal’s and Bill Manns 2016 Geological Assessment Report on the Rainbow Property and from the 2022 YMEP Application with minor modifications in [ ] by the author:

“The first mention of gold in this area is by Keele (1906), who carried out of a reconnaissance survey of the Stewart River in 1905.”

“Prospector Ron Berdahl encountered gold bearing, pyrite-rich fault zones in 1995 exposed along Rainbow Creek, along with visible gold in panned sediments.”

“Regional mapping by geologist Charlie Roots in 1996 identified previously undocumented granitic dykes exposed in the Rainbow Creek canyon. Berdahl staked the occurrence with his sons, in 1999 as the “End of the” claims and did more general prospecting, obtaining sulphide-rich grab samples from outcrop of up to 4.1 g/t Au.”

“Geologist David Caulfield visited the property on behalf of Rimfire Metals in 2000 and did a brief bit of prospecting and soils work, concluding the property had potential to host a deep-seated, intrusion-related gold system.”

“In 2004 Berdahl and his sons completed a small reconnaissance soils program, collecting 174 samples along contours at 50 m spacings. The soil geochemistry revealed zones of anomalous gold in soils (to 188 ppb Au) accompanied by and adjacent to zones of anomalous arsenic, bismuth, antimony, silver, lead, molybdenum and tungsten.”

“In 2012, 18526 Yukon Inc. completed an 182 sample soils grid at 100 m spacings over Rainbow Creek and the mineralized and anomalous areas encountered in prospecting and during the 2004 survey. The survey revealed a 1.7-km zone of elevated to highly anomalous multi-element geochemistry, with values of up to 1.27 g/t Au, >100 g/t Ag (detection limit), 7747 ppm As, 224 ppm Bi and 743 ppm Sb in talus fines and soils, coincident with the eroded edge of a 2 by 3 km magnetic high in regional magnetic data.”

“A property-wide stream sediment sampling program was also conducted by 18526 Yukon Inc. in 2012, revealing several streams with anomalous gold values and highlighting the increase in gold and pathfinders as Rainbow Creek passes through the mineralized canyon. A slight increase in arsenic values in a stream 3 km east of Rainbow Creek, at the eastern edge of the anomaly in the regional magnetic data, suggests a large lateral alteration footprint associated with the intrusion.”

“In 2015, a day visit to the property yielded an angular quartz float specimen from high on the cliffs in Rainbow Canyon, within the geochemical anomaly, which ran 8 g/t Au.”

“In 2016 a ground magnetometer survey was conducted and “revealed tight, pronounced magnetic low[s]... consistent with hornfels alteration around reduced intrusive dykes. Mapping by Bill Mann revealed a previously undocumented felsic (quartz biotite porphyry granite) stock exposed to the northeast of the main geochemical anomaly.”

“In 2021 an “Unmanned Aerial Vehicle photogrammetry survey [was flown by Drone North.] A total of 2,096 photographs were taken and combined to create high-resolution orthophoto mosaic imagery at 6.8 cm per pixel along with a digital surface model (DSM) at 13.6 cm resolution, to assist with exploration of steep areas and to serve as a baseline for geological and geochemical interpretation as well as potential drill program planning.”

4.1.2 Current 2022 Program - Snowline Gold Corp.

The airborne magnetic and radiometric survey was flow on the 26th and 27th of July covering the entire claim block and some additional areas to the NE off of the claim block but as a contiguous survey. A total of 379 line km was flown covering 42.8 km^2 with 2km of lines flown outside the claim boundaries for survey efficiency, (Hanlon, 2022).

The full report from Precision GeoSurveys written by Jen D. Hanlon is provided in Appendix M and describes the survey in much more detail. Figure 3, next page shows the outline of the survey in relation to the property claims.

Additional claims were staked by the contractor Coureur De Bois over three days from August 11th to the 13th . The new claims cover the airborne magnetics which trended off-claim and to cover more of the Robert Mountain Thrust to the southeast.

The 2022 field work by Snowline Gold Corp. employees was split between extending soil sample coverage towards the northeast and further defining the Rainbow Creek cliffs with 1:2000 scale mapping and soil, humus and rock sampling. Thirty-seven rock samples, 75 soils and 34 humus samples were taken. A detailed 1:2000 scale map was produced in the field by Shane Carlos with some point data additions from Jean Pautler at a later date. A total of 138 structural measurements were taken.

A full day was spent infilling the 2014 soil grid around the Rainbow Creek cliffs as was previously recommended in a 2014 YMEP application by Scott Berdahl. Greater than 1m thick humus and/or peat layers were encountered by Emily Mervyn and Reanna Newsome so the decision was made to collect these vegetative samples when soil was unavailable.

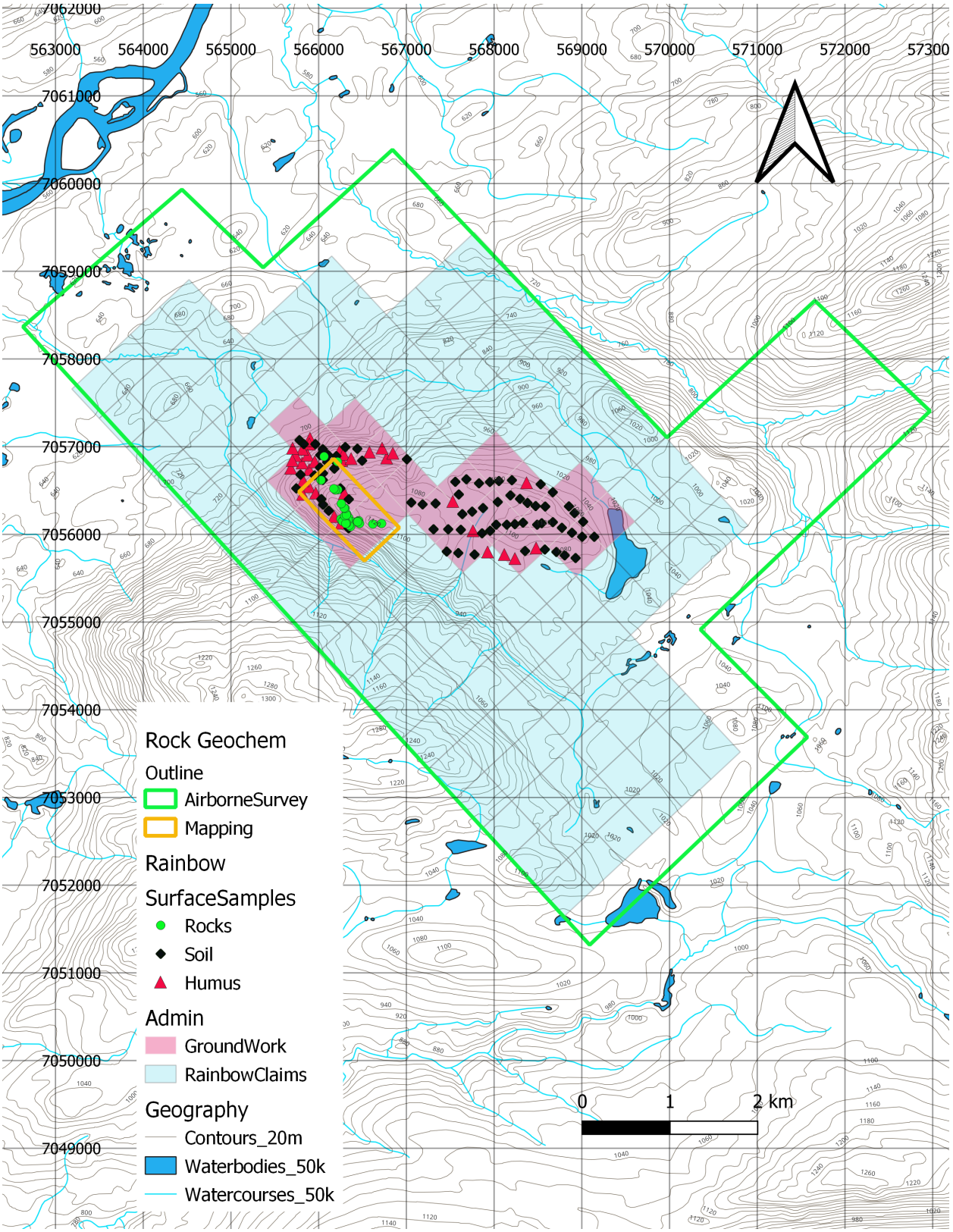


Figure 3. Location boundary of airborne survey, mapped 1:2000 area, and rock, soil and humus sample locations. Grid system is labelled in meters and is in NAD83Z8 UTM. Refer to Appendix L Maps for a more legible scale view.

Soil and humus were collected in small paper 4” by 6” bags and rock samples were placed in tough plastic sampling bags and tied off with flagging tape or zip-ties. Samples were organized in camp and placed into larger white ‘rice’ bags and sent to Whitehorse for initial storage at the author’s home at 57 Teslin Rd. Samples were stored securely with security ‘breakable’ zip ties placed on the rice bags until later being dropped off at the ALS prep lab in Whitehorse. Humus samples were dried in Whitehorse and later sent to Actlabs in Ontario, Canada.



Image 1. Typical humus/peat type vegetation sample from the 2022 survey.

Four 11x17 inch map sheets (R1 to R4) were worked on using polyester transparencies overlayed on a paper base map. The base map has 2m contours generated from the digital elevation model (DEM) (produced by Venessa Bennett’s photogrammetry in 2019) and historical gold in soil anomalies. Two polyester transparencies were used: one for the raw data collection and interpretation and one for an additional layer of interpretation and simplification of the important geological structures.

With a scale of 1:2000 the area of each map sheet covered about 800m by 530m though not all the area was mapped. In total about 1,000m by 550m was actually visited by traverses and has data recorded for it on the map (see yellow outline in Figure 3). Coloured pencils and Sakura Micron 005 Archival Ink pens were used for map data recording.

Mapping was hindered by the very steep cliffs that often sub-paralleled steeply inclined bedding, making progress slow. For example, it was easy to spend an entire afternoon in a limited area due to the amount of rock face available to study but of limited lateral extent and the difficulty traversing it.

Handheld GPS units were used for all location data on the map and sample sites. Locations were recorded in the GPS units as well as in notebooks or assay tag books. Location data on the map was assisted by the high resolution DEM when features could be identified, however most of the data would be handheld GPS accuracy which is in theory ± 3m. Though some of the data was collected on a steep cliff face there was a clear view to the south with a broad valley allowing for excellent satellite reception.

Rock and soil samples were sent to ALS Minerals sample preparation lab in Whitehorse and analyzed for gold and a 48 element suite. Samples were prepared by crushing and by a 30 g fire assay digestion followed with atomic absorption spectroscopy. For the multi-element suite, the samples were crushed and then digested with 4-acids and an induced coupled plasma was

analyzed using mass spectroscopy. The codes used can be referenced in Appendix K-Assay Certificates.

Humus samples were sent to Actlabs in Ontario and analyzed for gold and a 62 element suite. Vegetation samples were dried and macerated in a Retsch cutting mill with internal 1 mm sieve and digested in aqua regia solution at 95°C for 2 hours. The resultant sample solutions were diluted and analyzed via induced coupled plasma on a mass spectrometer. Lab duplicates were digested and analyzed every 14 samples and the instrument was re-calibrated every 69 samples.

No standard and blank insertion into the sample sequence was done by Snowline Gold Corp. besides the internal laboratory insertions for all sample types.

5 Geology

5.1 Regional Geology and Mineralization

5.1.1 Regional Geology

The regional geology around the Rainbow Property is described as follows in quotations by C. F. Roots (1997) in his study of the Upper Paleozoic strata for the northwestern Lansing map area (105N):

“The Lansing map area lies near the northern edge of the Selwyn Basin, which is the outer part of the Lower Paleozoic miogeocline of ancestral North America. Stratigraphic units in the Lansing area are summarized in [Table 2]. The Proterozoic off-shelf depositional environment accumulated grit succeeded by shale and chert. This regime was disrupted by Late Devonian block faulting, deposition of Earn Group turbidites and fanglomerates; structurally elevated areas were eroded. The subsequent clastic shelf regime included a sandstone, the Keno Hill quartzite, which form a 500 km. long, relatively narrow regional marker. In Middle Jurassic time the sedimentary succession was deformed by folds and thrust faults, perhaps resulting from collision and transpression with far-traveled terranes 300km southwest. The turbidite basin continued into Early Carboniferous time.”

“Jurassic and Early Cretaceous deformation of the Selwyn Basin is by tight, upright to overturned folds of competent rocks and echelon, fault imbrication of incompetent strata, all at sub-greenschist metamorphic grade. In general the structural style suggests thin-skinned contractions and underlying, relatively flat regional detachment faults. Deformation structures are cut by the Tombstone plutonic suite, whose 92-94 Ma (Late Early Cretaceous) age constrains the end of regional deformation.”

“The 1996 mapping in northwestern Lansing established the location of Robert Service Thrust map area. The Yusezyu grit (Hyland Group: PCH) is contorted in east- and west-plunging cylindrical and box folds in the hanging wall of the Robert Service Thrust. A 15km long strip of Hyland Group strata is separated from the larger area of Hyland Group by a belt of Keno Hill

and younger rocks. This strip is bounded on its south side by a vertical, northwest-trending fault. The northern contact, with Earn Group conglomerate, must be a fault and may also be a segment of the Robert Service Thrust. Thus the strip of isolated Hyland Group is interpreted as a klippe preserved by later downfaulting. The late northwest-trending faults were predominantly dextral transcurrent faults, and were traced southeastward about 9km of dextral offset is indicated."

5.1.2 Regional Mineralization

The Rainbow Property is within the Tombstone gold belt consisting of gold-bismuth-tungsten-tellurium-arsenic bearing quartz veins in felsic intrusive rocks. This broad area covers a strip across the Yukon from the NWT border at the northernmost road access on the Nahanni Range Road, across to the Rainbow Property, through to Mayo and on to Dawson City.

5.2 Property Geology and Mineralization

5.2.1 Property Geology

Property geology is described in quotations, as follows by C. F. Roots (1997):

"The covered surface trace of the Robert Service Thrust trends northwest, roughly parallel to Rainbow Creek on its south side of the valley. The footwall Earn Group, consisting of black mudstone laced with white quartz and lesser brown phyllite which results in iron-stained seeps, is exposed in the floor of the steep-walled creek. The northeast side is brush-covered talus surmounted by 200m high vertical, rusty weathering green, grey and brown interlaminated siltstone and fine sandstone, commonly silicified, occurs at the west end and atop the cliffs. This rock, considered part of the southern belt of the green-grey phyllite has a map width of 2km to a possible stratigraphic contact with Keno Hill quartzite. Gradations between siltstones and fine sandstone laminae indicate upright bedding. Because adjacent Keno Hill quartzite forms an anticline structure, the grey-green phyllite probably overlies it. The cliff, when viewed from a vantage point across Rainbow Creek, reveals a reticulate pattern of granitic dykes, up to 30m wide, vertically and horizontally on the face. Talus blocks consist of medium-grained, leucocratic, muscovite granite, and contain up to 1% interstitial sulphide blebs (probably pyrrhotite). The granite has not been described or shown on earlier maps. Because the exposure is steep, the plan view of this intrusion is minute, probably 1300m long."

Period or Epoch	Formation (if established)	Map unit and lithology	Ref. to nearest described locality
Late Early Creatceous	Tombstone Intrusions	**Kr** rhyolite dykes, biotite felsite **KT** quartz monzonite, granodiorite	
		Clastic Shelf	
		(Middle Carboniferous to Triassic)	
Triassic	Jones Lake Formation	**TJps** slate, sandy slate, limestone, calcareous black shale, micaceous, calcareous siltstone, sandstone; grey, non-calcareous shale	Roots et al. 1995
		unconformable	
Mid.Triassic	Mafic intrusions	**Td** metadiorite, gabbro	Mortensen and Thompson, 1990
		intrusive contact	
Permian	Mt. Christie Formation	**PMC** green-grey siltsone, argillite, chert	Roots et al., 1995
		conformable	
Permian-Carboniferous		**CPp** sandstone. argillite, dark grey slate interbedded with laminated quartz sandstone and thick bedded fine-grained quartzite, buff green phyllite.	Roots et al., 1995
Carboniferous	Keno Hill Quartzite	**MKH** quartzite, carbonaceous schist, limestone	Abbott, 1990a
		MKv chloritic phyllite	Turner and Abbott, 1990
		unconformable	
		Turbidite Basin	
		(Middle Devonian to Middle Carboniferous)	
Devonian to Carboniferous	Earn Group	**DME** - black shale, sandstone, chert grit, chert pebble conglomerate,minor limestone, siltstone and mudstone **DMp** - silicious slate, carbonaceous schist, metachert and meta-conglomerate **DMv** - quartz-sericite-chlorite phyllite, quartz-feldspar augen phyllite **uDc**- thick bedded coralline limestone	600 ? Abbott and Turner, 1990 Gordey, 1990a 200; Gordey, in prep
		unconformable	
		Selwyn Basin	
		(Late Precambrian to Middle Devonian)	
	Road River Group		
Silurian	Steel Fm.	**Ss** - grey-green siltstone, chert, minor carbonate	40; Roots et al., 1995
		conformable	
Ordovician to Early Devonian	Duo Lake Fm./ Elmer Creek Fm.	**OSD** -black, brown argillite, grey and black chert, dark siltstone, minor quartz arenite	~200; Gordey and Anderson, 1993 / Cecile, in press.
		unconformable	
Mid. Cambr. - Ordovician	Gull Lake Formation	**COG** - olive and brown siltstone, black argillite and shale; grey dolostone or carbonate breccia at base, minor grey quartzite	100-300; Roots et al., 1995
		conformable	
		Hyland Group (Narchilla, Algae Lake, Yuseyzu formations)	
Late Prot. to Mid. Cambr.	Narchilla Formation	**PCN** - Maroon argillite, grey and brown slate, minor quartz sandstone interbeds	50 ? Roots et al., 1995a,b
	Senoah mbr.	**PCNS** - siltstone, sandstone...	? Cecile, in press
	Algae Lk.Fm.	**PCAL** - Limestone...	? Cecile, in press
Late Proterozoic	Yusezyu Formation	**PY**- Sandstone, grit, psammite, metaconglomerate, chloritic metasiltstone; carbonaceous phyllite or graphitic slate near base; grey limestone, marble lenses near top	3000+ ; Roots et al., 1995a, b

Table 2 – Unit descriptions. From Roots, 1997.

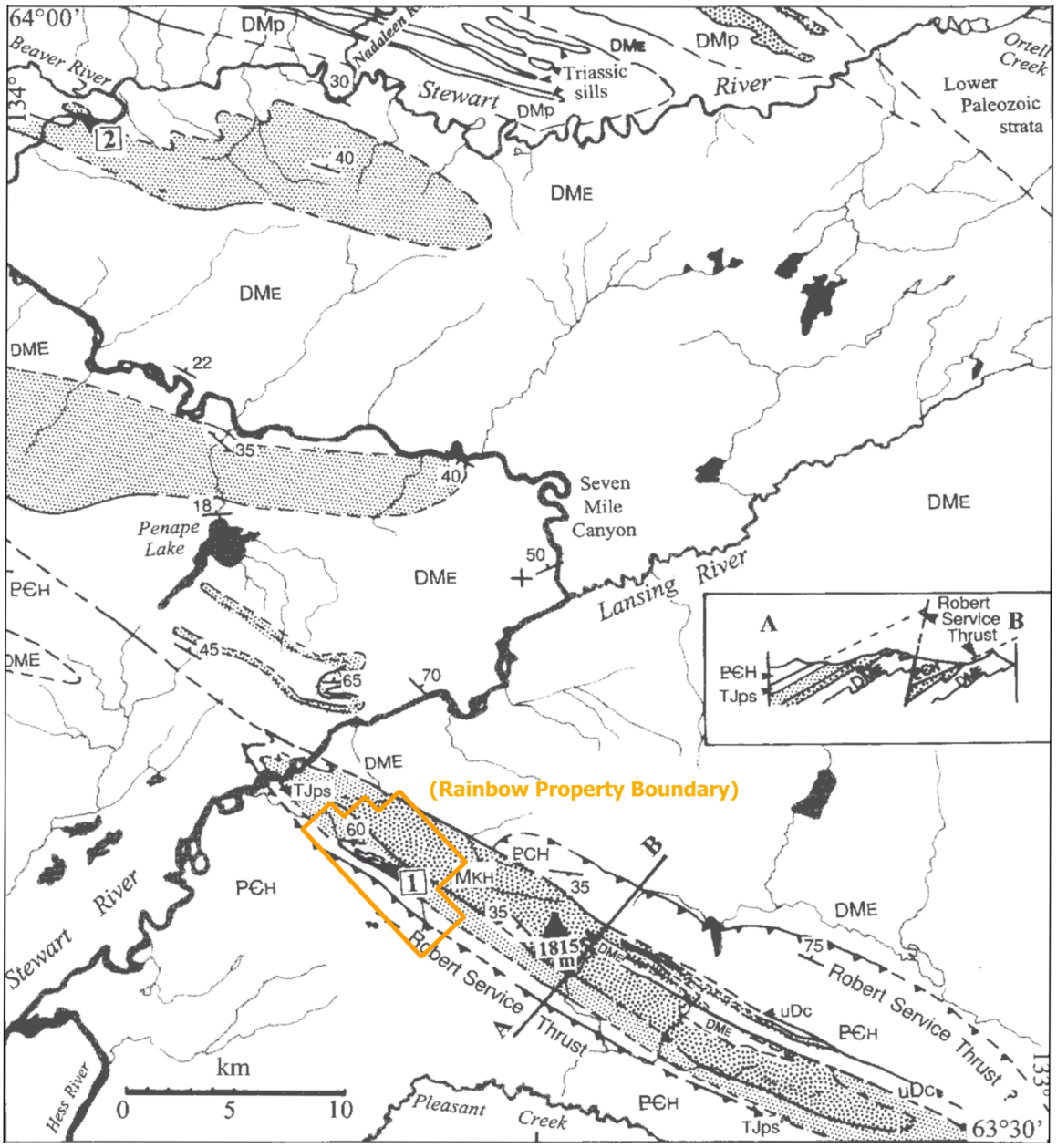


Figure 4. Geology Map of the Lansing map area. From Roots, 1997. The Rainbow Property is shown by the orange outline.

5.2.1 Property Mineralization

The following property mineralization in quotations is taken from the 2022 YMEP Application:

"Grid soil geochemistry completed over the property has revealed a 1 km by 300 m zone of high gold values (to 1.27 g/t) accompanied by anomalous bismuth, tellurium and tungsten flanked by zones of anomalous arsenic, antimony and silver. Prospecting returned shear-hosted sulphide-bearing outcrop samples grading 4.1 g/t Au and locally-derived angular quartz float samples running 7.98 g/t Au."

6 Results

6.1 Geological Mapping

Map Sheets R1 through R4 are shown in original 1:2000 scale in Appendix L Maps. Their location and the amount of mapping on them is shown in Figure 5 below. The orange outline is the same outline shown in Figure 3 which is the mapped area. Most of the mapping occurred at the intersection of the four sheets.

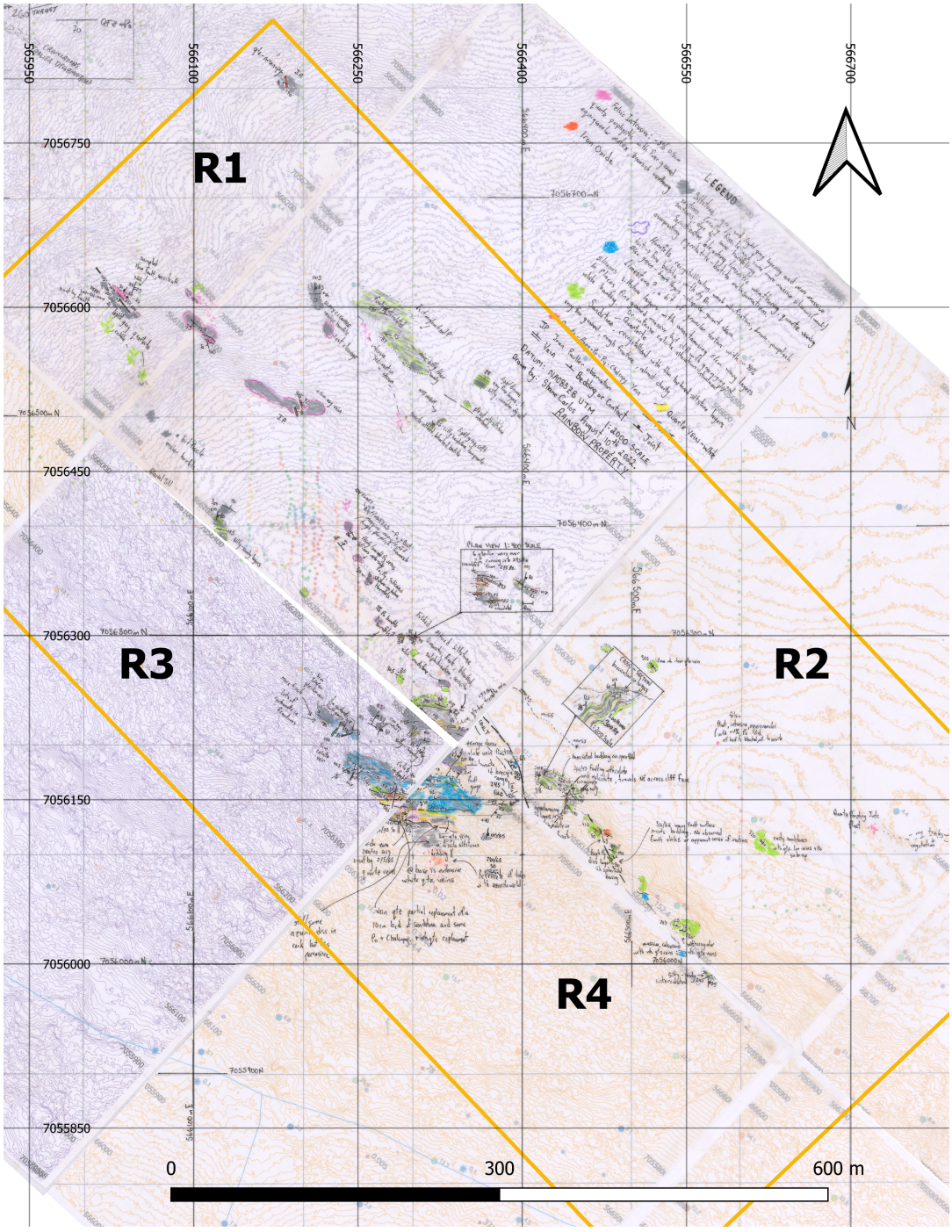


Figure 5. Mapped Area of Map Sheets R1 to R4. The orange outline indicates the area covered by mapping.

Rock types encountered included a biotite-quartz-eye porphry, quartzite, biotite hornfels, calc-silicate hornfels and their lower metamorphic grade phyllite equivalents, (see Table 3 below).

Mineralization included a gold-copper sulphide disseminated manto, gold bearing quartz-arsenopyrite veins, and gold bearing quartz-limonite veins. There are some non gold mineralized veins as well consisting of quartz-chlorite-epidote-chalcopyrite(minor)-pyrrhotite veins.
The copper-gold manto does have bedding parallel quartz-limonite veins as well but there is definitely a replacement style that is represented by the relatively even distribution of copper minerals in the phyllite, (see section 6.2.1 for more details on this mineralization).

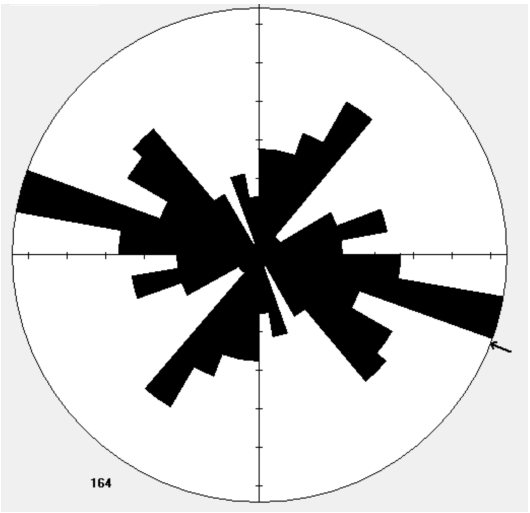
Very strong calcite alteration was seen in fault zones, as disseminations in sandstone/quartzite, fractures and veinlets. The calcite alteration was so strong that the author initially thought the unit was a calcareous sandstone but upon further examination it appeared to be more restricted to veinlets and disseminations. The blue colour on the map in Figure 5 above shows the area initially being mapped as calcareous sandstone but now represents calcite alteration possibly related to the immediate proximity of the copper-gold manto and veins below it in yellow-orange.
Additional alteration is from fault hosted sericite overprinting in the biotite quartz porphry and chlorite-epidote associated with quartz veins.

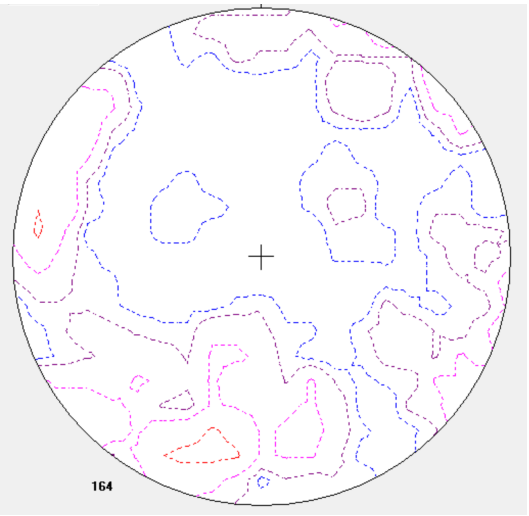
Table 3. Lithology and Veins

#	LITHOLOGY, VEINS, MINERALIZATION	DESCRIPTION
1	Felsic Intrusive	~5% 5mm quartz eye porphyritic with finer grained equigranular biotite, feldspar matrix
2	Quartzite	Light grey to brown, recrystallized sandstone with thin hardened siltstone layers, finely intercalated and crenulated
3	Biotite Hornfels	Brown-purplish recrystallized mudstone with very fine grained pyrrhotite
4	Calc-Silicate Hornfels	Green and brown layers within a metamorphosed silty sandstone with calcite veinlets
	Phyllite to siltstone and silty sandstone	These units had a lot of alteration , mineralization and surficial oxidation, masking the metamorphic grade
5	Quartz-Limonite Vein	Quartz-limonite
	Quartz-chlorite-chalcopyrite-pyrrhotite vein	As the name implies
6	Copper-Gold Manto	Acid leached orange, sandy, altered metasedimentary, with malachite

A total of 164 structural measurements were taken by the author and geologist Jean Pautler, including measurements of 62 beds, 28 faults, 29 veins, 37 joints and fractures, 5 fold related features and three intrusive contacts. There is some overlap in the orientations of these different features such as veins and bedding that are parallel in certain outcrops.

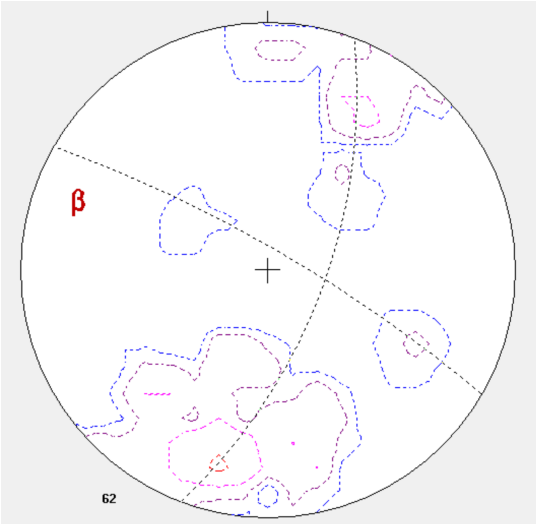
The structural data is summarized in the rose diagram and stereonet below. Both show the same full data set of 164 measurements.





Figures 6 and 7. All structural data plots. Rose diagram showing the frequency of structural trends. Noting in north quadrants only, there are strong frequencies at 285Az, 310Az, 034 Az, and 075 Az. A stereonet of all contoured points to planes data is to the right for reference. Red and pink are higher data density areas. The 285Az data frequency represents bedding parallel veins and bedding, the 310 Az trend indicates cleavage, faults and bedding, and the 075 Az trend indicates bedding, thrust faults, faults, veins and contacts with biotite quartz porphry.

The quartzite appeared sheared or is crenulated-intercalated silty layers and several anticlines were mapped, trending towards about 300Az, see Image 2, next page. Two fold axis were



indicated by bedding (Figure 8), one that is trending towards 290Az, plunging 20 and another one to the SW quadrant at about 210-20. Independent measurements of fold hinges vary from these stereonet calculated trends and plunges, for example fold hinges measured at 240 Az by Jean Pautler. Veins are a bit scattered but their appears to be a set that is steep bedding parallel at 280/60 and two others that are at 345 Az and 075 Az.

The veins and beds that are gold and copper mineralized are shown in Figure 9, (next page) and tabulated in the section on geochemical sampling, Table 3.

Figure 8. Contoured poles to planes of bedding surfaces. Notice the two dashed great circles showing the best fits for these two bedding populations for folding. The trend and plunge of these two hinges are 290-20 and 210-20

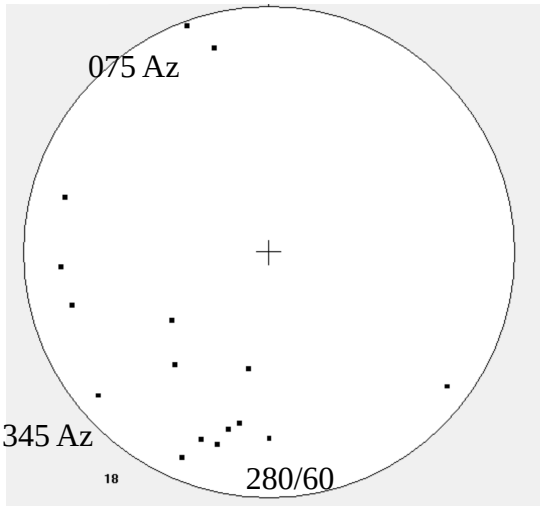


Figure 9. All gold bearing structures, plotted as poles to planes. As noted in the text there are roughly three clusters of orientations which are 280/60 and two others at 345 Az and 075 Az. The 280/60 data cluster is the approximate orientation of the gold-copper manto. The 280 Az direction is related to F2 folds and faults and the 345 Az direction is arsenopyrite veins that are s[acially associated with the biotite hornfels and biotite-quartz porphyry.

A large calcite and iron-oxide bearing fault zone oriented at 330 Azimuth was also encountered in the middle of the mapped area and is shown in Figure 17 in Section 7 on Discussion and Interpretation.



Image 2. Highly deformed Keno Hill Quartzite. Field of view is about 40cm across and facing about due north. The fold hinges in the image were measured at 300–40.

6.2 Geochemical Sampling

6.2.1 Rock samples

All 37 rock sample locations and gold values are plotted in Appendix L- Geology and Geochmistry Maps and are tabulated in Appendix E and Appendix H -Rock Assay Tables. Rock sample highlights are listed below in Table 4. Four samples were above 1 ppm gold and 18 samples were greater than 200 ppb gold. The samples in Table 4 are sorted from highest gold value to lowest.
Four elements have a fairly close relationship to gold and are also provided in the table. Tellurium is the closest to a linear relationship, with sequentially higher values with higher gold values. Bismuth, copper and arsenic are also good pathfinders but are not correlated exactly with increasing gold values.

Table 4. Rock Sample Highlights

SampleID	Source	Structure	Az	Dip	Auppm	Teppm	Bippm	Cuppm	Asppm
ST077931	Outcrop	shear	075	75	1.57	7.81	91.8	580	542
ST075841	Outcrop	fracture/ fault	345	72	1.56	2.95	407	972	10000
ST075838	Float				1.44	8.65	286	539	47.2
ST078249					1.16	5.58	19.95	145.5	9.93
ST077923	Outcrop	bedding	285	70	0.96	5.86	80	805	11.7
ST075829	Outcrop	fault	217	80	0.89	3.79	39.2	245	50.7
ST075837	Outcrop	fault	15	75	0.82	1.78	112.5	726	5.15
ST077922	Outcrop	vein	285	70	0.73	4.23	48	2120	37.3
ST077918	Outcrop	vein	290	70	0.73	2	16.1	1415	148
ST075833	Outcrop				0.64	3.07	37.8	384	1.81
ST077925	Outcrop	vein	280	60	0.5	2.93	32.7	1580	21.7
ST075836	Outcrop	few sheeted veins	356	74	0.41	3.76	97.7	2010	7.17
ST075828	Outcrop	fault	217	80	0.4	2.11	22.7	1360	10.3
ST077926	Outcrop				0.39	1.87	19	1805	16
ST077919	Outcrop	bed	270	65	0.33	1.34	19.6	326	25.4
ST077930	Outcrop	vein	070	88	0.3	1.22	15.85	162	24.4
ST077924	Outcrop				0.26	1.94	19.85	736	5.55
ST078250					0.2	2.4	115.5	168	68.4
ST075830	Outcrop	cleavage or strong fracture set	293	80	0.18	1.46	80.4	464	3.87
ST077920	Outcrop	vein	280	40	0.14	0.8	9.52	448	387
ST075839	Outcrop	draw	320		0.13	0.89	12.35	84.7	49.6

Rock sample ST077931 was the best gold result at 1.57 ppm Au from a sheared bedding plane, see Image 3 below. The second best gold sample is ST077931 from an arsenopyrite rich vein, see Image 4, below.



Image 3. Sample ST077931. Photograph of the 1.57 ppm Au rock sample.



Image 4. Sample ST075841. Photograph of the 1.56 ppm Au rock sample. The vein slabs consist predominantly of arsenopyrite, quartz and chalcopyrite. The vein thickness is about 1cm.

A lower grade gold occurrence with apparently well distributed gold copper is seen in continuous chip samples ST077922 to ST077926 and referred to as a manto for this report. The mineralization



Image 5. Gold-copper manto. Samples ST077922-924 are seen above in bags between the sample ribbons. Samples are 1.9m long and sample numbers increase from up-slope then sampled towards downhill or 212 Azimuth (along the line of ribbons and sample bags).



Image 6. Sample ST077922, close-up, field of view is about 15cm across. Clay altered and acid leached meta-siltstone.



Image 7. Sample ST077925, close-up, showing some malachite staining.

Table 5. Selection of continuous chip sampled outcrop re-ordered from Table 4.

SampleID	Source	Sample Length (m)	Structure	Az	Dip	Auppm	Teppm	Bippm	Cuppm
ST077922	Outcrop	1.9	vein	**285**	**70**	0.73	4.23	48	2120
ST077923	Outcrop	1.9	bedding	**285**	**70**	0.96	5.86	80	805
ST077924	Outcrop	1.9				0.26	1.94	19.85	736
ST077925	Outcrop	2.65	vein	**280**	**60**	0.5	2.93	32.7	1580
ST077926	Outcrop	4.9				0.39	1.87	19	1805

is shown in Table 5, above and partly in images 6 and 7, above. The mineralization was seemingly disseminated based upon the sparsity of veins and the pervasive oxidation and acid leaching of the rock, leaving some of the rock with a sandy texture with white clay alteration. The spacial orientation of these particular chip samples are shown in Figure 10 below and should be accurate to within about 0.5m to the start of the sample line at ST077922. The samples were re-plotted to match the outcrop seen in the <20cm resolution of the orthophotos flown by Drone North in 2021.

The weighted average in gold calculates to 0.524 ppm over 13.25 m, not accounting for the skew in the sample lines or the dip of the mineralization.

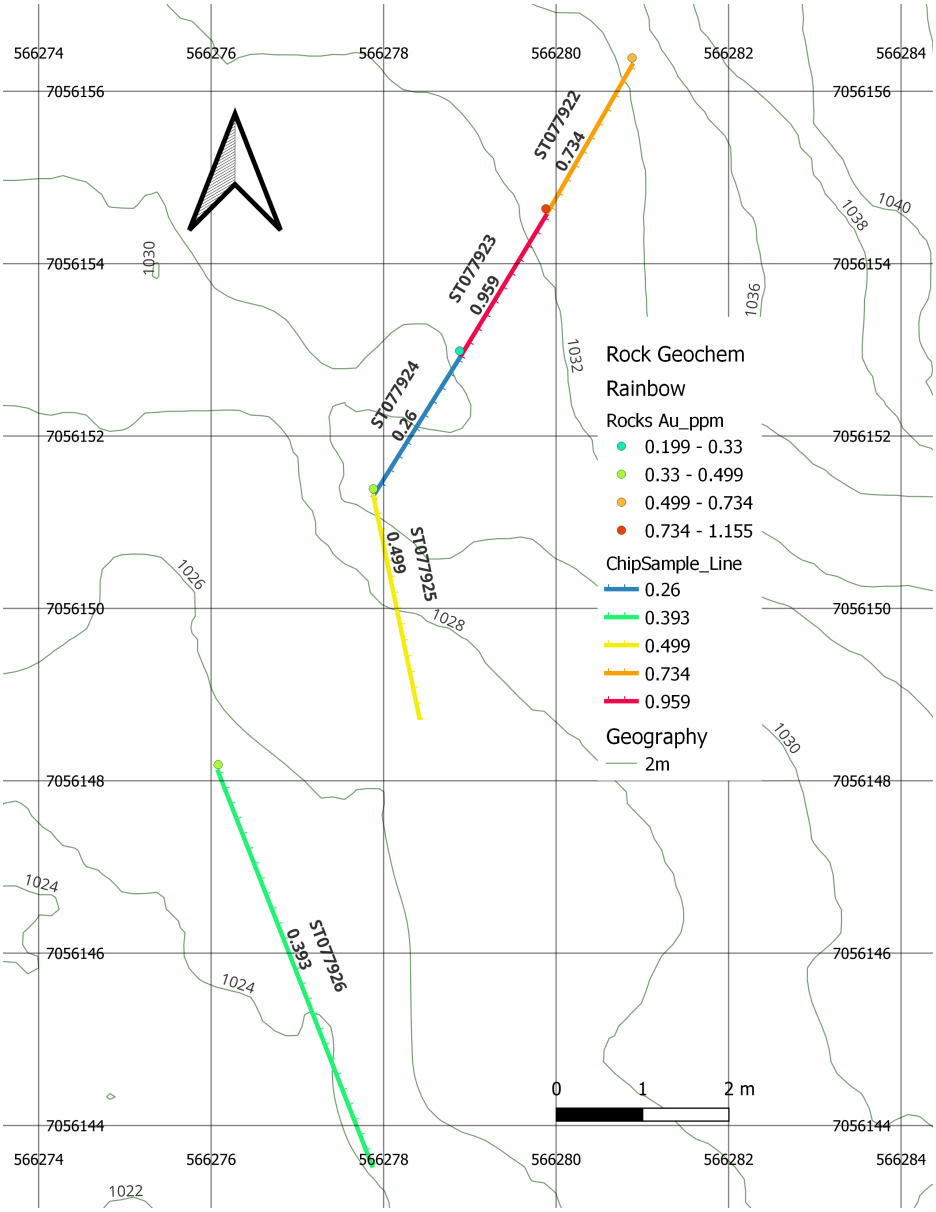


Figure 10. Chip samples of the gold-copper manto labelled by sample number and gold in parts per million. The trend of the mineralization is oriented at about 280 Azimuth, dipping 70 to the northeast (not shown) and the sample chip lines were locally controlled by the outcrop exposure. Two meter contour lines are shown (produced from the 2019 Drone North orthophoto) and the grid is in meters in NAD83Z8 UTM. In the legend, rocks and chip sample lines are the same samples.

6.2.2 Soil samples

Out of the 75 soil samples taken, seventeen are above 20 ppb gold, of which seven are 73 ppb and above, and of which four are above 150 ppb Au. The highest gold in soil sample is 722 ppb gold which is also the highest in tellurium, bismuth, copper and arsenic. The sample is from the Rainbow Creek cliff area, see Figure 11 below. All soil samples are described in Appendix F with assay results in Appendix I.

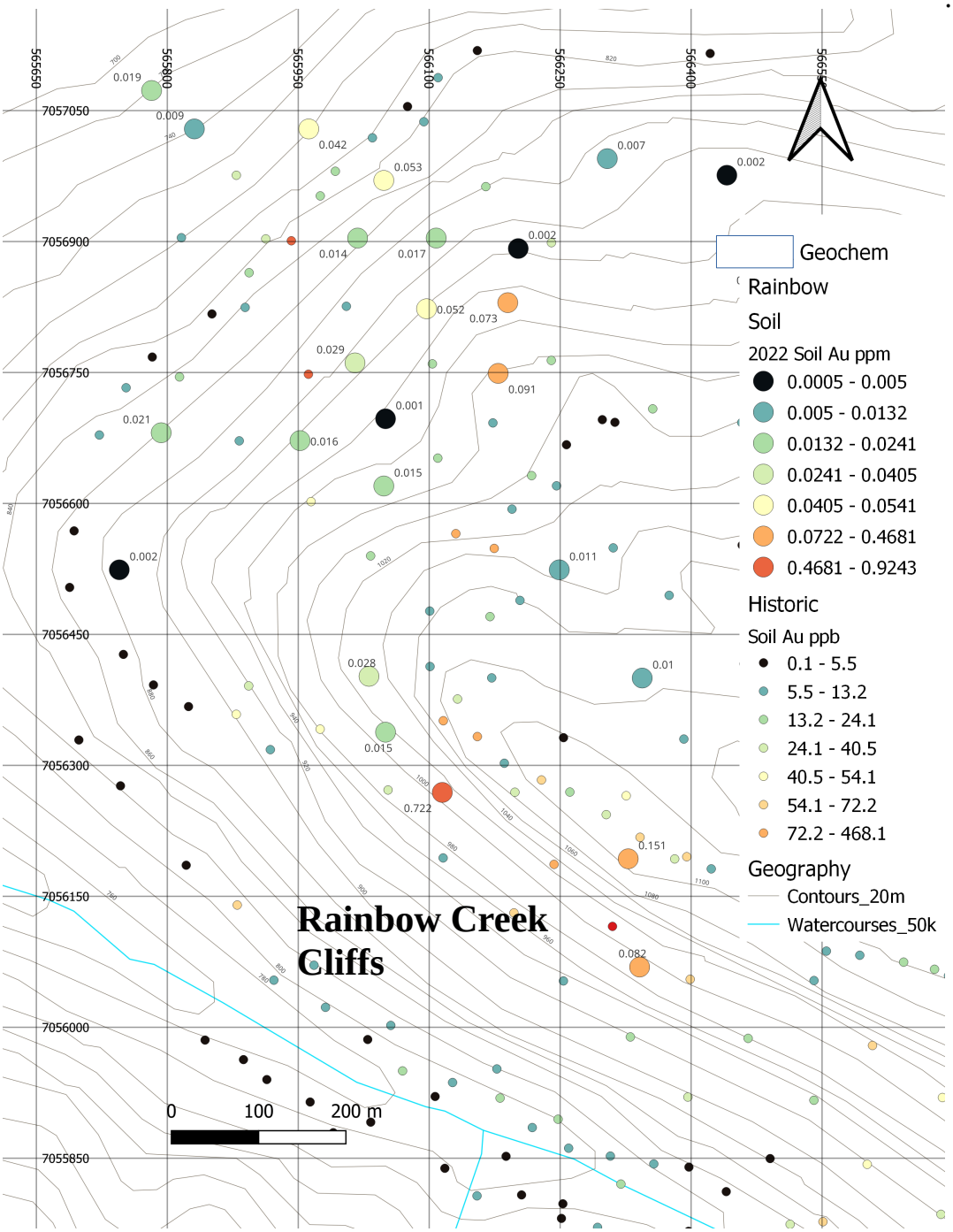


Figure 11. Gold from infill soil samples.

Infill soil samples in the Rainbow Creek cliff area and to the north identified some new areas of gold missed in the earlier survey, such as a 73 pbb and 91 ppb gold sample which were within a 150m gap in the historically sampled area. Additionally, the area around the copper-gold manto was further defined and expanded by the highest gold sample and a 151 ppb and 82 ppb gold. A 190 ppb and 182 ppb gold in soils came from the Rainbow East target that are about 400 m apart but open between them. These two samples are the second and third highest in gold value from the soil survey, see Figure 12 below.

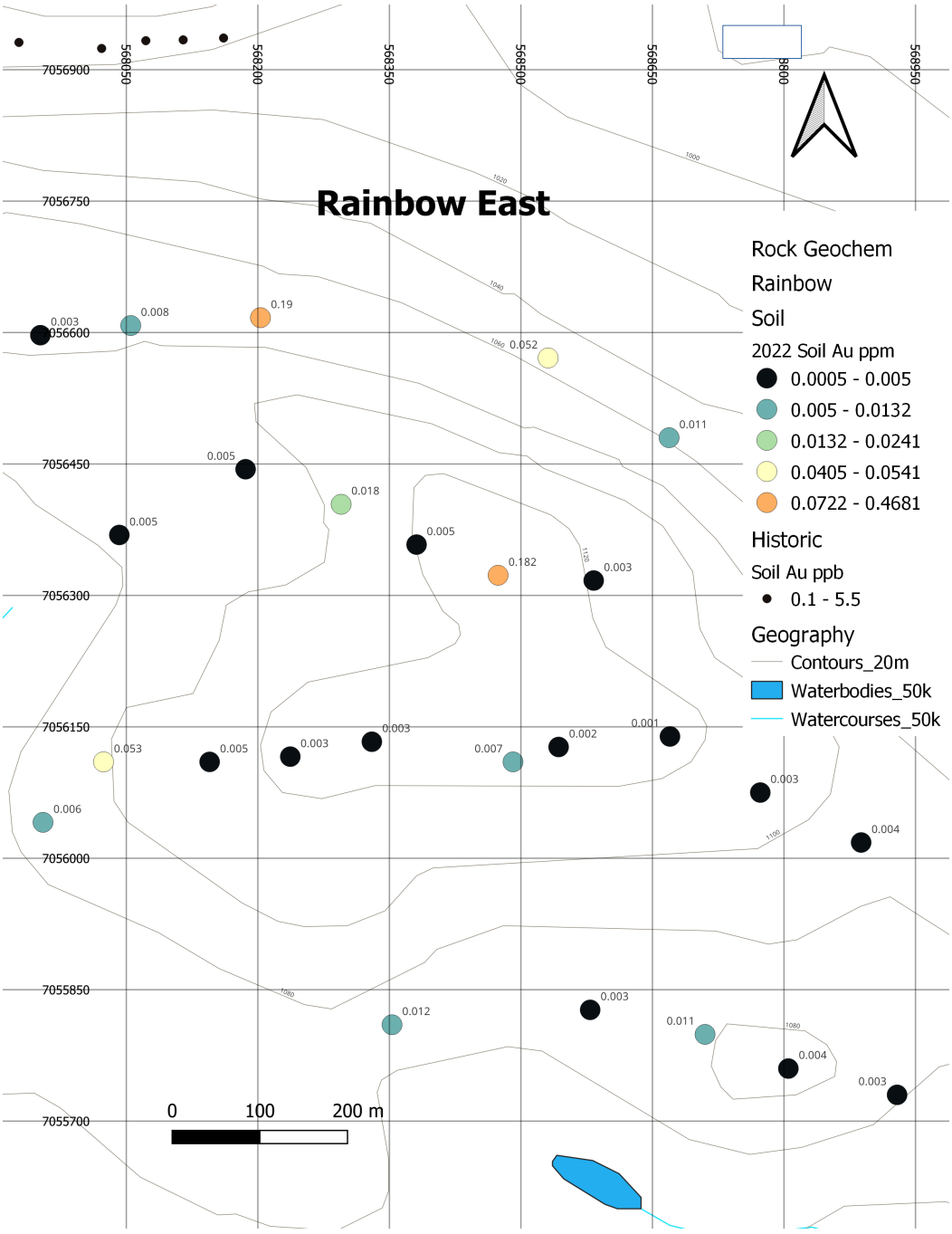


Figure 12. Gold in soil samples from the newly sampled Rainbow East target.

6.2.3 Humus samples

Of the thirty-four humus and peat samples, ST078701 was an infill sample near some outcropping copper-gold manto mineralization and is highly anomalous in gold, tellurium, bismuth and copper in contrast to the rest of the humus samples. This sample has values of 134 ppb gold, 2.3 ppm tellurium, 16.5 ppm bismuth and 700 ppm copper and is shown in Figure 13 below.1

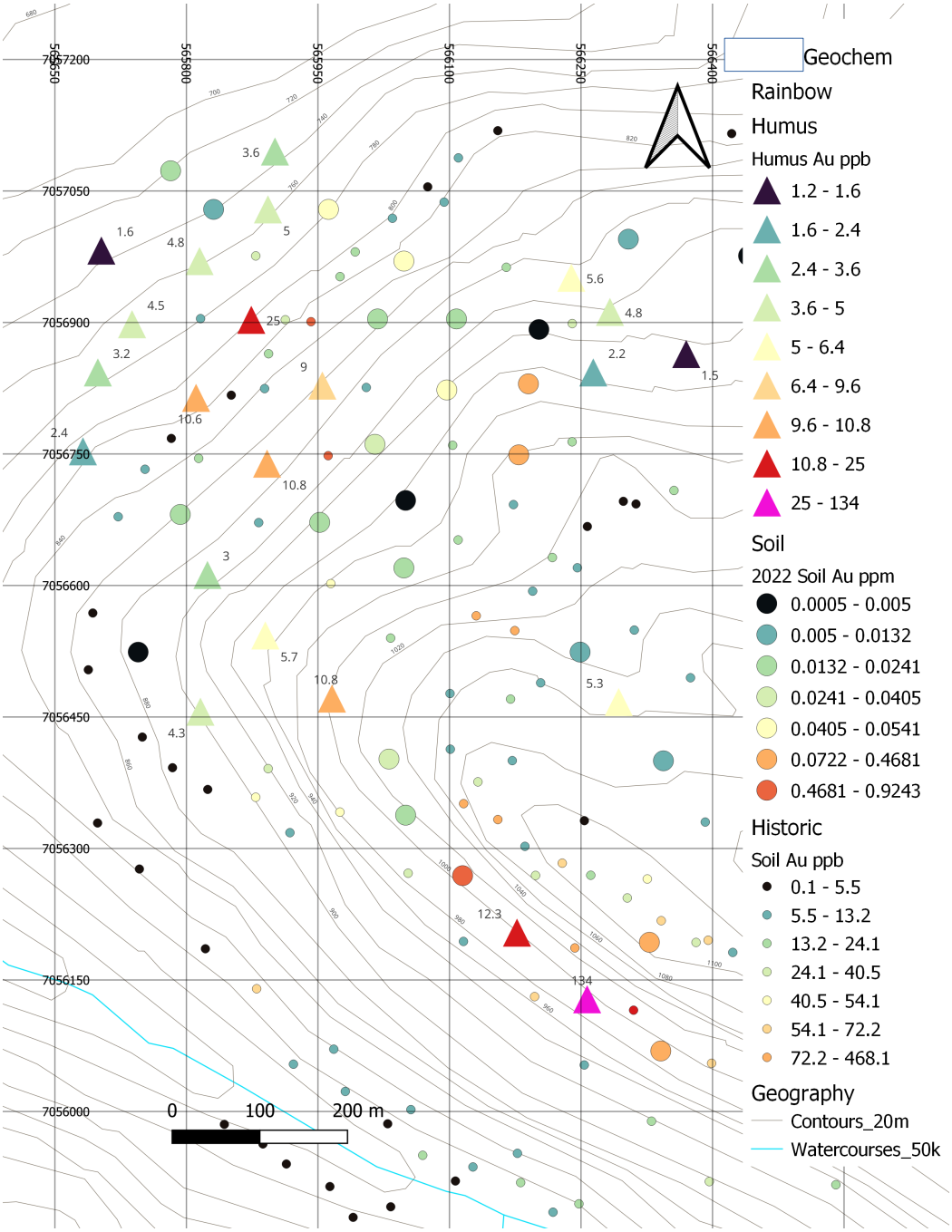


Figure 13. Gold in humus samples from the Rainbow Creek cliff area. With 2022 soils and historic soils.

One sample is high in tungsten and is to the East in an area that has seen gaps in the historic soil sampling presumably due to soils being inaccessible from ice and/or thick humus/peat layers. The area is shown below in Figure 14 where an important gap has revealed this gold and tungsten anomaly.
For the rest of the humus/peat samples values from 10 to 25 ppb are probably anomalous and correlate relatively well with surrounding gold in soil anomalies, see Figure 13 above.

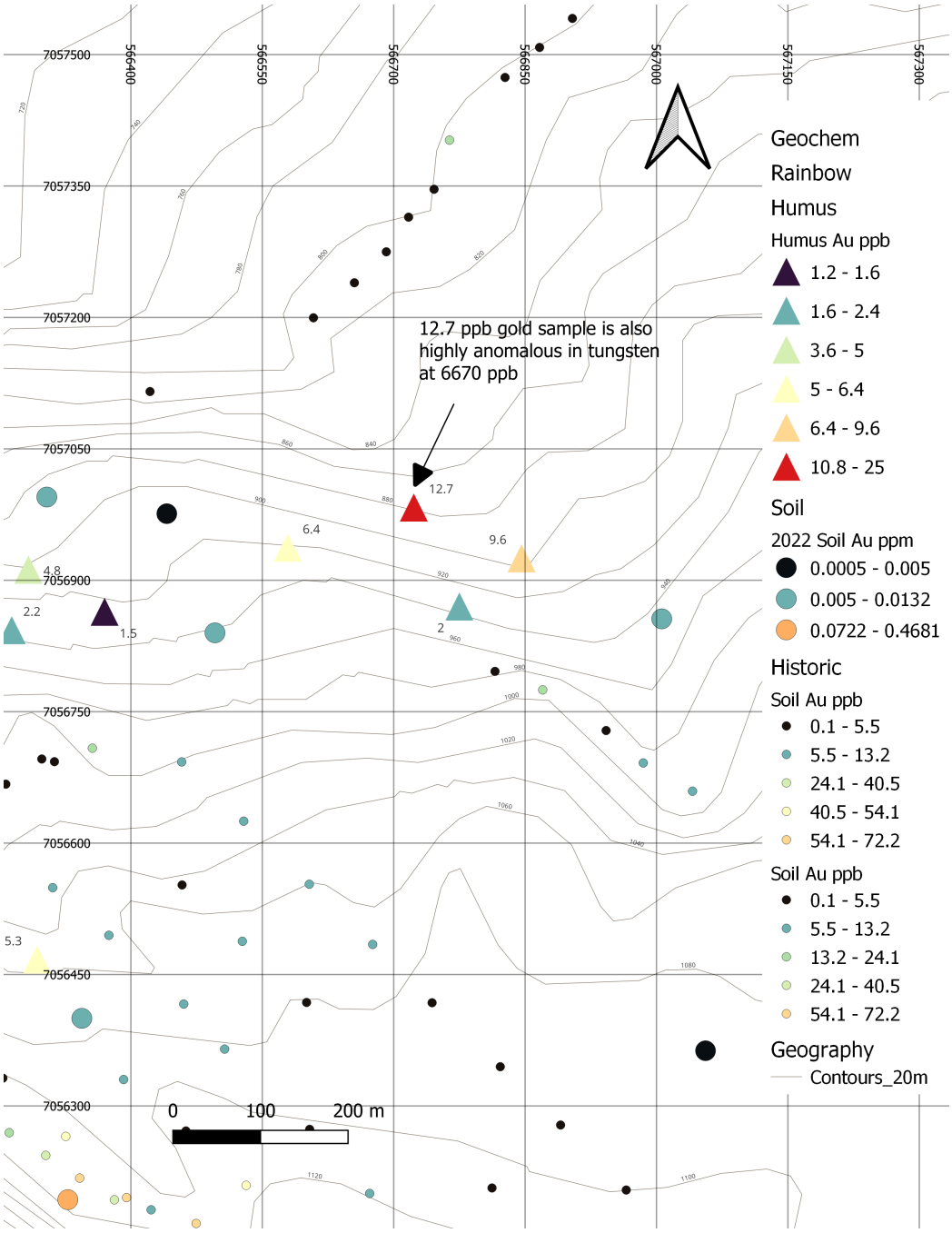


Figure 14. Gold in humus in an historic gap in sampling where soils were attempted previously. The tungsten value is the highest in the humus survey.

6.3 Geophysics

Several different magnetic and radiometric products that were produced from the airborne survey are listed below and can be found in Appendix N and described in the independent logistics report in Appendix M.

• Digital Terrain Model (DTM)
• Total Magnetic Intensity (TMI)
• Residual Magnetic Intensity (RMI) – removal of IGRF from TMI
• Reduced to Magnetic Pole (RTP) – reduced to magnetic pole of RMI
• Calculated Horizontal Gradient (CHG) – total magnitude of the horizontal gradients of RMI
• Calculated Vertical Gradient (CVG) – first order vertical derivative of RMI
• Analytic Signal (AS) – total gradient of RMI
• Potassium – Percentage (%K)
• Thorium – Equivalent Concentration (eTh)
• Uranium – Equivalent Concentration (eU)
• Total Count (TC)
• Total Count – Exposure Rate (TCexp)
• Potassium over Thorium Ratio (%K/eTh)
• Potassium over Uranium Ratio (%K/eU)
• Uranium over Thorium Ratio (eU/eTh)
• Uranium over Potassium Ratio (eU/%K)
• Thorium over Potassium Ratio (eTh/%K)
• Thorium over Uranium Ratio (eTh/eU)
• Ternary Image (TI)

The total magnetic intensity and the total count radiometrics are shown in Figure 15 and 16, respectively, below.

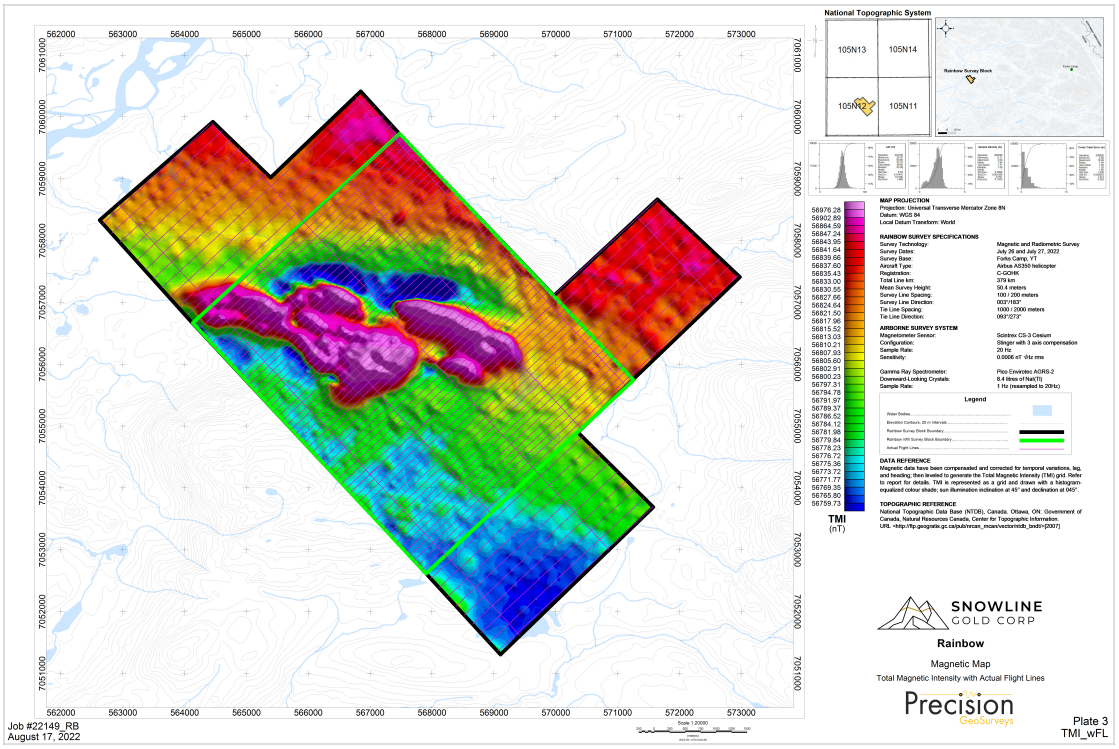


Figure 15. Total Magnetic Intensity. Note that the magnetic response can be defined by at least three bodies.

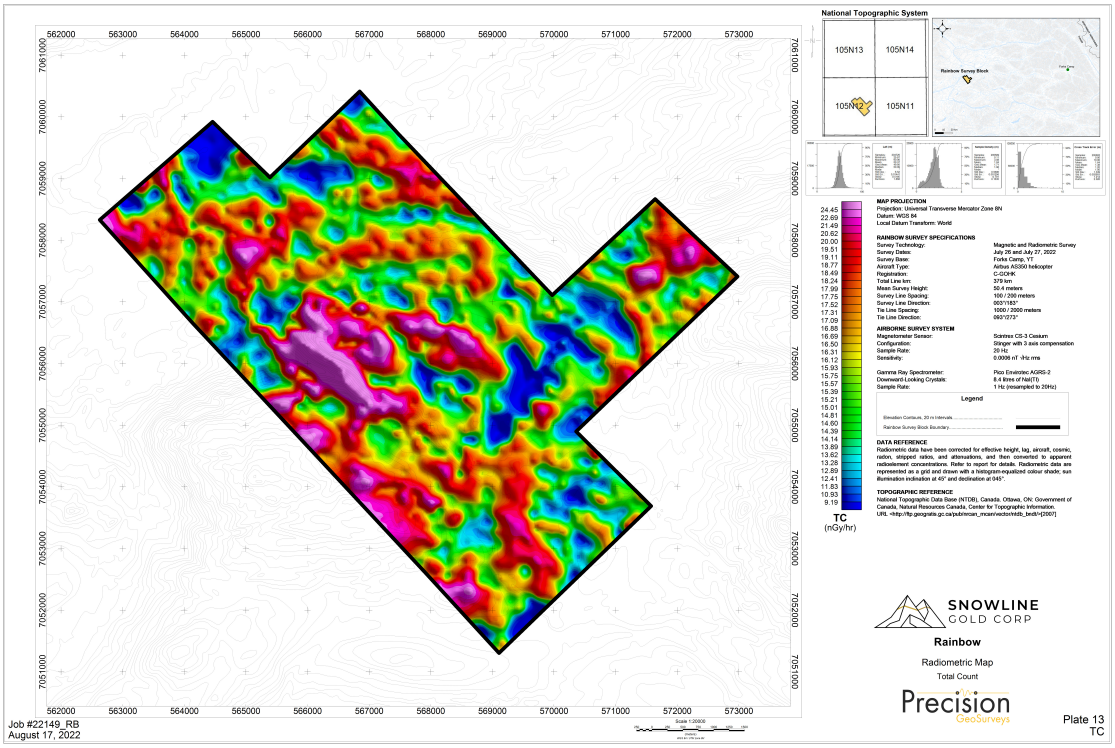


Figure 16. Total Count Radiometrics.

7 Discussion and Interpretation

A compilation and simplification of the mapping data is shown in Figure 17 below. The interpretation of the structural geology is dextral motion from transpressive stress causing some overprinting folds (F2) and some thrust faults (back thrusts observed only) with tension veins oriented at about 340 Az (ie. the primary direction of shortening). The earlier folding seen in the quartzite (green) would be caused by slightly different stress fields and is oriented to about 290-300 Azimuth which is also the approximate trend of the magnetic responses and biotite-quartz porphyry contacts.

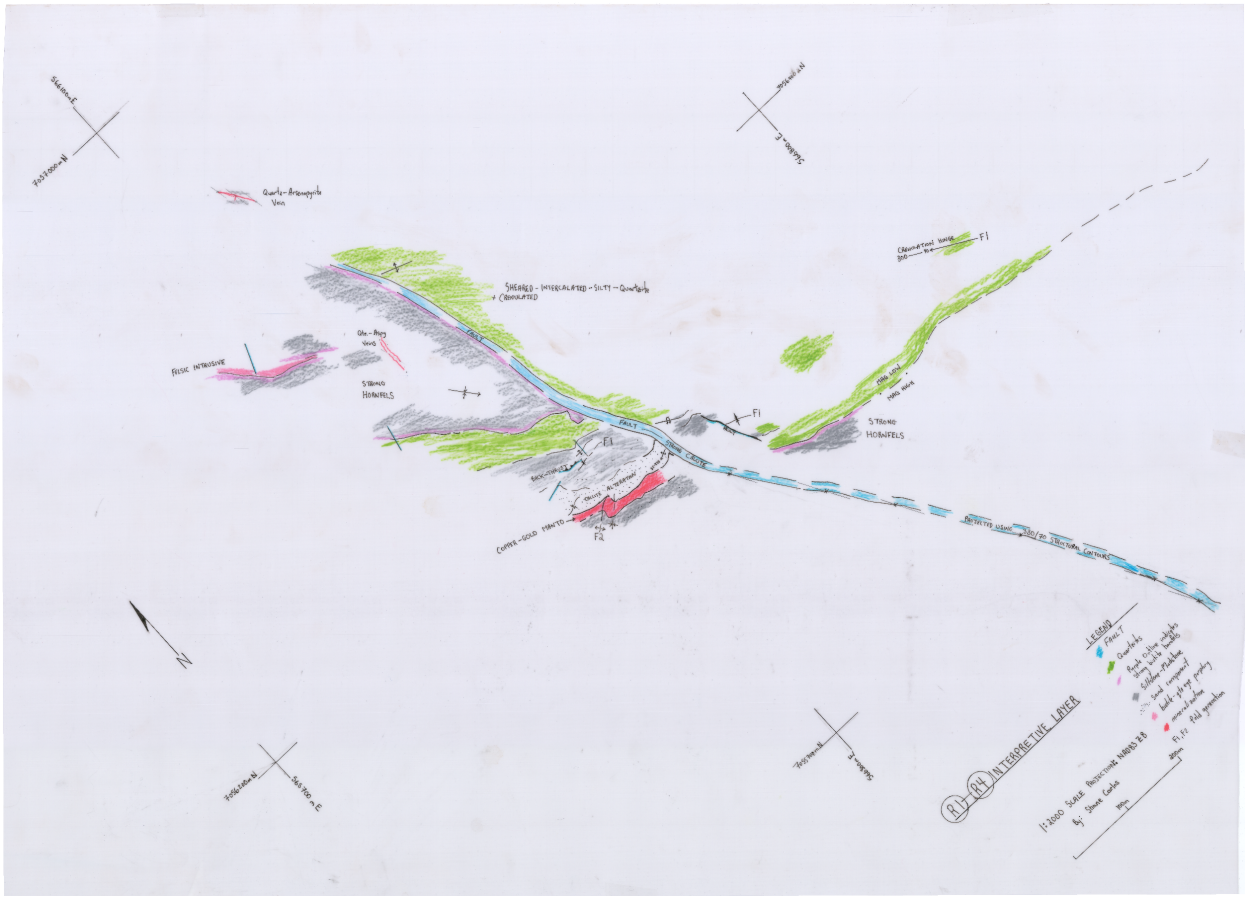


Figure 17. Interpretative and Simplified Geology Map of field sheets R1-R4. Notice the 330/70 major fault in blue and the mineralized zone in red trending with folded bedding. The fault was projected from a single outcropping, using structural countours to predict it's surface trace.

The magnetic responses seen in Figure 15 have an apparent segmentation into three bodies that are about 2 km long each in the 290 Az direction. Bedding and folding trend towards 290 Az with some very steep limbs on the Rainbow Creek cliffs. Felsic intrusive emplacement may have been partly controlled by this 330 Azimuth fault segmentation.

The dextral faulting interpretation is also the conclusion from C.F. Roots (1997) from the property geology section of this report. He observed, "late northwest-trending faults [that] were predominantly dextral transcurrent faults."

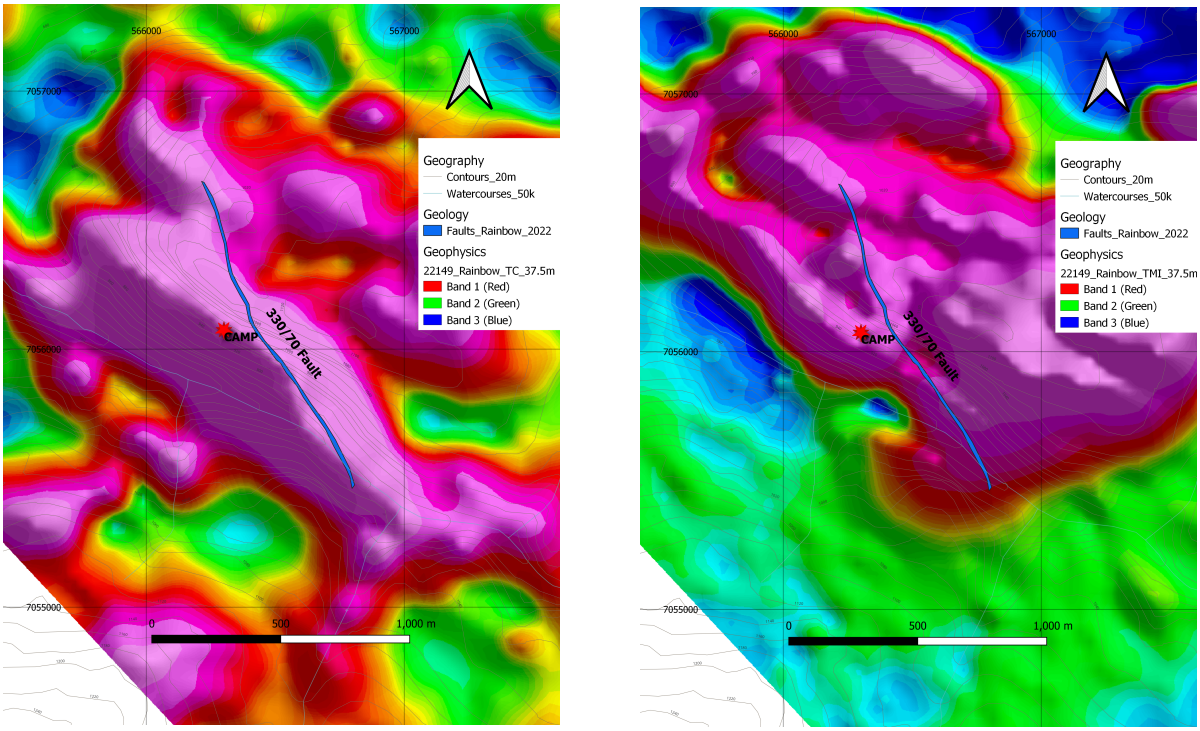


Figure 18. Total Count Radiometics and Total Magnetic Intensity plots with the important 330/70 fault overlayed.

Figure 18 above shows the 330 Azimuth fault overlayed on the total count radiometrics and total magnetic intensity plots. The radiometrics show features that are parallel to the 330 fault and are possibly reflecting this trend as an alteration related to this faulting. The outcrop does roughly match mutch of the radiometric pattern so there will be an apparent trend that could be influenced by a stronger response from exposed rock versus vegetation, colluvium and glacial cover.

The total magnetic intensity also shows parallel trends and edges in the data that match the 330 fault, also overlayed in Figure 18, right-side image.

8 Conclusions and Recommendations

The steeply inclined copper-gold ‘manto’ is a newly defined discovery that explains the source of ferricrete and azurite welded talus below and historical soil and rock float geochemistry. Some of the historical gold in rock float samples may have come from this feature or from other veins seen above. Infill soils and humus samples further defined and likely extended the geochemical footprint of this feature.

The 330 Az fault that was mapped this summer is a major structure and it transects nearby to many of the gold mineralized outcrops and float samples both historic and from this summer's work. Re-examination of historic gold samples in relation to this structure should be done. Though the fault itself does not appear to be mineralized it may be a syn and post mineral fault controlling the distribution of mineralization.

The program was hampered by near vertical cliff faces along the strike of the steeply inclined rocks which significantly slowed data collection. In addition, challenges with thick humus and/or peat layers interfered with soil collection masking the underlying geochemical response. Because of these challenges more mapping is required to build on the structural understanding and studying the possibility of humus sampling in areas that soils are unavailable.

Further rock sampling, pitting, and mapping can be done to follow-up on the gold in soil responses returned from the soil line extensions to the northeast Rainbow East target.

1. Appendix A - References

Bennett, V., 2021, Snowline Gold Corp - 2021 UAV Surveys.

Berdahl, J.S., 2014, YMEP 2014-Appendix A, Exploration Proposal-Rainbow Project-Target Evaluation

Berdahl, J. S., and Mann, B., 2016, Geological Assessment Report for work performed on the Rainbow Property: 18526 Yukon Inc. YMEP 2016-001.

Keele, J., 1906, A Reconnaissance Survey of the Stewart River. In: Summary Report of the Geological Survey Department of Canada for the Calender Year 1905. Sessional Paper No. 26:, p32-36 p.

Roots, C. F., 1997, Upper Paleozoic strata with potential for massive sulphide mineralization, northwestern Lansing map area (105N), Yukon. In: Yukon Exploration and Geology, 1996, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 138-146

2. Appendix B- Statement of Expenditures

SNOWLINE
GOLD CORP

Rainbow Statement of Expenditures 20-Sep-22

Phase 1

Airborne Survey	123 line-km @ $77.89/line-km	$9,580.47

Phase 2

Wages

Exploration Manager	1 day @ 850 - planning and prep	$850.00
Senior Geologist	6 days @ $700 - field work	$4,200.00
Geologist	6 days @ $500 - field work	$3,000.00
Geological Assistant x 2	12 days @$300 - field work	$3,600.00

Heli	2.5 hours @ $1625/hour	$4,062.50
Assays	146 samples @ ~$67.756/sample	$9,892.38
Fixed wing	2 x 120 Nm roundtrips @ $18.18/Nm	$4,362.96
Supplies, support, etc	Groceries	$224.29
Highway travel	954 km @ $0.605/km (Carcross - Mayo return)	$577.17
Total		$40,349.77

3. Appendix C - Statement of Qualifications

I, SHANE ALLEN CARLOS, hereby certify that:

1. I am a geologist contracted by Snowline Gold Corporation.

2. I am a graduate of the University of British Columbia, with a degree in Earth and Ocean Sciences (B.Sc., 2009).

3. I have been employed in mineral exploration, as a geologist seasonally since 2009.

4. I participated in the mapping and geochemical sampling.

5. The data contained herein is true and correct to the best of my knowledge.

April 3rd , 2023.

4. Appendix D- Table of Structural Measurements

Waypoint	Type	Strike (RH-rule)	Dip	Easting NAD83Z8	Northing NAD83Z8	Geologist	Additional Comments
1a	bed	30	32	566337	7056192	Jean P	bedding on NW side of fault
1b	bed	250	67	566341	7056188	Jean P	bedding on SE side of fault
9	bed	283	63	566375	7056081	Jean P	bedding and quartz vein
47	bed	280	70	566282	7056157	Jean P	below thrust
51	bed	290	30	566450	7056164	Jean P	
24	bed	136	34	566439	7056147	Jean P	malachite in outcrop
35	bed	310	63	566234	7056385	Jean P	weak biotite hornfels
38	bed	150	58	566245	7056397	Jean P	larger outcrop of bedded siltstone, weak biotite hornfels
42	bed	260	70	566079	7056493	Jean P	biotite hornfels
44e	bed	122	72	566026	7056619	Jean P	in fissile, weakly biotite hornfelsed siltstone
MAP R1-R4	bed	120	65	566295.74	7056127.41	Shane C	
MAP R1-R4	bed	310	70	566314.93	7056167.24	Shane C	
MAP R1-R4	bed	250	52	566320.38	7056150.9	Shane C	
MAP R1-R4	bed	290	70	566333.63	7056164.4	Shane C	
MAP R1-R4	bed	215	65	566298.67	7056145.37	Shane C	
MAP R1-R4	bed	260	50	566268.91	7056130.74	Shane C	
MAP R1-R4	bed	290	70	566281.92	7056137.69	Shane C	
MAP R1-R4	bed	95	75	566382.13	7056145.9	Shane C	
MAP R1-R4	bed	30	30	566334.12	7056195.68	Shane C	
MAP R1-R4	bed	210	50	566354.49	7056181.8	Shane C	
MAP R1-R4	bed	245	50	566570.18	7055988.7	Shane C	
MAP R1-R4	bed	280	75	566546.28	7056030.21	Shane C	
MAP R1-R4	bed	285	35	566541.12	7056034.72	Shane C	
MAP R1-R4	bed	292	80	566482.97	7056103.34	Shane C	
MAP R1-R4	bed	125	50	566468.05	7056121.96	Shane C	
MAP R1-R4	bed	125	65	566478.9	7056117.61	Shane C	
MAP R1-R4	bed	40	80	566442.88	7056142.73	Shane C	
MAP R1-R4	bed	140	85	566446.7	7056152.85	Shane C	
MAP R1-R4	bed	115	60	566436.01	7056166.8	Shane C	
MAP R1-R4	bed	125	88	566417.31	7056163.71	Shane C	
MAP R1-R4	bed	250	35	566877.86	7056090.21	Shane C	
MAP R1-R4	bed	275	55	566878.26	7056072.32	Shane C	
MAP R1-R4	bed	90	75	566341.9	7056209.77	Shane C	
MAP R1-R4	bed	290	80	566323.94	7056236.68	Shane C	
MAP R1-R4	bed	260	80	566306.46	7056226.03	Shane C	
MAP R1-R4	bed	265	55	566327.35	7056210.25	Shane C	pyrhotite
MAP R1-R4	bed	305	85	566287.51	7056263.75	Shane C	

Waypoint	Type	Strike (RH-rule)	Dip	Easting NAD83Z8	Northing NAD83Z8	Geologist	Additional Comments
MAP R1-R4	bed	105	85	566124.5	7056397.09	Shane C	
MAP R1-R4	bed	300	70	566132.39	7056416.03	Shane C	
MAP R1-R4	bed	305	88	566365.24	7056534.45	Shane C	
MAP R1-R4	bed	115	84	566275.81	7056575.92	Shane C	
MAP R1-R4	bed	290	35	566273.85	7056593.8	Shane C	
MAP R1-R4	bed	90	15	566211.58	7056611.53	Shane C	
MAP R1-R4	bed	135	35	566099.62	7056585.59	Shane C	
MAP R1-R4	bed	122	72	566025.41	7056605.95	Shane C	
MAP R1-R4	bed	10	75	566283.22	7056150.72	Shane C	
MAP R1-R4	bed	320	55	566269.4	7056158.82	Shane C	
MAP R1-R4	bed	280	70	566288.52	7056154.99	Shane C	
MAP R1-R4	bed	295	50	566262.23	7056173.81	Shane C	
MAP R1-R4	bed	255	60	566250.68	7056174.46	Shane C	
MAP R1-R4	bed	65	70	566239.27	7056177.1	Shane C	
MAP R1-R4	bed	260	75	566246.8	7056177.37	Shane C	
MAP R1-R4	bed	285	60	566310.73	7056203.75	Shane C	
MAP R1-R4	bed	205	55	566305.49	7056198.15	Shane C	
MAP R1-R4	bed	85	80	566301.15	7056221.15	Shane C	
MAP R1-R4	bed	310	50	566262.55	7056218.32	Shane C	
ST077923	bed	285	70	566276	7056155.25	Shane C	chalcopyrite, malacjite, quartz and acid leaching of mineralized laminated siltstones. 1.9m horizontal chip sample towards 213Az
ST077921	bed	285	70	566254	7056175	Shane C	2m true width chip sample. Less than 1% chalcopyrite, disseminated in blebs in meta-siltstones, interbedded with some fine meta-sandstones
ST077919	bed	270	65	566308	7056140	Shane C	Chipped 1.5m zone fissile siltstone, tough otherwise, limonitic at base of massive limy sediments. A 1.5m wide zone of bedding parallel quartz veins
ST075831	bedding and quartz vein	283	63	566364	7056088	Jean P	rusty 20-30 cm thick quartz vein zone trending 283/63, which blows out at northerly/steep intersecting structure; minor phyllite separating individual veins; extent of same vein 20m to NW with white quartz, minor malachite blebs, trace chalcopyrite
ST075835	bedding	290	30	566457	7056156	Jean P	carbonate-minor quartz stockwork to breccia with moderately hornfelsed siltstone clasts; joints at 342/80 and brecciation also extends along bedding

Waypoint	Type	Strike (RH-rule)	Dip	Easting NAD83Z8	Northing NAD83Z8	Geologist	Additional Comments
ST075834	bed	310	50	566312	7056129	Jean P	strong rusty, well fractured zone cuts across bedding in locally hornfelsed phyllite with jointing; strong limonite, minor clay, patchy silicification and sericite alteration, some quartz veins with minor pyrite, arsenopyrite??, cp?; above 1269.5 ppb Au soil; sample line at 030/+40
4a	cleavage	320	80	566391	7056155	Jean P	
MAP R1-R4	Cleavage	320	50	566258.16	7056351.97	Shane C	
44a	contact	145	80	566028	7056620	Jean P	granodiorite contact- fault zone
MAP R1-R4	Contact	160	30	566113.85	7056568.84	Shane C	biotite quartz porphry
MAP R1-R4	Contact	35	77	566032.43	7056610.83	Shane C	biotite quartz porphry
12	thrust fault	240	20	566265	7056218	Jean P	thrust in above outcrop
46	thrust fault	172	32	566281	7056159	Jean P	in steep outcrop
2	Fault	305	77	566341	7056185	Jean P	5m below wpt 1 fault, on SE side
3	Fault	330	70	566385	7056186	Jean P	fault bounding small 1 by 1.5m outcrop of carbonate breccia, NW side, surrounding
3a	Fault	345	57	566386	7056185	Jean P	faults bounding small outcrop of carbonate breccia, SE side
7	Fault	284	73	566370	7056135	Jean P	1.5m fault zone with breccia
48	Fault	10	75	566281	7056157	Jean P	in same steep outcrop
49	Fault	25	90	566283	7056157	Jean P	in same steep outcrop
17	Fault	20	80	566241	7056180	Jean P	fault on W side
17	Fault	255	70	566241	7056180	Jean P	fault on E side with quartz veins +/- chalcopyrite in wallrock clasts
18	Fault	170	70	566249	7056175	Jean P	
18a	Fault	40	80	566250	7056174	Jean P	cuts off 170/70 fault; siltstone/shale with local disseminated chalcopyrite, some bit hornfelsed
MAP R1-R4	Fault	320	65	566480.97	7056094.23	Shane C	
MAP R1-R4	Fault	260	45	566440.65	7056154.11	Shane C	calcite and malachite
MAP R1-R4	Fault	330	65	566394.39	7056185.33	Shane C	
MAP R1-R4	Fault	145	30	566024.69	7056618.18	Shane C	
MAP R1-R4	Fault	22	73	566042.25	7056609.36	Shane C	
MAP R1-R4	Fault	27	80	566244.51	7056170.77	Shane C	
MAP R1-R4	Fault	240	80	566275.62	7056218.38	Shane C	
MAP R1-R4	Fault	255	55	566240.5	7056209.41	Shane C	
1	fault, joints	217	80	566339	7056190	Jean P	fault in gully; SE side down
ST075841	fracture/ fault	345	72	566190	7056506	Jean P	0.8 cm fracture fillings with 50% arsenopyrite, strong limonite, minor

Waypoint	Type	Strike (RH-rule)	Dip	Easting NAD83Z8	Northing NAD83Z8	Geologist	Additional Comments
							scorodite, trace quartz? and 1-2% chalcopyrite as fracture fillings in rusty, well fractured biotite hornfels outcrop with pyrrhotite and chalcopyrite
ST075837	Fault	15	75	566467	7056124	Jean P	strongly orange weathering, limonitic 015/75 fault zone, selenite and limonite fracture fillings, boxwork after pyrite, 5-10% pyrrhotite, 1% chalcopyrite as disseminations and stringers; minor quartz, can't reach possible 1-1.5 cm quartz vein; at 468.1 ppb Au in talua anomaly
ST075840	Fault	170	70	566218	7056509	Jean P	rusty hornfels to skarn in outcrop with disseminated to blebby chalcopyrite and pyrrhotite associated with 170/70 structure; bedding at 105/23
ST075828	Fault	217	80	566339	7056190	Jean P	grab from fault zone, rusty weathering hornfelsed sedimentary rocks with intense to punky limonite +/- clay pockets, limonite and goethite fracture fillings and limonite extends locally along bedding, some pyrite visible, local silicification and minor irregular, discontinuous quartz veinlets
ST075829	Fault	217	80	566343	7056190	Jean P	0.5m chip across strong limonite-clay mangled fault zone to strongly fractured
ST077937	fault gouge	020	70	566027	7056618	Shane C	020/70 10cm diorite fault gouge with strong sericite alteration
ST077931	shear	075	75	566317	7056221	Shane C	siliceous, porous, on certain layers, sulphide leached out. Siltstone with sst layers, acid leached, bleached white on fresh breaks
6	fracture	45	75	566377	7056142	Jean P	open fracture at base of outcrop
14a	fracture	195	77	566227	7056219	Jean P	big open fracture
16a	fracture	207	80	566236	7056212	Jean P	open fracture
16b	fracture	255	70	566235	7056214	Jean P	open fracture
44d	fracture	20	70	566029	7056623	Jean P	limonitic clay altered fracture-fault zone
26	fracture	305	75	566455	7056132	Jean P	small zone of azurite & limonite in siltstone/shale, variably crenulated and brecciated
5	Joint	4	85	566394	7056148	Jean P	possible fault
MAP R1-R4	Joint	40	85	566375.36	7056138.42	Shane C	
MAP R1-R4	Joint	210	85	566342.66	7056189.03	Shane C	

Waypoint	Type	Strike (RH-rule)	Dip	Easting NAD83Z8	Northing NAD83Z8	Geologist	Additional Comments
MAP R1-R4	Joint	0	75	566570.27	7055982.73	Shane C	
MAP R1-R4	Joint	10	90	566415.69	7056172	Shane C	
MAP R1-R4	Joint	15	82	566334.34	7056231.15	Shane C	
MAP R1-R4	Joint	0	70	566305.97	7056231.72	Shane C	
MAP R1-R4	Joint	0	85	566318.25	7056493.19	Shane C	
MAP R1-R4	Joint	5	85	566210.76	7056617.87	Shane C	
MAP R1-R4	Joint	315	80	566039.15	7056608.84	Shane C	
MAP R1-R4	Joint	215	50	566036.89	7056614.78	Shane C	
MAP R1-R4	Joint	32	80	566266.95	7056227.12	Shane C	
MAP R1-R4	Joint	20	80	566270.02	7056214.41	Shane C	
MAP R1-R4	Joint	207	85	566237.98	7056217.12	Shane C	
4	Joint	300	80	566391	7056157	Jean P	closely spaced rusty joints with brecciation at top edge of cliff
8	Joint	15	85	566368	7056119	Jean P	joints over 4m with 0.4-1 cm quartz vein along one surface
12	Joint	12	80	566263	7056217	Jean P	rusty outcrop with rusty joints
14	Joint	180	67	566227	7056219	Jean P	lots malachite on surfaces; minor few mm sulphide fracture fillings
22	Joint	180	82	566451	7056165	Jean P	5 by 3m outcrop of weakly hornfelsed siltstone, minor pyrrhotite
50	Joint	342	80	566452	7056163	Jean P	same outcrop as 22, variably brecciated due to these joints?
38a	Joint	10	55	566245	7056397	Jean P	joints in wpt 38 outcrop
38b	Joint	10	82	566245	7056397	Jean P	joints in wpt 38 outcrop
41	Joint	10	80	566124	7056414	Jean P	biotite hornfels
44b	Joint	315	80	566029	7056621	Jean P	granodiorite contact from 135/77 to 315/80 granodiorite on NE
44c	Joint	215	50	566029	7056623	Jean P	in granodiorite
MAP R1-R4	Joint	225	85	566341.23	7056175.82	Shane C	
ST075830	cleavage or strong fracture set	293	80	566390	7056141	Jean P	rusty with limonite, some clay, filled vugs and fracture fillings, local silicification and some irregular quartz, minor pyrite
45	planar surface	280	20	566281	7056159	Jean P	planar surface inside thrust fault below; same as foliation above thrust; in same steep outcrop
16	planar surface	30	30	566235	7056212	Jean P	shallow possible fault plane
19	planar surface	180	50	566256	7056163	Jean P	
25	planar surface	186	70	566440	7056146	Jean P	malachite in outcrop along this structure
MAP R1-R4	quartz limonite vein	320	90	566219.61	7056219.11	Shane C	

Waypoint	Type	Strike (RH-rule)	Dip	Easting NAD83Z8	Northing NAD83Z8	Geologist	Additional Comments
3b	quartz stringers	345	57	566384	7056187	Jean P	few mm quartz stringers in above outcrop
MAP R1-R4	quartz vein	320	90	566519.51	7056271.92	Shane C	
MAP R1-R4	quartz vein	75	85	566316.78	7056221.15	Shane C	
14b	quartz vein	320	90	566227	7056220	Jean P	short, white quartz vein
14c	quartz vein	40	83	566229	7056219	Jean P	
31	quartz vein	170	70	566184	7056804	Jean P	tan quartzite with 0.7 cm quartz vein, trace arsenopyrite
44	quartz vein	290	85	566026	7056618	Jean P	at SAC trench, in weakly hornfelsed, more hornfelsed in footwall of vein
MAP R1-R4	quartz vein	280	40	566292.82	7056136.92	Shane C	
MAP R1-R4	quartz vein	215	65	566290.26	7056133.3	Shane C	x-cuts the 280/40 qt veins
MAP R1-R4	quartz vein	40	70	566453.74	7056157.85	Shane C	
MAP R1-R4	quartz vein	320	90	566619.84	7056110.41	Shane C	
MAP R1-R4	quartz vein	275	80	566313.69	7056224.32	Shane C	
MAP R1-R4	quartz vein	290	85	566021.8	7056612.52	Shane C	
MAP R1-R4	quartz veins	270	65	566307.7	7056141.02	Shane C	
MAP R1-R4	quartz-lim-tremolite vein	275	65	566335.08	7056217.16	Shane C	
MAP R1-R4	calcite vein	40	80	566229.06	7056212.24	Shane C	
ST077930	vein	070	88	566320	7056232	Shane C	070/88 limonitic quartz vein less than 10cm width
ST075836	few sheeted veins	356	74	566442	7056148	Jean P	malachite, azurite, limonite on weathered surface with chalcopyrite, pyrrhotite veinlets to 0.5 cm and as disseminations in hornfelsed wallrock, possible intrusive? patchy silicification and minor quartz with minor chalcopyrite, pyrite, arsenopyrite?; minor sheeted veinlets 2m to E, trending 356/74 with minor cp & po (4 over 3 cm zone)
ST077933	quartz	090	70	566290	7056301	Shane C	Po hornfels? 165 cm chip and true

Waypoint	Type	Strike (RH-rule)	Dip	Easting NAD83Z8	Northing NAD83Z8	Geologist	Additional Comments
	vein						width , 090/70 qtz-limonite veins, 7 veins up to 5cm wide
ST077932	Quartz-Po-Py	105	85	566302	7056297	Shane C	105/85 qtz vein with Po, Py, Aspy, Chlcopy disseminated in a high Po hornfelsed mudstone
ST077920	vein	280	40	566295.5	7056143	Shane C	65% lim-quartz vein in calc-silicate skarn?, 170cm true width chipped
ST077925	vein	280	60	566274	7056152	Shane C	chalcopyrite, malacjite, quartz and acid leaching of mineralized laminated siltstones, vein and bedding at 280/60. 2.5m horizontal chip sample towards 169Az
ST077927	vein	280	50	566318	7056127	Shane C	2 veins 10cm apart at 285/50, 5cm quartz vein bedding replacement-patchy of sandy bed and a 1% chalcopyrite-pyrrhottite bed
ST077922	vein	285	70	566277	7056157	Shane C	chalcopyrite, malacjite, quartz and acid leaching of mineralized laminated siltstones. 1.9m horizontal chip sample towards 213Az
ST077918	vein	290	70	566335	7056166	Shane C	290/70 qtz calcite-malachite-limonite vein from 2cm to locally 15cm wide
ST077936	Quartz-limonite vein	290	85	566026	7056618	Shane C	290/85 lim-clay qtz vein to 15cm width, also sampled 1cm wallrock , margins on both sides. (JeanP:multiple chip sample lines across rusty quartz vein, 7-15 cm thick, then narrows to few cm to west, limonite and minor clay fracture fillings; fissile siltstone above, more jointed biotite hornfels below with pyrrhotite and minor chalcopyrite (SAC trench))
ST077935	Quartz-lim-Po Vein	320	90	566617	7056117	Shane C	320/90 10cm qtz-lim-Po vein
ST077928	vein	325	40	566309	7056123	Shane C	325/40 qtz—trace malachite vein, folded, 0.5cm wide
MAP R1-R4	Crenulation Hinge	300	40	566878.91	7056079.64	Shane C	trend and plunge
MAP R1-R4	Crenulation Hinge	290	20	566888.02	7056077.93	Shane C	trend and plunge
5a	fold axis	245	55	566394	7056148	Jean P	or possible fault; folding related to drag?

5. Appendix E – Table of Rock Sample Descriptions

Type	Sampler	Sample ID	Projection	Zone	Easting	Northing	Source	Method	Structure	Az	Dip	Description	Au ppm
Rock	JeanP	ST075828	NAD83	8V	566339	7056190	Outcrop	grab	fault	**217**	**80**	grab from fault zone, rusty weathering hornfelsed sedimentary rocks with intense to punky limonite +/- clay pockets, limonite and goethite fracture fillings and limonite extends locally along bedding, some pyrite visible, local silicification and minor irregular, discontinuous quartz veinlets	0.4
Rock	JeanP	ST075829	NAD83	8V	566343	7056190	Outcrop	0.5 chip	fault	**217**	**80**	0.5m chip across strong limonite-clay mangled fault zone to strongly fractured	0.89
Rock	JeanP	ST075830	NAD83	8V	566390	7056141	Outcrop	grab	cleavage or strong fracture set	**293**	**80**	rusty with limonite, some clay, filled vugs and fracture fillings, local silicification and some irregular quartz, minor pyrite	0.18
Rock	JeanP	ST075831	NAD83	8V	566364	7056088	Outcrop	grab	bedding and quartz vein	**283**	**63**	rusty 20-30 cm thick quartz vein zone trending 283/63, which blows out at northerly/steep intersecting structure; minor phyllite separating individual veins; extent of same vein 20m to NW with white quartz, minor malachite blebs, trace chalcopyrite	0.1
Rock	JeanP	ST075832	NAD83	8V	566348	7056103	Float	grab	quartz vein			strong rusty weathering 20 cm quartz vein with strong limonite fracture fillings as float below cliffy area	0.01
Rock	JeanP	ST075833	NAD83	8V	566315	7056127	Outcrop	grab				strong rusty 5 cm quartz vein with pyrite, from brecciated zone in phyllite with strong limonite, lesser goethite, associated with fault, minor clay; above 1269.5 ppb Au soil	0.64
Rock	JeanP	ST075834	NAD83	8V	566312	7056129	Outcrop	1.5m chip	bedding	**310**	**50**	strong rusty, well fractured zone cuts across bedding in locally hornfelsed phyllite with jointing; strong limonite, minor clay, patchy silicification and sericite alteration, some quartz veins with minor pyrite, arsenopyrite??, cp?; above 1269.5 ppb Au soil; sample line at 030/+40	0.1
Rock	JeanP	ST075835	NAD83	8V	566457	7056156	Outcrop	grab	bedding	**290**	**30**	carbonate-minor quartz stockwork to breccia with moderately hornfelsed siltstone clasts; joints at 342/80 and brecciation also extends along bedding	0.01
Rock	JeanP	ST075836	NAD83	8V	566442	7056148	Outcrop	grab	few sheeted veins	**356**	**74**	malachite, azurite, limonite on weathered surface with chalcopyrite, pyrrhotite veinlets to 0.5 cm and as disseminations in hornfelsed wallrock, possible intrusive? patchy silicification and minor quartz with minor chalcopyrite, pyrite, arsenopyrite?; minor sheeted veinlets 2m to E, trending 356/74 with minor cp & po (4 over 3 cm zone)	0.41
Rock	JeanP	ST075837	NAD83	8V	566467	7056124	Outcrop	grab	fault	**15**	**75**	strongly orange weathering, limonitic 015/75 fault zone, selenite and limonite fracture fillings, boxwork after pyrite, 5-10% pyrrhotite, 1% chalcopyrite as disseminations and stringers; minor quartz, can't reach possible 1-1.5 cm quartz vein; at 468.1	0.82

Type	Sampler	Sample ID	Projection	Zone	Easting	Northing	Source	Method	Structure	Az	Dip	Description	Au ppm
												ppb Au in talua anomaly	
Rock	JeanP	ST075838	NAD83	8V	566445	7056143	Float	grab	quartz vein			5 cm quartz vein float below fault in cliff outcrop, local limonite fracture fillings, boxwork after pyrite, minor chalcopyrite, grey, possible arsenopyrite ribbon through quartz	1.44
Rock	JeanP	ST075839	NAD83	8V	566718	7056123	Outcrop	grab	draw	**320**		rusty to orange weathering biotite quartz eye porphyry subcrop in an approximate 320° trending draw with disseminated and blebby pyrrhotite and pyrrhotite on fractures, limonite and Mn fracture fillings, patchy silicification	0.13
Rock	JeanP	ST075840	NAD83	8V	566218	7056509	Outcrop	grab	fault	**170**	**70**	rusty hornfels to skarn in outcrop with disseminated to blebby chalcopyrite and pyrrhotite associated with 170/70 structure; bedding at 105/23	0.01
Rock	JeanP	ST075841	NAD83	8V	566190	7056506	Outcrop	grab	fracture/ fault	**345**	**72**	0.8 cm fracture fillings with 50% arsenopyrite, strong limonite, minor scorodite, trace quartz? and 1-2% chalcopyrite as fracture fillings in rusty, well fractured biotite hornfels outcrop with pyrrhotite and chalcopyrite	1.56
Rock	JeanP	ST075842	NAD83	8V	566173	7056520	Outcrop	grab				rusty hornfels outcrop with disseminated pyrrhotite and lesser chalcopyrite	0.03
Rock	ShaneC	ST077918	NAD83	8V	566335	7056166	Outcrop	Grab	vein	**290**	**70**	290/70 qtz calcite-malachite-limonite vein from 2cm to locally 15cm wide	0.73
Rock	ShaneC	ST077919	NAD83	8V	566308	7056140	Outcrop	Chip	bed	**270**	**65**	Chipped 1.5m zone fissile siltstone, tough otherwise, limonitic at base of massive limy sediments. A 1.5m wide zone of bedding parallel quartz veins	0.33
Rock	ShaneC	ST077920	NAD83	8V	566295.5	7056143	Outcrop	Chip	vein	**280**	**40**	65% lim-quartz vein in calc-silicate skarn?, 170cm true width chipped	0.14
Rock	ShaneC	ST077921	NAD83	8V	566254	7056175	Outcrop	Chip	bedding	**285**	**70**	2m true width chip sample. Less than 1% chalcopyrite, disseminated in blebs in meta-siltstones, interbedded with some fine meta-sandstones	0.07
Rock	ShaneC	ST077922	NAD83	8V	566280.88	7056156.39	Outcrop	Chip	vein	**285**	**70**	chalcopyrite, malacjite, quartz and acid leaching of mineralized laminated siltstones. 1.9m horizontal chip sample towards 213Az	0.73
Rock	ShaneC	ST077923	NAD83	8V	566279.88	7056154.64	Outcrop	Chip	bedding	**285**	**70**	chalcopyrite, malacjite, quartz and acid leaching of mineralized laminated siltstones. 1.9m horizontal chip sample towards 213Az	0.96
Rock	ShaneC	ST077924	NAD83	8V	566278.88	7056152.99	Outcrop	Chip				chalcopyrite, malachite, 40% quartz vein and acid leaching of mineralized laminated siltstones. 1.9m horizontal chip sample towards 213Az	0.26
Rock	ShaneC	ST077925	NAD83	8V	566277.88	7056151.39	Outcrop	Chip	vein	**280**	**60**	chalcopyrite, malacjite, quartz and acid leaching of mineralized laminated siltstones, vein and bedding at 280/60. 2.5m horizontal chip sample towards 169Az	0.5
Rock	JeanP	ST077926	NAD83	8V	566276.08	7056148.19	Outcrop	Chip				chalcopyrite, malachite, some azurite quartz and acid leaching of mineralized laminated siltstones. (start of interval of strong malachite and azurite stained phyllite with minor quartz; along 160/-05 line, 2.4m offset at 250 below ST077925. A 4.9m chip sample along 150Az horizontal (see SAC rocks))	0.39

Type	Sampler	Sample ID	Projection	Zone	Easting	Northing	Source	Method	Structure	Az	Dip	Description	Au ppm
Rock	ShaneC	ST077927	NAD83	8V	566318	7056127	Outcrop	Composite Grab	vein	**280**	**50**	2 veins 10cm apart at 285/50, 5cm quartz vein bedding replacement-patchy of sandy bed and a 1% chalcopyrite-pyrrhottite bed	0.07
Rock	ShaneC	ST077928	NAD83	8V	566309	7056123	Outcrop	Chip	vein	**325**	**40**	325/40 qtz—trace malachite vein, folded, 0.5cm wide	0.13
Rock	ShaneC	ST077929	NAD83	8V	566297	7056212	Subcrop	Grab				limonitic quartz vein, 5cm wide piece	0.06
Rock	ShaneC	ST077930	NAD83	8V	566320	7056232	Outcrop	Grab	vein	**070**	**88**	070/88 limonitic quartz vein less than 10cm width	0.3
Rock	ShaneC	ST077931	NAD83	8V	566317	7056221	Outcrop	Grab	shear vein	**075**	**75**	siliceous, porous, on certain layers, sulphide leached out. Siltstone with sst layers, acid leached, bleached white on fresh breaks	1.57
Rock	ShaneC	ST077932	NAD83	8V	566302	7056297	Outcrop	Grab	Quartz-Po-Py	**105**	**85**	105/85 qtz vein with Po, Py, Aspy, Chlcopy disseminated in a high Po hornfelsed mudstone	0.01
Rock	ShaneC	ST077933	NAD83	8V	566290	7056301	Outcrop	Chip	quartz vein	**090**	**70**	Po hornfels? 165 cm chip and true width , 090/70 qtz-limonite veins, 7 veins up to 5cm wide	0.01
Rock	ShaneC	ST077934	NAD83	8V	566258	7056350	Outcrop	Grab				Po, Py hornfels with pyrite veinlets, mets-mudstone-siltstone	0.01
Rock	ShaneC	ST077935	NAD83	8V	566617	7056117	Outcrop	Grab	Quartz-lim-Po Vein	**320**	**90**	320/90 10cm qtz-lim-Po vein	0.01
Rock	JeanP	ST077936	NAD83	8V	566026	7056618	Outcrop	Chip	Quartz-limonite vein	**290**	**85**	290/85 lim-clay qtz vein to 15cm width, also sampled 1cm wallrock , margins on both sides. (JeanP:multiple chip sample lines across rusty quartz vein, 7-15 cm thick, then narrows to few cm to west, limonite and minor clay fracture fillings; fissile siltstone above, more jointed biotite hornfels below with pyrrhotite and minor chalcopyrite (SAC trench))	0.02
Rock	ShaneC	ST077937	NAD83	8V	566027	7056618	Outcrop	Chip	fault gouge	**020**	**70**	020/70 10cm diorite fault gouge with strong sericite alteration	0.02
Rock	EmilyM	ST078249	NAD83	8V	566062	7056888		grab					1.16
Rock	EmilyM	ST078250	NAD83	8V	566216	7056828		grab					0.2

6. Appendix F – Table of Soil Sample Descriptions

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z8	Note	Depth cm	Horizon
Soil	Rhianna	ST078729	567684	7056628	light brown soil with some light grey. Clay with coarse gravel. Moss/ lichen / labrador tea / blueberries / swamp birch, some fir.	15	B/C
Soil	EmilyM	ST078231	567558	7056599	grey and light brown mottled soil. Thin organic layer, permafrost at 20cm	20	B
Soil	EmilyM	ST078730	567952	7056597	Light brown soil. Moss / lichen / blueberry/labrador tea / swamp birch. Gravel in soil.	15	B
Soil	EmilyM	ST078502	569142	7055972	yellow orange soil.	20	B
Soil	EmilyM	ST078235	568669	7056480	medium grey soil. Moss and black spruce. Thin organic layer.	40	B
Soil	Rhianna	ST078743	568145	7056110	light brown soil. Moss / licne / swamp birhc / fir. One really rusted gravel chunk.	20	B
Soil	EmilyM	ST078248	568670	7056139	medium brown soil	25	B
Soil	Rhianna	ST078735	568583	7056317	light grey soil. Clay with coarse gravel. Moss, some lichen, lab tea, blueberries, fir, spruce.	30	B
Soil	Rhianna	ST078744	568330	7056133	light yellow brown soil. Predominantly lichen, some moss, swamp birch, fir	20	B
Soil	EmilyM	ST078232	567828	7056582	yellowish orange soil. Thin organic layer	25	B
Soil	EmilyM	ST078246	568237	7056116	light red brown soil.	20	B
Soil	Rhianna	ST078745	568543	7056127	light yellow brown soil. Moss with some lichen, spruce /fir, some swamp birch	30	B
Soil	EmilyM	ST078241	567750	7056259	light brown soil	25	B
Soil	EmilyM	ST078503	568805	7055760	medium brown soil	25	B
Soil	EmilyM	ST078236	568853	7056319	medium grey soil. No well	30	B

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z8	Note	Depth cm	Horizon
					developed soil, predominently medium fine gravel, some orange rocks. Moss and black spruce.		
Soil	EmilyM	ST078509	567592	7055787	olive grey soil	30	B
Soil	EmilyM	ST078511	567460	7055804	medium grey soil.	30	B
Soil	EmilyM	ST078242	567310	7056058	medium grey brown soil.	30	B
Soil	EmilyM	ST078229	567185	7056342	light brown soil. Very thin organics layer. Lichen and swamp birch.	15	B
Soil	EmilyM	ST078218	567006	7056856	dark grey soil. Moss and willows, Rich clay close to surface in runoff creek gully.	35	B
Soil	Rhianna	ST078734	568917	7056242	dark grey soil. Thick moss with lab tea, spruce and fir. Hit permafrost at 40cm	45	B
Soil	Rhianna	ST078738	567874	7056300	dark grey soil. Moss, some grass and swamp marsh, spruce. Small yellow rusted gravel flecks. Soils had slight sulphur smell.	35	B
Soil	Rhianna	ST078742	567955	7056041	light brown soil. Lichen, moss, spruce, willow.	25	B
Soil	EmilyM	ST078243	567621	7056052	light grey soil. Clay with coarse gravel. Moss, some lichen, lab tea, blueberries, fir, spruce.	25	B
Soil	Rhianna	ST078736	568381	7056358	yellow brown soil. Clay with gravel. Predominantly licen, with 40% moss, swamp birch, fir	30	B
Soil	EmilyM	ST078504	568579	7055827	medium grey soil. Oange rusted fleck within soil.	35	B
Soil	EmilyM	ST078510	567777	7055770	medium grey soil. Some rusted orange gravel and yellow flecks in soil.	25	B
Soil	EmilyM	ST078215	566249	7056524	light grey / brown soil. Glacial till/marraine. Some oragne gravel chunks in hole.	40	B

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z8	Note	Depth cm	Horizon
Soil	EmilyM	ST078247	568491	7056110	yellowish light brown soil.	25	B
Soil	EmilyM	ST078240	568042	7056369	dark grey soil. Some yellow rusted gravel flecks. Thick sphagnum moss layer.	35	B
Soil	Rhianna	ST078749	568710	7055799	light / medium gray soil. Moss / 35% lichen spruce, some fir, willlow	15	B
Soil	Rhianna	ST078748	568929	7055730	light yellow brown soil. Moss with some lichen, spruce /fir. Some patches in soil of rusted orange.	25	B
Soil	EmilyM	ST078501	568888	7056018	yellow brown soil	30	B
Soil	Rhianna	ST078737	568186	7056444	moss, some lichen, spruce, few fir + swamp birch.	25	B
Soil	EmilyM	ST078245	568024	7056110	medium grey soil	25	B
Soil	Rhianna	ST078739	567638	7056231	blue / steel grey soil. Thick organic soil layer before mineral soil. Lichen, moss, little ground vegetation. Spruce, swamp birch.	85	B
Soil	Rhianna	ST078740	567477	7056058	medium grey soil. Thick moss, willow and spruce.	25	B
Soil	EmilyM	ST078233	568055	7056608	light brown soil. Small medium angular gravel in soil.	35	B
Soil	Rhianna	ST078746	568773	7056075	light brown soil. Moss, 40% lichen, blueberries, fir spruce	25	B
Soil	Rhianna	ST078747	569004	7055972	light grey / olive grey. Moss / some lichen / fir /spruce/willow. Some orange stained gravel chunks	25	B
Soil	Rhianna	ST078726	567056	7056363	light brown soil. Moss cover with labrador tea, willow dominante, fir and spruce.	45	B/C
Soil	Rhianna	ST078718	566050	7056697	rust brown soil. Moss/kinnikikinick, some licen. Overgrown talus, birch dominant, some fir.	25	B

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z8	Note	Depth cm	Horizon
					Labrador tea. Angular gravel within soil		
Soil	Rhianna	ST078731	568203	7056617	moss thick cover, lab tea, some willow, fir dominant. Mottled orange / dark brown / dark grey soil - orange patches are more granular.	30	B
Soil	EmilyM	ST078244	567863	7056012	dark grey soil. Oragne rusted gravel flecks in soil.	40	B
Soil	EmilyM	ST078222	566441	7056976	light brown and grey. Lichen. Lots of rocks in hole. Overgrown tallus slide?	15	B
Soil	Rhianna	ST078728	567598	7056455	clay with small gravel - light brown soil. Moss/licen/blueberry cover with buckbrush. Thin organic layer to gravel clay.	15	B/C
Soil	EmilyM	ST078505	568353	7055810	dark brown soil	50	B
Soil	EmilyM	ST078223	566304	7056995	light brown soil with red hue. Feather moss / spruce.	15	B
Soil	Rhianna	ST078714	566048	7056620	grey B, dark brown C. lichen moss cover, dispersed spruce and willow. Soils profile goes from organic to clay to dark mineral soil. Clay layer ~3cm.	30	B/C
Soil	Rhianna	ST078732	568531	7056571	moss / lichen cover, lab tea and blueberries, fi. Soil has fine gravel, 10cm organic layer.	30	B/C
Soil	Rhianna	ST078715	565952	7056672	overgrown talus slope, moss cover everywhere. Birch dominant. Soil profile changes from light medium brown to light tan bown.	40	B
Soil	EmilyM	ST078724	566048	7056970	rust-tan medium brown soil. Lichen/moss on talus but 30% rock expoused. Kinnikinick everywhere. Birch dominant with some	30	B

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z8	Note	Depth cm	Horizon
					fir and willow. Lots of angular gravel in soil, soil hard to find.		
Soil	EmilyM	ST078206	565745	7056524	lots of angular gravel in hole	30	B
Soil	EmilyM	ST078723	566108	7056904	medium grey soil. Moss with labrador tea, birch and fir, some willow. Soils heavily dominated with angular gravel and pebbles.	25	B
Soil	Rhianna	ST078720	566179	7056749	dark medium brown soil. Some moss mostly lichen, blueberries, birch, fir. Angular, small to large gravel in soil. exposed slope, little canopy.	20	B
Soil	Rhianna	ST078711	565831	7057029	water run off would have come through this area. Moss cover with some horsetails. Alder with some spruce.	45	B/C
Soil	EmilyM	ST078211	565782	7057073	dark grey soil. Limonitic weather on gravel in hole. Feather moss.	25	B/C
Soil	EmilyM	ST078239	568295	7056404	medium to dark grey soil. Gravel in soil rusty into little oragne blobs.	30	B
Soil	EmilyM	ST078216	566496	7056840	medium grey soil. Overgrown tallus / slide. Big boulders in hole.	45	B
Soil	EmilyM	ST078238	568474	7056323	yellow brown soil. Clay with sand. Clay formed little peds below surface. Licehn & fir.	35	B
Soil	EmilyM	ST078725	566018	7056904	medium brown soil. Most dominant, some lichen/kinnikinick, birch/fir. Very hard to get sample, all gravel (little mineral soil), sample has many smalled cleaved rock within it. Bad sample.	40	B

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z8	Note	Depth cm	Horizon
Soil	Rhianna	ST078721	566190	7056830	medium brown soil. Lichen / moss cover with some exposed talus. Willow, birch, spruce. Lots of small medium angular gravel in smaple (taken out). Made up 60% of soil.	30	B
Soil	Rhianna	ST078727	567333	7056352	moss lichen cover with buckbrush, blueberries and labrador tea. Some orange coated gravel in hole, red soil at bottom was coarser.	15	B
Soil	EmilyM	ST078722	566202	7056892	tan medium-dark brown soil. Lichen/moss cover, little - no talus showing. Alder/spruce dominante, some willow. Large-small angular rocks everywhere in soil. Hit bedrock ~20cm.	20	B
Soil	EmilyM	ST078237	569015	7056144	dark grey soil	70	B
Soil	EmilyM	ST078214	566344	7056400	Glacial till / morraine. Light brown soil. Lichen.	25	B
Soil	Rhianna	ST078707	565793	7056681	flat on hillside, hill continues below. Medium brown soil. Thick green alder, grass and dispersed moss on forest floor.	30	B
Soil	Rhianna	ST078717	566015	7056761	moderately exposed talus. Lichen and kinnikinick gorwth. Aspen, alder, birch, fir. Lots of small to medium angular gravel bits in soil.	20	B
Soil	Rhianna	ST078703	566050	7056338	overgrown mossy layer, spruce alder forest 50% cover	35	B/C
Soil	Rhianna/ Emily	ST078201	566328	7056193	exposed soil. Aspen bushes.	10	B
Soil	Rhianna	ST078719	566097	7056823	light rust, orange brown soil. Cliffside sample, exposed rock, talus scattered throughout, red cliffs.	15	B

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z8	Note	Depth cm	Horizon
Soil	EmilyM	ST078213	565962	7057029	light tan brown. Few small spruce and alder. Course gravel with clay matrix. Thin soil on coarse tallus slope.	15	B
Soil	EmilyM	ST078204	566031	7056402	tan/light brown soil. small gravel and siltstone (?) tallus in area / hole. Open kinickinick.	30	B
Soil	Rhianna/ Emily	ST078202	566341	7056069	talus slope. 40% alder cover, low bushes. Limanectic weathering on fine grained rocks. Thin layer of soil.	25	B
Soil	EmilyM	ST078203	566115	7056269	orange brown soil. Open slide patch, exposed soil.	15	B

7. Appendix G – Humus Sample Descriptions



Unfortunately, there are no recorded descriptions for the humus/vegetation samples. This image is from one of the samples examined after returning to Whitehorse. It was spongy, degraded moss for the most part, often greater than a meter in thickness.

Humus sample location coordinates are provided alongside the assay tables in: Appendix J--Humus Assay Tables for Plotting.

8. Appendix H – Rock Assay Tables for Plotting

APPENDIX H—ROCK ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed, 0-values are values rounded to zero

Type	Sampler	SampleID	Au ppm	Te ppm	Cu ppm	Bippm	Asppm	Ag ppm	Al%	Ba ppm	Beppm	Ca%	Cd ppm	Ce ppm	Co ppm	Cr ppm	Csppm	Fe%	Gappm	Ge ppm	Hfppm	Inppm	K%	La ppm	Lippm	Mg%	Mn ppm
Rock	JeanP	ST075828	0.4	2.11	1360	22.7	10.3	4.24	4.16	3400	1.18	1.96	0.37	42.3	16.65	43.9	1.73	5.08	11.3	0.17	1.82	0.32	3.07	20.1	9.3	1.23	178
Rock	JeanP	ST075829	0.89	3.79	245	39.2	50.7	0.23	6.69	2260	2.16	3.68	0.07	68.7	12.65	66.3	7.74	3.01	18.35	0.17	2.6	0.03	4.33	36.3	12.8	1.46	197.5
Rock	JeanP	ST075830	0.18	1.46	464	80.4	3.87	2.3	3.3	850	0.66	0.94	0.06	34.3	5.42	29.5	1.3	4.01	8.08	0.16	1.47	0.13	3.01	17	3.3	0.73	97.5
Rock	JeanP	ST075831	0.1	0.45	1410	6.66	4.27	2.45	3.84	1970	1.02	3.13	0.5	36.7	8.49	70.7	2.09	2.54	10.2	0.1	1.47	0.22	2	17.7	5.3	1.35	284
Rock	JeanP	ST075832	0.01	0.04	379	0.67	4.75	0.4	1.26	369	0.39	0.78	0.17	10.4	7.65	21.4	0.73	1.72	3.87	0.05	0.34	0.09	0.55	5.3	4.8	0.42	102
Rock	JeanP	ST075833	0.64	3.07	384	37.8	1.81	1.37	1.66	76	0.38	1.68	0.03	20.6	5.26	58.6	0.41	4.41	5.59	0.13	1.23	0.1	1.21	10.5	5.2	0.47	74.7
Rock	JeanP	ST075834	0.1	0.78	1565	9.16	6.98	2.11	3.47	230	1	1.94	0.74	40.2	31.2	90.6	1.26	5.17	9.26	0.18	2.08	0.17	2.24	18.85	9.8	1.04	353
Rock	JeanP	ST075835	0.01	0.05	81.5	0.86	1.67	0.05	2.95	1150	0.78	13.75	0.02	27.5	5.53	28.5	1.46	4.16	7.88	0.1	1.15	0.01	0.14	15	28.5	5.19	269
Rock	JeanP	ST075836	0.41	3.76	2010	97.7	7.17	2.57	3.14	730	0.9	2.42	0.43	35.9	25.1	37.2	13.9	6.51	8.88	0.19	1.37	0.18	2.76	16.95	14.6	1.02	252
Rock	JeanP	ST075837	0.82	1.78	726	112.5	5.15	0.86	3.31	770	0.98	3.44	0.11	37	10.7	33.7	4.81	5.48	10.05	0.17	1.44	0.08	0.89	17.5	17.4	1.09	165
Rock	JeanP	ST075838	1.44	8.65	539	286	47.2	3.74	1.92	1680	0.31	0.17	0.11	10.4	6.91	26.8	1.88	3.7	5.2	0.11	0.86	0.06	1.44	4.65	5.8	0.08	78.6
Rock	JeanP	ST075839	0.13	0.89	84.7	12.35	49.6	0.11	7.44	5870	2.14	1.96	0.14	54.7	6.62	8	6.28	2.24	19.25	0.14	2.14	0.02	3.19	25.3	16.5	0.7	161
Rock	JeanP	ST075840	0.01	0.18	1350	5.07	3.64	0.49	2.81	36	0.39	2.42	0.07	26.6	17.8	31.3	0.33	8.29	6.67	0.2	0.87	0.09	0.04	13.85	3.7	0.6	333
Rock	JeanP	ST075841	1.56	2.95	972	407	10000	0.84	1.45	24	0.31	0.49	0.08	14.4	99.5	13.3	1.24	20.5	6.6	0.59	0.3	0.1	0.53	7.03	3.8	0.13	134
Rock	JeanP	ST075842	0.03	0.04	1055	43.4	290	0.62	1.98	300	0.47	1.51	0.17	32.4	11.25	32.7	0.52	6.04	5.9	0.16	0.82	0.05	0.81	15.55	5.2	0.5	157
Rock	ShaneC	ST077918	0.73	2	1415	16.1	148	2.77	2.15	2670	0.55	1.88	0.44	20.4	21.1	26.4	1.31	4.34	6.78	0.11	0.91	0.23	1.69	10.05	6.3	1.31	217
Rock	ShaneC	ST077919	0.33	1.34	326	19.6	25.4	0.68	2.93	700	0.85	4.9	0.11	37	15.9	93.6	1.43	4.5	8.49	0.17	1.66	0.08	2.09	18.8	9.4	0.86	256
Rock	ShaneC	ST077920	0.14	0.8	448	9.52	387	0.89	2.44	5050	0.73	2.14	0.12	26.4	12.45	70.1	1.42	4.53	6.94	0.14	1.3	0.09	1.56	13.8	7.2	0.64	259
Rock	ShaneC	ST077921	0.07	0.33	686	5.23	9.5	1.09	6.56	4850	1.87	3.41	0.29	67.6	10.5	70.9	2.56	2.97	17.55	0.17	2.59	0.09	3.91	32.7	10.6	1.8	209
Rock	ShaneC	ST077922	0.73	4.23	2120	48	37.3	11.7	1.25	1560	0.33	1.8	0.58	14.45	11.5	39.9	0.54	4.97	5.36	0.17	1.18	0.42	0.92	7.22	5.3	0.39	134.5
Rock	ShaneC	ST077923	0.96	5.86	805	80	11.7	3.9	2.63	2650	0.71	3.09	0.23	28.8	10.95	74.3	0.96	6.04	8.96	0.17	1.71	0.21	1.97	15.2	6.5	1.39	362
Rock	ShaneC	ST077924	0.26	1.94	736	19.85	5.55	1.54	3.81	3580	1.1	3.11	0.32	41.8	12.7	106.5	1.73	4.93	11.4	0.18	2.02	0.13	2.19	21.7	8.4	1.01	276
Rock	ShaneC	ST077925	0.5	2.93	1580	32.7	21.7	4.35	3.91	5940	1.03	2.5	0.59	41.7	15.45	114.5	1.4	4.17	11.1	0.17	2.11	0.29	2.77	21.7	7.9	1.08	299
Rock	JeanP	ST077926	0.39	1.87	1805	19	16	2.32	4.83	7560	1.49	3.78	0.64	52.7	27.2	125.5	1.19	3.36	12.15	0.15	2.33	0.21	3.07	27.7	7.5	1.35	417
Rock	ShaneC	ST077927	0.07	0.52	599	6.38	7.79	1.21	1.29	1180	0.36	0.54	0.15	17.95	11.45	27.6	0.56	3.68	3.52	0.11	0.63	0.09	0.88	8.73	2.7	0.4	78
Rock	ShaneC	ST077928	0.13	0.56	1135	6.49	25	0.13	4.42	3010	1.68	3.9	0.45	45.7	30.4	46.5	1.86	1.91	12.3	0.1	1.47	0.07	1.63	21.8	9.3	1.4	491
Rock	ShaneC	ST077929	0.06	0.36	1140	7.17	6.92	2	3.77	1200	1.08	2.06	0.35	41	12.3	36.4	2.21	5.16	10.6	0.14	1.61	0.15	2	20.7	9.2	1.28	183
Rock	ShaneC	ST077930	0.3	1.22	162	15.85	24.4	0.64	1.78	850	0.54	0.6	0.02	17.4	4.12	32.4	1.27	3.03	5.81	0.09	0.6	0.07	1	9.56	5.1	0.56	84.1
Rock	ShaneC	ST077931	1.57	7.81	580	91.8	542	2.43	2.46	1920	0.59	0.68	0.18	38.4	14.15	30.3	0.73	6.86	7.93	0.19	1.47	0.14	2.17	19.8	6.8	0.7	140.5
Rock	ShaneC	ST077932	0.01	0.06	334	3.23	6.41	0.41	6.41	1950	1.78	3.29	0.11	61.1	7.92	66.4	6.56	4.04	17.85	0.17	2	0.14	2.94	28.4	14.1	1.54	250
Rock	ShaneC	ST077933	0.01	0.1	322	6.08	9.09	0.41	5.86	1700	1.67	3.35	0.03	58.7	6.11	70.5	3.8	4.75	16.95	0.19	2.22	0.1	2.95	28.2	10.7	1.51	294
Rock	ShaneC	ST077934	0.01	0.07	72.4	1.41	8.28	0.1	7.37	1760	2.33	2.3	0.13	73	11.15	111	8.01	4.8	22.2	0.15	2.48	0.02	3.04	38.8	17.4	1.49	128.5
Rock	ShaneC	ST077935	0.01	0.07	264	14.45	138	0.2	1.49	570	0.25	0.35	0.03	13.5	1.16	23.8	0.64	4.5	4.72	0.05	0.58	0.03	0.64	7.15	3.8	0.46	117
Rock	JeanP	ST077936	0.02	0.47	206	9.52	5.99	0.6	1.81	409	0.51	0.37	0.04	20.1	2.13	30.7	0.91	3.56	5.77	0.06	0.95	0.05	0.76	10.4	7.2	0.53	83.8
Rock	ShaneC	ST077937	0.02	0.96	249	32.9	420	0.37	8.23	2140	1.93	0.85	0.17	63.9	10.3	6.9	2.44	3.08	19.6	0.12	2.97	0.04	4.91	31.1	17.3	0.75	129.5
Rock	EmilyM	ST078249	1.16	5.58	145.5	19.95	9.93	2.48	1.58	1180	0.18	0.52	0.1	11.55	1.5	24.1	0.18	4.13	6.4	0.21	0.56	0.04	0.04	5.58	10.5	0.05	86.5
Rock	EmilyM	ST078250	0.2	2.4	168	115.5	68.4	5.85	2.31	49	0.45	0.03	0.02	13.85	17.55	40.7	0.47	9.96	11.7	0.22	1.3	0.02	0.05	6.91	27.1	0.06	69.5

APPENDIX H—ROCK ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed, 0-values are values rounded to zero

Type	Sampler	SampleID	Mo ppm	Na %	Nb ppm	Nippm	P%	Pbppm	Rb ppm	Reppm	S%	Sbppm	Scppm	Seppm	Snppm	Srppm	Tappm	Thppm	Ti%	Tlppm	Uppm	Vppm	Wppm	Yppm	Znppm	Zrppm
Rock	JeanP	ST075828	9.22	0.36	9.18	17.65	0.34	4.54	108.5	0	0.34	0.56	7.89	7.49	12.55	153	0.61	6.35	0.3	0.43	2.76	65.4	1.7	27	41.7	64
Rock	JeanP	ST075829	10	0.64	13.45	43.1	0.25	5.19	194	0	0.29	0.69	13.35	1.3	6.76	197.5	0.9	9.71	0.43	0.83	3.98	150	7.18	31.3	23.3	91.9
Rock	JeanP	ST075830	7.15	0.39	8.05	4.03	0.2	10.5	111.5	0	0.18	0.99	4.94	9.21	8.19	120.5	0.55	4.7	0.27	0.52	1.92	40	1.87	19.1	15.1	50.2
Rock	JeanP	ST075831	2.83	0.34	7.44	26.5	0.12	3.81	85.4	0	0.12	0.81	7.65	1.82	7.4	154.5	0.48	4.95	0.25	0.37	1.82	75.9	1.03	20.9	46.1	53
Rock	JeanP	ST075832	1.59	0.09	1.8	23.8	0.04	1.39	25	0	0.08	0.23	3.08	1.92	1.78	32	0.11	1.32	0.06	0.12	0.39	17.6	0.27	5.46	17.3	11.6
Rock	JeanP	ST075833	2.57	0.08	3.93	6.55	0.26	4	40.3	0	1.96	0.39	3.85	9.5	6.93	50.1	0.26	2.67	0.15	0.19	1.4	65.2	0.81	14.7	12.2	43.9
Rock	JeanP	ST075834	3.59	0.15	7.21	54.8	0.24	4.82	73.4	0	1.35	1.5	7.48	10.95	9.14	98.5	0.48	5.18	0.27	0.46	2.65	107.5	1.23	28	57.8	75.9
Rock	JeanP	ST075835	11.95	0.03	5.51	16.55	0.06	1.12	6.92	0	0.08	0.25	6.45	0.45	2.21	358	0.36	3.83	0.18	0.12	2.49	79.9	2.95	24.8	9.6	40.8
Rock	JeanP	ST075836	7.7	0.24	7.65	18.55	0.14	3.05	91	0	2.07	1.1	5.84	11.85	7.56	85.7	0.52	5.06	0.25	0.4	1.75	60.5	11.45	20.8	37.4	45.3
Rock	JeanP	ST075837	5.75	0.3	7.79	8.69	0.21	3.83	42.7	0	2.36	0.63	5.63	7.24	7.16	103	0.53	5.04	0.25	0.19	1.78	41.8	1.26	21.2	19.9	50.3
Rock	JeanP	ST075838	4.77	0.06	3.69	11.2	0.04	4.38	41.7	0	0.12	1.33	2.58	7.62	8.5	50.5	0.24	1.9	0.12	0.57	1.05	34.9	5.92	6.16	23.9	30.5
Rock	JeanP	ST075839	0.48	1.07	14.5	3.79	0.05	9.92	122.5	0	0.26	0.48	6.75	0.95	2.57	370	1.14	10.45	0.27	0.75	3.1	20.7	2.19	12.1	34.3	65.8
Rock	JeanP	ST075840	3.75	0.11	5.67	6.79	0.06	1.98	2.06	0	5.25	0.31	3.8	16.65	5.55	90.4	0.41	3.93	0.18	0.06	0.95	18	23.3	14.5	18	27.3
Rock	JeanP	ST075841	0.98	0.07	2.4	12.3	0.03	3.31	20.5	0	7.62	50.6	1.98	96.1	3.71	29.6	0.17	1.89	0.08	0.47	0.86	12.6	2.74	6.77	10.2	9.5
Rock	JeanP	ST075842	1.74	0.12	5.42	14.55	0.07	3.05	27.7	0	2.72	0.44	3.17	6.03	7.06	60.3	0.38	4.06	0.18	0.12	1.05	20.9	1.59	15.85	13.7	24.7
Rock	ShaneC	ST077918	9.69	0.14	4.21	23.4	0.18	2.11	62.1	0	0.23	0.79	4.05	3.09	6.76	74.9	0.31	3.32	0.15	0.28	1.65	40	0.84	12.45	43.6	32.3
Rock	ShaneC	ST077919	9.84	0.14	6.07	44.1	1	4.81	70.3	0.01	1.27	0.82	7.09	6.78	8.95	135	0.39	4.5	0.22	0.3	3.29	131	3.26	29.6	21.2	63.3
Rock	ShaneC	ST077920	3.73	0.09	4.69	34.3	0.29	3.83	53.7	0	0.21	1.37	7.41	3.58	8.82	77.1	0.3	3.67	0.17	0.27	1.86	69.1	6.47	24.3	22.6	46.3
Rock	ShaneC	ST077921	3.8	0.67	14.4	35.8	0.18	5.39	161	0	0.27	0.5	12.85	2.46	9.41	221	0.93	9.83	0.44	0.65	2.85	113.5	1.52	31.7	38.9	91
Rock	ShaneC	ST077922	6.52	0.06	4.03	15.75	0.45	5.34	30.4	0	1.04	0.59	3.49	16.9	10.05	55.6	0.28	2.7	0.15	0.16	1.76	48.6	1.25	14.55	60.2	44.6
Rock	ShaneC	ST077923	5.8	0.17	6.28	20.4	0.43	4.58	63.5	0	0.45	0.64	6	13.7	8.11	94.2	0.41	4.7	0.23	0.26	2.28	102	1.08	19.75	36.4	62.8
Rock	ShaneC	ST077924	5.68	0.25	7.67	27.6	0.43	4.49	76.8	0	0.39	0.59	9.16	8.99	8.21	141	0.5	5.93	0.29	0.31	2.83	133	1.3	23.7	31	72.7
Rock	ShaneC	ST077925	3.33	0.22	8.79	32.9	0.22	4.43	87.4	0	0.23	0.65	8.96	9.65	14.6	120	0.57	6.13	0.32	0.33	2.6	128	1.34	26.9	49.4	77.6
Rock	JeanP	ST077926	3.45	0.36	9.85	54.2	0.32	4.8	95.6	0	0.25	0.68	10.55	5.04	11.85	176	0.63	7.07	0.35	0.33	3.08	156.5	1.46	32.4	56.2	88.8
Rock	ShaneC	ST077927	1.65	0.07	3.06	17.5	0.09	2.37	36.4	0	0.6	0.93	2.73	7.21	5.73	37.5	0.2	2.77	0.11	0.17	0.8	18.6	0.97	10.75	15.7	22.2
Rock	ShaneC	ST077928	2.75	0.3	7.7	67.5	0.1	2.96	66.2	0	0.18	0.85	8.62	0.66	6.73	163	0.52	5.75	0.25	0.29	1.91	70	1.26	20	46.2	48.9
Rock	ShaneC	ST077929	19.55	0.35	7.64	19.75	0.29	4.25	87.3	0	0.09	1.12	6.66	4.75	7.75	128	0.53	5.54	0.26	0.49	3.23	60	1.44	22.3	34.3	55.9
Rock	ShaneC	ST077930	2.31	0.13	3.06	8.32	0.09	2.58	52.7	0	0.07	0.55	4.81	3.3	3.37	48.6	0.2	2.31	0.1	0.22	0.92	50.3	2.57	10.8	10.9	21.5
Rock	ShaneC	ST077931	19.25	0.11	6.27	15.95	0.15	14.6	84.4	0	0.4	0.78	4.65	12.8	6.93	71.6	0.42	4.52	0.21	0.4	2.6	37.9	1.25	14.2	26.7	51.3
Rock	ShaneC	ST077932	12.5	0.64	10.55	32.1	0.1	5.24	123	0	0.5	0.91	13.05	3.65	8.96	230	0.71	7.99	0.35	0.49	3.02	87.4	1.42	26.9	24.5	70.2
Rock	ShaneC	ST077933	5.71	0.73	12.05	19.55	0.22	5.51	115.5	0	0.37	1.02	12	4.12	9.98	193	0.79	8.49	0.39	0.42	2.7	90.8	1.4	28.6	25	79.1
Rock	ShaneC	ST077934	3.19	0.59	12.1	44.1	0.28	4.05	162.5	0.01	0.69	0.8	15.05	6.35	2.01	168	0.79	9.67	0.4	1.47	3.82	317	1.48	28.4	31.9	90.5
Rock	ShaneC	ST077935	1.53	0.09	3.12	1.99	0.07	2.82	26.1	0	0.19	0.43	2.45	3.05	4.75	29.2	0.2	2.09	0.1	0.13	0.64	14.9	0.5	9.25	9.6	19.7
Rock	JeanP	ST077936	3.06	0.21	3.96	5.27	0.03	8.6	37.9	0	0.16	1.11	3.43	3.53	2.71	46.1	0.26	2.84	0.14	0.3	1.3	38.7	1.35	10.4	10.2	32.2
Rock	ShaneC	ST077937	0.8	1.06	14	3.16	0.05	16.6	176.5	0	0.14	1.01	7.29	1.64	2.06	290	1	11.15	0.29	1.02	3.5	20.7	6.21	12.85	37	98.1
Rock	EmilyM	ST078249	1.17	0.01	2	6.47	0.02	2.87	1.98	0	0.68	0.43	1.91	53.7	3.77	53.9	0.12	0.71	0.08	0.08	0.52	22.1	15.75	4.81	13.6	23.1
Rock	EmilyM	ST078250	1.55	0	3.93	17.25	0.02	11.35	2.45	0.03	4.17	0.99	4.01	44.2	8.97	10.4	0.24	1.59	0.16	0.45	1.16	64.9	1030	6.74	15.2	45.9

9. Appendix I – Soil Assay Tables for Plotting

APPENDIX I—SOIL ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed, 0-values are values rounded to zero

Type	Sampler	Sample ID	Au ppm	Ag ppm	al_pct	as_ppm	ba_ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	ce_ppm	co_ppm	cr_ppm	cs_ppm	cu_ppm	fe_pct	ga_ppm	ge_ppm	hf_ppm	in_ppm	k_pct	la_ppm	li_ppm	mg_pct	mn_ppm	mo_ppm
Soil	Rhianna	ST078729	0	0.54	4.86	34	970	0.93	0.45	0.43	0.1	63.2	3.02	58.9	4.22	9.47	2.15	16.55	0.08	2.07	0.04	1.15	33.6	21.2	0.36	163	1.74
Soil	EmilyM	ST078231	0	0.39	4.66	23.7	950	0.88	0.47	0.41	0.25	61.5	3.85	59.1	4.03	15.5	2.69	14.65	0.11	1.88	0.04	1.11	31.6	20.2	0.36	216	1.76
Soil	EmilyM	ST078730	0	1.1	6.04	40.8	1200	1.31	0.56	0.47	0.18	64.9	7.67	71.5	4.62	19.9	3.63	15.35	0.09	2.11	0.05	1.42	33.9	34.4	0.59	277	2.93
Soil	EmilyM	ST078502	0	0.2	5.92	17.3	1420	1.29	0.28	0.47	0.17	60.4	7.8	70.8	4.97	20.7	3.69	15.35	0.1	2.05	0.04	1.35	31.7	37.2	0.61	306	2.23
Soil	EmilyM	ST078235	0.01	1.83	6	36.4	1680	1.3	2.28	0.59	0.15	62.2	2.95	75.2	5.4	21.9	1.36	15.75	0.11	2.1	0.06	1.67	32.8	26.7	0.48	126.5	0.8
Soil	Rhianna	ST078743	0.01	1.08	5.78	29.5	1480	1.31	0.44	0.37	0.28	64.4	7.53	69.2	4.12	23.7	3.47	15.05	0.07	1.95	0.05	1.17	33.8	33.6	0.49	236	3.08
Soil	EmilyM	ST078248	0	0.46	5.93	20.4	1340	1.13	0.42	0.46	0.27	60.5	5.38	71	5.25	23.8	3.3	17.35	0.1	2.06	0.05	1.27	31.5	30.2	0.53	272	2.88
Soil	Rhianna	ST078735	0	0.54	6.16	26.4	1420	1.47	0.44	0.41	0.24	63.3	11.4	72	4.36	24.6	3.77	14.6	0.09	2.04	0.05	1.32	33.3	37	0.62	323	2.79
Soil	Rhianna	ST078744	0	0.94	6.2	33	1530	1.44	0.41	0.46	0.39	67	9.64	69.6	4.5	25.1	3.66	16.05	0.09	2.01	0.05	1.28	35.2	35.5	0.6	280	2.82
Soil	EmilyM	ST078232	0	0.28	5.5	82.5	1290	1.19	0.74	0.31	0.32	60.7	7.02	67.2	3.97	26.5	3.74	15.25	0.11	2.01	0.06	1.17	32.7	35.6	0.46	207	2.66
Soil	EmilyM	ST078246	0	0.24	6.18	33	1490	1.41	0.52	0.35	0.37	63.9	10.3	73.3	4.27	31.9	3.89	15.15	0.11	2.05	0.05	1.24	33.4	41.8	0.55	282	3.15
Soil	Rhianna	ST078745	0	0.25	5.54	26.6	1870	1.23	0.62	0.39	0.28	77.3	6.63	68.6	4.76	32.4	2.98	15.95	0.11	2.23	0.04	1.28	40.4	32.2	0.43	237	2.7
Soil	EmilyM	ST078241	0	0.85	6.28	66	1540	1.54	0.8	0.44	0.32	67.6	12.45	73.2	4.32	32.4	3.78	15.25	0.11	2.12	0.07	1.42	35.5	36.3	0.67	401	2.92
Soil	EmilyM	ST078503	0	0.36	5.34	19.4	2120	1.35	0.26	0.38	0.29	63.5	10.1	69.3	4.36	34.6	3.33	13.7	0.1	1.89	0.05	1.19	32.5	34.9	0.52	299	3.03
Soil	EmilyM	ST078236	0	0.29	4.64	26.1	1570	1.14	0.64	0.31	0.18	58.5	4.26	63.1	5.99	35.1	2.01	12.05	0.11	1.86	0.07	1.31	30.1	21.5	0.26	215	3.04
Soil	EmilyM	ST078509	0	0.71	6.45	62	2490	1.64	0.77	0.98	1.25	69	12.65	76.6	5.39	41.6	3.12	16.45	0.13	2.14	0.07	1.59	35.5	48.5	0.64	495	3.14
Soil	EmilyM	ST078511	0	0.44	5.56	38.7	2170	1.53	0.51	0.79	0.44	73.1	11.95	61	4.24	42.2	3.11	14.15	0.1	2.05	0.06	1.45	37.8	39.4	0.61	583	3.26
Soil	EmilyM	ST078242	0	0.4	5.65	51.6	1820	1.42	0.74	0.48	0.33	69.5	8.81	67.7	3.98	42.3	3.08	14.05	0.12	2.1	0.05	1.44	36.4	35.8	0.54	319	2.83
Soil	EmilyM	ST078229	0	0.24	5.76	47.9	1420	1.39	0.96	0.26	0.29	68.9	13.25	71.3	4.61	42.5	3.81	14	0.11	2.28	0.06	1.18	35	36.2	0.46	237	2.8
Soil	EmilyM	ST078218	0.01	0.97	6.22	50.7	2620	1.66	1.75	1.12	0.79	61.8	9.97	77	7.25	43.1	2.59	15.2	0.13	2.16	0.07	1.6	31.7	43.1	0.53	358	1.43
Soil	Rhianna	ST078734	0.02	0.45	5.4	16.85	1700	1.33	0.29	0.47	0.39	69.1	3.94	64.5	4.77	44.8	2.59	14.25	0.1	2.08	0.05	1.49	35.8	35.3	0.42	99	1.97
Soil	Rhianna	ST078738	0.01	0.82	5.45	69.5	2290	1.36	0.9	0.91	1.02	62.9	7.93	69.1	4.3	45.8	2.33	13.65	0.1	2.06	0.05	1.38	33.2	36.6	0.6	179.5	2.38
Soil	Rhianna	ST078742	0.01	0.44	5.99	54.3	1730	1.61	0.57	0.4	0.34	69	12.4	70.2	4.36	46.1	3.47	14.85	0.1	2.12	0.05	1.41	35.4	36.7	0.61	339	3.24
Soil	EmilyM	ST078243	0	0.48	5.76	66.3	2150	1.47	0.94	0.51	0.34	71	11.3	70.8	4.22	46.3	3.05	14.35	0.12	2.03	0.07	1.47	36.7	38.5	0.56	488	2.9
Soil	Rhianna	ST078736	0.01	0.9	6.14	40.6	1430	1.29	0.64	0.4	0.44	58.1	9.22	71.4	5.42	47.2	4.32	17.9	0.09	1.95	0.09	1.32	30.8	40.7	0.56	332	3.19
Soil	EmilyM	ST078504	0	0.46	5.57	25	4940	1.53	0.47	0.66	0.64	61.9	13.6	70.6	4.48	47.9	3.39	14.15	0.11	1.92	0.06	1.5	30.6	41.3	0.56	726	3.35
Soil	EmilyM	ST078510	0.01	0.44	5.51	57.3	2380	1.52	0.66	0.61	0.46	72.5	8.54	57.4	3.89	47.9	3.2	13.7	0.09	2.05	0.05	1.48	37.5	36.1	0.58	409	3.5
Soil	EmilyM	ST078215	0.01	0.36	6.4	136.5	1950	1.35	1.44	0.22	0.12	63	4.48	68.3	9.98	49.2	2.54	19.5	0.11	2.24	0.05	1.68	33.5	30.8	0.36	134.5	4.63
Soil	EmilyM	ST078247	0.01	0.35	5.87	42.4	1630	1.21	1.02	0.3	0.33	62.9	7.33	72.5	4.2	49.3	4.1	12.65	0.09	2	0.06	1.22	33.4	32.5	0.46	244	2.92
Soil	EmilyM	ST078240	0.01	0.93	5.65	26.4	2590	1.54	0.47	0.71	1.73	67.1	9.24	63.7	4.28	51.5	2.9	13.5	0.12	2.01	0.05	1.43	34.9	40.4	0.57	237	2.13
Soil	Rhianna	ST078749	0.01	0.34	5.09	28.3	4850	1.38	0.35	0.28	0.2	65.4	14.3	75.4	3.8	52.4	3.22	13.15	0.11	2.22	0.06	1.22	32.7	38.4	0.41	932	2.64
Soil	Rhianna	ST078748	0	0.17	5.32	20.6	2830	1.41	0.32	0.19	0.32	68.5	12.05	69.3	4.87	53.3	3.28	14.2	0.1	2.16	0.05	1.37	33.7	35.7	0.45	379	3.38
Soil	EmilyM	ST078501	0	0.17	5.71	21.9	2980	1.51	0.33	0.22	0.27	68.2	11.8	72.3	4.74	53.5	3.89	14.6	0.11	2.08	0.06	1.24	34	39.5	0.58	287	2.48
Soil	Rhianna	ST078737	0.01	1.83	7.08	45.9	3640	1.95	0.81	0.56	1.54	64.7	9.83	85.8	11	54.5	3.43	19	0.1	1.94	0.07	1.57	34.9	42.8	0.53	330	3.28
Soil	EmilyM	ST078245	0.05	0.39	5.09	44.2	1830	1.35	0.73	0.45	0.42	74.5	9.35	59.2	3.29	54.6	3.17	13.1	0.13	2.11	0.05	1.28	38.4	36.5	0.54	353	2.86
Soil	Rhianna	ST078739	0	0.5	6.47	70.9	2300	1.74	0.69	0.9	1.99	66.8	13.8	81.6	5.09	56	2.46	16.5	0.12	2.21	0.06	1.7	34.5	47.4	0.7	228	3.07
Soil	Rhianna	ST078740	0.01	0.6	5.57	71.9	2950	1.55	0.82	0.63	0.43	71	9.92	71.3	4.28	56.2	3.16	11.25	0.09	2.18	0.06	1.46	37.3	40.5	0.56	289	3.79

APPENDIX I—SOIL ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed, 0-values are values rounded to zero

Type	Sampler	Sample ID	Au ppm	Ag ppm	al_pct	as_ppm	ba_ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	ce_ppm	co_ppm	cr_ppm	cs_ppm	cu_ppm	fe_pct	ga_ppm	ge_ppm	hf_ppm	in_ppm	k_pct	la_ppm	li_ppm	mg_pct	mn_ppm	mo_ppm
Soil	EmilyM	ST078233	0.01	1.9	6.63	43.9	1460	1.53	1.19	0.62	0.37	69.5	8.68	75.8	5.33	56.9	3.3	17.45	0.13	2.09	0.07	1.54	36.8	35.1	0.64	310	5.74
Soil	Rhianna	ST078746	0	0.4	6.01	26.2	2460	1.5	0.37	0.36	0.23	67.9	8.02	77	6.97	58.8	3.92	16.55	0.1	2.06	0.05	1.34	35.3	55.4	0.73	345	2.37
Soil	Rhianna	ST078747	0	0.47	6.09	20.8	3510	1.67	0.31	0.66	0.32	67.6	12.05	74.1	6.33	61.8	3.39	15.5	0.1	2.05	0.06	1.4	35.3	48.5	0.6	409	2.77
Soil	Rhianna	ST078726	0	0.56	5.41	22.7	2300	1.54	0.63	0.85	0.29	70.9	10.7	66.4	5.91	61.9	3.07	13.75	0.11	2.13	0.05	1.18	37.4	40.8	0.51	282	2.37
Soil	Rhianna	ST078718	0	0.22	5.99	144	1160	1.52	1.31	0.36	0.17	61.4	11.65	65.5	11.2	64.3	5.23	15.75	0.09	1.91	0.04	1.39	32.4	39.7	0.56	239	3.88
Soil	Rhianna	ST078731	0.19	1.54	7.74	21.7	2180	1.93	4.44	1.33	1.1	50.8	8.41	34.8	9.93	73.9	2.91	19.9	0.09	2.13	0.08	1.73	24.3	34.6	0.68	269	3.02
Soil	EmilyM	ST078244	0.02	1	6.88	64.5	2860	1.92	0.96	1.37	1.31	58.6	14.65	82.7	6.92	78.1	3.61	15.9	0.12	1.97	0.07	1.75	30.3	57.1	0.64	503	3.1
Soil	EmilyM	ST078222	0	0.21	5.75	235	1200	1.16	1.87	0.58	0.13	58.8	4.49	65.9	13.4	79.2	1.88	17.25	0.11	2.14	0.04	1.57	30.6	24.5	0.52	184	9.11
Soil	Rhianna	ST078728	0.01	1.18	5.35	265	1700	1.45	1.4	0.46	1.01	64.8	8.13	60.9	5.69	80.8	3.34	13.35	0.09	1.88	0.06	1.3	33.3	33.2	0.51	270	2.63
Soil	EmilyM	ST078505	0.01	0.97	6.6	356	2440	1.94	4	1.82	1.29	53.1	9.21	55.9	10.55	85.2	3.05	16.2	0.12	1.8	0.05	1.84	28.7	59.1	0.66	514	2.38
Soil	EmilyM	ST078223	0.01	0.79	6.83	206	1560	1.86	2.22	0.72	0.53	72.3	33	77.3	19	98.2	3.31	17.75	0.13	1.54	0.05	1.54	34.1	56.1	0.6	1100	2.04
Soil	Rhianna	ST078714	0.02	0.31	5.2	597	1100	1.12	9.09	0.52	0.14	62	4.83	47.8	5.48	101.5	2.33	17.8	0.08	1.96	0.04	1.45	32.3	18.2	0.39	149	2.94
Soil	Rhianna	ST078732	0.05	10.9	6.87	389	2350	1.68	5.35	0.37	0.66	78.7	6.95	91.5	6.09	112.5	3.22	17.8	0.12	2.32	0.37	1.96	40.9	41.7	0.56	179	3.46
Soil	Rhianna	ST078715	0.02	0.58	5.99	533	1290	1.34	7.59	0.78	0.33	61.6	10	67.5	7.77	118.5	2.83	17	0.09	1.68	0.05	1.37	31.8	26.5	0.56	331	1.66
Soil	EmilyM	ST078724	0.05	1.32	5.2	82.7	4660	1.07	4.55	0.37	0.38	51.5	11.1	59.1	8.63	122	4.86	16.35	0.08	1.73	0.07	1.14	26.7	45.9	0.46	462	2.45
Soil	EmilyM	ST078206	0	0.22	6.14	237	1630	1.84	1.47	1.32	0.14	58.6	22.4	58.9	4.63	131	4.45	14.45	0.11	1.98	0.08	1.91	30.2	18.8	1.36	381	5.64
Soil	EmilyM	ST078723	0.02	0.58	5.36	483	2530	1.17	5.16	0.39	0.19	61.3	9.23	82.6	7.55	142	3.87	16.1	0.09	2.14	0.05	1.42	32.4	26.1	0.49	241	4.44
Soil	Rhianna	ST078720	0.09	1.15	4.76	10000	1600	1.36	37.6	0.46	0.65	63	12.05	59.6	5.46	144.5	6.31	12.5	0.09	1.67	0.07	1.08	31.7	23.8	0.43	596	1.96
Soil	Rhianna	ST078711	0.01	0.78	5.95	119.5	1880	1.87	1.31	1.41	1.23	69.9	59.9	64.4	7.86	145.5	6.96	13.7	0.12	1.8	0.04	1.4	37	46.6	0.55	1625	9.98
Soil	EmilyM	ST078211	0.02	0.93	6.22	517	2450	1.68	3.33	0.82	0.53	71.7	18.3	79.9	9.08	149	3.83	15.6	0.14	1.92	0.05	1.55	38.1	40.1	0.54	798	5.92
Soil	EmilyM	ST078239	0.02	3.24	6.64	65.1	2560	1.75	1.73	0.68	1.18	76.8	12.8	78.2	5.86	176.5	3.44	15.7	0.15	2.11	0.14	1.58	40.5	49.6	0.66	339	3.26
Soil	EmilyM	ST078216	0.01	0.69	5.3	60.5	1510	1.3	0.84	0.26	0.32	64.4	12.4	65.8	5.72	190	3.04	11.15	0.1	1.78	0.06	1.27	34.2	35.9	0.35	498	3
Soil	EmilyM	ST078238	0.18	0.46	7.38	42	2910	2.13	0.75	0.4	0.47	58.5	12.6	59.3	6.74	191.5	4.73	17.9	0.12	2.16	0.06	1.61	30	38	0.65	260	3.79
Soil	EmilyM	ST078725	0.01	0.46	6.96	82	2050	2.68	0.85	0.14	0.09	173.5	31.4	81.3	12.15	192.5	12	17	0.25	2.24	0.06	1.67	96.9	23.2	0.45	386	4.8
Soil	Rhianna	ST078721	0.07	0.46	5.6	3350	3330	1.56	16.65	0.21	0.22	60.9	15.4	85.4	8.2	200	5.94	17.25	0.08	1.74	0.08	0.89	28.3	38.1	0.25	537	1.88
Soil	Rhianna	ST078727	0.01	0.31	4.98	27	1160	1.48	0.93	1.48	0.72	73.9	14.85	58.6	5.55	205	7.8	12.4	0.13	1.65	0.13	0.99	39.8	37.7	0.49	587	3.81
Soil	EmilyM	ST078722	0	0.49	4.91	204	2460	0.96	2.54	0.39	0.14	65.4	6.49	58.7	7.3	206	3.67	15.9	0.09	1.61	0.04	0.98	33.6	19.1	0.37	361	2.23
Soil	EmilyM	ST078237	0.02	1.29	6.45	8.26	7030	1.76	0.33	1.88	0.36	46	10.5	99.2	33.1	209	2.62	16.5	0.15	1.99	0.06	1.7	25.2	96.6	0.79	624	0.92
Soil	EmilyM	ST078214	0.01	0.66	6.18	137	2320	1.79	1.09	0.15	0.32	76.2	30.6	75.3	6.46	220	4.29	14.8	0.13	2.32	0.06	1.48	38.8	45.7	0.53	298	4.29
Soil	Rhianna	ST078707	0.02	0.82	5.56	497	1170	1.85	10.75	0.99	0.36	61.1	30.9	60.3	5.46	309	4.55	14.3	0.09	1.76	0.07	1.48	30.9	22.7	0.91	1070	9.51
Soil	Rhianna	ST078717	0.03	1.15	4.66	940	1030	1.23	10.25	0.19	0.12	42.4	5.8	63.4	6.56	326	5.5	12.05	0.08	1.67	0.07	0.79	23.5	32.3	0.51	144	38.9
Soil	Rhianna	ST078703	0.02	0.46	5.77	411	1950	1.83	16.1	1.72	0.32	68	27.2	60	6.05	349	4.5	14.35	0.1	1.74	0.05	1.91	35.5	21.9	0.99	359	20.3
Soil	Rhianna/ Emily	ST078201	0.15	0.43	7.4	130	2800	2.51	9.08	2.88	0.07	82.5	18.65	77.5	8.35	385	3.91	19.35	0.26	2.97	0.06	3.32	43.6	14.3	1.36	288	11.2
Soil	Rhianna	ST078719	0.05	2.27	4.41	441	640	0.85	22.7	0.1	0.04	50.4	8.71	68.6	7.4	492	11.3	15.15	0.11	1.94	0.12	1.2	26.9	21.5	0.51	207	4.88
Soil	EmilyM	ST078213	0.04	2.69	7.66	161.5	6350	2.85	2.46	0.25	0.91	123	113.5	102	11.15	524	6.47	16.65	0.23	2.36	0.07	1.56	52.1	36.5	0.56	1685	5.46
Soil	EmilyM	ST078204	0.03	1.25	6.66	296	1770	1.91	32.2	1.26	0.19	64.7	23.7	69.7	7.48	534	6.19	17.1	0.12	2.29	0.1	2.07	34.4	24.9	1.5	246	7.93

APPENDIX I—SOIL ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed, 0-values are values rounded to zero

Type	Sampler	Sample ID	Au ppm	Ag ppm	al_pct	as_ppm	ba_ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	ce_ppm	co_ppm	cr_ppm	cs_ppm	cu_ppm	fe_pct	ga_ppm	ge_ppm	hf_ppm	in_ppm	k_pct	la_ppm	li_ppm	mg_pct	mn_ppm	mo_ppm
Soil	Rhianna/ Emily	ST078202	0.08	1.13	3.76	40.1	960	1.35	24.2	4.36	0.78	48.7	37.3	44.2	3.35	1075	4.99	9.17	0.11	1.22	0.1	1.4	25.3	9.1	1.05	482	4.36
Soil	EmilyM	ST078203	0.72	2.3	2.5	10000	1640	1.57	394	0.84	1.07	36.1	13.1	60.6	3.21	2280	22.1	6.6	0.19	1.05	0.16	1.14	19.8	8.4	0.54	132	12.5

Type	Sampler	Sample ID	Na pct	Nb ppm	ni_ppm	p_pct	pb_ppm	rb_ppm	re_ppm	s_pct	sb_ppm	sc_ppm	se_ppm	sn_ppm	sr_ppm	ta_ppm	te_ppm	th_ppm	ti_pct	tl_ppm	u_ppm	v_ppm	w_ppm	y_ppm	Zn ppm	zr_ppm
Soil	Rhianna	ST078729	0.66	15.2	10.15	0.03	14.25	60.8	0	0.01	1.17	9.11	0.26	2.26	97	1.03	0.05	8.38	0.47	0.64	2.49	141	1.67	10.45	39.7	76.7
Soil	EmilyM	ST078231	0.62	13.65	12.7	0.07	12	57.9	0	0.01	1.34	8.36	0.43	1.99	93.3	0.94	0.05	7.91	0.44	0.63	2.32	131	1.55	9.71	65.6	71.2
Soil	EmilyM	ST078730	0.77	13.9	21.9	0.05	21.1	80.5	0	0.01	1.65	10.2	0.82	2.12	110.5	0.93	0.06	9.98	0.42	0.7	2.76	157.5	1.61	12.2	74	78.1
Soil	EmilyM	ST078502	0.73	13.6	23.8	0.06	19.15	72.7	0	0.01	1.6	9.66	0.61	2.06	110	0.94	0.05	9.37	0.41	0.61	2.56	154.5	1.55	11.35	91.3	75.8
Soil	EmilyM	ST078235	0.81	13.2	13.65	0.06	57.2	93.6	0	0.05	1.23	10.65	1.69	3.65	136	0.91	0.04	8.8	0.41	0.88	2.89	142.5	1.6	13.05	39.7	77.3
Soil	Rhianna	ST078743	0.62	13.65	27.1	0.04	23.2	67.4	0	0.01	2.31	9.57	0.84	2.01	94.6	0.89	0.07	8.95	0.43	0.67	2.65	168.5	1.55	10.9	85.4	72.7
Soil	EmilyM	ST078248	0.73	14.55	16.15	0.06	17.75	68.6	0	0.02	1.63	10.3	0.56	2.28	107	1.02	0.05	8.81	0.45	0.69	2.69	163	1.66	11	74	76.9
Soil	Rhianna	ST078735	0.7	13.05	31.4	0.05	22.6	74	0	0.01	2.16	10.5	0.92	1.84	106	0.87	0.06	10.75	0.4	0.71	2.75	156.5	1.45	11.85	89.8	76
Soil	Rhianna	ST078744	0.76	13.65	27.5	0.04	31.9	73	0	0.01	2.14	10.95	0.86	2.83	109.5	0.91	0.06	10.4	0.41	0.7	2.89	157	1.6	11.85	85.3	76.8
Soil	EmilyM	ST078232	0.53	13.45	25.5	0.04	22	65.9	0	0.01	2.48	9.34	0.91	2.12	88.5	0.91	0.06	8.7	0.45	0.61	2.53	159	1.49	10.9	90	75.2
Soil	EmilyM	ST078246	0.6	13.7	34.3	0.05	21.5	70.8	0	0.02	2.49	10.05	1.14	2.01	98.8	0.9	0.07	9.64	0.42	0.67	2.83	168.5	1.62	11.45	112	77.1
Soil	Rhianna	ST078745	0.54	14.65	25.5	0.06	18.85	79	0	0.01	1.92	11.55	0.79	1.96	115	0.95	0.07	10.05	0.46	0.66	2.71	146	1.68	13.85	79.8	80.8
Soil	EmilyM	ST078241	0.74	13.45	31.6	0.06	24.5	77.4	0	0.01	2.45	11.25	0.98	2.14	112	0.93	0.06	10.9	0.42	0.72	3.12	158.5	1.62	14.05	92.4	79.4
Soil	EmilyM	ST078503	0.58	12.75	32.2	0.04	15.95	71.4	0	0.02	2.43	9.57	0.85	1.81	99.5	0.85	0.06	8.68	0.39	0.65	2.79	160.5	1.35	12.5	106.5	72.9
Soil	EmilyM	ST078236	0.45	10.9	16.75	0.06	25.8	70	0	0.02	1.77	9.08	0.93	2.09	116.5	0.72	0.06	7.92	0.35	0.59	2.72	132	1.24	12.1	66.1	73.7
Soil	EmilyM	ST078509	0.53	12.45	34.2	0.11	36.2	93.2	0	0.07	2.96	13	1.58	2.26	148	0.84	0.06	10.65	0.39	0.82	6.01	175.5	1.55	16.85	143	79.6
Soil	EmilyM	ST078511	0.57	12.55	37.8	0.11	25.4	76.6	0	0.03	2.65	12.05	1.5	1.9	130.5	0.82	0.06	10.3	0.38	0.66	3.46	137	1.47	18.5	123.5	77.9
Soil	EmilyM	ST078242	0.65	12.95	28.7	0.1	27.7	75	0	0.01	2.71	10.85	1.5	2.08	117.5	0.89	0.06	10.2	0.41	0.65	3.43	147	1.51	16.5	95.7	77.4
Soil	EmilyM	ST078229	0.48	13.45	39.6	0.04	25.5	68	0	0.01	3.19	9.83	1.21	2.11	97.5	0.9	0.06	11.1	0.42	0.59	2.99	143.5	1.89	13.2	97.2	86.6
Soil	EmilyM	ST078218	0.42	11	32.4	0.07	37.7	91.5	0	0.13	1.67	12.75	1.91	2.55	173	0.73	0.05	9.55	0.36	0.74	3.3	134	1.39	19.3	128.5	85.7
Soil	Rhianna	ST078734	0.46	12.6	31.2	0.09	18.55	84.5	0	0.07	1.32	11	2.16	1.77	122	0.81	0.05	9.84	0.36	0.62	2.86	132	1.19	15.65	66.2	78.2
Soil	Rhianna	ST078738	0.67	11.7	35.2	0.1	22.6	76.9	0	0.12	2.18	11.65	1.46	1.86	152.5	0.78	0.06	9.54	0.37	0.69	3.87	145.5	1.32	17.45	93.1	78.2
Soil	Rhianna	ST078742	0.65	13	40.3	0.06	24.8	79.3	0	0.01	2.71	11.45	1.19	1.94	105.5	0.87	0.07	10.8	0.39	0.72	3.07	161	1.68	14.35	105.5	79.8
Soil	EmilyM	ST078243	0.58	13.4	30.1	0.09	29.7	79.9	0	0.02	2.87	11.05	1.25	2.35	117	0.88	0.07	10	0.42	0.72	3.22	167.5	1.61	16.15	101.5	78.1
Soil	Rhianna	ST078736	0.66	13.6	25.7	0.08	41.9	79.6	0	0.01	2.33	11	0.77	2.7	103	0.92	0.12	8.79	0.42	0.79	2.45	163	1.82	10.35	142	73.4
Soil	EmilyM	ST078504	0.44	11.5	33.3	0.1	31.3	77.1	0	0.07	2.02	11.9	1.27	2.52	165	0.76	0.07	8.67	0.38	0.64	3.39	156	1.46	16.05	163.5	77.2
Soil	EmilyM	ST078510	0.61	12.05	34.4	0.1	21.1	69.2	0	0.01	2.9	10.85	1.05	1.88	117.5	0.82	0.07	10.2	0.39	0.66	3.19	153.5	1.56	17.1	120	77.3
Soil	EmilyM	ST078215	0.43	15.1	14.25	0.05	11.35	95.1	0	0.02	1.73	10.55	0.63	2.57	97.4	1.02	0.1	9.29	0.46	1.02	2.89	154.5	10.65	11.05	44.9	84.7
Soil	EmilyM	ST078247	0.51	13.05	28.9	0.08	31.5	67.7	0	0.02	2.79	7.95	1.12	2.27	89.5	0.9	0.11	9.64	0.42	0.66	2.68	161	1.65	11	110.5	77.8
Soil	EmilyM	ST078240	0.61	11.7	39.2	0.13	24.2	74.4	0	0.09	2.2	12.25	2.53	1.69	133.5	0.8	0.06	10.3	0.37	0.69	4.56	139.5	1.8	18.95	132.5	74.5
Soil	Rhianna	ST078749	0.38	11.8	38.9	0.06	30.8	64.1	0	0.03	2.89	11.8	1.07	1.84	122.5	0.75	0.1	8.1	0.36	0.55	2.77	138.5	1.49	13.4	131.5	86.6
Soil	Rhianna	ST078748	0.38	12.8	39.4	0.04	18.65	74.4	0	0.01	2.22	12.05	0.83	1.78	95.2	0.82	0.08	8.34	0.39	0.65	2.57	144.5	1.48	13.05	123.5	84.1

APPENDIX I—SOIL ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed, 0-values are values rounded to zero

Type	Sampler	Sample ID	Na pct	Nb ppm	ni_ppm	p_pct	pb_ppm	rb_ppm	re_ppm	s_pct	sb_ppm	sc_ppm	se_ppm	sn_ppm	sr_ppm	ta_ppm	te_ppm	th_ppm	ti_pct	tl_ppm	u_ppm	v_ppm	w_ppm	y_ppm	Zn ppm	zr_ppm
Soil	EmilyM	ST078501	0.45	12.3	39.7	0.05	18.45	76.7	0	0.02	2.26	11.25	0.85	1.79	102.5	0.81	0.09	9.53	0.39	0.61	2.68	148.5	1.48	14.3	114.5	81.2
Soil	Rhianna	ST078737	0.51	11.15	54.9	0.18	36.8	113.5	0	0.09	2.17	14.75	1.77	2.28	125	0.71	0.08	10.4	0.34	0.97	3.86	189.5	1.85	17.85	106	75
Soil	EmilyM	ST078245	0.6	13.3	32.7	0.08	28.4	66.2	0	0.01	3.11	10.5	1.14	1.94	113.5	0.91	0.07	10.6	0.41	0.58	3.05	139	1.58	17.05	122.5	80.5
Soil	Rhianna	ST078739	0.84	12.85	48.6	0.08	28.5	93.6	0.01	0.23	2.72	14.3	5.12	2.19	176.5	0.86	0.07	10.7	0.39	0.8	7.81	160.5	1.49	19.1	189	81.6
Soil	Rhianna	ST078740	0.57	13.1	45.1	0.1	22.6	80.8	0	0.04	3.36	9.94	1.97	1.94	134	0.85	0.08	10.5	0.41	0.72	4.15	182	1.5	19.45	126.5	84.9
Soil	EmilyM	ST078233	0.93	13.95	25.9	0.05	35	87.9	0	0.01	2.19	11.6	1.99	2.74	134.5	0.97	0.06	10.15	0.43	0.84	3.51	154	1.6	16.4	77.2	78.3
Soil	Rhianna	ST078746	0.56	12.4	37.4	0.04	16.4	80.6	0	0.02	1.68	12.15	0.62	1.89	106	0.88	0.07	8.68	0.4	0.7	2.69	164.5	1.41	14.25	125.5	77.1
Soil	Rhianna	ST078747	0.65	11.95	39.9	0.07	19.2	82	0	0.02	1.9	12.95	0.85	1.74	177.5	0.8	0.07	9.58	0.38	0.76	3.13	150	1.29	18.05	108.5	82.7
Soil	Rhianna	ST078726	0.52	11.5	46.5	0.1	17.95	65.8	0	0.06	1.88	12	1.49	1.68	135.5	0.76	0.06	10.35	0.36	0.63	3.47	122	1.71	20.4	81.4	81.5
Soil	Rhianna	ST078718	0.58	12.05	49.3	0.05	14.7	81.8	0	0.03	2.39	10.25	0.99	1.94	89.8	0.8	0.09	8.74	0.38	0.67	2.43	133.5	1.59	10.05	72	72.3
Soil	Rhianna	ST078731	0.67	14.2	26.6	0.07	36.7	91.1	0	0.07	3.28	8.45	7.61	2.69	183.5	1	0.5	11.05	0.35	0.72	2.94	75.9	2.77	11.15	125	73.2
Soil	EmilyM	ST078244	0.52	10.95	59.5	0.09	26.8	103.5	0	0.11	3.1	13.5	3.43	2.1	231	0.75	0.1	9.46	0.34	0.98	4.59	201	1.35	18.25	137.5	75.6
Soil	EmilyM	ST078222	0.83	13.75	15.6	0.03	12.8	88.3	0	0.02	0.73	10.15	0.28	2.2	123.5	0.94	0.08	8.22	0.46	0.75	2.69	139	3.2	12.2	45.6	80.3
Soil	Rhianna	ST078728	0.64	11.25	27.2	0.09	36.9	77.8	0	0.03	1.87	9.05	0.59	2.01	108	0.76	0.07	7.61	0.37	1.64	2.5	128.5	1.47	13.55	92.2	67.6
Soil	EmilyM	ST078505	0.34	11	37.5	0.08	41.1	101	0	0.18	2.7	10.95	2.11	2.07	304	0.74	0.18	9.7	0.32	0.92	5.04	128	1.28	16.85	135	66.4
Soil	EmilyM	ST078223	0.81	12.7	69.5	0.03	16.95	127.5	0	0.02	2.39	11.35	0.66	2.46	158.5	0.86	0.1	8.74	0.41	2.01	3.62	155.5	2.26	14.05	74.3	57.5
Soil	Rhianna	ST078714	0.7	13.4	13.9	0.05	13.3	73	0	0.04	1.26	8.55	0.74	2.28	117	0.94	0.27	8.72	0.4	0.64	2.73	104.5	1.74	10.65	43.1	71.8
Soil	Rhianna	ST078732	0.47	14.1	31.1	0.12	757	112	0	0.05	9.36	14.75	2.32	6.64	126.5	0.89	0.3	11.4	0.43	1.08	3.78	176.5	2.04	19.8	133	89.9
Soil	Rhianna	ST078715	0.82	12.65	28	0.04	15.4	91.1	0	0.03	2.09	10.1	0.37	2.93	124.5	0.85	0.1	7.95	0.41	0.88	2.61	124	1.7	13.25	39.2	61.6
Soil	EmilyM	ST078724	0.51	9.83	39.6	0.06	15.55	73.1	0	0.04	3.46	10.9	0.75	2.11	105	0.64	0.46	6.34	0.37	0.86	1.88	130.5	2.84	9.67	170	65.7
Soil	EmilyM	ST078206	0.48	10.6	57.7	0.12	9.21	106.5	0	0.04	1.58	11	1.72	5.69	163.5	0.75	0.04	8.64	0.37	0.76	3	93.1	1.5	21.6	45	70.9
Soil	EmilyM	ST078723	0.54	10.1	49.2	0.06	12.6	83.5	0	0.04	2.24	12.4	2.27	2.21	97.1	0.7	0.31	8.13	0.35	1.06	3.45	151	3.03	12.85	57.8	80.8
Soil	Rhianna	ST078720	0.46	9.4	36.3	0.12	15.95	59.4	0	0.05	6.24	9.24	2.1	1.83	84	0.65	0.28	9.37	0.31	1.02	2.59	110.5	1.77	12.8	77.1	61.7
Soil	Rhianna	ST078711	0.33	8.85	201	0.08	16.25	85.3	0.01	0.15	5.69	11.35	2.98	1.81	158.5	0.6	0.06	9.09	0.28	0.84	7.94	105.5	1.92	28.9	289	69.2
Soil	EmilyM	ST078211	0.29	9.59	45.5	0.08	18.1	106.5	0	0.09	6.35	12.3	3.18	2.08	158.5	0.67	0.12	8.93	0.33	1.3	4.66	147	5.38	19.2	91.7	73.6
Soil	EmilyM	ST078239	0.81	13.1	50.4	0.1	116.5	90.5	0	0.03	2.9	13.55	3.44	3.64	146	0.9	0.1	11.65	0.4	1.2	4.38	157.5	1.77	24.1	179	80.8
Soil	EmilyM	ST078216	0.41	10.15	18.65	0.06	19.2	78.6	0	0.04	1.68	8.01	1.36	1.94	99.7	0.7	0.07	8.55	0.33	0.78	3.55	128	5.54	20.1	60.2	65.3
Soil	EmilyM	ST078238	0.67	13.75	46	0.06	77.6	88.3	0	0.02	2.44	9.95	1.27	2.19	115	1	0.11	13.25	0.39	0.83	3.28	126	1.84	12.2	149.5	75.3
Soil	EmilyM	ST078725	0.14	7.45	150	0.15	7.31	96.4	0	0.09	25.3	15.55	6.37	1.4	139	0.5	0.14	14.3	0.28	0.91	4.1	137.5	3.82	26.3	95.5	90.3
Soil	Rhianna	ST078721	0.2	8.46	38.9	0.08	12.8	59.9	0	0.05	5.97	11.9	1.88	3.08	70	0.55	0.41	7.8	0.29	1.06	2.2	113	11.4	11.85	56.3	69.7
Soil	Rhianna	ST078727	0.55	9.57	69.3	0.51	13	56.1	0	0.02	4.12	12.25	4.84	2.58	111.5	0.66	0.16	7.82	0.29	0.7	4.66	124	1.94	77.3	127.5	74.4
Soil	EmilyM	ST078722	0.53	10.6	24.2	0.05	11.95	51.5	0	0.03	1.61	9.77	0.53	2.17	95.3	0.73	0.08	6.36	0.39	0.74	2.33	123.5	1.76	19.15	53.5	64.6
Soil	EmilyM	ST078237	0.3	8.48	52.8	0.09	17.85	128	0.01	0.17	1.26	16.8	4.75	1.97	504	0.58	0.1	7.53	0.31	0.8	3.98	141.5	1.42	39.7	103	76.4
Soil	EmilyM	ST078214	0.33	12.45	73.7	0.05	18.85	89.3	0	0.03	3.1	12.45	2.21	1.9	94.8	0.83	0.08	12.25	0.38	0.87	3.46	158	2	15.4	115	86.5
Soil	Rhianna	ST078707	0.53	9.34	44.7	0.15	23.1	77.3	0	0.09	9.23	10.65	1.9	3.45	108	0.63	0.12	9.41	0.31	0.66	3.69	108.5	1.57	18.35	67.9	61
Soil	Rhianna	ST078717	0.17	6.49	54.5	0.05	7.35	45.9	0	0.05	4.7	8.73	3.82	2.13	41.5	0.43	0.15	7.28	0.23	0.4	5.14	106.5	4.98	12.15	36.9	71.6
Soil	Rhianna	ST078703	0.53	10.45	78.1	0.12	12	131.5	0	0.07	1.79	11.35	1.87	3.71	143.5	0.71	0.28	8.37	0.34	0.8	5.13	115	1.54	20.5	54.3	64.2

APPENDIX I—SOIL ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed, 0-values are values rounded to zero

Type	Sampler	Sample ID	Na pct	Nb ppm	ni_ppm	p_pct	pb_ppm	rb_ppm	re_ppm	s_pct	sb_ppm	sc_ppm	se_ppm	sn_ppm	sr_ppm	ta_ppm	te_ppm	th_ppm	ti_pct	tl_ppm	u_ppm	v_ppm	w_ppm	y_ppm	Zn ppm	zr_ppm
Soil	Rhianna/ Emily	ST078201	0.33	13.5	65	0.28	6.92	138	0	0.07	1.08	14.8	1.29	7.53	186	1	0.51	13.3	0.45	0.82	4.84	146.5	3.14	37.6	31.7	105.5
Soil	Rhianna	ST078719	0.18	5.78	47.9	0.09	13.5	60.3	0	0.34	7.46	15.5	8.92	2.32	169	0.39	1.19	7.7	0.24	0.99	2.95	103.5	10.65	12.25	41.3	72
Soil	EmilyM	ST078213	0.2	7.18	233	0.13	17.85	97.6	0	0.17	5.73	19.5	6.51	2.16	98.3	0.48	0.33	9.47	0.29	1.13	7.3	162.5	3.37	41.2	250	95.4
Soil	EmilyM	ST078204	0.43	12.6	66.4	0.12	12.45	160	0	0.06	1.98	11.45	2.05	7.22	119.5	0.88	2.46	9.13	0.43	0.8	3.57	119	1.73	24.2	53.9	86
Soil	Rhianna/ Emily	ST078202	0.23	5.97	71.5	0.21	5.89	77.7	0	0.4	0.91	8.22	6.47	4.31	173.5	0.43	0.47	6.13	0.21	0.41	2.42	67.6	0.92	20.9	54	46.2
Soil	EmilyM	ST078203	0.04	3.08	44.2	0.16	9.65	63.3	0	0.35	21.7	7.94	22.2	2.54	86.8	0.2	9.11	5.71	0.11	0.92	3.49	68.7	1.17	22.9	26.8	42.8

10. Appendix J – Humus Assay Tables for Plotting

APPENDIX J—HUMUS/PEAT ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed

Type	Sampler	Sample ID	Easting NAD83 Z8	Northing NAD83Z 8	Au ppb	Ag ppb	Al ppm	Fe ppm	W ppb	Te ppb	Sb ppb	Ni ppb	Cu ppb	Bi ppb	As ppb	B ppm	Ba ppb	Be ppb	Ca ppm	Cd ppb	Ce ppb	Co ppb	Cr ppb	Cs ppb	Dy ppb	Erppb	Euppb	Gappb	Gdppb	Geppb	Hfppb	Hgppb	Hoppb	Inppb	Kppm	Lappb
Humus/Peat	EmilyM	ST078205	565816	7056456	4.3	459	34300	49200	1430	56	4530	62400	352000	8690	319000	3	88800	1070	17500	298	29100	17700	117000	2800	2270	1220	769	11600	3370	196	302	14	496	88.6	2900	13900
Humus/Peat	EmilyM	ST078207	565682	7056753	2.4	173	7370	8770	90	29	1390	16100	40900	710	31300	4	164000	340	19500	212	13200	4080	33000	2060	989	501	283	2880	1380	59	27.6	78	176	10.9	630	6700
Humus/Peat	EmilyM	ST078208	565699	7056843	3.2	161	4530	5380	36	28	1420	15100	21900	267	14600	4	121000	150	5780	228	10900	1790	31200	1230	599	287	200	1310	980	45	28	73	105	3.5	580	5350
Humus/Peat	EmilyM	ST078209	565738	7056898	4.5	368	8340	14500	95	58	2040	38600	106000	1210	40700	4	469000	390	5100	262	22400	5350	23800	1820	1680	743	559	2060	2520	93	18.8	91	282	16.4	470	10700
Humus/Peat	EmilyM	ST078210	565703	7056982	1.6	174	3080	5620	25	14	1910	42200	26400	157	5100	8	171000	300	21200	854	3620	1200	4000	158	790	492	183	418	891	27	42.2	136	166	6.6	340	1990
Humus/Peat	EmilyM	ST078212	565901	7057095	3.6	397	11500	26900	116	133	3150	71500	46500	856	80300	3	606000	340	10100	538	22400	17200	91500	1770	1340	606	547	2530	2560	118	86.1	252	263	25.4	890	11000
Humus/Peat	EmilyM	ST078217	566775	7056870	2	168	3730	5780	25	14	540	5860	56000	334	2570	2	310000	340	7470	296	30200	1050	5100	207	1070	442	398	986	2160	89	38.7	79	175	7.7	190	18300
Humus/Peat	EmilyM	ST078219	566846	7056925	9.6	739	10600	26400	1340	269	1080	55000	150000	6600	84200	2	151000	450	759	214	22700	5880	130000	1390	1060	456	355	3740	1830	84	43.6	63	176	40	740	11700
Humus/Peat	EmilyM	ST078220	566723	7056983	12.7	157	8170	14500	6670	119	240	43800	34000	837	112000	3	63200	230	2330	96	18000	2640	119000	3600	694	260	219	4270	1280	52	78.8	144	107	42	670	9360
Humus/Peat	EmilyM	ST078221	566579	7056937	6.4	453	10100	13000	95	141	730	24000	230000	1370	68400	7	202000	790	40000	566	32400	7730	16500	3640	3160	1560	1100	2830	4320	161	89.3	282	576	23.6	540	21000
Humus/Peat	EmilyM	ST078224	566239	7056951	5.6	381	9830	14000	96	15	440	15500	32700	925	22000	2	199000	220	631	180	30200	2870	23500	5950	789	272	375	5250	1930	101	14.2	513	115	11.3	710	16000
Humus/Peat	EmilyM	ST078225	566283	7056912	4.8	365	5150	8860	80	75	1030	34600	79100	574	12600	2	339000	430	7290	272	18500	4110	20500	4340	1410	622	483	1810	2120	72	43.9	589	246	9.6	280	8790
Humus/Peat	EmilyM	ST078226	566370	7056864	1.5	113	2800	5670	40	43	350	14000	27600	174	5670	2	198000	100	2970	302	5460	1650	5800	156	679	319	200	592	877	32	26.6	117	120	5.9	120	2690
Humus/Peat	EmilyM	ST078227	566264	7056843	2.2	72	2340	2340	25	59	290	6110	16000	170	3340	2	179000	60	8180	429	3640	631	4900	290	237	112	75.1	608	359	25	43.7	87	43.8	4.7	140	1800
Humus/Peat	EmilyM	ST078228	565955	7056828	9	315	4900	7800	107	46	1700	43200	243000	1890	115000	10	110000	410	41400	479	20100	8750	7100	1150	2370	1250	792	1210	3340	130	56.2	108	444	11.4	310	14000
Humus/Peat	EmilyM	ST078230	567529	7056375	6	691	14800	22500	97	108	3560	38900	59700	693	25200	3	588000	580	12000	1770	26800	11300	30000	2790	2190	956	709	4290	3400	110	131	331	369	36.2	820	13600
Humus/Peat	EmilyM	ST078234	568370	7056588	4.3	492	3310	7970	25	63	1230	9290	21700	184	4010	3	389000	100	7050	686	5810	1020	8700	296	696	343	191	751	918	40	39.4	250	128	12.6	210	2890
Humus/Peat	EmilyM	ST078506	568237	7055724	1.2	106	1890	2810	25	8	300	5570	7020	48	1200	3	101000	70	14600	359	2160	726	3600	122	186	98.2	60.5	509	261	19	45.9	51	35.2	4.3	80	1070
Humus/Peat	EmilyM	ST078507	568116	7055770	2.2	268	6310	8910	42	58	1230	125000	20900	112	7050	3	496000	280	3920	594	14900	6410	320000	987	796	332	318	2310	1460	59	62.7	80	131	14.2	1010	7780
Humus/Peat	EmilyM	ST078508	567926	7055799	1.6	104	2260	2950	25	29	450	9200	10300	42	1780	3	192000	120	12600	743	3260	1180	4900	153	442	244	124	426	622	21	49.2	60	84.4	3.6	160	1620
Humus/Peat	Rhianna	ST078701	566257	7056128	134	1010	33400	41600	258	2300	370	107000	700000	16500	20900	4	129000	1060	23000	385	28100	20200	261000	2460	1780	922	596	11500	2950	315	280	26	375	113	3370	13800
Humus/Peat	Rhianna	ST078702	566177	7056204	12.3	955	21300	28300	295	373	750	48700	321000	8310	441000	5	251000	820	21200	516	46000	13800	86900	2990	1590	759	834	7250	3470	238	170	38	319	45.6	2180	25500
Humus/Peat	Rhianna	ST078704	565966	7056471	10.8	381	25100	38700	351	419	990	32700	110000	12300	118000	2	118000	480	4280	228	28100	8640	70500	2730	1460	729	459	10300	2420	127	140	24	274	43.1	870	14600
Humus/Peat	Rhianna	ST078705	565890	7056543	5.7	399	21400	15800	159	128	530	24900	204000	2120	42300	2	89900	650	7570	149	22400	5140	30800	2420	1360	632	460	5930	2230	100	71.2	74	255	27.8	540	11400
Humus/Peat	Rhianna	ST078706	565824	7056612	3	128	4230	3780	40	59	2760	6350	55900	507	13600	3	66400	130	13300	136	3570	1670	4600	203	293	155	101	643	441	39	49.6	73	58.2	6.2	210	1850
Humus/Peat	Rhianna	ST078708	565811	7056814	10.6	702	17200	25300	217	114	3270	29100	157000	2860	199000	2	350000	280	4410	136	29800	5550	42700	3790	1630	705	647	5030	2890	113	68.2	95	296	21	1010	14200
Humus/Peat	Rhianna	ST078709	565874	7056903	25	1370	11800	28100	648	181	8510	96800	342000	6240	502000	5	203000	400	25400	633	34200	23600	95700	2870	3000	1440	1000	3010	4640	178	111	892	582	52.5	720	19200
Humus/Peat	Rhianna	ST078710	565815	7056970	4.8	467	9870	35600	222	149	8610	68300	109000	1220	471000	2	387000	290	9700	1030	25900	12700	114000	1510	1690	726	608	2600	3000	109	128	227	291	39	760	13300
Humus/Peat	Rhianna	ST078712	565893	7057029	5	304	8860	28400	730	95	2580	72600	193000	2100	231000	4	410000	570	12800	402	39700	12800	48300	2350	2660	1240	1050	2270	4740	233	96.6	416	519	22	890	22200
Humus/Peat	Rhianna	ST078713	566293	7056467	5.3	148	4270	8110	45	29	1290	11100	111000	653	8870	4	292000	140	39500	162	7910	558	6200	482	1100	675	316	633	1450	68	106	109	236	7.7	230	4050
Humus/Peat	Rhianna	ST078716	565892	7056739	10.8	389	7770	11600	109	56	5410	16300	90000	2590	33800	2	101000	110	4530	259	14900	3090	30000	1570	823	385	294	2100	1440	72	50.2	90	161	14.3	470	7700
Humus/Peat	Rhianna	ST078733	568796	7056398	4.2	360	14900	22200	105	59	1100	34600	46200	241	12800	4	682000	410	14600	1210	23700	12900	44300	1540	1560	675	576	3950	2780	121	145	199	279	24.4	1000	11700
Humus/Peat	Rhianna	ST078741	567759	7056041	4.7	683	23100	20100	154	76	1780	69000	74900	538	51200	5	926000	540	16200	4800	29700	25400	38800	2120	2340	1070	776	4990	3890	136	91.2	249	435	37.9	1080	13500
Humus/Peat	Rhianna	ST078750	568479	7055845	4	652	17200	27000	139	96	970	39800	58200	847	16900	2	1500000	630	10300	781	23200	8800	42900	1780	1970	913	652	4750	2960	113	116	153	345	28.6	600	11900

APPENDIX J—HUMUS/PEAT ASSAY TABLES—FOR PLOTTING—values with < symbols have been removed, > symbols are removed

Type	Sampler	Sample ID	Easting NAD83Z8	Northing NAD83Z8	Lippb	Lu ppb	Mgppm	Mnppb	Moppb	Na ppm	Nbppb	Ndppb	Pppm	Pbppb	Pdppb	Prppb	Ptppb	Rbppb	Reppb	Seppb	Smppb	Snppb	Srppb	Tappb	Tbppb	Thppb	Tippb	Tlppb	Tmppb	Uppb	Vppb	Yppb	Ybppb	Znppb	Zrppb
Humus/Peat	EmilyM	ST078205	565816	7056456	13700	147	15900	399000	3590	1480	2520	15000	2100	15800	3	3110	1.8	43500	1.4	5600	2840	4810	81300	2.3	474	6270	1060000	241	162	1310	50300	13300	1140	37500	11400
Humus/Peat	EmilyM	ST078207	565682	7056753	3850	66.3	2160	196000	2390	93	847	6920	654	4550	0.4	1770	0.2	12800	0.5	1400	1370	680	45500	7	144	1350	185000	146	70.6	989	11200	4800	427	16400	1560
Humus/Peat	EmilyM	ST078208	565699	7056843	1560	37	1020	38200	1690	86	252	5370	737	2680	0.2	1390	1.2	7110	0.3	1000	1010	200	22600	2.6	93.4	1120	67000	128	39.4	672	4780	2910	248	14700	1820
Humus/Peat	EmilyM	ST078209	565738	7056898	2210	77.1	877	48900	1920	68	423	11000	736	10800	0.2	2740	1.1	9800	1	1800	2280	300	34800	4.8	260	1460	98300	161	91	1330	6180	7520	527	17600	1240
Humus/Peat	EmilyM	ST078210	565703	7056982	240	74.6	2780	41200	720	102	113	2500	830	3320	0.2	559	0.9	910	2.6	1100	658	80	174000	4.3	108	538	47800	20	68.7	435	1740	5390	460	16500	2160
Humus/Peat	EmilyM	ST078212	565901	7057095	13100	65.3	4650	984000	1290	101	443	11100	626	16300	1.5	2340	1.2	10300	2.7	4900	2170	320	76100	1	315	3200	83400	159	75.7	856	17200	6270	534	88500	4330
Humus/Peat	EmilyM	ST078217	566775	7056870	190	41.4	721	16500	980	163	193	13300	804	3450	0.2	3660	1	870	0.7	1300	2100	130	49800	6.9	188	1280	75100	33	52.6	3310	1460	4700	284	12000	1660
Humus/Peat	EmilyM	ST078219	566846	7056925	10000	45.8	1810	151000	5660	77	904	10600	451	10600	0.2	2780	1.1	8920	0.5	1200	1870	600	11400	1.3	173	3130	118000	100	58.1	1080	14600	4160	327	43200	1830
Humus/Peat	EmilyM	ST078220	566723	7056983	4250	24.7	1780	84700	1690	144	405	7800	426	4930	2.1	2110	0.6	7380	0.7	1100	1380	710	13700	1.5	120	3600	58100	83	31.5	950	5180	2630	183	16600	3030
Humus/Peat	EmilyM	ST078221	566579	7056937	5700	191	3440	662000	1710	185	710	20500	1030	5400	0.2	5060	1.2	10000	7.5	5000	4150	400	219000	5	472	1960	136000	200	203	8900	13000	17700	1240	36900	3800
Humus/Peat	EmilyM	ST078224	566239	7056951	4560	26	1170	59800	560	93	610	13800	562	8230	0.2	3640	0.6	9460	0.5	2000	2280	650	13800	2	161	2620	94000	237	32.5	960	17200	2660	174	24800	790
Humus/Peat	EmilyM	ST078225	566283	7056912	1500	68.1	906	19300	690	130	469	8760	697	4150	3.7	2250	0.9	5600	0.7	2700	1840	330	74200	10	226	1470	99100	205	88.7	1050	5050	6070	481	10900	2040
Humus/Peat	EmilyM	ST078226	566370	7056864	70	38.2	1250	14800	520	186	138	3110	603	2360	2.8	743	0.4	690	1.8	1100	717	190	26000	6.1	98.6	374	83600	30	44.9	568	1360	3180	251	9700	1140
Humus/Peat	EmilyM	ST078227	566264	7056843	50	13.9	1240	11600	260	138	150	1740	315	1870	0.2	449	0.5	910	0.6	1100	351	220	87000	8.9	35.3	364	71400	19	16.3	186	1160	1110	85.9	9300	1500
Humus/Peat	EmilyM	ST078228	565955	7056828	3470	139	3750	232000	2830	155	244	14900	833	2670	0.2	3500	0.9	4980	14.7	10500	2990	220	155000	5.2	353	441	64000	84	162	4250	5410	14100	972	28700	2430
Humus/Peat	EmilyM	ST078230	567529	7056375	18800	111	3410	858000	1510	143	815	14800	981	29300	0.2	3600	2.3	13300	24.3	5400	3150	650	60700	3.1	344	3890	105000	227	122	3850	25200	9580	745	94400	5640
Humus/Peat	EmilyM	ST078234	568370	7056588	390	38.9	2860	18400	2860	234	231	3380	785	11600	0.2	794	0.8	1380	2.1	1700	801	560	35800	6.9	104	541	95000	41	44.8	550	2280	3340	272	15900	1640
Humus/Peat	EmilyM	ST078506	568237	7055724	100	13.5	1520	6400	480	50	118	1200	353	1150	0.6	285	0.8	360	1.7	800	248	90	100000	8.2	29.5	249	75400	11	14	599	1850	926	84.2	7700	1590
Humus/Peat	EmilyM	ST078507	568116	7055770	9500	33.8	1940	74900	2300	49	415	7820	533	7650	1.4	1960	1.6	8580	3.9	1700	1560	220	44300	1.3	141	1920	72700	135	42	764	22400	3280	228	49800	2930
Humus/Peat	EmilyM	ST078508	567926	7055799	220	28.6	2200	21500	470	83	115	2120	477	1560	0.2	473	0.5	580	1.9	800	537	80	145000	5.9	67.7	279	60400	17	31.3	395	2120	2260	185	16600	1830
Humus/Peat	Rhianna	ST078701	566257	7056128	9840	108	12500	279000	6320	2420	1880	14000	2530	5650	2.2	2940	0.9	36000	1.7	9800	2480	2790	118000	2.9	377	5380	979000	208	119	1430	60400	9950	852	28700	11400
Humus/Peat	Rhianna	ST078702	566177	7056204	11800	89.8	7560	418000	2590	538	1850	20400	1260	8120	0.2	4630	1.3	46300	1.5	4100	3260	1360	93600	6.6	379	4110	513000	139	97.8	1780	29600	8710	718	46200	6770
Humus/Peat	Rhianna	ST078704	565966	7056471	16400	90.3	7250	123000	4260	109	2470	12800	649	15000	0.2	3140	1	26100	0.4	3600	2210	3170	21500	5.2	241	3550	886000	235	98.8	925	60800	7730	659	32300	5560
Humus/Peat	Rhianna	ST078705	565890	7056543	5350	78.3	3160	44600	2250	181	991	10200	1080	6690	3.2	2430	0.2	13400	1	4300	1920	1160	30100	12.4	221	1540	302000	189	84.4	1940	24100	6640	569	13700	3230
Humus/Peat	Rhianna	ST078706	565824	7056612	150	22.8	476	25000	2630	366	130	1950	773	1780	0.7	421	1	1030	0.2	900	392	190	28100	5	45.8	579	77400	24	18.8	310	3000	1780	159	11500	1250
Humus/Peat	Rhianna	ST078708	565811	7056814	6620	84	3370	116000	4430	140	782	12700	833	16600	0.2	3040	0.4	20300	1.2	4300	2470	510	33100	7.8	281	2710	234000	314	86	2610	20500	7520	645	26500	3820
Humus/Peat	Rhianna	ST078709	565874	7056903	12900	164	4530	834000	6540	145	650	18600	769	28800	0.2	4220	0.7	15100	15.8	14200	3670	830	117000	4.7	485	2910	168000	264	177	9500	19600	16600	1230	69200	4850
Humus/Peat	Rhianna	ST078710	565815	7056970	14100	80.7	3090	601000	6330	104	329	12900	747	30900	7	2990	1.7	8950	8.5	9900	2510	540	54600	1.6	290	3520	77600	144	91.9	3510	16600	7930	621	131000	5260
Humus/Peat	Rhianna	ST078712	565893	7057029	8520	144	3850	373000	3190	96	302	21000	515	8210	4.1	4460	1.3	15000	4.7	5900	4010	480	81400	1.5	517	3540	67400	270	157	3050	21200	14400	1050	45500	4760
Humus/Peat	Rhianna	ST078713	566293	7056467	240	106	2800	15100	1920	260	262	5050	636	2460	11.5	1070	2.9	1820	2	6300	1070	210	163000	11.2	160	1320	127000	31	93.4	2340	2540	7360	731	9200	5090
Humus/Peat	Rhianna	ST078716	565892	7056739	750	54.6	798	63300	2020	228	529	7030	889	24600	10.9	1670	1.6	7260	0.5	3300	1260	460	26400	7.1	144	947	214000	118	52.5	1720	6320	4500	385	21000	2160
Humus/Peat	Rhianna	ST078733	568796	7056398	21800	76.5	5770	422000	1690	139	831	11900	858	17100	3	2710	1.9	12000	3.2	7100	2400	370	89900	3.3	276	3710	199000	137	82.9	2010	27000	7230	573	92100	6500
Humus/Peat	Rhianna	ST078741	567759	7056041	30000	130	4720	378000	3060	205	957	14400	1310	25900	11.4	3170	2.7	14400	14.8	9900	3090	490	144000	2.7	390	3450	174000	233	138	5410	37800	11700	990	176000	3680
Humus/Peat	Rhianna	ST078750	568479	7055845	20900	98.7	4590	398000	2590	68	603	12300	923	20900	0.2	2750	1.2	11300	3.9	3000	2840	490	139000	4.2	336	3180	65800	135	114	2740	27400	8850	708	84300	4150

11. Appendix K – Assay Certificates

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 17-FEB-2023
This copy reported on
6-MAR-2023
Account: SNOLIGO

WH22283780

Project: Rainbow

P.O. No.: SGD-22-SC_20221005_R

This report is for 37 samples of Rock submitted to our lab in Whitehorse, YT, Canada on 4-OCT-2022.

The following have access to data associated with this certificate:

SCOTT BERDAHL ZOE GOODYEAR	THOMAS BRANSON ANDREW TURNER	SERGIO GAMONAL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
SOR-01	Additional sorting of samples
CRU-QC	Crushing QC Test
CRU-31	Fine crushing - 70% <2mm
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-MS61L	Super Trace Lowest DL 4A by ICP-MS	

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

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

Signature:



Saa Traxler, Director, North Vancouver Operations

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 17-FEB-2023
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283780

Sample Description	Method	WEI-21	Au-AA23	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.005	0.002	0.01	0.02	1	0.02	0.002	0.01	0.005	0.01	0.005	0.3	0.01	0.02
ST075828		2.26	0.396	4.24	4.16	10.30	3400	1.18	22.7	1.96	0.369	42.3	16.65	43.9	1.73	1360
ST075829		1.49	0.891	0.225	6.69	50.7	2260	2.16	39.2	3.68	0.066	68.7	12.65	66.3	7.74	245
ST075830		1.62	0.175	2.30	3.30	3.87	850	0.66	80.4	0.94	0.056	34.3	5.42	29.5	1.30	464
ST075831		1.72	0.097	2.45	3.84	4.27	1970	1.02	6.66	3.13	0.499	36.7	8.49	70.7	2.09	1410
ST075832		1.15	0.005	0.403	1.26	4.75	369	0.39	0.674	0.78	0.165	10.40	7.65	21.4	0.73	379
ST075833		0.72	0.640	1.365	1.66	1.81	76	0.38	37.8	1.68	0.032	20.6	5.26	58.6	0.41	384
ST075834		2.30	0.099	2.11	3.47	6.98	230	1.00	9.16	1.94	0.743	40.2	31.2	90.6	1.26	1565
ST075835		1.39	0.006	0.050	2.95	1.67	1150	0.78	0.862	13.75	0.019	27.5	5.53	28.5	1.46	81.5
ST075836		2.47	0.408	2.57	3.14	7.17	730	0.90	97.7	2.42	0.429	35.9	25.1	37.2	13.90	2010
ST075837		2.15	0.821	0.859	3.31	5.15	770	0.98	112.5	3.44	0.113	37.0	10.70	33.7	4.81	726
ST075838		0.51	1.435	3.74	1.92	47.2	1680	0.31	286	0.17	0.114	10.40	6.91	26.8	1.88	539
ST075839		1.66	0.134	0.111	7.44	49.6	5870	2.14	12.35	1.96	0.141	54.7	6.62	8.0	6.28	84.7
ST075840		1.34	0.013	0.485	2.81	3.64	36	0.39	5.07	2.42	0.071	26.6	17.80	31.3	0.33	1350
ST075841		1.49	1.555	0.841	1.45	>10000	24	0.31	407	0.49	0.082	14.40	99.5	13.3	1.24	972
ST075842		1.46	0.028	0.623	1.98	290	300	0.47	43.4	1.51	0.165	32.4	11.25	32.7	0.52	1055
ST077918		1.48	0.726	2.77	2.15	148.0	2670	0.55	16.10	1.88	0.441	20.4	21.1	26.4	1.31	1415
ST077919		1.87	0.330	0.679	2.93	25.4	700	0.85	19.60	4.90	0.107	37.0	15.90	93.6	1.43	326
ST077920		4.84	0.141	0.891	2.44	387	5050	0.73	9.52	2.14	0.115	26.4	12.45	70.1	1.42	448
ST077921		1.53	0.072	1.090	6.56	9.50	4850	1.87	5.23	3.41	0.293	67.6	10.50	70.9	2.56	686
ST077922		2.48	0.734	11.70	1.25	37.3	1560	0.33	48.0	1.80	0.580	14.45	11.50	39.9	0.54	2120
ST077923		2.89	0.959	3.90	2.63	11.70	2650	0.71	80.0	3.09	0.234	28.8	10.95	74.3	0.96	805
ST077924		3.76	0.260	1.535	3.81	5.55	3580	1.10	19.85	3.11	0.316	41.8	12.70	106.5	1.73	736
ST077925		3.93	0.499	4.35	3.91	21.7	5940	1.03	32.7	2.50	0.585	41.7	15.45	114.5	1.40	1580
ST077926		6.88	0.393	2.32	4.83	16.00	7560	1.49	19.00	3.78	0.636	52.7	27.2	125.5	1.19	1805
ST077927		2.39	0.070	1.210	1.29	7.79	1180	0.36	6.38	0.54	0.150	17.95	11.45	27.6	0.56	599
ST077928		2.04	0.129	0.131	4.42	25.0	3010	1.68	6.49	3.90	0.445	45.7	30.4	46.5	1.86	1135
ST077929		2.01	0.061	1.995	3.77	6.92	1200	1.08	7.17	2.06	0.353	41.0	12.30	36.4	2.21	1140
ST077930		3.25	0.303	0.638	1.78	24.4	850	0.54	15.85	0.60	0.020	17.40	4.12	32.4	1.27	162.0
ST077931		2.21	1.565	2.43	2.46	542	1920	0.59	91.8	0.68	0.175	38.4	14.15	30.3	0.73	580
ST077932		1.67	0.013	0.406	6.41	6.41	1950	1.78	3.23	3.29	0.110	61.1	7.92	66.4	6.56	334
ST077933		5.72	0.014	0.406	5.86	9.09	1700	1.67	6.08	3.35	0.032	58.7	6.11	70.5	3.80	322
ST077934		1.06	<0.005	0.103	7.37	8.28	1760	2.33	1.410	2.30	0.130	73.0	11.15	111.0	8.01	72.4
ST077935		1.59	0.014	0.196	1.49	138.0	570	0.25	14.45	0.35	0.034	13.50	1.160	23.8	0.64	264
ST077936		1.50	0.021	0.596	1.81	5.99	409	0.51	9.52	0.37	0.037	20.1	2.13	30.7	0.91	206
ST077937		2.43	0.024	0.367	8.23	420	2140	1.93	32.9	0.85	0.172	63.9	10.30	6.9	2.44	249
ST078249		1.29	1.155	2.48	1.58	9.93	1180	0.18	19.95	0.52	0.103	11.55	1.500	24.1	0.18	145.5
ST078250		1.41	0.199	5.85	2.31	68.4	49	0.45	115.5	0.03	0.022	13.85	17.55	40.7	0.47	168.0

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

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 17-FEB-2023
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283780

Sample Description	Method	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
	LOD	0.002	0.05	0.05	0.004	0.005	0.01	0.005	0.2	0.01	0.2	0.02	0.001	0.005	0.08	0.001
ST075828		5.08	11.30	0.17	1.815	0.318	3.07	20.1	9.3	1.23	178.0	9.22	0.356	9.18	17.65	0.343
ST075829		3.01	18.35	0.17	2.60	0.028	4.33	36.3	12.8	1.46	197.5	10.00	0.640	13.45	43.1	0.246
ST075830		4.01	8.08	0.16	1.470	0.132	3.01	17.00	3.3	0.73	97.5	7.15	0.389	8.05	4.03	0.200
ST075831		2.54	10.20	0.10	1.465	0.222	2.00	17.70	5.3	1.35	284	2.83	0.335	7.44	26.5	0.115
ST075832		1.720	3.87	0.05	0.343	0.087	0.55	5.30	4.8	0.42	102.0	1.59	0.091	1.800	23.8	0.036
ST075833		4.41	5.59	0.13	1.225	0.104	1.21	10.50	5.2	0.47	74.7	2.57	0.079	3.93	6.55	0.263
ST075834		5.17	9.26	0.18	2.08	0.165	2.24	18.85	9.8	1.04	353	3.59	0.148	7.21	54.8	0.235
ST075835		4.16	7.88	0.10	1.150	<0.005	0.14	15.00	28.5	5.19	269	11.95	0.031	5.51	16.55	0.062
ST075836		6.51	8.88	0.19	1.370	0.182	2.76	16.95	14.6	1.02	252	7.70	0.244	7.65	18.55	0.141
ST075837		5.48	10.05	0.17	1.435	0.075	0.89	17.50	17.4	1.09	165.0	5.75	0.302	7.79	8.69	0.206
ST075838		3.70	5.20	0.11	0.860	0.059	1.44	4.65	5.8	0.08	78.6	4.77	0.059	3.69	11.20	0.039
ST075839		2.24	19.25	0.14	2.14	0.020	3.19	25.3	16.5	0.70	161.0	0.48	1.065	14.50	3.79	0.053
ST075840		8.29	6.67	0.20	0.870	0.094	0.04	13.85	3.7	0.60	333	3.75	0.105	5.67	6.79	0.058
ST075841		20.5	6.60	0.59	0.296	0.104	0.53	7.03	3.8	0.13	134.0	0.98	0.070	2.40	12.30	0.027
ST075842		6.04	5.90	0.16	0.816	0.051	0.81	15.55	5.2	0.50	157.0	1.74	0.122	5.42	14.55	0.069
ST077918		4.34	6.78	0.11	0.911	0.230	1.69	10.05	6.3	1.31	217	9.69	0.137	4.21	23.4	0.183
ST077919		4.50	8.49	0.17	1.660	0.080	2.09	18.80	9.4	0.86	256	9.84	0.135	6.07	44.1	>1.00
ST077920		4.53	6.94	0.14	1.295	0.091	1.56	13.80	7.2	0.64	259	3.73	0.090	4.69	34.3	0.290
ST077921		2.97	17.55	0.17	2.59	0.089	3.91	32.7	10.6	1.80	209	3.80	0.674	14.40	35.8	0.182
ST077922		4.97	5.36	0.17	1.175	0.423	0.92	7.22	5.3	0.39	134.5	6.52	0.055	4.03	15.75	0.453
ST077923		6.04	8.96	0.17	1.710	0.213	1.97	15.20	6.5	1.39	362	5.80	0.173	6.28	20.4	0.434
ST077924		4.93	11.40	0.18	2.02	0.131	2.19	21.7	8.4	1.01	276	5.68	0.254	7.67	27.6	0.429
ST077925		4.17	11.10	0.17	2.11	0.294	2.77	21.7	7.9	1.08	299	3.33	0.219	8.79	32.9	0.220
ST077926		3.36	12.15	0.15	2.33	0.212	3.07	27.7	7.5	1.35	417	3.45	0.357	9.85	54.2	0.318
ST077927		3.68	3.52	0.11	0.631	0.092	0.88	8.73	2.7	0.40	78.0	1.65	0.065	3.06	17.50	0.086
ST077928		1.910	12.30	0.10	1.465	0.067	1.63	21.8	9.3	1.40	491	2.75	0.304	7.70	67.5	0.095
ST077929		5.16	10.60	0.14	1.610	0.150	2.00	20.7	9.2	1.28	183.0	19.55	0.347	7.64	19.75	0.286
ST077930		3.03	5.81	0.09	0.601	0.071	1.00	9.56	5.1	0.56	84.1	2.31	0.130	3.06	8.32	0.087
ST077931		6.86	7.93	0.19	1.470	0.140	2.17	19.80	6.8	0.70	140.5	19.25	0.109	6.27	15.95	0.148
ST077932		4.04	17.85	0.17	2.00	0.140	2.94	28.4	14.1	1.54	250	12.50	0.641	10.55	32.1	0.103
ST077933		4.75	16.95	0.19	2.22	0.103	2.95	28.2	10.7	1.51	294	5.71	0.730	12.05	19.55	0.221
ST077934		4.80	22.2	0.15	2.48	0.019	3.04	38.8	17.4	1.49	128.5	3.19	0.585	12.10	44.1	0.284
ST077935		4.50	4.72	0.05	0.582	0.033	0.64	7.15	3.8	0.46	117.0	1.53	0.085	3.12	1.99	0.069
ST077936		3.56	5.77	0.06	0.945	0.051	0.76	10.40	7.2	0.53	83.8	3.06	0.206	3.96	5.27	0.034
ST077937		3.08	19.60	0.12	2.97	0.044	4.91	31.1	17.3	0.75	129.5	0.80	1.060	14.00	3.16	0.047
ST078249		4.13	6.40	0.21	0.563	0.039	0.04	5.58	10.5	0.05	86.5	1.17	0.012	2.00	6.47	0.019
ST078250		9.96	11.70	0.22	1.300	0.023	0.05	6.91	27.1	0.06	69.5	1.55	0.004	3.93	17.25	0.021

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

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 17-FEB-2023
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283780

Sample Description	Method	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.01	0.02	0.0004	0.01	0.02	0.01	0.006	0.02	0.02	0.01	0.005	0.004	0.001	0.002	0.01
ST075828		4.54	108.5	0.0013	0.34	0.56	7.89	7.49	12.55	153.0	0.61	2.11	6.35	0.304	0.428	2.76
ST075829		5.19	194.0	0.0043	0.29	0.69	13.35	1.295	6.76	197.5	0.90	3.79	9.71	0.425	0.825	3.98
ST075830		10.50	111.5	0.0006	0.18	0.99	4.94	9.21	8.19	120.5	0.55	1.455	4.70	0.267	0.523	1.92
ST075831		3.81	85.4	0.0011	0.12	0.81	7.65	1.820	7.40	154.5	0.48	0.454	4.95	0.252	0.368	1.82
ST075832		1.39	25.0	<0.0004	0.08	0.23	3.08	1.920	1.78	32.0	0.11	0.038	1.320	0.061	0.116	0.39
ST075833		4.00	40.3	0.0023	1.96	0.39	3.85	9.50	6.93	50.1	0.26	3.07	2.67	0.145	0.193	1.40
ST075834		4.82	73.4	0.0023	1.35	1.50	7.48	10.95	9.14	98.5	0.48	0.778	5.18	0.271	0.463	2.65
ST075835		1.12	6.92	0.0009	0.08	0.25	6.45	0.451	2.21	358	0.36	0.047	3.83	0.182	0.123	2.49
ST075836		3.05	91.0	0.0022	2.07	1.10	5.84	11.85	7.56	85.7	0.52	3.76	5.06	0.251	0.399	1.75
ST075837		3.83	42.7	0.0017	2.36	0.63	5.63	7.24	7.16	103.0	0.53	1.775	5.04	0.254	0.190	1.78
ST075838		4.38	41.7	0.0008	0.12	1.33	2.58	7.62	8.50	50.5	0.24	8.65	1.900	0.122	0.565	1.05
ST075839		9.92	122.5	0.0004	0.26	0.48	6.75	0.953	2.57	370	1.14	0.887	10.45	0.273	0.747	3.10
ST075840		1.98	2.06	0.0012	5.25	0.31	3.80	16.65	5.55	90.4	0.41	0.181	3.93	0.182	0.061	0.95
ST075841		3.31	20.5	<0.0004	7.62	50.6	1.98	96.1	3.71	29.6	0.17	2.95	1.890	0.078	0.474	0.86
ST075842		3.05	27.7	0.0010	2.72	0.44	3.17	6.03	7.06	60.3	0.38	0.042	4.06	0.180	0.118	1.05
ST077918		2.11	62.1	0.0005	0.23	0.79	4.05	3.09	6.76	74.9	0.31	2.00	3.32	0.149	0.277	1.65
ST077919		4.81	70.3	0.0060	1.27	0.82	7.09	6.78	8.95	135.0	0.39	1.340	4.50	0.222	0.299	3.29
ST077920		3.83	53.7	0.0020	0.21	1.37	7.41	3.58	8.82	77.1	0.30	0.796	3.67	0.168	0.265	1.86
ST077921		5.39	161.0	0.0021	0.27	0.50	12.85	2.46	9.41	221	0.93	0.331	9.83	0.440	0.654	2.85
ST077922		5.34	30.4	0.0017	1.04	0.59	3.49	16.90	10.05	55.6	0.28	4.23	2.70	0.151	0.156	1.76
ST077923		4.58	63.5	0.0033	0.45	0.64	6.00	13.70	8.11	94.2	0.41	5.86	4.70	0.229	0.257	2.28
ST077924		4.49	76.8	0.0033	0.39	0.59	9.16	8.99	8.21	141.0	0.50	1.935	5.93	0.289	0.313	2.83
ST077925		4.43	87.4	0.0028	0.23	0.65	8.96	9.65	14.60	120.0	0.57	2.93	6.13	0.316	0.333	2.60
ST077926		4.80	95.6	0.0042	0.25	0.68	10.55	5.04	11.85	176.0	0.63	1.870	7.07	0.352	0.328	3.08
ST077927		2.37	36.4	0.0016	0.60	0.93	2.73	7.21	5.73	37.5	0.20	0.517	2.77	0.108	0.173	0.80
ST077928		2.96	66.2	0.0015	0.18	0.85	8.62	0.662	6.73	163.0	0.52	0.559	5.75	0.254	0.285	1.91
ST077929		4.25	87.3	0.0005	0.09	1.12	6.66	4.75	7.75	128.0	0.53	0.356	5.54	0.257	0.485	3.23
ST077930		2.58	52.7	0.0004	0.07	0.55	4.81	3.30	3.37	48.6	0.20	1.215	2.31	0.103	0.224	0.92
ST077931		14.60	84.4	0.0007	0.40	0.78	4.65	12.80	6.93	71.6	0.42	7.81	4.52	0.207	0.404	2.60
ST077932		5.24	123.0	0.0037	0.50	0.91	13.05	3.65	8.96	230	0.71	0.063	7.99	0.345	0.488	3.02
ST077933		5.51	115.5	0.0015	0.37	1.02	12.00	4.12	9.98	193.0	0.79	0.098	8.49	0.385	0.422	2.70
ST077934		4.05	162.5	0.0088	0.69	0.80	15.05	6.35	2.01	168.0	0.79	0.074	9.67	0.396	1.465	3.82
ST077935		2.82	26.1	0.0007	0.19	0.43	2.45	3.05	4.75	29.2	0.20	0.071	2.09	0.104	0.134	0.64
ST077936		8.60	37.9	0.0012	0.16	1.11	3.43	3.53	2.71	46.1	0.26	0.468	2.84	0.137	0.300	1.30
ST077937		16.60	176.5	0.0009	0.14	1.01	7.29	1.635	2.06	290	1.00	0.963	11.15	0.291	1.020	3.50
ST078249		2.87	1.98	0.0030	0.68	0.43	1.91	53.7	3.77	53.9	0.12	5.58	0.710	0.079	0.083	0.52
ST078250		11.35	2.45	0.0252	4.17	0.99	4.01	44.2	8.97	10.40	0.24	2.40	1.585	0.157	0.446	1.16

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

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 17-FEB-2023
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283780

Sample Description	Method Analyte Units LOD	ME-MS61L V ppm 0.1	ME-MS61L W ppm 0.008	ME-MS61L Y ppm 0.01	ME-MS61L Zn ppm 0.2	ME-MS61L Zr ppm 0.1
ST075828		65.4	1.695	27.0	41.7	64.0
ST075829		150.0	7.18	31.3	23.3	91.9
ST075830		40.0	1.865	19.10	15.1	50.2
ST075831		75.9	1.025	20.9	46.1	53.0
ST075832		17.6	0.271	5.46	17.3	11.6
ST075833		65.2	0.809	14.70	12.2	43.9
ST075834		107.5	1.230	28.0	57.8	75.9
ST075835		79.9	2.95	24.8	9.6	40.8
ST075836		60.5	11.45	20.8	37.4	45.3
ST075837		41.8	1.260	21.2	19.9	50.3
ST075838		34.9	5.92	6.16	23.9	30.5
ST075839		20.7	2.19	12.10	34.3	65.8
ST075840		18.0	23.3	14.50	18.0	27.3
ST075841		12.6	2.74	6.77	10.2	9.5
ST075842		20.9	1.585	15.85	13.7	24.7
ST077918		40.0	0.836	12.45	43.6	32.3
ST077919		131.0	3.26	29.6	21.2	63.3
ST077920		69.1	6.47	24.3	22.6	46.3
ST077921		113.5	1.515	31.7	38.9	91.0
ST077922		48.6	1.245	14.55	60.2	44.6
ST077923		102.0	1.075	19.75	36.4	62.8
ST077924		133.0	1.295	23.7	31.0	72.7
ST077925		128.0	1.340	26.9	49.4	77.6
ST077926		156.5	1.455	32.4	56.2	88.8
ST077927		18.6	0.967	10.75	15.7	22.2
ST077928		70.0	1.255	20.0	46.2	48.9
ST077929		60.0	1.435	22.3	34.3	55.9
ST077930		50.3	2.57	10.80	10.9	21.5
ST077931		37.9	1.250	14.20	26.7	51.3
ST077932		87.4	1.415	26.9	24.5	70.2
ST077933		90.8	1.395	28.6	25.0	79.1
ST077934		317	1.480	28.4	31.9	90.5
ST077935		14.9	0.496	9.25	9.6	19.7
ST077936		38.7	1.350	10.40	10.2	32.2
ST077937		20.7	6.21	12.85	37.0	98.1
ST078249		22.1	15.75	4.81	13.6	23.1
ST078250		64.9	1030	6.74	15.2	45.9

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

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 17-FEB-2023
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283780

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-21	PUL-31
	PUL-QC	SOR-01	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:		
	Au-AA23	ME-MS61L

ALS Canada Ltd.
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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
This copy reported on
22-MAR-2023
Account: SNOLIGO

WH22283766

Project: Rainbow

P.O. No.: SGD-22-SC_20221005_S

This report is for 76 samples of Soil submitted to our lab in Whitehorse, YT, Canada on 4-OCT-2022.

The following have access to data associated with this certificate:

SCOTT BERDAHL ZOE GOODYEAR	THOMAS BRANSON ANDREW TURNER	SERGIO GAMONAL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS61L	Super Trace Lowest DL 4A by ICP-MS	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

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

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

Signature:

Saa Traxler, Director, North Vancouver Operations

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Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61L Ag ppm 0.002	ME-MS61L Al % 0.01	ME-MS61L As ppm 0.02	ME-MS61L Ba ppm 1	ME-MS61L Be ppm 0.02	ME-MS61L Bi ppm 0.002	ME-MS61L Ca % 0.01	ME-MS61L Cd ppm 0.005	ME-MS61L Ce ppm 0.01	ME-MS61L Co ppm 0.005	ME-MS61L Cr ppm 0.3	ME-MS61L Cs ppm 0.01	ME-MS61L Cu ppm 0.02
ST078201		0.37	0.151	0.426	7.40	130.0	2800	2.51	9.08	2.88	0.070	82.5	18.65	77.5	8.35	385
ST078202		0.21	0.082	1.130	3.76	40.1	960	1.35	24.2	4.36	0.778	48.7	37.3	44.2	3.35	1075
ST078203		0.61	0.722	2.30	2.50	>10000	1640	1.57	394	0.84	1.070	36.1	13.10	60.6	3.21	2280
ST078204		0.52	0.028	1.250	6.66	296	1770	1.91	32.2	1.26	0.191	64.7	23.7	69.7	7.48	534
ST078206		0.34	0.002	0.217	6.14	237	1630	1.84	1.465	1.32	0.135	58.6	22.4	58.9	4.63	131.0
ST078211		0.42	0.019	0.926	6.22	517	2450	1.68	3.33	0.82	0.531	71.7	18.30	79.9	9.08	149.0
ST078213		0.36	0.042	2.69	7.66	161.5	6350	2.85	2.46	0.25	0.910	123.0	113.5	102.0	11.15	524
ST078214		0.47	0.010	0.657	6.18	137.0	2320	1.79	1.090	0.15	0.315	76.2	30.6	75.3	6.46	220
ST078215		0.49	0.011	0.360	6.40	136.5	1950	1.35	1.435	0.22	0.121	63.0	4.48	68.3	9.98	49.2
ST078216		0.35	0.007	0.688	5.30	60.5	1510	1.30	0.839	0.26	0.324	64.4	12.40	65.8	5.72	190.0
ST078218		0.53	0.006	0.974	6.22	50.7	2620	1.66	1.745	1.12	0.794	61.8	9.97	77.0	7.25	43.1
ST078222		0.42	0.002	0.211	5.75	235	1200	1.16	1.870	0.58	0.133	58.8	4.49	65.9	13.40	79.2
ST078223		0.27	0.007	0.791	6.83	206	1560	1.86	2.22	0.72	0.527	72.3	33.0	77.3	19.00	98.2
ST078229		0.59	0.003	0.242	5.76	47.9	1420	1.39	0.963	0.26	0.288	68.9	13.25	71.3	4.61	42.5
ST078231		0.40	<0.001	0.385	4.66	23.7	950	0.88	0.465	0.41	0.249	61.5	3.85	59.1	4.03	15.50
ST078232		0.45	0.003	0.278	5.50	82.5	1290	1.19	0.738	0.31	0.322	60.7	7.02	67.2	3.97	26.5
ST078233		0.52	0.008	1.895	6.63	43.9	1460	1.53	1.190	0.62	0.369	69.5	8.68	75.8	5.33	56.9
ST078235		0.46	0.011	1.825	6.00	36.4	1680	1.30	2.28	0.59	0.147	62.2	2.95	75.2	5.40	21.9
ST078236		0.68	0.003	0.289	4.64	26.1	1570	1.14	0.644	0.31	0.182	58.5	4.26	63.1	5.99	35.1
ST078237		0.30	0.019	1.285	6.45	8.26	7030	1.76	0.334	1.88	0.359	46.0	10.50	99.2	33.1	209
ST078238		0.62	0.182	0.461	7.38	42.0	2910	2.13	0.751	0.40	0.466	58.5	12.60	59.3	6.74	191.5
ST078239		0.49	0.018	3.24	6.64	65.1	2560	1.75	1.730	0.68	1.175	76.8	12.80	78.2	5.86	176.5
ST078240		0.32	0.005	0.933	5.65	26.4	2590	1.54	0.467	0.71	1.725	67.1	9.24	63.7	4.28	51.5
ST078241		0.58	0.003	0.854	6.28	66.0	1540	1.54	0.801	0.44	0.324	67.6	12.45	73.2	4.32	32.4
ST078242		0.45	0.003	0.398	5.65	51.6	1820	1.42	0.735	0.48	0.331	69.5	8.81	67.7	3.98	42.3
ST078243		0.64	0.004	0.483	5.76	66.3	2150	1.47	0.942	0.51	0.339	71.0	11.30	70.8	4.22	46.3
ST078244		0.49	0.020	0.996	6.88	64.5	2860	1.92	0.959	1.37	1.310	58.6	14.65	82.7	6.92	78.1
ST078245		0.57	0.053	0.387	5.09	44.2	1830	1.35	0.725	0.45	0.415	74.5	9.35	59.2	3.29	54.6
ST078246		0.56	0.003	0.238	6.18	33.0	1490	1.41	0.517	0.35	0.371	63.9	10.30	73.3	4.27	31.9
ST078247		0.55	0.007	0.346	5.87	42.4	1630	1.21	1.015	0.30	0.326	62.9	7.33	72.5	4.20	49.3
ST078248		0.40	0.001	0.464	5.93	20.4	1340	1.13	0.418	0.46	0.266	60.5	5.38	71.0	5.25	23.8
ST078501		0.58	0.004	0.167	5.71	21.9	2980	1.51	0.328	0.22	0.270	68.2	11.80	72.3	4.74	53.5
ST078502		0.53	0.002	0.199	5.92	17.30	1420	1.29	0.282	0.47	0.166	60.4	7.80	70.8	4.97	20.7
ST078503		0.46	0.004	0.362	5.34	19.40	2120	1.35	0.255	0.38	0.287	63.5	10.10	69.3	4.36	34.6
ST078504		0.63	0.003	0.459	5.57	25.0	4940	1.53	0.469	0.66	0.635	61.9	13.60	70.6	4.48	47.9
ST078505		0.30	0.012	0.972	6.60	356	2440	1.94	4.00	1.82	1.285	53.1	9.21	55.9	10.55	85.2
ST078509		0.56	0.004	0.710	6.45	62.0	2490	1.64	0.768	0.98	1.245	69.0	12.65	76.6	5.39	41.6
ST078510		0.68	0.010	0.436	5.51	57.3	2380	1.52	0.664	0.61	0.455	72.5	8.54	57.4	3.89	47.9
ST078511		0.50	0.004	0.440	5.56	38.7	2170	1.53	0.507	0.79	0.435	73.1	11.95	61.0	4.24	42.2
ST078703		0.23	0.015	0.461	5.77	411	1950	1.83	16.10	1.72	0.320	68.0	27.2	60.0	6.05	349

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

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
	LOD	0.002	0.05	0.05	0.004	0.005	0.01	0.005	0.2	0.01	0.2	0.02	0.001	0.005	0.08	0.001
ST078201		3.91	19.35	0.26	2.97	0.059	3.32	43.6	14.3	1.36	288	11.20	0.331	13.50	65.0	0.278
ST078202		4.99	9.17	0.11	1.215	0.096	1.40	25.3	9.1	1.05	482	4.36	0.230	5.97	71.5	0.212
ST078203		22.1	6.60	0.19	1.045	0.164	1.14	19.80	8.4	0.54	132.0	12.50	0.039	3.08	44.2	0.158
ST078204		6.19	17.10	0.12	2.29	0.101	2.07	34.4	24.9	1.50	246	7.93	0.428	12.60	66.4	0.116
ST078206		4.45	14.45	0.11	1.980	0.077	1.91	30.2	18.8	1.36	381	5.64	0.481	10.60	57.7	0.118
ST078211		3.83	15.60	0.14	1.915	0.052	1.55	38.1	40.1	0.54	798	5.92	0.292	9.59	45.5	0.080
ST078213		6.47	16.65	0.23	2.36	0.074	1.56	52.1	36.5	0.56	1685	5.46	0.201	7.18	233	0.126
ST078214		4.29	14.80	0.13	2.32	0.056	1.48	38.8	45.7	0.53	298	4.29	0.327	12.45	73.7	0.048
ST078215		2.54	19.50	0.11	2.24	0.049	1.68	33.5	30.8	0.36	134.5	4.63	0.432	15.10	14.25	0.049
ST078216		3.04	11.15	0.10	1.780	0.060	1.27	34.2	35.9	0.35	498	3.00	0.409	10.15	18.65	0.062
ST078218		2.59	15.20	0.13	2.16	0.065	1.60	31.7	43.1	0.53	358	1.43	0.418	11.00	32.4	0.070
ST078222		1.880	17.25	0.11	2.14	0.041	1.57	30.6	24.5	0.52	184.0	9.11	0.829	13.75	15.60	0.030
ST078223		3.31	17.75	0.13	1.535	0.052	1.54	34.1	56.1	0.60	1100	2.04	0.812	12.70	69.5	0.034
ST078229		3.81	14.00	0.11	2.28	0.058	1.18	35.0	36.2	0.46	237	2.80	0.481	13.45	39.6	0.043
ST078231		2.69	14.65	0.11	1.875	0.037	1.11	31.6	20.2	0.36	216	1.76	0.618	13.65	12.70	0.068
ST078232		3.74	15.25	0.11	2.01	0.056	1.17	32.7	35.6	0.46	207	2.66	0.528	13.45	25.5	0.043
ST078233		3.30	17.45	0.13	2.09	0.067	1.54	36.8	35.1	0.64	310	5.74	0.929	13.95	25.9	0.046
ST078235		1.360	15.75	0.11	2.10	0.060	1.67	32.8	26.7	0.48	126.5	0.80	0.805	13.20	13.65	0.058
ST078236		2.01	12.05	0.11	1.860	0.069	1.31	30.1	21.5	0.26	215	3.04	0.451	10.90	16.75	0.057
ST078237		2.62	16.50	0.15	1.990	0.061	1.70	25.2	96.6	0.79	624	0.92	0.297	8.48	52.8	0.088
ST078238		4.73	17.90	0.12	2.16	0.057	1.61	30.0	38.0	0.65	260	3.79	0.665	13.75	46.0	0.056
ST078239		3.44	15.70	0.15	2.11	0.142	1.58	40.5	49.6	0.66	339	3.26	0.808	13.10	50.4	0.104
ST078240		2.90	13.50	0.12	2.01	0.051	1.43	34.9	40.4	0.57	237	2.13	0.606	11.70	39.2	0.133
ST078241		3.78	15.25	0.11	2.12	0.067	1.42	35.5	36.3	0.67	401	2.92	0.739	13.45	31.6	0.055
ST078242		3.08	14.05	0.12	2.10	0.051	1.44	36.4	35.8	0.54	319	2.83	0.649	12.95	28.7	0.103
ST078243		3.05	14.35	0.12	2.03	0.066	1.47	36.7	38.5	0.56	488	2.90	0.581	13.40	30.1	0.086
ST078244		3.61	15.90	0.12	1.970	0.072	1.75	30.3	57.1	0.64	503	3.10	0.517	10.95	59.5	0.090
ST078245		3.17	13.10	0.13	2.11	0.052	1.28	38.4	36.5	0.54	353	2.86	0.596	13.30	32.7	0.083
ST078246		3.89	15.15	0.11	2.05	0.050	1.24	33.4	41.8	0.55	282	3.15	0.604	13.70	34.3	0.045
ST078247		4.10	12.65	0.09	2.00	0.060	1.22	33.4	32.5	0.46	244	2.92	0.506	13.05	28.9	0.082
ST078248		3.30	17.35	0.10	2.06	0.048	1.27	31.5	30.2	0.53	272	2.88	0.725	14.55	16.15	0.059
ST078501		3.89	14.60	0.11	2.08	0.060	1.24	34.0	39.5	0.58	287	2.48	0.454	12.30	39.7	0.045
ST078502		3.69	15.35	0.10	2.05	0.044	1.35	31.7	37.2	0.61	306	2.23	0.725	13.60	23.8	0.062
ST078503		3.33	13.70	0.10	1.890	0.051	1.19	32.5	34.9	0.52	299	3.03	0.578	12.75	32.2	0.044
ST078504		3.39	14.15	0.11	1.920	0.059	1.50	30.6	41.3	0.56	726	3.35	0.443	11.50	33.3	0.100
ST078505		3.05	16.20	0.12	1.800	0.050	1.84	28.7	59.1	0.66	514	2.38	0.341	11.00	37.5	0.075
ST078509		3.12	16.45	0.13	2.14	0.066	1.59	35.5	48.5	0.64	495	3.14	0.526	12.45	34.2	0.112
ST078510		3.20	13.70	0.09	2.05	0.051	1.48	37.5	36.1	0.58	409	3.50	0.609	12.05	34.4	0.103
ST078511		3.11	14.15	0.10	2.05	0.061	1.45	37.8	39.4	0.61	583	3.26	0.572	12.55	37.8	0.106
ST078703		4.50	14.35	0.10	1.740	0.053	1.91	35.5	21.9	0.99	359	20.3	0.534	10.45	78.1	0.116

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method Analyte Units LOD	ME-MS61L Pb ppm 0.01	ME-MS61L Rb ppm 0.02	ME-MS61L Re ppm 0.0004	ME-MS61L S % 0.01	ME-MS61L Sb ppm 0.02	ME-MS61L Sc ppm 0.01	ME-MS61L Se ppm 0.006	ME-MS61L Sn ppm 0.02	ME-MS61L Sr ppm 0.02	ME-MS61L Ta ppm 0.01	ME-MS61L Te ppm 0.005	ME-MS61L Th ppm 0.004	ME-MS61L Ti % 0.001	ME-MS61L Tl ppm 0.002	ME-MS61L U ppm 0.01
ST078201		6.92	138.0	0.0006	0.07	1.08	14.80	1.290	7.53	186.0	1.00	0.506	13.30	0.452	0.816	4.84
ST078202		5.89	77.7	0.0012	0.40	0.91	8.22	6.47	4.31	173.5	0.43	0.468	6.13	0.210	0.411	2.42
ST078203		9.65	63.3	0.0008	0.35	21.7	7.94	22.2	2.54	86.8	0.20	9.11	5.71	0.110	0.923	3.49
ST078204		12.45	160.0	0.0007	0.06	1.98	11.45	2.05	7.22	119.5	0.88	2.46	9.13	0.425	0.795	3.57
ST078206		9.21	106.5	<0.0004	0.04	1.58	11.00	1.715	5.69	163.5	0.75	0.038	8.64	0.371	0.760	3.00
ST078211		18.10	106.5	0.0044	0.09	6.35	12.30	3.18	2.08	158.5	0.67	0.117	8.93	0.332	1.295	4.66
ST078213		17.85	97.6	0.0013	0.17	5.73	19.50	6.51	2.16	98.3	0.48	0.331	9.47	0.285	1.125	7.30
ST078214		18.85	89.3	0.0005	0.03	3.10	12.45	2.21	1.90	94.8	0.83	0.084	12.25	0.382	0.872	3.46
ST078215		11.35	95.1	0.0006	0.02	1.73	10.55	0.630	2.57	97.4	1.02	0.100	9.29	0.461	1.020	2.89
ST078216		19.20	78.6	0.0008	0.04	1.68	8.01	1.355	1.94	99.7	0.70	0.066	8.55	0.326	0.776	3.55
ST078218		37.7	91.5	0.0023	0.13	1.67	12.75	1.910	2.55	173.0	0.73	0.048	9.55	0.358	0.735	3.30
ST078222		12.80	88.3	0.0005	0.02	0.73	10.15	0.284	2.20	123.5	0.94	0.080	8.22	0.459	0.748	2.69
ST078223		16.95	127.5	0.0006	0.02	2.39	11.35	0.662	2.46	158.5	0.86	0.097	8.74	0.410	2.01	3.62
ST078229		25.5	68.0	0.0004	0.01	3.19	9.83	1.210	2.11	97.5	0.90	0.057	11.10	0.421	0.586	2.99
ST078231		12.00	57.9	<0.0004	0.01	1.34	8.36	0.428	1.99	93.3	0.94	0.053	7.91	0.440	0.629	2.32
ST078232		22.0	65.9	<0.0004	0.01	2.48	9.34	0.906	2.12	88.5	0.91	0.062	8.70	0.449	0.614	2.53
ST078233		35.0	87.9	0.0006	0.01	2.19	11.60	1.990	2.74	134.5	0.97	0.061	10.15	0.433	0.843	3.51
ST078235		57.2	93.6	0.0009	0.05	1.23	10.65	1.690	3.65	136.0	0.91	0.036	8.80	0.408	0.877	2.89
ST078236		25.8	70.0	0.0021	0.02	1.77	9.08	0.930	2.09	116.5	0.72	0.056	7.92	0.348	0.594	2.72
ST078237		17.85	128.0	0.0076	0.17	1.26	16.80	4.75	1.97	504	0.58	0.095	7.53	0.310	0.796	3.98
ST078238		77.6	88.3	0.0005	0.02	2.44	9.95	1.265	2.19	115.0	1.00	0.108	13.25	0.385	0.830	3.28
ST078239		116.5	90.5	0.0011	0.03	2.90	13.55	3.44	3.64	146.0	0.90	0.100	11.65	0.396	1.200	4.38
ST078240		24.2	74.4	0.0028	0.09	2.20	12.25	2.53	1.69	133.5	0.80	0.061	10.30	0.369	0.687	4.56
ST078241		24.5	77.4	0.0004	0.01	2.45	11.25	0.975	2.14	112.0	0.93	0.060	10.90	0.422	0.716	3.12
ST078242		27.7	75.0	0.0006	0.01	2.71	10.85	1.500	2.08	117.5	0.89	0.059	10.20	0.413	0.652	3.43
ST078243		29.7	79.9	0.0010	0.02	2.87	11.05	1.250	2.35	117.0	0.88	0.066	10.00	0.421	0.716	3.22
ST078244		26.8	103.5	0.0022	0.11	3.10	13.50	3.43	2.10	231	0.75	0.098	9.46	0.338	0.979	4.59
ST078245		28.4	66.2	0.0009	0.01	3.11	10.50	1.135	1.94	113.5	0.91	0.068	10.60	0.408	0.582	3.05
ST078246		21.5	70.8	0.0004	0.02	2.49	10.05	1.135	2.01	98.8	0.90	0.074	9.64	0.417	0.671	2.83
ST078247		31.5	67.7	0.0005	0.02	2.79	7.95	1.115	2.27	89.5	0.90	0.113	9.64	0.416	0.662	2.68
ST078248		17.75	68.6	<0.0004	0.02	1.63	10.30	0.557	2.28	107.0	1.02	0.050	8.81	0.453	0.689	2.69
ST078501		18.45	76.7	0.0004	0.02	2.26	11.25	0.848	1.79	102.5	0.81	0.091	9.53	0.386	0.609	2.68
ST078502		19.15	72.7	<0.0004	0.01	1.60	9.66	0.610	2.06	110.0	0.94	0.053	9.37	0.408	0.614	2.56
ST078503		15.95	71.4	0.0006	0.02	2.43	9.57	0.854	1.81	99.5	0.85	0.064	8.68	0.389	0.650	2.79
ST078504		31.3	77.1	0.0021	0.07	2.02	11.90	1.270	2.52	165.0	0.76	0.070	8.67	0.377	0.642	3.39
ST078505		41.1	101.0	0.0034	0.18	2.70	10.95	2.11	2.07	304	0.74	0.184	9.70	0.318	0.918	5.04
ST078509		36.2	93.2	0.0043	0.07	2.96	13.00	1.575	2.26	148.0	0.84	0.062	10.65	0.385	0.819	6.01
ST078510		21.1	69.2	0.0012	0.01	2.90	10.85	1.050	1.88	117.5	0.82	0.073	10.20	0.393	0.662	3.19
ST078511		25.4	76.6	0.0016	0.03	2.65	12.05	1.500	1.90	130.5	0.82	0.061	10.30	0.379	0.657	3.46
ST078703		12.00	131.5	0.0010	0.07	1.79	11.35	1.870	3.71	143.5	0.71	0.283	8.37	0.342	0.796	5.13

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

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method Analyte Units LOD	ME-MS61L V ppm 0.1	ME-MS61L W ppm 0.008	ME-MS61L Y ppm 0.01	ME-MS61L Zn ppm 0.2	ME-MS61L Zr ppm 0.1
ST078201		146.5	3.14	37.6	31.7	105.5
ST078202		67.6	0.922	20.9	54.0	46.2
ST078203		68.7	1.170	22.9	26.8	42.8
ST078204		119.0	1.725	24.2	53.9	86.0
ST078206		93.1	1.495	21.6	45.0	70.9
ST078211		147.0	5.38	19.20	91.7	73.6
ST078213		162.5	3.37	41.2	250	95.4
ST078214		158.0	1.995	15.40	115.0	86.5
ST078215		154.5	10.65	11.05	44.9	84.7
ST078216		128.0	5.54	20.1	60.2	65.3
ST078218		134.0	1.385	19.30	128.5	85.7
ST078222		139.0	3.20	12.20	45.6	80.3
ST078223		155.5	2.26	14.05	74.3	57.5
ST078229		143.5	1.885	13.20	97.2	86.6
ST078231		131.0	1.550	9.71	65.6	71.2
ST078232		159.0	1.485	10.90	90.0	75.2
ST078233		154.0	1.595	16.40	77.2	78.3
ST078235		142.5	1.600	13.05	39.7	77.3
ST078236		132.0	1.240	12.10	66.1	73.7
ST078237		141.5	1.420	39.7	103.0	76.4
ST078238		126.0	1.835	12.20	149.5	75.3
ST078239		157.5	1.770	24.1	179.0	80.8
ST078240		139.5	1.800	18.95	132.5	74.5
ST078241		158.5	1.620	14.05	92.4	79.4
ST078242		147.0	1.505	16.50	95.7	77.4
ST078243		167.5	1.610	16.15	101.5	78.1
ST078244		201	1.350	18.25	137.5	75.6
ST078245		139.0	1.575	17.05	122.5	80.5
ST078246		168.5	1.620	11.45	112.0	77.1
ST078247		161.0	1.650	11.00	110.5	77.8
ST078248		163.0	1.655	11.00	74.0	76.9
ST078501		148.5	1.480	14.30	114.5	81.2
ST078502		154.5	1.550	11.35	91.3	75.8
ST078503		160.5	1.350	12.50	106.5	72.9
ST078504		156.0	1.455	16.05	163.5	77.2
ST078505		128.0	1.275	16.85	135.0	66.4
ST078509		175.5	1.545	16.85	143.0	79.6
ST078510		153.5	1.560	17.10	120.0	77.3
ST078511		137.0	1.465	18.50	123.5	77.9
ST078703		115.0	1.535	20.5	54.3	64.2

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61L Ag ppm 0.002	ME-MS61L Al % 0.01	ME-MS61L As ppm 0.02	ME-MS61L Ba ppm 1	ME-MS61L Be ppm 0.02	ME-MS61L Bi ppm 0.002	ME-MS61L Ca % 0.01	ME-MS61L Cd ppm 0.005	ME-MS61L Ce ppm 0.01	ME-MS61L Co ppm 0.005	ME-MS61L Cr ppm 0.3	ME-MS61L Cs ppm 0.01	ME-MS61L Cu ppm 0.02
ST078707		0.37	0.021	0.821	5.56	497	1170	1.85	10.75	0.99	0.357	61.1	30.9	60.3	5.46	309
ST078711		0.44	0.009	0.776	5.95	119.5	1880	1.87	1.310	1.41	1.225	69.9	59.9	64.4	7.86	145.5
ST078714		0.36	0.015	0.308	5.20	597	1100	1.12	9.09	0.52	0.140	62.0	4.83	47.8	5.48	101.5
ST078715		0.33	0.016	0.579	5.99	533	1290	1.34	7.59	0.78	0.325	61.6	10.00	67.5	7.77	118.5
ST078717		0.41	0.029	1.150	4.66	940	1030	1.23	10.25	0.19	0.123	42.4	5.80	63.4	6.56	326
ST078718		0.40	0.001	0.222	5.99	144.0	1160	1.52	1.310	0.36	0.166	61.4	11.65	65.5	11.20	64.3
ST078719		0.57	0.052	2.27	4.41	441	640	0.85	22.7	0.10	0.044	50.4	8.71	68.6	7.40	492
ST078720		0.45	0.091	1.145	4.76	>10000	1600	1.36	37.6	0.46	0.653	63.0	12.05	59.6	5.46	144.5
ST078721		0.54	0.073	0.457	5.60	3350	3330	1.56	16.65	0.21	0.216	60.9	15.40	85.4	8.20	200
ST078722		0.47	0.002	0.487	4.91	204	2460	0.96	2.54	0.39	0.141	65.4	6.49	58.7	7.30	206
ST078723		0.52	0.017	0.582	5.36	483	2530	1.17	5.16	0.39	0.188	61.3	9.23	82.6	7.55	142.0
ST078724		0.34	0.053	1.315	5.20	82.7	4660	1.07	4.55	0.37	0.384	51.5	11.10	59.1	8.63	122.0
ST078725		0.53	0.014	0.457	6.96	82.0	2050	2.68	0.846	0.14	0.093	173.5	31.4	81.3	12.15	192.5
ST078726		0.41	0.003	0.563	5.41	22.7	2300	1.54	0.626	0.85	0.288	70.9	10.70	66.4	5.91	61.9
ST078727		0.49	0.005	0.305	4.98	27.0	1160	1.48	0.927	1.48	0.715	73.9	14.85	58.6	5.55	205
ST078728		0.33	0.007	1.180	5.35	265	1700	1.45	1.400	0.46	1.005	64.8	8.13	60.9	5.69	80.8
ST078729		0.51	<0.001	0.544	4.86	34.0	970	0.93	0.453	0.43	0.103	63.2	3.02	58.9	4.22	9.47
ST078730		0.60	0.003	1.095	6.04	40.8	1200	1.31	0.562	0.47	0.181	64.9	7.67	71.5	4.62	19.90
ST078731		0.49	0.190	1.535	7.74	21.7	2180	1.93	4.44	1.33	1.095	50.8	8.41	34.8	9.93	73.9
ST078732		0.53	0.052	10.90	6.87	389	2350	1.68	5.35	0.37	0.659	78.7	6.95	91.5	6.09	112.5
ST078733		Listed, NR														
ST078734		0.19	0.021	0.445	5.40	16.85	1700	1.33	0.289	0.47	0.390	69.1	3.94	64.5	4.77	44.8
ST078735		0.54	0.003	0.536	6.16	26.4	1420	1.47	0.443	0.41	0.240	63.3	11.40	72.0	4.36	24.6
ST078736		0.56	0.005	0.895	6.14	40.6	1430	1.29	0.640	0.40	0.438	58.1	9.22	71.4	5.42	47.2
ST078737		0.39	0.005	1.825	7.08	45.9	3640	1.95	0.810	0.56	1.540	64.7	9.83	85.8	11.00	54.5
ST078738		0.45	0.007	0.816	5.45	69.5	2290	1.36	0.897	0.91	1.015	62.9	7.93	69.1	4.30	45.8
ST078739		0.62	0.004	0.498	6.47	70.9	2300	1.74	0.692	0.90	1.985	66.8	13.80	81.6	5.09	56.0
ST078740		0.63	0.005	0.598	5.57	71.9	2950	1.55	0.818	0.63	0.425	71.0	9.92	71.3	4.28	56.2
ST078742		0.67	0.006	0.438	5.99	54.3	1730	1.61	0.573	0.40	0.338	69.0	12.40	70.2	4.36	46.1
ST078743		0.58	0.005	1.080	5.78	29.5	1480	1.31	0.442	0.37	0.276	64.4	7.53	69.2	4.12	23.7
ST078744		0.82	0.003	0.938	6.20	33.0	1530	1.44	0.411	0.46	0.394	67.0	9.64	69.6	4.50	25.1
ST078745		0.56	0.002	0.251	5.54	26.6	1870	1.23	0.619	0.39	0.279	77.3	6.63	68.6	4.76	32.4
ST078746		0.69	0.003	0.397	6.01	26.2	2460	1.50	0.368	0.36	0.230	67.9	8.02	77.0	6.97	58.8
ST078747		0.61	0.004	0.467	6.09	20.8	3510	1.67	0.314	0.66	0.319	67.6	12.05	74.1	6.33	61.8
ST078748		0.84	0.003	0.171	5.32	20.6	2830	1.41	0.317	0.19	0.315	68.5	12.05	69.3	4.87	53.3
ST078749		0.69	0.011	0.344	5.09	28.3	4850	1.38	0.353	0.28	0.198	65.4	14.30	75.4	3.80	52.4

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
	LOD	0.002	0.05	0.05	0.004	0.005	0.01	0.005	0.2	0.01	0.2	0.02	0.001	0.005	0.08	0.001
ST078707		4.55	14.30	0.09	1.760	0.065	1.48	30.9	22.7	0.91	1070	9.51	0.527	9.34	44.7	0.148
ST078711		6.96	13.70	0.12	1.800	0.043	1.40	37.0	46.6	0.55	1625	9.98	0.326	8.85	201	0.075
ST078714		2.33	17.80	0.08	1.960	0.035	1.45	32.3	18.2	0.39	149.0	2.94	0.695	13.40	13.90	0.048
ST078715		2.83	17.00	0.09	1.675	0.048	1.37	31.8	26.5	0.56	331	1.66	0.824	12.65	28.0	0.042
ST078717		5.50	12.05	0.08	1.665	0.066	0.79	23.5	32.3	0.51	144.0	38.9	0.167	6.49	54.5	0.053
ST078718		5.23	15.75	0.09	1.905	0.043	1.39	32.4	39.7	0.56	239	3.88	0.577	12.05	49.3	0.051
ST078719		11.30	15.15	0.11	1.935	0.120	1.20	26.9	21.5	0.51	207	4.88	0.184	5.78	47.9	0.090
ST078720		6.31	12.50	0.09	1.665	0.066	1.08	31.7	23.8	0.43	596	1.96	0.464	9.40	36.3	0.115
ST078721		5.94	17.25	0.08	1.735	0.077	0.89	28.3	38.1	0.25	537	1.88	0.203	8.46	38.9	0.083
ST078722		3.67	15.90	0.09	1.610	0.038	0.98	33.6	19.1	0.37	361	2.23	0.528	10.60	24.2	0.054
ST078723		3.87	16.10	0.09	2.14	0.051	1.42	32.4	26.1	0.49	241	4.44	0.539	10.10	49.2	0.056
ST078724		4.86	16.35	0.08	1.730	0.074	1.14	26.7	45.9	0.46	462	2.45	0.514	9.83	39.6	0.060
ST078725		12.00	17.00	0.25	2.24	0.056	1.67	96.9	23.2	0.45	386	4.80	0.137	7.45	150.0	0.151
ST078726		3.07	13.75	0.11	2.13	0.050	1.18	37.4	40.8	0.51	282	2.37	0.520	11.50	46.5	0.098
ST078727		7.80	12.40	0.13	1.645	0.126	0.99	39.8	37.7	0.49	587	3.81	0.553	9.57	69.3	0.514
ST078728		3.34	13.35	0.09	1.875	0.057	1.30	33.3	33.2	0.51	270	2.63	0.635	11.25	27.2	0.089
ST078729		2.15	16.55	0.08	2.07	0.041	1.15	33.6	21.2	0.36	163.0	1.74	0.656	15.20	10.15	0.034
ST078730		3.63	15.35	0.09	2.11	0.054	1.42	33.9	34.4	0.59	277	2.93	0.771	13.90	21.9	0.049
ST078731		2.91	19.90	0.09	2.13	0.083	1.73	24.3	34.6	0.68	269	3.02	0.674	14.20	26.6	0.073
ST078732		3.22	17.80	0.12	2.32	0.374	1.96	40.9	41.7	0.56	179.0	3.46	0.473	14.10	31.1	0.116
ST078733																
ST078734		2.59	14.25	0.10	2.08	0.046	1.49	35.8	35.3	0.42	99.0	1.97	0.461	12.60	31.2	0.090
ST078735		3.77	14.60	0.09	2.04	0.046	1.32	33.3	37.0	0.62	323	2.79	0.700	13.05	31.4	0.048
ST078736		4.32	17.90	0.09	1.950	0.092	1.32	30.8	40.7	0.56	332	3.19	0.660	13.60	25.7	0.076
ST078737		3.43	19.00	0.10	1.935	0.066	1.57	34.9	42.8	0.53	330	3.28	0.514	11.15	54.9	0.177
ST078738		2.33	13.65	0.10	2.06	0.051	1.38	33.2	36.6	0.60	179.5	2.38	0.666	11.70	35.2	0.103
ST078739		2.46	16.50	0.12	2.21	0.064	1.70	34.5	47.4	0.70	228	3.07	0.837	12.85	48.6	0.078
ST078740		3.16	11.25	0.09	2.18	0.059	1.46	37.3	40.5	0.56	289	3.79	0.566	13.10	45.1	0.098
ST078742		3.47	14.85	0.10	2.12	0.054	1.41	35.4	36.7	0.61	339	3.24	0.645	13.00	40.3	0.056
ST078743		3.47	15.05	0.07	1.945	0.053	1.17	33.8	33.6	0.49	236	3.08	0.622	13.65	27.1	0.043
ST078744		3.66	16.05	0.09	2.01	0.052	1.28	35.2	35.5	0.60	280	2.82	0.755	13.65	27.5	0.044
ST078745		2.98	15.95	0.11	2.23	0.043	1.28	40.4	32.2	0.43	237	2.70	0.542	14.65	25.5	0.058
ST078746		3.92	16.55	0.10	2.06	0.054	1.34	35.3	55.4	0.73	345	2.37	0.559	12.40	37.4	0.036
ST078747		3.39	15.50	0.10	2.05	0.060	1.40	35.3	48.5	0.60	409	2.77	0.654	11.95	39.9	0.072
ST078748		3.28	14.20	0.10	2.16	0.052	1.37	33.7	35.7	0.45	379	3.38	0.379	12.80	39.4	0.043
ST078749		3.22	13.15	0.11	2.22	0.061	1.22	32.7	38.4	0.41	932	2.64	0.380	11.80	38.9	0.057

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VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method / Analyte / Units / LOD	ME-MS61L Pb ppm 0.01	ME-MS61L Rb ppm 0.02	ME-MS61L Re ppm 0.0004	ME-MS61L S % 0.01	ME-MS61L Sb ppm 0.02	ME-MS61L Sc ppm 0.01	ME-MS61L Se ppm 0.006	ME-MS61L Sn ppm 0.02	ME-MS61L Sr ppm 0.02	ME-MS61L Ta ppm 0.01	ME-MS61L Te ppm 0.005	ME-MS61L Th ppm 0.004	ME-MS61L Ti % 0.001	ME-MS61L Tl ppm 0.002	ME-MS61L U ppm 0.01
ST078707		23.1	77.3	0.0005	0.09	9.23	10.65	1.895	3.45	108.0	0.63	0.118	9.41	0.306	0.664	3.69
ST078711		16.25	85.3	0.0079	0.15	5.69	11.35	2.98	1.81	158.5	0.60	0.064	9.09	0.278	0.842	7.94
ST078714		13.30	73.0	<0.0004	0.04	1.26	8.55	0.735	2.28	117.0	0.94	0.271	8.72	0.400	0.638	2.73
ST078715		15.40	91.1	<0.0004	0.03	2.09	10.10	0.365	2.93	124.5	0.85	0.099	7.95	0.412	0.882	2.61
ST078717		7.35	45.9	0.0018	0.05	4.70	8.73	3.82	2.13	41.5	0.43	0.154	7.28	0.232	0.400	5.14
ST078718		14.70	81.8	<0.0004	0.03	2.39	10.25	0.985	1.94	89.8	0.80	0.090	8.74	0.376	0.669	2.43
ST078719		13.50	60.3	0.0009	0.34	7.46	15.50	8.92	2.32	169.0	0.39	1.190	7.70	0.243	0.993	2.95
ST078720		15.95	59.4	<0.0004	0.05	6.24	9.24	2.10	1.83	84.0	0.65	0.278	9.37	0.306	1.020	2.59
ST078721		12.80	59.9	0.0008	0.05	5.97	11.90	1.880	3.08	70.0	0.55	0.413	7.80	0.291	1.055	2.20
ST078722		11.95	51.5	0.0004	0.03	1.61	9.77	0.528	2.17	95.3	0.73	0.077	6.36	0.386	0.742	2.33
ST078723		12.60	83.5	0.0010	0.04	2.24	12.40	2.27	2.21	97.1	0.70	0.312	8.13	0.351	1.055	3.45
ST078724		15.55	73.1	<0.0004	0.04	3.46	10.90	0.747	2.11	105.0	0.64	0.460	6.34	0.370	0.858	1.88
ST078725		7.31	96.4	0.0008	0.09	25.3	15.55	6.37	1.40	139.0	0.50	0.139	14.30	0.281	0.909	4.10
ST078726		17.95	65.8	0.0008	0.06	1.88	12.00	1.485	1.68	135.5	0.76	0.058	10.35	0.359	0.633	3.47
ST078727		13.00	56.1	0.0008	0.02	4.12	12.25	4.84	2.58	111.5	0.66	0.157	7.82	0.290	0.695	4.66
ST078728		36.9	77.8	<0.0004	0.03	1.87	9.05	0.591	2.01	108.0	0.76	0.069	7.61	0.372	1.640	2.50
ST078729		14.25	60.8	<0.0004	0.01	1.17	9.11	0.257	2.26	97.0	1.03	0.046	8.38	0.468	0.635	2.49
ST078730		21.1	80.5	<0.0004	0.01	1.65	10.20	0.816	2.12	110.5	0.93	0.064	9.98	0.416	0.704	2.76
ST078731		36.7	91.1	0.0030	0.07	3.28	8.45	7.61	2.69	183.5	1.00	0.500	11.05	0.351	0.717	2.94
ST078732		757	112.0	0.0021	0.05	9.36	14.75	2.32	6.64	126.5	0.89	0.298	11.40	0.427	1.080	3.78
ST078733																
ST078734		18.55	84.5	0.0012	0.07	1.32	11.00	2.16	1.77	122.0	0.81	0.050	9.84	0.364	0.624	2.86
ST078735		22.6	74.0	<0.0004	0.01	2.16	10.50	0.920	1.84	106.0	0.87	0.060	10.75	0.397	0.707	2.75
ST078736		41.9	79.6	<0.0004	0.01	2.33	11.00	0.767	2.70	103.0	0.92	0.115	8.79	0.415	0.785	2.45
ST078737		36.8	113.5	0.0004	0.09	2.17	14.75	1.765	2.28	125.0	0.71	0.076	10.40	0.337	0.970	3.86
ST078738		22.6	76.9	0.0017	0.12	2.18	11.65	1.460	1.86	152.5	0.78	0.063	9.54	0.366	0.691	3.87
ST078739		28.5	93.6	0.0069	0.23	2.72	14.30	5.12	2.19	176.5	0.86	0.071	10.70	0.386	0.798	7.81
ST078740		22.6	80.8	0.0015	0.04	3.36	9.94	1.965	1.94	134.0	0.85	0.080	10.50	0.406	0.724	4.15
ST078742		24.8	79.3	0.0004	0.01	2.71	11.45	1.185	1.94	105.5	0.87	0.073	10.80	0.393	0.718	3.07
ST078743		23.2	67.4	0.0015	0.01	2.31	9.57	0.840	2.01	94.6	0.89	0.066	8.95	0.430	0.668	2.65
ST078744		31.9	73.0	0.0011	0.01	2.14	10.95	0.857	2.83	109.5	0.91	0.062	10.40	0.412	0.701	2.89
ST078745		18.85	79.0	0.0007	0.01	1.92	11.55	0.788	1.96	115.0	0.95	0.071	10.05	0.456	0.663	2.71
ST078746		16.40	80.6	0.0005	0.02	1.68	12.15	0.616	1.89	106.0	0.88	0.069	8.68	0.396	0.704	2.69
ST078747		19.20	82.0	0.0006	0.02	1.90	12.95	0.850	1.74	177.5	0.80	0.069	9.58	0.377	0.762	3.13
ST078748		18.65	74.4	0.0013	0.01	2.22	12.05	0.834	1.78	95.2	0.82	0.077	8.34	0.394	0.654	2.57
ST078749		30.8	64.1	0.0015	0.03	2.89	11.80	1.065	1.84	122.5	0.75	0.101	8.10	0.361	0.553	2.77

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

Sample Description	Method Analyte Units LOD	ME-MS61L V ppm 0.1	ME-MS61L W ppm 0.008	ME-MS61L Y ppm 0.01	ME-MS61L Zn ppm 0.2	ME-MS61L Zr ppm 0.1
ST078707		108.5	1.570	18.35	67.9	61.0
ST078711		105.5	1.915	28.9	289	69.2
ST078714		104.5	1.735	10.65	43.1	71.8
ST078715		124.0	1.695	13.25	39.2	61.6
ST078717		106.5	4.98	12.15	36.9	71.6
ST078718		133.5	1.590	10.05	72.0	72.3
ST078719		103.5	10.65	12.25	41.3	72.0
ST078720		110.5	1.765	12.80	77.1	61.7
ST078721		113.0	11.40	11.85	56.3	69.7
ST078722		123.5	1.755	19.15	53.5	64.6
ST078723		151.0	3.03	12.85	57.8	80.8
ST078724		130.5	2.84	9.67	170.0	65.7
ST078725		137.5	3.82	26.3	95.5	90.3
ST078726		122.0	1.705	20.4	81.4	81.5
ST078727		124.0	1.935	77.3	127.5	74.4
ST078728		128.5	1.465	13.55	92.2	67.6
ST078729		141.0	1.670	10.45	39.7	76.7
ST078730		157.5	1.610	12.20	74.0	78.1
ST078731		75.9	2.77	11.15	125.0	73.2
ST078732		176.5	2.04	19.80	133.0	89.9
ST078733						
ST078734		132.0	1.190	15.65	66.2	78.2
ST078735		156.5	1.450	11.85	89.8	76.0
ST078736		163.0	1.815	10.35	142.0	73.4
ST078737		189.5	1.845	17.85	106.0	75.0
ST078738		145.5	1.315	17.45	93.1	78.2
ST078739		160.5	1.485	19.10	189.0	81.6
ST078740		182.0	1.495	19.45	126.5	84.9
ST078742		161.0	1.680	14.35	105.5	79.8
ST078743		168.5	1.550	10.90	85.4	72.7
ST078744		157.0	1.600	11.85	85.3	76.8
ST078745		146.0	1.680	13.85	79.8	80.8
ST078746		164.5	1.410	14.25	125.5	77.1
ST078747		150.0	1.290	18.05	108.5	82.7
ST078748		144.5	1.480	13.05	123.5	84.1
ST078749		138.5	1.485	13.40	131.5	86.6

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

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To: SENOA GOLD CORP.
1201 - 1166 ALBERNI STREET
VANCOUVER BC V6E 3Z3

Finalized Date: 22-NOV-2022
Account: SNOLIGO

Project: Rainbow

CERTIFICATE OF ANALYSIS WH22283766

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.
LOG-21 SCR-41 WEI-21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Au-ICP21 ME-MS61L

Quality Analysis ... *Innovative Technologies*

Report No.: **A23-00100**
Report Date: **17-Mar-23**
Date Submitted: **05-Jan-23**
Your Reference: **Yukon**

Senoa Gold(Snowline Gold)
110 Falcon Dr,
Whitehorse Yukon
Canada
Canada

ATTN: Cassis Lindsay

CERTIFICATE OF ANALYSIS

35 Soil samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
2G-5g	Unashed Vegetation ICP/MS	2023-01-27 11:44:32

REPORT **A23-00100**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

SCC Accredited LAB Accrédité CCN TM

LabID: 266

CERTIFIED BY:

Mark Vandergeest
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
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TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
Unit Symbol	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb
Lower Limit	3	4	10	0.2	1	100	30	2	25	6	15	4	100	0.2	50	0.5	0.4	0.2	3	4	0.4	3	0.4
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
ST078506	106	1890	1200	1.2	3	101000	70	48	14600	359	2160	726	3600	122	7020	186	98.2	60.5	2810	509	261	19	45.9
ST078507	268	6310	7050	2.2	3	496000	280	112	3920	594	14900	6410	320000	987	20900	796	332	318	8910	2310	1460	59	62.7
ST078508	104	2260	1780	1.6	3	192000	120	42	12600	743	3260	1180	4900	153	10300	442	244	124	2950	426	622	21	49.2
ST078205	459	34300	319000	4.3	3	88800	1070	8690	17500	298	29100	17700	117000	2800	352000	2270	1220	769	49200	11600	3370	196	302
ST078207	173	7370	31300	2.4	4	164000	340	710	19500	212	13200	4080	33000	2060	40900	989	501	283	8770	2880	1380	59	27.6
ST078208	161	4530	14600	3.2	4	121000	150	267	5780	228	10900	1790	31200	1230	21900	599	287	200	5380	1310	980	45	28.0
ST078209	368	8340	40700	4.5	4	469000	390	1210	5100	262	22400	5350	23800	1820	106000	1680	743	559	14500	2060	2520	93	18.8
ST078210	174	3080	5100	1.6	8	171000	300	157	21200	854	3620	1200	4000	158	26400	790	492	183	5620	418	891	27	42.2
ST078212	397	11500	80300	3.6	3	606000	340	856	10100	538	22400	17200	91500	1770	46500	1340	606	547	26900	2530	2560	118	86.1
ST078217	168	3730	2570	2.0	2	310000	340	334	7470	296	30200	1050	5100	207	56000	1070	442	398	5780	986	2160	89	38.7
ST078219	739	10600	84200	9.6	2	151000	450	6600	759	214	22700	5880	130000	1390	150000	1060	456	355	26400	3740	1830	84	43.6
ST078220	157	8170	112000	12.7	3	63200	230	837	2330	96	18000	2640	119000	3600	34000	694	260	219	14500	4270	1280	52	78.8
ST078221	453	10100	68400	6.4	7	202000	790	1370	40000	566	32400	7730	16500	3640	230000	3160	1560	1100	13000	2830	4320	161	89.3
ST078224	381	9830	22000	5.6	2	199000	220	925	631	180	30200	2870	23500	5950	32700	789	272	375	14000	5250	1930	101	14.2
ST078225	365	5150	12600	4.8	2	339000	430	574	7290	272	18500	4110	20500	4340	79100	1410	622	483	8860	1810	2120	72	43.9
ST078226	113	2800	5670	1.5	2	198000	100	174	2970	302	5460	1650	5800	156	27600	679	319	200	5670	592	877	32	26.6
ST078227	72	2340	3340	2.2	2	179000	60	170	8180	429	3640	631	4900	290	16000	237	112	75.1	2340	608	359	25	43.7
ST078228	315	4900	115000	9.0	10	110000	410	1890	41400	479	20100	8750	7100	1150	243000	2370	1250	792	7800	1210	3340	130	56.2
ST078230	691	14800	25200	6.0	3	588000	580	693	12000	1770	26800	11300	30000	2790	59700	2190	956	709	22500	4290	3400	110	131
ST078234	492	3310	4010	4.3	3	389000	100	184	7050	686	5810	1020	8700	296	21700	696	343	191	7970	751	918	40	39.4
ST078701	1010	33400	20900	134	4	129000	1060	16500	23000	385	28100	20200	261000	2460	700000	1780	922	596	41600	11500	2950	315	280
ST078702	955	21300	441000	12.3	5	251000	820	8310	21200	516	46000	13800	86900	2990	321000	1590	759	834	28300	7250	3470	238	170
ST078704	381	25100	118000	10.8	2	118000	480	12300	4280	228	28100	8640	70500	2730	110000	1460	729	459	38700	10300	2420	127	140
ST078705	399	21400	42300	5.7	2	89900	650	2120	7570	149	22400	5140	30800	2420	204000	1360	632	460	15800	5930	2230	100	71.2
ST078706	128	4230	13600	3.0	3	66400	130	507	13300	136	3570	1670	4600	203	55900	293	155	101	3780	643	441	39	49.6
ST078708	702	17200	199000	10.6	2	350000	280	2860	4410	136	29800	5550	42700	3790	157000	1630	705	647	25300	5030	2890	113	68.2
ST078709	1370	11800	502000	25.0	5	203000	400	6240	25400	633	34200	23600	95700	2870	342000	3000	1440	1000	28100	3010	4640	178	111
ST078710	467	9870	471000	4.8	2	387000	290	1220	9700	1030	25900	12700	114000	1510	109000	1690	726	608	35600	2600	3000	109	128
ST078712	304	8860	231000	5.0	4	410000	570	2100	12800	402	39700	12800	48300	2350	193000	2660	1240	1050	28400	2270	4740	233	96.6
ST078713	148	4270	8870	5.3	4	292000	140	653	39500	162	7910	558	6200	482	111000	1100	675	316	8110	633	1450	68	106
ST078716	389	7770	33800	10.8	2	101000	110	2590	4530	259	14900	3090	30000	1570	90000	823	385	294	11600	2100	1440	72	50.2
ST078733	360	14900	12800	4.2	4	682000	410	241	14600	1210	23700	12900	44300	1540	46200	1560	675	576	22200	3950	2780	121	145
ST078741	683	23100	51200	4.7	5	926000	540	538	16200	4800	29700	25400	38800	2120	74900	2340	1070	776	20100	4990	3890	136	91.2
ST078750	652	17200	16900	4.0	2	1500000	630	847	10300	781	23200	8800	42900	1780	58200	1970	913	652	27000	4750	2960	113	116

Analyte Symbol	Hg	Ho	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Re	Sb	Se
Unit Symbol	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	2	0.2	0.2	10	10	10	0.5	2	100	10	5	2	5	50	4	50	0.2	1	0.2	10	0.2	10	100
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
ST078506	51	35.2	4.3	80	1070	100	13.5	1520	6400	480	50	118	1200	5570	353	1150	0.6	285	0.8	360	1.7	300	800
ST078507	80	131	14.2	1010	7780	9500	33.8	1940	74900	2300	49	415	7820	125000	533	7650	1.4	1960	1.6	8580	3.9	1230	1700
ST078508	60	84.4	3.6	160	1620	220	28.6	2200	21500	470	83	115	2120	9200	477	1560	< 0.2	473	0.5	580	1.9	450	800
ST078205	14	496	88.6	2900	13900	13700	147	15900	399000	3590	1480	2520	15000	62400	2100	15800	3.0	3110	1.8	43500	1.4	4530	5600
ST078207	78	176	10.9	630	6700	3850	66.3	2160	196000	2390	93	847	6920	16100	654	4550	0.4	1770	0.2	12800	0.5	1390	1400
ST078208	73	105	3.5	580	5350	1560	37.0	1020	38200	1690	86	252	5370	15100	737	2680	< 0.2	1390	1.2	7110	0.3	1420	1000
ST078209	91	282	16.4	470	10700	2210	77.1	877	48900	1920	68	423	11000	38600	736	10800	< 0.2	2740	1.1	9800	1.0	2040	1800
ST078210	136	166	6.6	340	1990	240	74.6	2780	41200	720	102	113	2500	42200	830	3320	< 0.2	559	0.9	910	2.6	1910	1100
ST078212	252	263	25.4	890	11000	13100	65.3	4650	984000	1290	101	443	11100	71500	626	16300	1.5	2340	1.2	10300	2.7	3150	4900
ST078217	79	175	7.7	190	18300	190	41.4	721	16500	980	163	193	13300	5860	804	3450	< 0.2	3660	1.0	870	0.7	540	1300
ST078219	63	176	40.0	740	11700	10000	45.8	1810	151000	5660	77	904	10600	55000	451	10600	< 0.2	2780	1.1	8920	0.5	1080	1200
ST078220	144	107	42.0	670	9360	4250	24.7	1780	84700	1690	144	405	7800	43800	426	4930	2.1	2110	0.6	7380	0.7	240	1100
ST078221	282	576	23.6	540	21000	5700	191	3440	662000	1710	185	710	20500	24000	1030	5400	< 0.2	5060	1.2	10000	7.5	730	5000
ST078224	513	115	11.3	710	16000	4560	26.0	1170	59800	560	93	610	13800	15500	562	8230	< 0.2	3640	0.6	9460	0.5	440	2000
ST078225	589	246	9.6	280	8790	1500	68.1	906	19300	690	130	469	8760	34600	697	4150	3.7	2250	0.9	5600	0.7	1030	2700
ST078226	117	120	5.9	120	2690	70	38.2	1250	14800	520	186	138	3110	14000	603	2360	2.8	743	0.4	690	1.8	350	1100
ST078227	87	43.8	4.7	140	1800	50	13.9	1240	11600	260	138	150	1740	6110	315	1870	< 0.2	449	0.5	910	0.6	290	1100
ST078228	108	444	11.4	310	14000	3470	139	3750	232000	2830	155	244	14900	43200	833	2670	< 0.2	3500	0.9	4980	14.7	1700	10500
ST078230	331	369	36.2	820	13600	18800	111	3410	858000	1510	143	815	14800	38900	981	29300	< 0.2	3600	2.3	13300	24.3	3560	5400
ST078234	250	128	12.6	210	2890	390	38.9	2860	18400	2860	234	231	3380	9290	785	11600	< 0.2	794	0.8	1380	2.1	1230	1700
ST078701	26	375	113	3370	13800	9840	108	12500	279000	6320	2420	1880	14000	107000	2530	5650	2.2	2940	0.9	36000	1.7	370	9800
ST078702	38	319	45.6	2180	25500	11800	89.8	7560	418000	2590	538	1850	20400	48700	1260	8120	< 0.2	4630	1.3	46300	1.5	750	4100
ST078704	24	274	43.1	870	14600	16400	90.3	7250	123000	4260	109	2470	12800	32700	649	15000	< 0.2	3140	1.0	26100	0.4	990	3600
ST078705	74	255	27.8	540	11400	5350	78.3	3160	44600	2250	181	991	10200	24900	1080	6690	3.2	2430	< 0.2	13400	1.0	530	4300
ST078706	73	58.2	6.2	210	1850	150	22.8	476	25000	2630	366	130	1950	6350	773	1780	0.7	421	1.0	1030	< 0.2	2760	900
ST078708	95	296	21.0	1010	14200	6620	84.0	3370	116000	4430	140	782	12700	29100	833	16600	< 0.2	3040	0.4	20300	1.2	3270	4300
ST078709	892	582	52.5	720	19200	12900	164	4530	834000	6540	145	650	18600	96800	769	28800	< 0.2	4220	0.7	15100	15.8	8510	14200
ST078710	227	291	39.0	760	13300	14100	80.7	3090	601000	6330	104	329	12900	68300	747	30900	7.0	2990	1.7	8950	8.5	8610	9900
ST078712	416	519	22.0	890	22200	8520	144	3850	373000	3190	96	302	21000	72600	515	8210	4.1	4460	1.3	15000	4.7	2580	5900
ST078713	109	236	7.7	230	4050	240	106	2800	15100	1920	260	262	5050	11100	636	2460	11.5	1070	2.9	1820	2.0	1290	6300
ST078716	90	161	14.3	470	7700	750	54.6	798	63300	2020	228	529	7030	16300	889	24600	10.9	1670	1.6	7260	0.5	5410	3300
ST078733	199	279	24.4	1000	11700	21800	76.5	5770	422000	1690	139	831	11900	34600	858	17100	3.0	2710	1.9	12000	3.2	1100	7100
ST078741	249	435	37.9	1080	13500	30000	130	4720	378000	3060	205	957	14400	69000	1310	25900	11.4	3170	2.7	14400	14.8	1780	9900
ST078750	153	345	28.6	600	11900	20900	98.7	4590	398000	2590	68	603	12300	39800	923	20900	< 0.2	2750	1.2	11300	3.9	970	3000

Analyte Symbol	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	1	50	40	0.2	0.2	8	2	150	1	0.1	1	10	25	2	0.4	400	20
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
ST078506	248	90	100000	8.2	29.5	< 8	249	75400	11	14.0	599	1850	< 25	926	84.2	7700	1590
ST078507	1560	220	44300	1.3	141	58	1920	72700	135	42.0	764	22400	42	3280	228	49800	2930
ST078508	537	80	145000	5.9	67.7	29	279	60400	17	31.3	395	2120	< 25	2260	185	16600	1830
ST078205	2840	4810	81300	2.3	474	56	6270	1060000	241	162	1310	50300	1430	13300	1140	37500	11400
ST078207	1370	680	45500	7.0	144	29	1350	185000	146	70.6	989	11200	90	4800	427	16400	1560
ST078208	1010	200	22600	2.6	93.4	28	1120	67000	128	39.4	672	4780	36	2910	248	14700	1820
ST078209	2280	300	34800	4.8	260	58	1460	98300	161	91.0	1330	6180	95	7520	527	17600	1240
ST078210	658	80	174000	4.3	108	14	538	47800	20	68.7	435	1740	< 25	5390	460	16500	2160
ST078212	2170	320	76100	1.0	315	133	3200	83400	159	75.7	856	17200	116	6270	534	88500	4330
ST078217	2100	130	49800	6.9	188	14	1280	75100	33	52.6	3310	1460	< 25	4700	284	12000	1660
ST078219	1870	600	11400	1.3	173	269	3130	118000	100	58.1	1080	14600	1340	4160	327	43200	1830
ST078220	1380	710	13700	1.5	120	119	3600	58100	83	31.5	950	5180	6670	2630	183	16600	3030
ST078221	4150	400	219000	5.0	472	141	1960	136000	200	203	8900	13000	95	17700	1240	36900	3800
ST078224	2280	650	13800	2.0	161	15	2620	94000	237	32.5	960	17200	96	2660	174	24800	790
ST078225	1840	330	74200	10.0	226	75	1470	99100	205	88.7	1050	5050	80	6070	481	10900	2040
ST078226	717	190	26000	6.1	98.6	43	374	83600	30	44.9	568	1360	40	3180	251	9700	1140
ST078227	351	220	87000	8.9	35.3	59	364	71400	19	16.3	186	1160	< 25	1110	85.9	9300	1500
ST078228	2990	220	155000	5.2	353	46	441	64000	84	162	4250	5410	107	14100	972	28700	2430
ST078230	3150	650	60700	3.1	344	108	3890	105000	227	122	3850	25200	97	9580	745	94400	5640
ST078234	801	560	35800	6.9	104	63	541	95000	41	44.8	550	2280	< 25	3340	272	15900	1640
ST078701	2480	2790	118000	2.9	377	2300	5380	979000	208	119	1430	60400	258	9950	852	28700	11400
ST078702	3260	1360	93600	6.6	379	373	4110	513000	139	97.8	1780	29600	295	8710	718	46200	6770
ST078704	2210	3170	21500	5.2	241	419	3550	886000	235	98.8	925	60800	351	7730	659	32300	5560
ST078705	1920	1160	30100	12.4	221	128	1540	302000	189	84.4	1940	24100	159	6640	569	13700	3230
ST078706	392	190	28100	5.0	45.8	59	579	77400	24	18.8	310	3000	40	1780	159	11500	1250
ST078708	2470	510	33100	7.8	281	114	2710	234000	314	86.0	2610	20500	217	7520	645	26500	3820
ST078709	3670	830	117000	4.7	485	181	2910	168000	264	177	9500	19600	648	16600	1230	69200	4850
ST078710	2510	540	54600	1.6	290	149	3520	77600	144	91.9	3510	16600	222	7930	621	131000	5260
ST078712	4010	480	81400	1.5	517	95	3540	67400	270	157	3050	21200	730	14400	1050	45500	4760
ST078713	1070	210	163000	11.2	160	29	1320	127000	31	93.4	2340	2540	45	7360	731	9200	5090
ST078716	1260	460	26400	7.1	144	56	947	214000	118	52.5	1720	6320	109	4500	385	21000	2160
ST078733	2400	370	89900	3.3	276	59	3710	199000	137	82.9	2010	27000	105	7230	573	92100	6500
ST078741	3090	490	144000	2.7	390	76	3450	174000	233	138	5410	37800	154	11700	990	176000	3680
ST078750	2840	490	139000	4.2	336	96	3180	65800	135	114	2740	27400	139	8850	708	84300	4150

Analyte Symbol	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
Unit Symbol	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb
Lower Limit	3	4	10	0.2	1	100	30	2	25	6	15	4	100	0.2	50	0.5	0.4	0.2	3	4	0.4	3	0.4
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
CLV-1 Meas					11	49000			5670			483							1350				
CLV-1 Cert					11	49300			5940			494							1400				
CLV-1 Meas					10	49500			5650			461							1350				
CLV-1 Cert					10	49300			5940			494							1400				
CLV-1 Meas					9	48800			5600			485							1330				
CLV-1 Cert					10	49300			5940			494							1400				
CLV-1 Meas					11	49500			5870			484							1330				
CLV-1 Cert					11	49300			5940			494							1400				
CLV-2 Meas					42	22700																	
CLV-2 Cert					43	22500																	
CLV-2 Meas					34	21600																	
CLV-2 Cert					43	22500																	
CDV-1 Meas	9	1330	1290	2.4	19	8700		20	19900	41	4360	1990	12100	121	8870				2750	609		31	47.4
CDV-1 Cert	9	1500	1300	2.3	12	8500		20	19400	40	4350	2000	12100	121	8610				2560	600		30	46
CDV-1 Meas	9	1510	1300	2.7	17	8700		20	20000	40	4370	2010	12400	121	8520				3010	603		30	46.7
CDV-1 Cert	9	1500	1300	2.3	12	8500		20	19400	40	4350	2000	12100	121	8610				2560	600		30	46
CDV-1 Meas	9	1510	1300	2.9	16	8700		20	19900	40	4330	1980	12100	121	8670				2750	598		30	46.1
CDV-1 Cert	9	1500	1300	2.3	12	8500		20	19400	40	4350	2000	12100	121	8610				2560	600		30	46
CDV-1 Meas	7	1680	1410	1.6	14	8100		25	19100	45	4360	1920	13100	124	8440				2790	651		33	48.2
CDV-1 Cert	9	1500	1300	2.3	12	8500		20	19400	40	4350	2000	12100	121	8610				2560	600		30	46
CDV-1 Meas	10	1360	1370	4.3	18	8500		21	18800	38	4340	1890	11700	120	8650				2690	582		36	48.4
CDV-1 Cert	9	1500	1300	2.3	12	8500		20	19400	40	4350	2000	12100	121	8610				2560	600		30	46
ST078212 Orig	382	11200	76400	3.2	3	595000	350	829	9640	517	22100	16500	91300	1730	44900	1290	577	527	24900	2500	2460	115	71.7
ST078212 Dup	412	11800	84200	4.0	3	618000	330	884	10500	558	22700	17900	91700	1820	48000	1390	635	567	28900	2560	2650	122	100
ST078712 Orig	319	9180	233000	5.2	4	430000	580	2190	13700	409	41400	13200	47200	2410	200000	2760	1280	1090	28400	2250	4930	238	102
ST078712 Dup	290	8540	230000	4.8	3	390000	560	2010	12000	396	37900	12500	49300	2290	186000	2550	1200	1020	28500	2290	4550	229	91.2
ST078750 Orig	658	18000	17000	4.1	2	1540000	670	946	10600	788	25100	9070	45300	1840	59300	2020	930	681	27600	4950	3050	126	118
ST078750 Dup	645	16400	16800	3.9	1	1470000	590	748	10100	773	21300	8520	40400	1720	57100	1920	896	623	26400	4550	2870	100	115
Method Blank	< 3	< 4	< 10	0.2	< 1	< 100	< 30	< 2	< 25	< 6	< 15	< 4	< 100	< 0.2	< 50	< 0.5	< 0.4	< 0.2	< 3	< 4	< 0.4	< 3	< 0.4
Method Blank	< 3	< 4	< 10	< 0.2	< 1	< 100	< 30	< 2	< 25	< 6	< 15	< 4	300	< 0.2	< 50	< 0.5	< 0.4	< 0.2	< 3	< 4	< 0.4	< 3	< 0.4

Analyte Symbol	Hg	Ho	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Re	Sb	Se
Unit Symbol	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	2	0.2	0.2	10	10	10	0.5	2	100	10	5	2	5	50	4	50	0.2	1	0.2	10	0.2	10	100
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
CLV-1 Meas				1760				1210	570000	2270	137				571	11400				2320			
CLV-1 Cert				1760				1240	571000	2180	134				581	11100				2230			
CLV-1 Meas				1770				1200	559000	2010	133				578	10900				2150			
CLV-1 Cert				1760				1240	571000	2180	134				581	11100				2230			
CLV-1 Meas				1720				1180	547000	2010	133				543	10400				2280			
CLV-1 Cert				1760				1240	571000	2180	134				581	11100				2230			
CLV-1 Meas				1680				1130	536000	2150	126				572	10100				2160			
CLV-1 Cert				1760				1240	571000	2180	134				581	11100				2230			
CLV-2 Meas																					22.8		
CLV-2 Cert																					23.0		
CLV-2 Meas																					23.1		
CLV-2 Cert																					23.0		
CDV-1 Meas	43			1800	2320	530		1370	429000	200	58	59		6400	404	1250				2470		30	500
CDV-1 Cert	41			1800	2310	560		1310	413000	200	60	60		6400	400	1330				2600		30	300
CDV-1 Meas	41			1800	2310	560		1360	419000	210	59	60		6510	397	1330				2670		30	300
CDV-1 Cert	41			1800	2310	560		1310	413000	200	60	60		6400	400	1330				2600		30	300
CDV-1 Meas	41			1820	2310	560		1400	439000	220	60	60		6360	410	1370				2550		30	300
CDV-1 Cert	41			1800	2310	560		1310	413000	200	60	60		6400	400	1330				2600		30	300
CDV-1 Meas	49			1740	2310	570		1310	412000	210	58	66		6540	406	1260				2470		40	500
CDV-1 Cert	41			1800	2310	560		1310	413000	200	60	60		6400	400	1330				2600		30	300
CDV-1 Meas	39			1670	2280	570		1300	390000	220	62	60		6440	411	1290				2480		30	500
CDV-1 Cert	41			1800	2310	560		1310	413000	200	60	60		6400	400	1330				2600		30	300
ST078212 Orig	237	253	24.2	900	10800	13200	61.6	4470	948000	1160	96	442	10900	69700	593	15700	2.4	2300	0.9	10300	2.6	3110	4200
ST078212 Dup	268	273	26.6	890	11200	12900	69.0	4820	1020000	1430	107	443	11300	73200	660	16900	0.6	2370	1.4	10400	2.8	3180	5600
ST078712 Orig	421	541	22.5	910	23100	8780	148	4050	368000	3170	99	313	21600	73900	537	8400	7.1	4620	1.1	15600	5.1	2630	5700
ST078712 Dup	411	497	21.4	870	21300	8260	140	3640	378000	3200	94	290	20300	71300	494	8020	1.0	4300	1.4	14400	4.4	2530	6100
ST078750 Orig	159	349	29.5	640	12800	22400	100	4820	398000	2600	72	622	13100	40900	950	21200	< 0.2	2920	1.3	11700	4.1	940	3200
ST078750 Dup	146	340	27.6	570	11000	19400	97.0	4350	397000	2590	65	584	11600	38700	896	20700	< 0.2	2580	1.0	10800	3.7	1000	2800
Method Blank	3	< 0.2	< 0.2	< 10	< 10	< 10	< 0.5	< 2	< 100	< 10	< 5	< 2	< 5	< 50	< 4	< 50	< 0.2	< 1	< 0.2	< 10	< 0.2	< 10	< 100
Method Blank	< 2	< 0.2	0.2	< 10	< 10	< 10	< 0.5	< 2	< 100	< 10	< 5	< 2	< 5	< 50	< 4	< 50	< 0.2	< 1	< 0.2	< 10	< 0.2	< 10	< 100

Analyte Symbol	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	1	50	40	0.2	0.2	8	2	150	1	0.1	1	10	25	2	0.4	400	20
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
CLV-1 Meas			27700		17.5						96400					71800	
CLV-1 Cert			28500		17.0						98500					74000	
CLV-1 Meas			27200		17.6						92400					74100	
CLV-1 Cert			28500		17.0						98500					74000	
CLV-1 Meas			27800		18.8						93700					74600	
CLV-1 Cert			28500		17.0						98500					74000	
CLV-1 Meas			27300		17.0						87000					73900	
CLV-1 Cert			28500		17.0						98500					74000	
CLV-2 Meas																	
CLV-2 Cert																	
CLV-2 Meas																	
CLV-2 Cert																	
CDV-1 Meas		140	128000			31	608	30900			170	4170		1400		22900	1300
CDV-1 Cert		80	122000			40	610	30000			170	4200		1410		23300	1290
CDV-1 Meas		130	126000			< 8	612	30200			181	4190		1410		23500	1290
CDV-1 Cert		80	122000			40	610	30000			170	4200		1410		23300	1290
CDV-1 Meas		130	131000			13	613	30000			174	4210		1410		23000	1280
CDV-1 Cert		80	122000			40	610	30000			170	4200		1410		23300	1290
CDV-1 Meas		100	118000			< 8	661	32300			176	4440		1410		22400	1400
CDV-1 Cert		80	122000			40	610	30000			170	4200		1410		23300	1290
CDV-1 Meas		140	116000			< 8	625	25900			182	4300		1440		22300	1280
CDV-1 Cert		80	122000			40	610	30000			170	4200		1410		23300	1290
ST078212 Orig	2120	310	73800	0.9	301	140	3100	87400	157	71.9	816	16800	113	5990	521	83800	4050
ST078212 Dup	2220	340	78400	1.0	330	126	3300	79300	160	79.5	896	17600	118	6550	547	93300	4610
ST078712 Orig	4160	490	86100	1.7	536	127	3590	68800	278	164	3200	21400	705	15200	1100	45400	4770
ST078712 Dup	3870	470	76800	1.3	498	63	3490	66000	262	151	2900	20900	754	13700	996	45700	4750
ST078750 Orig	2970	500	143000	4.1	347	105	3340	73200	142	118	2790	28900	135	9040	728	85900	4200
ST078750 Dup	2710	480	135000	4.4	325	86	3020	58400	128	110	2690	26000	144	8670	689	82600	4090
Method Blank	< 1	< 50	< 40	< 0.2	< 0.2	< 8	< 2	< 150	< 1	< 0.1	< 1	< 10	< 25	< 2	< 0.4	< 400	< 20
Method Blank	< 1	< 50	< 40	< 0.2	< 0.2	< 8	< 2	< 150	< 1	< 0.1	< 1	20	< 25	< 2	< 0.4	< 400	< 20

9. Appendix L—Geology and Geochemistry Maps

LEGEND

Felsic Intrusive: ~5% 0.5cm quartz porphyritic with finer grained equigranular matrix, brownish weathering

Iron Oxide Po

Siltstone, grey and light grey layering and more massive sections. Locally fissile and some more massive siliceous (weak) sections, due to some hornfelsing.
Sericitization, bleaching, limonitic weathering, quartz veining overprinting pyrrhotite-biotite metasomatism.

Hornfels, recrystallization: weak silicification, brown-purplish tint → fine biotite, with vfg Po
Also green-brown layers - diopside-garnet skarn.

Limestone?, a bit vf. granular texture with ~40% siliceous siltstone layers with anastamosing ≤1cm wavy layers
In places, fine grained massive but still with green-grey and white banding. Or intense calcite alteration introduced?

Quartzite

Sandstone, recrystallized with thin hardened siltstone layers
very fine grained, rough fracture, almost cherty

Quartz-Aspy-Po-Py-Chalcopy. Vein

Quartz VEIN - White

J.P. Jean Pautler observation.

FAULT

Vein

Bedding or Contact

Joint

Projection: NAD83Z8 UTM 1:2000 SCALE

Drawn by: Shane Carlos August 10th, 2022.

RAINBOW PROPERTY

26 40 60m

566100 7057100 566200 7057000 566300 7056

566100mE 7057000mN

STRUCTURAL INTERP. BOX

FAULT 330 65 FAULT 65 aspy 345 72 45 THRUST 10 QTZ-Po

260 CREVULATIONS (EARLIER DEFORMATION)

350 Az

J.P. qtz-arsenopy. 76 170

7057000 565900 7056900 565800 7056800 7056700 565800 7056700 565900

7056700 566200 7056600 566100 7056500 566200 7056400 566300 7056300 566400 7056200 566500 7056100 566600

7056400mN 566400mE

7056700mN 565900mE

sampled 15cm fault, sericitalt. 022 215 50 80 315 145 335 con 280/85 Limt-QV-carn fault 72 tight grey quartzite cobble

135 35 160

Is it mylonitized?

finely recrystallized 290 115 84 more silty than sandy

light brown very fine layers, silty, laminae vfg sst 88

pte sst with siltstone interbeds

005 085 090 15 SLATY CLEAVAGE weaker hornfels lost cleavage

intrusive sediment in stream

NOT HORNF

light grey, soft 86 silty sandstone, low quartz sericite altered, bleached biotite

PLAN VIEW 1:400 SCALE

6 qtz-flm veins over 2m, curving in to 295/80 crosscutting 2 from 275/85.

015 82 105 85 185 80 295 70 285 75 45 crosscutted

4cm asy vein 345 72 70 J.P.

QV FLOAT

HORNFELS - Po + Biot. massive, non-silicified tough, purplish-brownish

thinly laminated Py veins siliceous meta-sedy 80 68 28 63

Po, Py, Siliceous 50 siltstone-rich dstone Hornfels 330

3% Po hornfels hornfels?

Folded Altered Siltstone limonitic, fissile, bleached, sulphidization, sericite 72 105 85 30

silic. mudstone 305

1cm-1m Recessive vein 85 015 82 65 80 280 075 85 35

a bit fissile weaker hornfels

Glacial Till

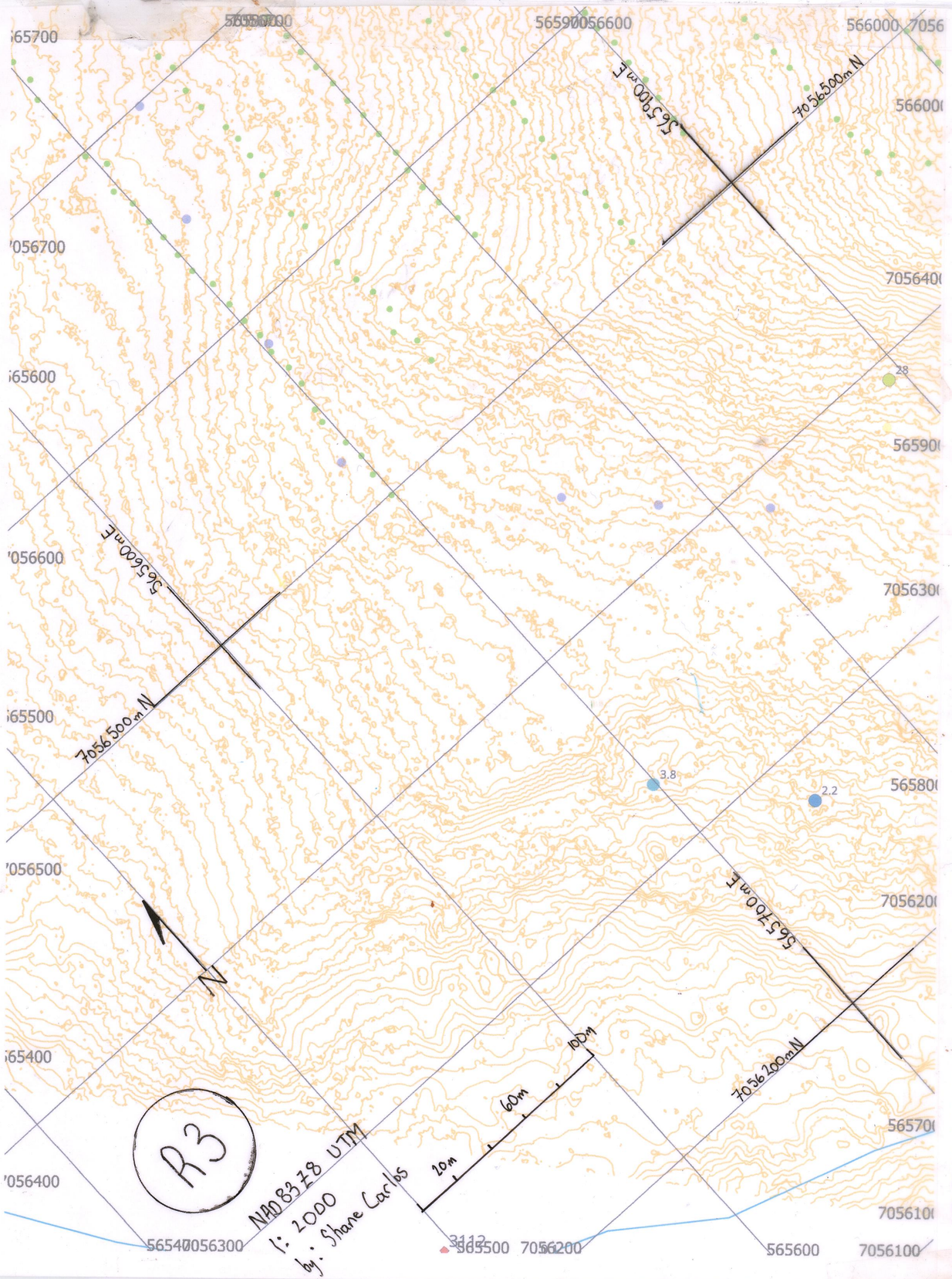
300 010 88 105 Silty-sandy layers

7056800 565800 7056700 565900 7056600 566000 7056500 566100 7056400 566200 7056300

RI



566800 m E
7056400 m N
566500 m E
7056300 m N
567100 m E
7056100 m N
7055800 m N
566900 m E
CROSS-SECTION
brecciation in hinges
Looking 300 Az
1:200 Scale
FAULT
Quartz Porphyry Intr. float
rusty sandstones with qtz-lim veins + Po subcrop
vegetation
High
R2
1:2000 Scale
Projection: NAD83 Z8 UTM
Shane C.
Aug. 10th, 2022.


565900 m E
7056500 m N
565600 m E
7056500 m N
565700 m E
7056200 m N
N
20m
60m
100m
R3
NAD83Z8 UTM
1: 2000
by: Shane Carlos
3112
565700
7056100
565600
7056100
565500
7056200
565400
7056400
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565900
7055800
566100
7056300
566100 m E
7056300 m N
566100 m E
7056000 m N
96.1
40.5
43.1
36.2
10.6
61.8
4.9
57.1
6.1
0.1
5cm 320/90 qtz-lim vein
1/2m carbonate fault gouge
more fissile
lots of carbonate in fractures
5cm calcite vein
Calcite vein in fault
silty-sandy
240 THIN FAULT


7056400
7056100
7055800
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566500
566200
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7056000
7055900
7055700
7055600
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566300
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569800
569900
570000
570100
570200
570300
570400
570500
570600
570700

566100mE
7057000mN

7056900mN
566800mE

Quartz - Arsenopyrite Vein

SHEARED - INTERCALATED - SILTY - Quartzite + CRENULATED

FAULT

Qtz. - Aspy Veins

FELSIC INTRUSIVE

STRONG HORNFELS

FAULT

F1

FAULT

STRONG CALCITE

BACK-THRUST

CALCITE ALTERATION

COPPER - GOLD MANTO

F2

210 - 245 Az Faults & Folds

CRENULATION HINGE
300 —— 40 F1

MAG LOW

MAG HIGH

STRONG HORNFELS

PROJECTED USING 330/70 STRUCTURAL CONTOURS

N

7056200m N
566700 m E

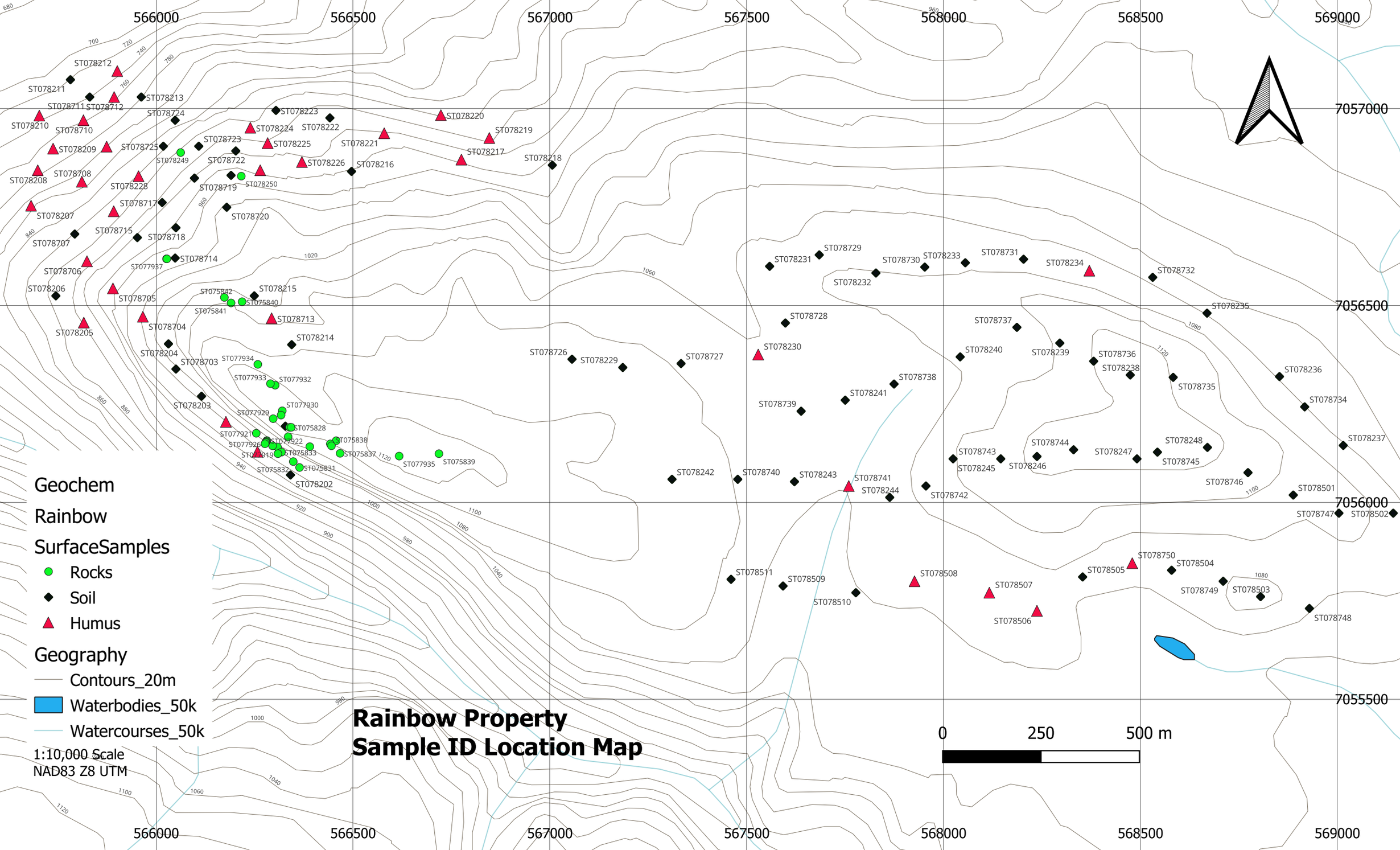
7055700mN
566300m E

R1 - R4 INTERPRETIVE LAYER

LEGEND
- FAULT
- Quartzites
- Purple Outline indicates Strong biotite hornfels
- Siltstone - Mudstone
- Sandy component
- biotite - qtz eye porphyry
- mineralization
- F1, F2 fold generation

1:2000 SCALE PROJECTION: NAD83 Z8
By: Shane Cooles

100m 200m


566000
566500
567000
567500
568000
568500
569000
7057000
7056500
7056000
7055500
Geochem
Rainbow
SurfaceSamples
Rocks
Soil
Humus
Geography
Contours_20m
Waterbodies_50k
Watercourses_50k
1:10,000 Scale
NAD83 Z8 UTM
Rainbow Property
Sample ID Location Map
0
250
500 m

Rainbow Property
Gold Plots

566000
566500
567000
567500
568000
568500
569000

7057000
7056500
7056000
7055500

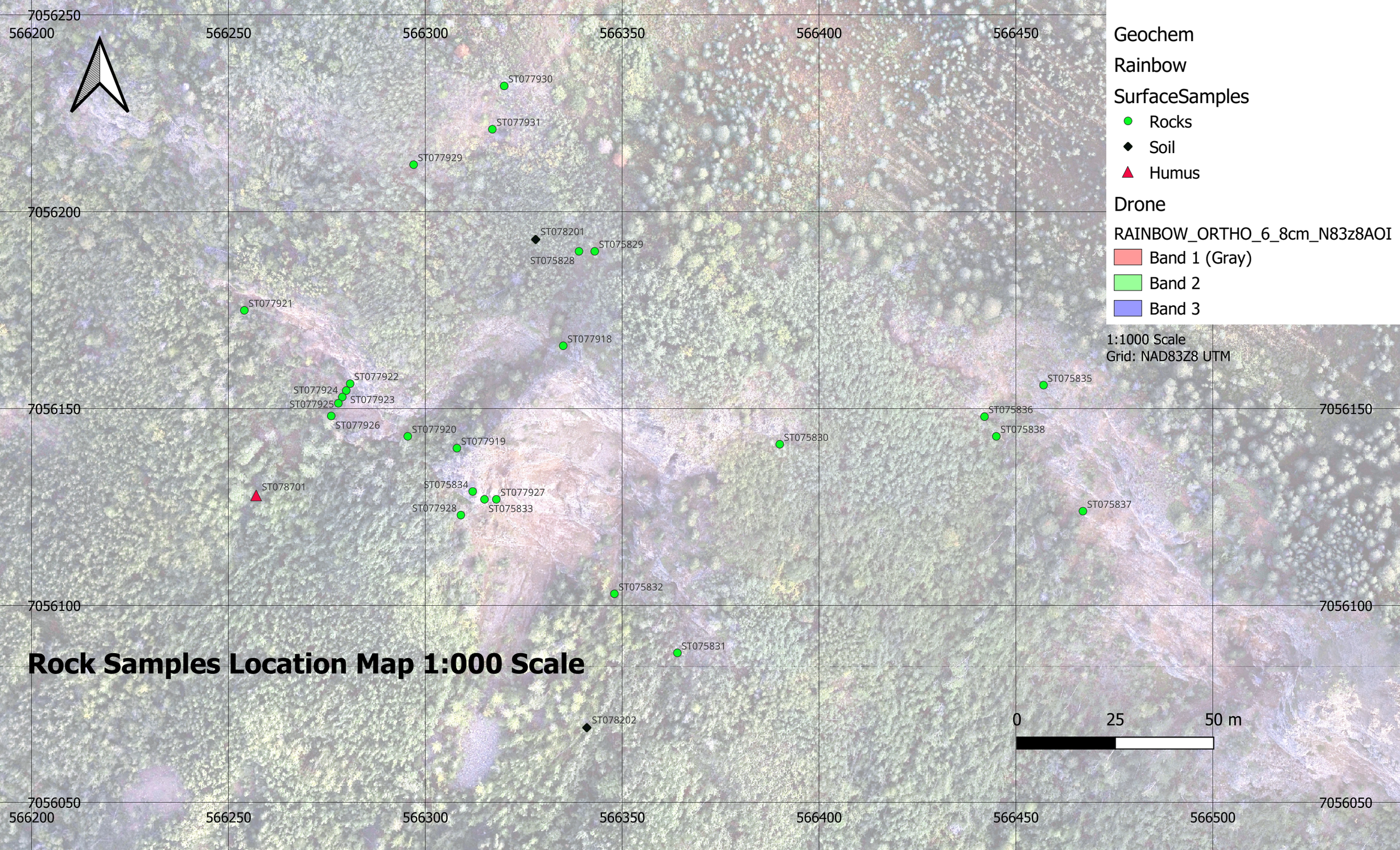
Geochem
Rainbow
Rocks Au_ppm
0.005 - 0.072
0.072 - 0.199
0.199 - 0.33
0.33 - 0.499
0.499 - 0.734
0.734 - 1.155
1.155 - 1.565

Humus
Humus Au ppb
1.2 - 1.6
1.6 - 2.4
2.4 - 3.6
3.6 - 5
5 - 6.4
6.4 - 9.6
9.6 - 10.8
10.8 - 25
25 - 134

Soil
Soil Au ppm
0.0005 - 0.005
0.005 - 0.0132
0.0132 - 0.0241
0.0241 - 0.0405
0.0405 - 0.0541
0.0722 - 0.4681
0.4681 - 0.9243

Geography
Contours_20m
Waterbodies_50k
Watercourses_50k

0 250 500 m
1:10,000 Scale
NAD83 Z8 UTM


Geochem
Rainbow
SurfaceSamples
Rocks
Soil
Humus
Drone
RAINBOW_ORTHO_6_8cm_N83z8AOI
Band 1 (Gray)
Band 2
Band 3
1:1000 Scale
Grid: NAD83Z8 UTM
Rock Samples Location Map 1:000 Scale
0
25
50 m
7056250
566200
566250
566300
566350
566400
566450
7056200
7056150
7056100
7056050
566500
ST077930
ST077931
ST077929
ST078201
ST075829
ST075828
ST077921
ST077918
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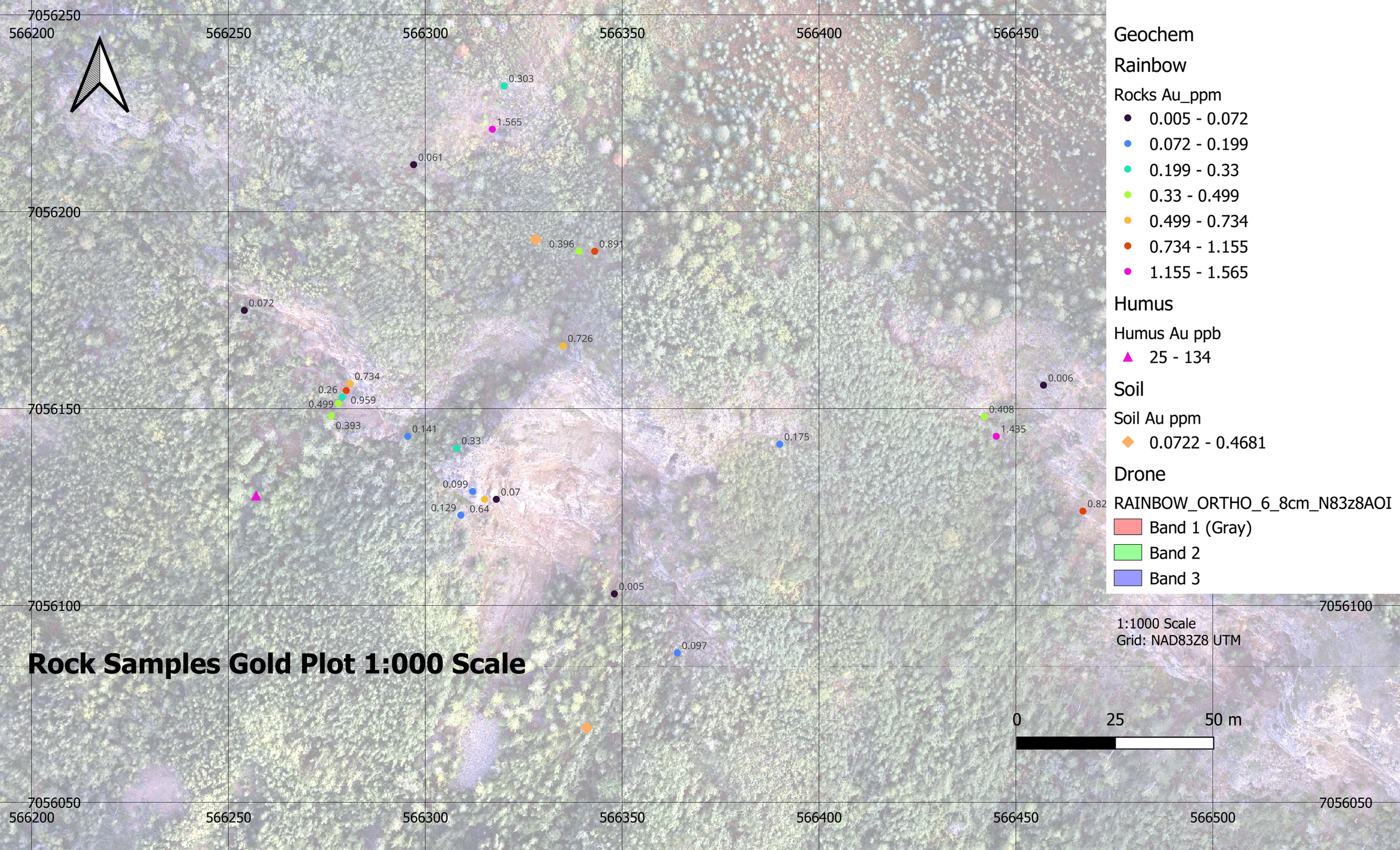
7056250
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566250
566300
566350
566400
566450
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1.565
0.061
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0.891
0.072
0.726
0.734
0.26
0.959
0.499
0.393
7056150
0.141
0.33
0.175
0.006
0.408
1.435
0.099
0.07
0.129
0.64
0.82
0.005
7056100
0.097
7056050
566500
Geochem
Rainbow
Rocks Au_ppm
0.005 - 0.072
0.072 - 0.199
0.199 - 0.33
0.33 - 0.499
0.499 - 0.734
0.734 - 1.155
1.155 - 1.565
Humus
Humus Au ppb
25 - 134
Soil
Soil Au ppm
0.0722 - 0.4681
Drone
RAINBOW_ORTHO_6_8cm_N83z8AOI
Band 1 (Gray)
Band 2
Band 3
1:1000 Scale
Grid: NAD83Z8 UTM
0
25
50 m
Rock Samples Gold Plot 1:000 Scale

10. Appendix M—Geophysics Logistics Report

Precision GeoSurveys

AIRBORNE GEOPHYSICAL SURVEY REPORT



Rainbow

Mayo, Yukon

Snowline Gold Corp.

Precision GeoSurveys Inc.

BC Permit to Practice 1002615

www.precisiongeosurveys.com

Hangar 42, Langley Airport

21330 - 56th Ave., Langley, BC

Canada V2Y 0E5

604-484-9402

Jen D. Hanlon, M.Sc., P.Geo.

August 2022

Job# 22149_RB

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1.0 Introduction

This report describes the high-resolution helicopter-borne magnetic and radiometric survey completed by Precision GeoSurveys Inc. at the Rainbow survey area for Snowline Gold Corp. The Rainbow survey area is in central Yukon (Figure 1) and the survey was flown on July 26 and July 27, 2022.



Figure 1: Rainbow survey area located in central Yukon.

1.1 Survey Area

The survey block is centered approximately 115 km west of Forks Camp and 111 km east of Mayo, Yukon (Figure 2).

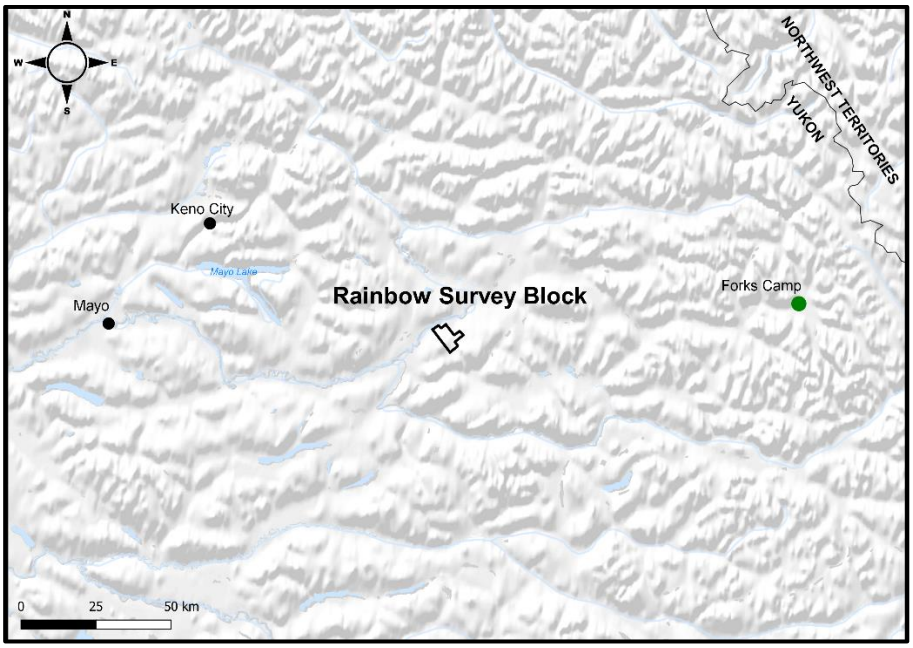


Figure 2: Rainbow survey block 115 km west of Forks Camp and 111 km east of Mayo, Yukon.

The Rainbow survey block was flown at 200 m line spacing at a heading of 047°/227°; tie lines were flown at 2000 m line spacing at a heading of 137°/317°. An infill block was flown within the center of the Rainbow survey block to increase survey line density to 100 m and tie line density to 1000 m (Figures 3 and 4).

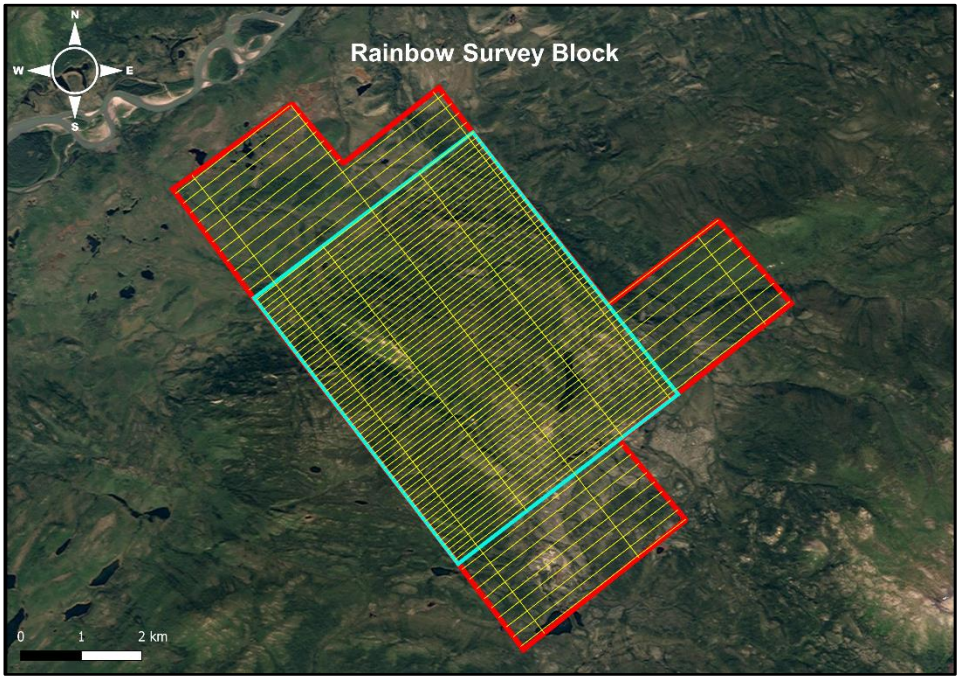


Figure 3: Plan View – Rainbow survey block with actual flight lines in yellow, outer survey block boundary in red, and infill block boundary in cyan. Survey and tie lines within the infill survey block are at 100 m/1000 m line spacings.

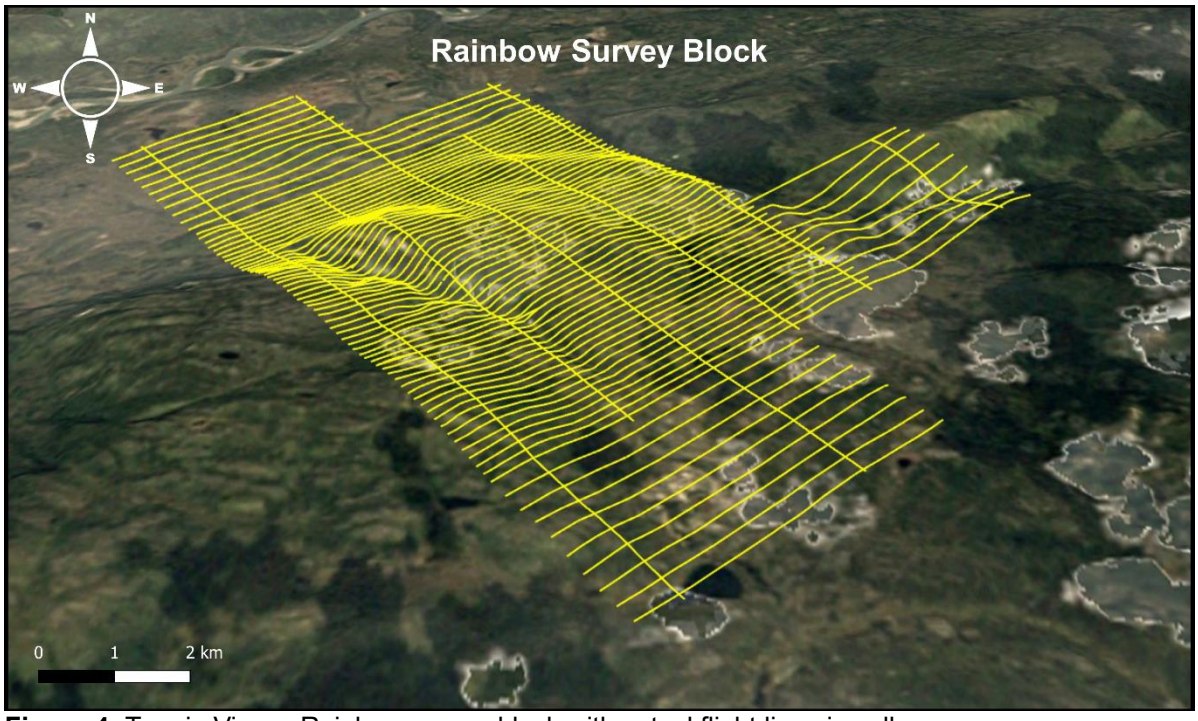


Figure 4: Terrain View – Rainbow survey block with actual flight lines in yellow.

1.2 Survey Specifications

The geodetic system used for the geophysical survey was WGS 84 in UTM Zone 8N. A total of 379 line km was flown over an area of 42.8 km^2 (Table 1). This total includes 2 km of data retained from partial flight lines flown outside the survey block margins for survey efficiency. Polygon coordinates for the Rainbow survey block are specified in Appendix A.

Survey Block	Area (km^2)	Line Type	Line Orientation (UTM grid)	Line Spacing (m)	No. of Lines Planned	No. of Lines Completed	Total Planned Line km	Total Actual km Flown
Rainbow (main)	42.8	Survey	047°/227°	200	48	48	215	217
		Tie	137°/317°	2000	4	4	27	27
		Total:			**52**	**52**	**242**	**244**
Infill Area	25.1	Survey	047°/227°	100	27	27	124	124
		Tie	137°/317°	1000	2	2	11	11
		Total:			**29**	**29**	**135**	**135**
Total					**81**	**81**	**377**	**379**

Table 1: Survey flight line specifications for Rainbow and Infill survey blocks. Survey and tie lines within the Infill Area were offset to generate 100 m/1000 m infill line spacings.

2.0 Geophysical Data

Geophysical data are collected in a variety of ways and are used for many purposes including aiding in the determination of geology, mineral deposits, oil and gas deposits, geotechnical investigations, contaminated land sites, and UXO (unexploded ordnance) detection.

For the purposes of this survey, airborne magnetic and radiometric data were collected to serve in geological mapping and exploration for mineral deposits.

2.1 Magnetic Data

Magnetic surveying is the most common airborne geophysical technology used for both mineral and hydrocarbon exploration. Aeromagnetic surveys record the intensity of the total magnetic field measured at a magnetometer sensor, which is fixed to the aircraft. The total magnetic field is comprised of the desired geomagnetic field in combination with undesired influences from varying solar wind and the aircraft's inherent magnetic field. Subtracting the undesired magnetic effects from the total field results in aeromagnetic maps that show the spatial distribution and relative abundance of magnetic minerals - most commonly the iron oxide mineral magnetite - in the upper levels of Earth's crust. These results, in turn, can then be related to geological attributes such as lithology, structure, and alteration of bedrock. Survey specifications, instrumentation, and interpretation procedures depend on the individual objectives of each survey. Magnetic surveys are typically performed for:

- Geological Mapping - to aid in mapping lithology, structure, and alteration.
- Identification of variations in ferromagnetic response directly or indirectly related to mineral deposits.
- Depth to Basement Mapping - for exploration in sedimentary basins or mineralization associated with the basement surface.

2.2 Radiometric Data

Radiometric surveys are used to determine the absolute or relative concentrations, or both, of the naturally occurring radioelements uranium (U), thorium (Th), and potassium (K) in surface rocks and soils using radioactive emanations. Mapping the distribution and concentration of radioelements is useful for:

- Determining different lithologies based on characteristic radioelement geochemistry, either absolute or relative. For example, natural radioactivity of igneous rocks generally increases with SiO_2 content.

- Identification of hydrothermal alteration. For example, individual radioelements follow very different pathways of evolution during alteration of rocks, particularly potassic enrichments.
- Exploration for valuable mineral deposits related to increases in radioelement concentrations such as uranium and rare earth elements.
- Providing insights into weathering. For example, clay minerals tend to fix the natural radioelements in near-surface environments.
- Environmental mapping purposes, such as delineation of surface drainage features.

Gamma rays are electromagnetic waves with frequencies between 10^{19} and 10^{21} Hz emitted spontaneously from an atomic nucleus during radioactive decay, in packets referred to as photons. The energy E transported by a photon is related to the wavelength λ or frequency ν by the formula:

$$E = h\nu = hc/\lambda$$

where: c is the velocity of light
h is Planck's constant (6.626×10^{-34} joule)

All detectable gamma radiation from Earth materials comes from the natural decay products of three primary radioelements: U, Th, and K. Each individual nuclear species (element) emits gamma rays at one or more specific energies, as shown in Figure 5. Of these elements, only potassium (^{40}K) emits gamma energy directly, at 1.46 MeV. Uranium (^{238}U) and thorium (^{232}Th) emit gamma rays through their respective decay series; ^{214}Bi at 1.76 MeV for uranium and ^{208}Tl at 2.61 MeV for thorium. Accordingly, the ^{214}Bi and ^{208}Tl measurements are considered equivalents for uranium (eU) and thorium (eTh), as the daughter products will be in equilibrium under most natural conditions.

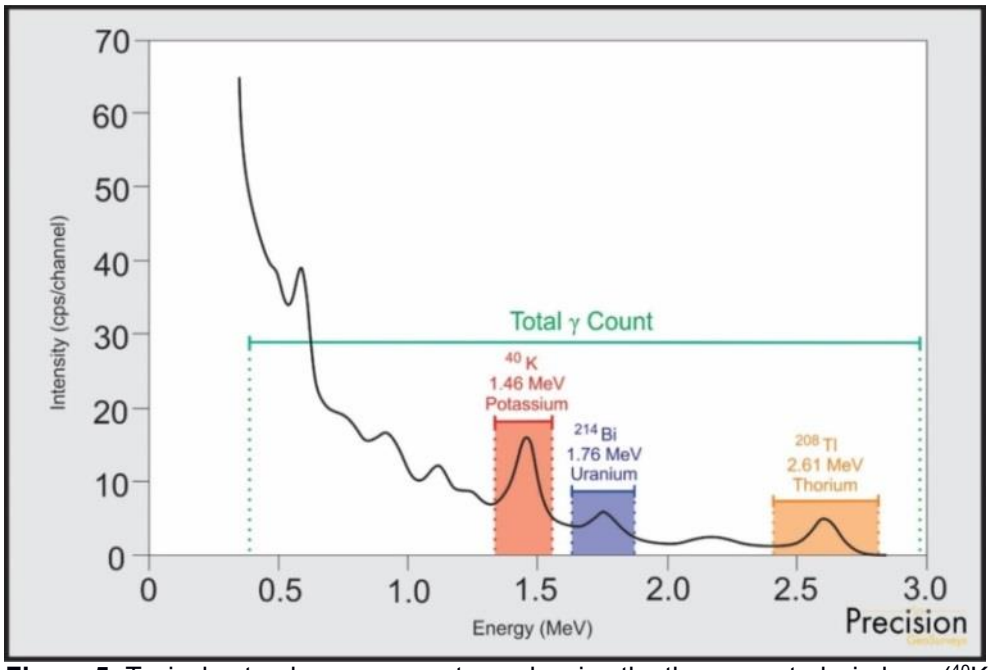


Figure 5: Typical natural gamma spectrum showing the three spectral windows (^{40}K 1.37-1.57 MeV, ^{214}Bi 1.66-1.86 MeV, ^{208}Tl 2.41-2.81 MeV) and total count (0.40-2.81 MeV) window.

Surficial debris, vegetation, standing water (lakes, marshes, swamps), ice, and snow can attenuate gamma rays originating from the underlying rocks. Therefore, surficial conditions must be evaluated before attributing variations in gamma counts to changes in the underlying geology. An increase in soil moisture can also significantly affect gamma radiation concentrations. For example, a 10% increase in soil moisture can decrease the measured gamma radiation by about the same amount. Radon isotopes are long-lived members of both the U and Th decay series and Ra mobility can influence radiometric surveys. In addition to being directly radioactive, ^{226}Ra and ^{222}Rn can attach to dust particles in the atmosphere. Precipitation of these radioactive dust particles by rain can lead to apparent increases of more than 2000% in uranium ground concentration (IAEA, 2003). Therefore, gamma data are not typically collected during a rainfall, or shortly after a rainfall.

3.0 Aircraft and Equipment

All geophysical and subsidiary equipment were carefully installed on an aircraft by Precision GeoSurveys to collect magnetic and radiometric data.

3.1 Aircraft

Precision GeoSurveys flew the survey using an Airbus AS350 helicopter, registration C-GOHK.

3.2 Geophysical Equipment

The survey aircraft (Figure 6) was equipped with a data acquisition system, GPS navigation system, pilot guidance unit (PGU), laser altimeter, cesium vapor magnetometer, fluxgate magnetometer, gamma ray spectrometer, barometer, and temperature/humidity probe. In addition, two magnetic base stations were used to record temporal magnetic variations. Technical specifications for the geophysical equipment are provided in Appendix B.

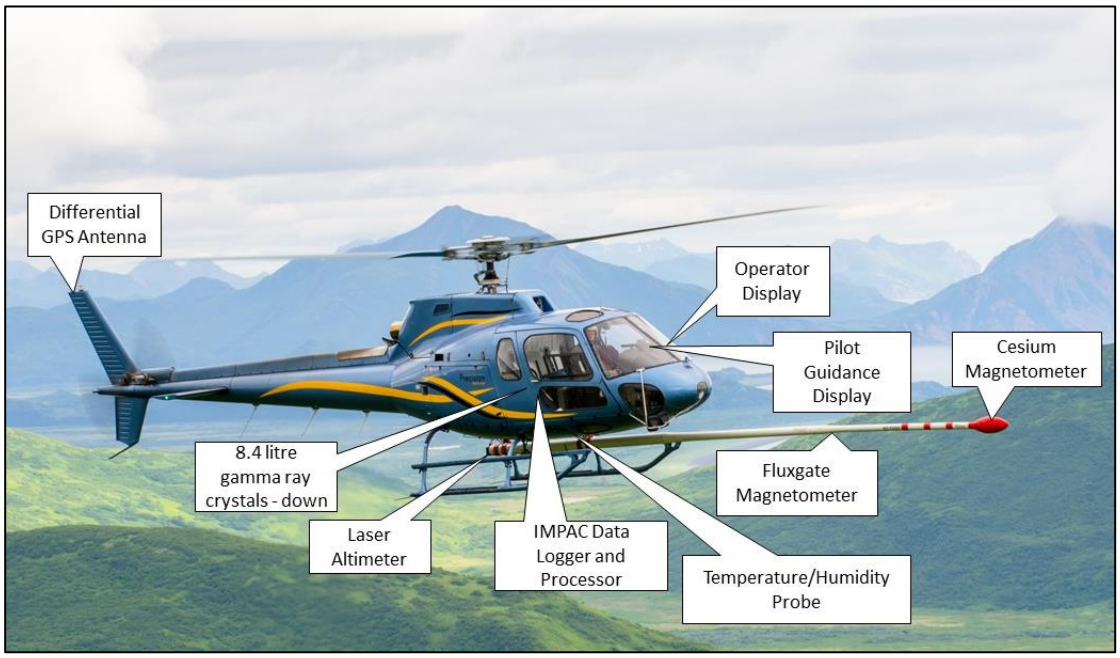


Figure 6: Survey helicopter equipped with a magnetic sensor for magnetic data acquisition and gamma ray spectrometer for radiometric measurements.

3.2.1 IMPAC

The Integrated Multi-Parameter Acquisition Console (IMPAC) (Figure 7), manufactured by Nuvia Dynamics Inc. (previously Pico Envirotec Inc.), is the main computer used in integrated data recording, data synchronizing, providing real-time quality control data for the geophysical operator display, and the generation of navigation information for the pilot and operator display systems.



Figure 7: IMPAC data acquisition system.

IMPAC uses the Microsoft Windows operating system and geophysical parameters are based on Nuvia's Airborne Geophysical Information System (AGIS) software. Depending on survey specifications, information such as magnetic field, electromagnetic response, total gamma count, counts of various radioelements (K, U, Th, etc.), cosmic radiation, barometric pressure, atmospheric humidity, temperature, aircraft attitude, aircraft height, navigation parameters, and GPS status can all be monitored on the AGIS on-board display (Figure 8).

While in flight, the raw magnetic response, magnetic fourth difference, compensated and uncompensated data, radiometric spectra, aircraft position, survey altitude, cross track error, and other parameters are recorded (depending on sensor configuration) and can be viewed by the geophysical operator for immediate quality control (QC). Additional software allows for post or real time magnetic compensation.

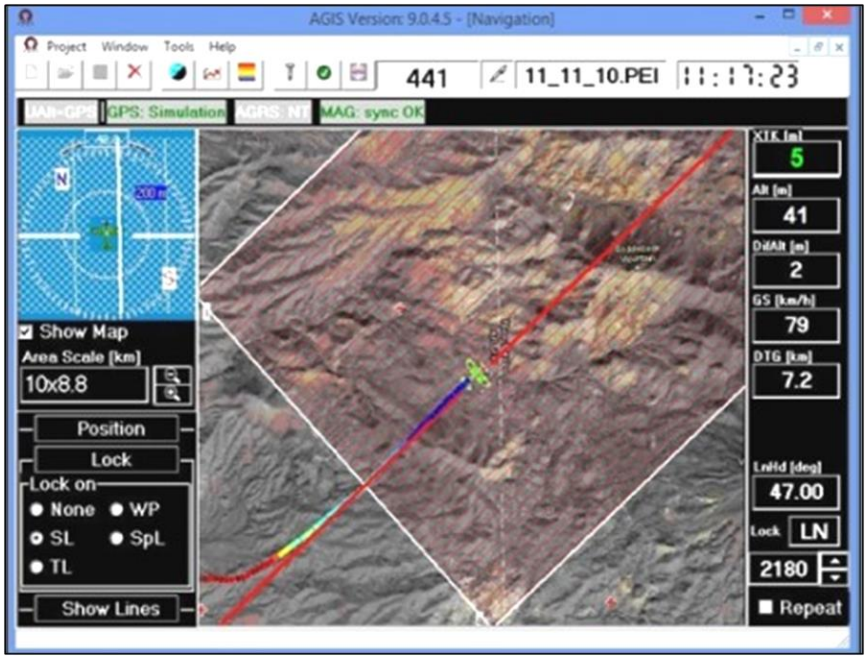


Figure 8: AGIS operator display showing real time flight line recording and navigation parameters. Additional windows display real-time geophysical data to operator.

3.2.2 GPS Navigation System

A Hemisphere R330 GPS receiver (Figure 9) and a Novatel GPS antenna on the tail of the aircraft integrated with the AGIS navigation system and pilot display (PGU) provide accurate navigational information and position control. The R330 GPS receiver supports fast updates at a rate of up to 10 Hz (10 times per second), delivering sub-meter positioning accuracy in three dimensions. It receives GNSS (GPS/GLONASS) L1 and L2 signals.

Differential correction methods including WAAS, L-Band, RTK, SBAS, and Beacon are supported by the R330. Innovative Hemisphere GPS Eclipse SureTrack technology allows the receiver to model the phase on satellites that the airborne unit is currently tracking. With SureTrack technology, dropouts are reduced and speed of the signal reacquisitions is increased, which enhances accurate positioning when base corrections are temporarily not available.



Figure 9: Hemisphere R330 GPS receiver.

3.2.3 Pilot Guidance Unit

Steering and elevation (ground clearance) information is continuously provided to the pilot by the Pilot Guidance Unit (PGU). The graphical display is mounted on top of the aircraft's instrument panel, remotely from the data acquisition system. The PGU is the primary navigation aid (Figure 10) to assist the pilot in keeping the aircraft on the planned flight path, heading, speed, and at the desired ground clearance.

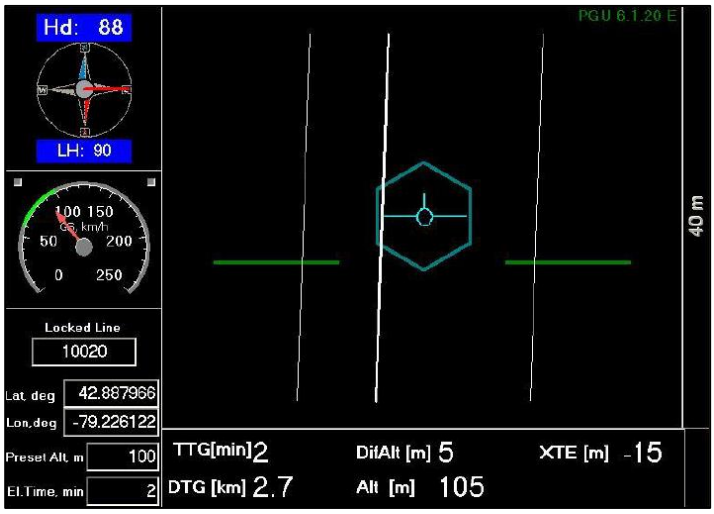


Figure 10: PGU screen displaying navigation information.

PGU information is displayed on a full VGA 600 x 800-pixel 7-inch (17.8 cm) LCD display. The CPU for the PGU is contained in a PC-104 console and uses Microsoft Windows operating system control, with input from the GPS antenna on the aircraft, laser altimeter, and AGIS.

3.2.4 Laser Altimeter

Terrain clearance is measured by an Opti-Logic RS800 Rangefinder laser altimeter (Figure 11) attached to the aft end of the magnetometer boom. The RS800 laser is a time-of-flight sensor that measures distance by a rapidly modulated and collimated laser beam that creates a dot on the target surface. The maximum range of the laser altimeter is 700 m off natural surfaces with accuracy of ±1 m on a 1 x 1 m diffuse target with 50% (±20%) reflectivity. Within the sensor unit, reflected signal light is collected by the lens and focused onto a photodiode. Through serial communications and digital outputs, ground clearance data are transmitted to an RS-232 compatible port and recorded and displayed by the AGIS and PGU at 10 Hz in meters.

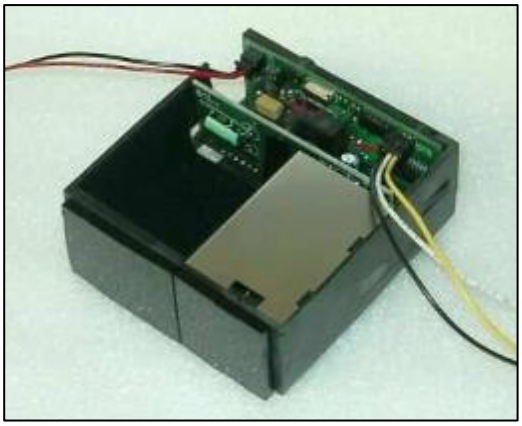


Figure 11: Opti-Logic RS800 Rangefinder laser altimeter.

3.2.5 Magnetometer

The survey was flown with a Scintrex CS-3 split-beam cesium vapor magnetometer (Figure 12) mounted on the front of the helicopter in a non-magnetic and non-conductive "stinger" configuration to measure total magnetic intensity. The magnetometer sensor was oriented at 45° to couple with local magnetic field at the Rainbow survey area.



Figure 12: Scintrex CS-3 cesium vapor magnetometer.

3.2.6 Fluxgate Magnetometer

As the survey helicopter flies along a survey line, small attitude changes (pitch, roll, and yaw) are measured by a triaxial fluxgate magnetometer (Figure 13). The fluxgate consists of three magnetic sensors, X, Y, and Z, operating independently and simultaneously. Each sensor has an analog output corresponding to the directional component of the ambient magnetic field along its axis. Response of the sensors is proportional to the cosine of the angle between the applied field and the sensor's sensitive axis.

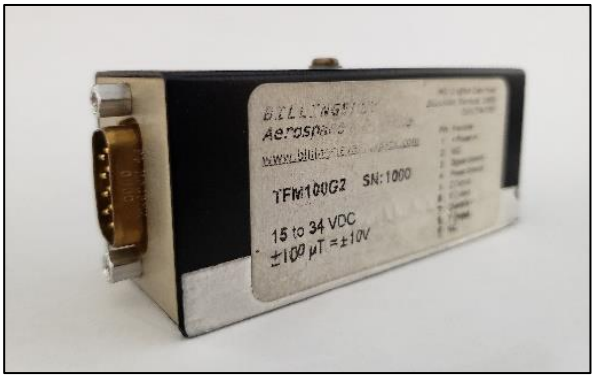


Figure 13: Billingsley TFM100G2 triaxial fluxgate magnetometer.

3.2.7 Magnetic Base Station

Temporal variations of Earth's magnetic field were monitored and recorded by two GEM GSM-19T base station magnetometers. They were operated at all times during surveying. The base stations were located in an area with low magnetic gradient (i.e., away from electric power transmission lines and moving ferrous objects, such as motor vehicles), for optimum survey data integrity.

The GEM GSM-19T magnetometers (Figure 14) with integrated GPS time synchronization uses proton precession technology with absolute accuracy of ±0.20 nT and sensitivity of 0.15 nT at 1 Hz. Base station magnetic data were recorded on internal solid-state memory and downloaded onto a field laptop using a serial cable and GEMLink 5.4 software. Profile plots of the base station readings were generated, updated, and reviewed at the end of each survey day.



Figure 14: GEM GSM-19T proton precession magnetometer.

3.2.8 Spectrometer

Gamma radiation data were collected by an Advanced Gamma Ray Spectrometer (AGRS-2) manufactured by Nuvia Dynamics. The AGRS-2 is an intelligent, self-calibrating, fully integrated gamma detection system (Figure 15) containing two thallium-activated synthetic sodium iodide crystals: 8.4 litres (two crystals of 4.2 litres each) downward-looking, with user-selectable 256, 512, or 1024 channel output at 1 Hz sampling rate. The downward-looking crystals are designed to measure gamma rays from below the aircraft. The AGRS-2 system is installed in the rear passenger cabin of the helicopter away from the fuel tank to minimize variable gamma attenuation from fluctuating fuel levels.



Figure 15: AGRS-2 gamma spectrometer system with two downward detectors; 8.4 litres in total.

4.0 Survey Operations

The Rainbow geophysical survey was flown on July 26 and July 27, 2022 in overcast and variably misty conditions. The experience of the pilot ensured that data quality objectives were met, and the safety of the flight crew was never compromised given the potential risks involved in airborne geophysical surveying. Field processing and quality control checks were performed daily.

4.1 Operations Base and Crew

The base of operation for the Rainbow survey was at Snowline's Forks Camp, Yukon, 115 km east of the survey block.

Precision's geophysical crew consisted of five members (Table 2):

Crew Member	Position
Ryan Snow	Helicopter pilot
Jen Hanlon, M.Sc., P.Geo.	Geophysicist – geophysical operator and data processor (on-site), and reporting (off-site)
Puraz Shirzad, B.A.	GIS technician – mapping (off-site)
Jenny Poon, B.Sc., P.Geo.	Geophysicist – data processor (off-site) and project manager
Shawn Walker, M.Sc., P.Geo.	Geophysicist – data processor (off-site)

Table 2: List of survey crew members.

4.2 Magnetic Base Station Specifications

Changes in Earth's magnetic field over time, such as diurnal variations, magnetic pulsations, and geomagnetic storms, were measured and recorded by two stationary GEM GSM-19T proton precession magnetometers. The magnetic base stations were installed in a clearing next to the Forks Camp airstrip (Table 3; Figures 16 and 17) in an area away from sources of potential

interference such as ferromagnetic objects, vehicles, and power lines that could affect the base station data and ultimately the survey data.

Station Name	Easting/Northing	Latitude/Longitude	Datum/Projection
GEM 3 S/N 5081669	388012 m E 7075118 m N	63° 47' 08.23" N 131° 16' 21.18" W	WGS 84, Zone 9N
GEM 5 S/N 1094678	388016 m E 7075120 m N	63° 47' 08.30" N 131° 16' 20.86" W	WGS 84, Zone 9N

Table 3: Magnetic base station location.

Magnetic readings were reviewed at regular intervals to ensure that no airborne data were collected during periods of high magnetic activity (i.e., in excess of 10 nT from a linear chord length of five minutes).

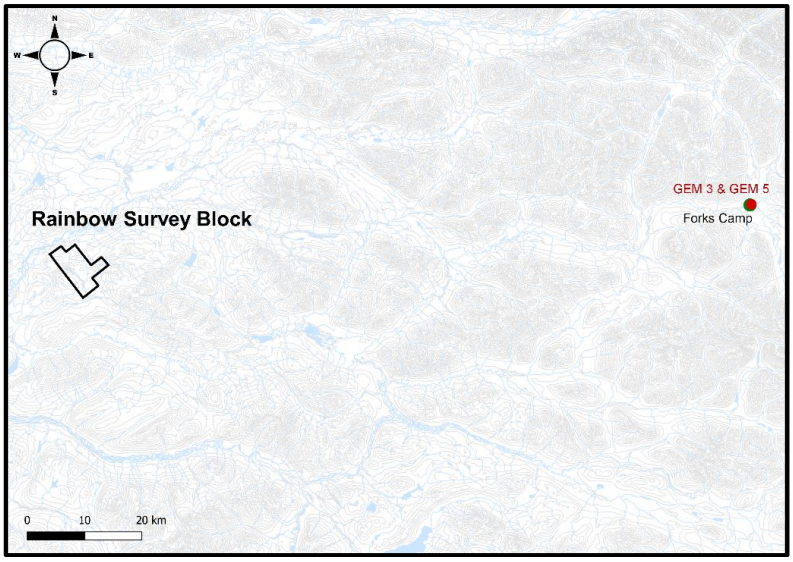


Figure 16: Location of GEM 3 and GEM 5 magnetic base stations 115 km east of the survey block.



Figure 17: GEM 3 and GEM 5 magnetic base stations.

4.3 Field Processing and Quality Control

Survey data were transferred from the aircraft's data acquisition system onto a USB memory stick and copied onto a field data processing laptop on a flight-by-flight basis. The raw data files in PEI binary data format were converted into Geosoft GDB database format. Using Geosoft Oasis Montaj 2021.2.1.11, the data were inspected to ensure compliance with contract specifications (Table 4; Figures 18 to 20).

Parameter	Specification	Tolerance
Position	Line Spacing	Flight line deviation within 8 m L/R from ideal flight path. No exceedance for more than 1 km.
	Height	Nominal flight height of 50 m above ground level (AGL) with tolerance of ±10 m. No exceedance for more than 1 km, provided deviation is not due to tall trees, topography, mitigation of wildlife/livestock harassment, cultural features, or other obstacles beyond the pilot's control.
	GPS	GPS signals from four or more satellites must be received at all times, except where signal loss is due to topography. No exceedance for more than 1 km.
	Sample Rate	10 Hz
Magnetics	Temporal/Diurnal Variations	Non-linear temporal magnetic variations within 10 nT of a linear chord of 5 minutes length.
	Normalized 4th Difference	Magnetic data within 0.02 nT peak to peak. No exceedance for distances greater than 1 km or more, provided noise is not due to geological or cultural features.
	Sample Rate	20 Hz
Radiometrics	Moisture Conditions	No delays shall be incurred due to unfavourable radiometric survey conditions.
	Sample Rate	1 Hz, 256 channels

Table 4: Contract survey specifications.

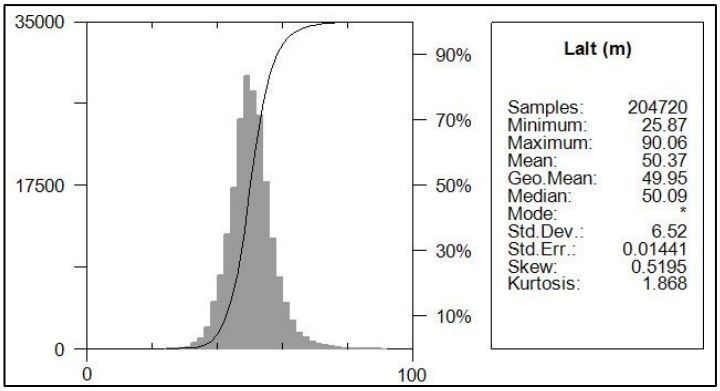


Figure 18: Histogram showing survey elevation vertically above ground.

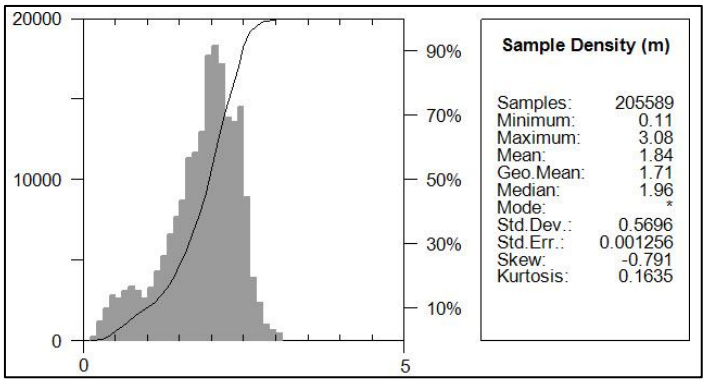


Figure 19: Histogram showing magnetic sample density. Horizontal distance in meters between adjacent measurement locations; magnetic sample frequency 20 Hz.

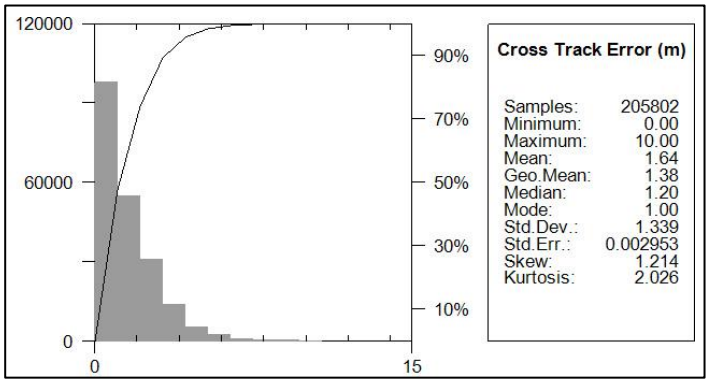


Figure 20: Histogram showing cross track error of survey helicopter.

5.0 Data Acquisition Equipment Checks

Equipment tests and calibrations were conducted for the laser altimeter, magnetometer, and spectrometer at the start of the survey to ensure compliance with contract specifications and to deliver high quality airborne geophysical data. A lag test was conducted for all sensors. For the airborne magnetometer compensation and heading error test flights were flown. There were three tests conducted for the gamma spectrometer: calibration pad test, cosmic flight test, and altitude correction and sensitivity test.

5.1 Laser Altimeter Calibration

The Opti-Logic RS800 laser altimeter used on the survey helicopter was tested and calibrated in accordance with manufacturer's instructions prior to starting the survey. This ensured that heights reported by the laser were accurate within the normal survey operating range.

5.2 Lag Test

A lag test was performed to determine the time difference between recording the digital readings from the magnetometer, spectrometer, and laser altimeter, and the fiducially marked position fix time of the readings obtained by the GPS system. Lag can result from a combination of system lag and varying distances of the sensors with respect to the GPS antenna. The test was flown in reciprocal headings over identifiable features at survey speed and height to isolate position changes. The resulting data (Table 5) were used to correct for time and position.

Instrument	Source	Lag Fiducial	Correction (sec)
Magnetometer	Logging machinery	5	0.25
Laser	Sharp gully	16	0.80
Spectrometer	Lake edge	32	1.60

Table 5: Survey lag correction values. Magnetic data at 20 Hz; laser altimeter and spectrometer were resampled to 20 Hz.

5.3 Magnetometer Tests

The magnetometer was tested and calibrated with a series of dedicated flights specifically for removing instrument offset errors and undesired effects of aircraft movement, speed, and heading direction.

5.3.1 Compensation Flight Test

During aeromagnetic surveying, the magnetometer is located within the aircraft's magnetic field and are therefore influenced by changes in the aircraft attitude and permanent magnetization of ferrous aircraft components. To remove this noise, the aircraft was degaussed using proprietary technology prior to the survey and the remaining magnetic noise was removed by a process called magnetic compensation.

Magnetic compensation is achieved by completing a series of prescribed maneuvers in flight (±10° roll, ±10° pitch, and ±10° yaw) over each of the four orthogonal headings utilized within the survey area. The maneuvers must be completed at a sufficient altitude (typically > 2,500 m AGL) in an area of low magnetic gradient, so that Earth's magnetic field becomes nearly uniform at the altitude of the compensation flights. In each heading direction, three instances of the roll, pitch, and yaw maneuvers (total 36) are performed at constant elevation with the maneuvers recorded by the fluxgate magnetometer relative to the ambient magnetic field. In this manner, the magnetic response at the airborne magnetometers can be attributed to aircraft movement, and the necessary parameters can be calculated to remove aircraft movement noise from the survey data. Compensation flight test results are summarized in Table 6.

Pre-Compensation (nT)					Post-Compensation (nT)				
Heading	**Roll**	**Pitch**	**Yaw**	**Total**	**Heading**	**Roll**	**Pitch**	**Yaw**	**Total**
047°	2.6238	0.8424	0.9407	4.4069	047°	0.1771	0.1565	0.1392	0.4728
137°	2.1340	0.9903	1.2319	4.3562	137°	0.0938	0.1152	0.1007	0.3097
227°	2.1006	1.7980	0.9849	4.8835	227°	0.1610	0.4982	0.3729	1.0321
317°	2.0721	0.8900	0.6649	3.6270	317°	0.2111	0.2551	0.2128	0.6790
Figure of Merit = 17.2736					**Figure of Merit = 2.4936**				

Table 6: Results of compensation flight.

5.3.2 Heading Correction Test

To determine heading errors, a cloverleaf pattern flight test was conducted at high altitude to minimize the effect of natural magnetic gradient. The cloverleaf test was flown in the same orthogonal headings as the survey and tie lines at >2500 m AGL in an area with low magnetic gradient. For all four directions of the cloverleaf test the survey helicopter must pass over the same point, at the same elevation, with the aircraft in straight and level flight. The difference in magnetic values obtained in reciprocal headings is referred to as the heading error. Heading correction values derived from the test flight are summarized in Table 7.

Heading	Heading Correction (nT)
047°	-7.4425
137°	-4.0225
227°	1.9575
317°	9.5075
Total:	**0.0000**

Table 7: Magnetic sensor heading corrections.

5.4 Gamma-ray Spectrometer Tests and Calibrations

Calibration and testing of the AGRS-2 airborne gamma-ray spectrometry system was carried out prior to starting the survey. Spectrometer calibration involved three tests which enabled the conversion of airborne data to ground concentration of natural radioactive elements. These tests were the calibration pad test, cosmic flight test, and the altitude correction and sensitivity test. Procedures were generally in accordance with IAEA technical report series No. 323, *Airborne Gamma Ray Spectrometer Surveying*, and AGSO Record 1995/60, *A Guide to the Technical Specifications for Airborne Gamma-Ray Surveys*.

5.4.1 Calibration Pad Test

The calibration pad test was conducted using Geological Survey of Canada (GSC) portable calibration pads. The pads are slabs of concrete containing known concentrations of the natural radioelements K, Th, and U and are used to simulate ideal geological sources of radiation. The measurements collected from the calibration pad test were used to determine Compton scattering and Grasty backscatter (spectral overlap between element windows) coefficients.

5.4.2 Cosmic Flight Test

While the background source of gamma radiation from the aircraft itself is essentially constant, the amount of signal detected from ground sources varies with ground clearance. As the height of the aircraft increases, the distance between the ground and the spectrometer crystals increases, and the proportion of cosmic radiation in each spectral window increases exponentially. The cosmic flight test is conducted to determine the aircraft's background attenuation coefficients for the detector crystal packs and the cosmic coefficients. The pilot is required to fly over the same low gamma source location (such as a large lake) repeatedly at 4000, 5000, 6000, 7000, and 8000 feet (1220, 1520, 1830, 2130, and 2440 m) above ground, for approximately two minutes each, to collect gamma data used to determine the non-terrestrial component present in the total gamma signal.

5.4.3 Altitude Correction and Sensitivity Test

The altitude and sensitivity test is similar to the cosmic flight test but is conducted at lower elevations. The aircraft is required to fly over the same location at 30, 40, 50, 60, 70, 100, and 120 m above ground, for two minutes each. As the distance between the gamma detectors on the aircraft and the radioactive ground source increases, the source signature exponentially degrades. As a result, this test is used to determine the altitude attenuation coefficients and the radio-element sensitivity of the airborne spectrometer system.

6.0 Data Processing

After all data were collected, several procedures were undertaken to ensure that the data met a high standard of quality. Magnetic and radiometric data recorded by the IMPAC were converted into Geosoft or ASCII file formats using Nuvia Dynamics software. Further processing (Figure 21) was carried out using Geosoft Oasis Montaj 2021.2.1.11 geophysical processing software along with proprietary processing algorithms.

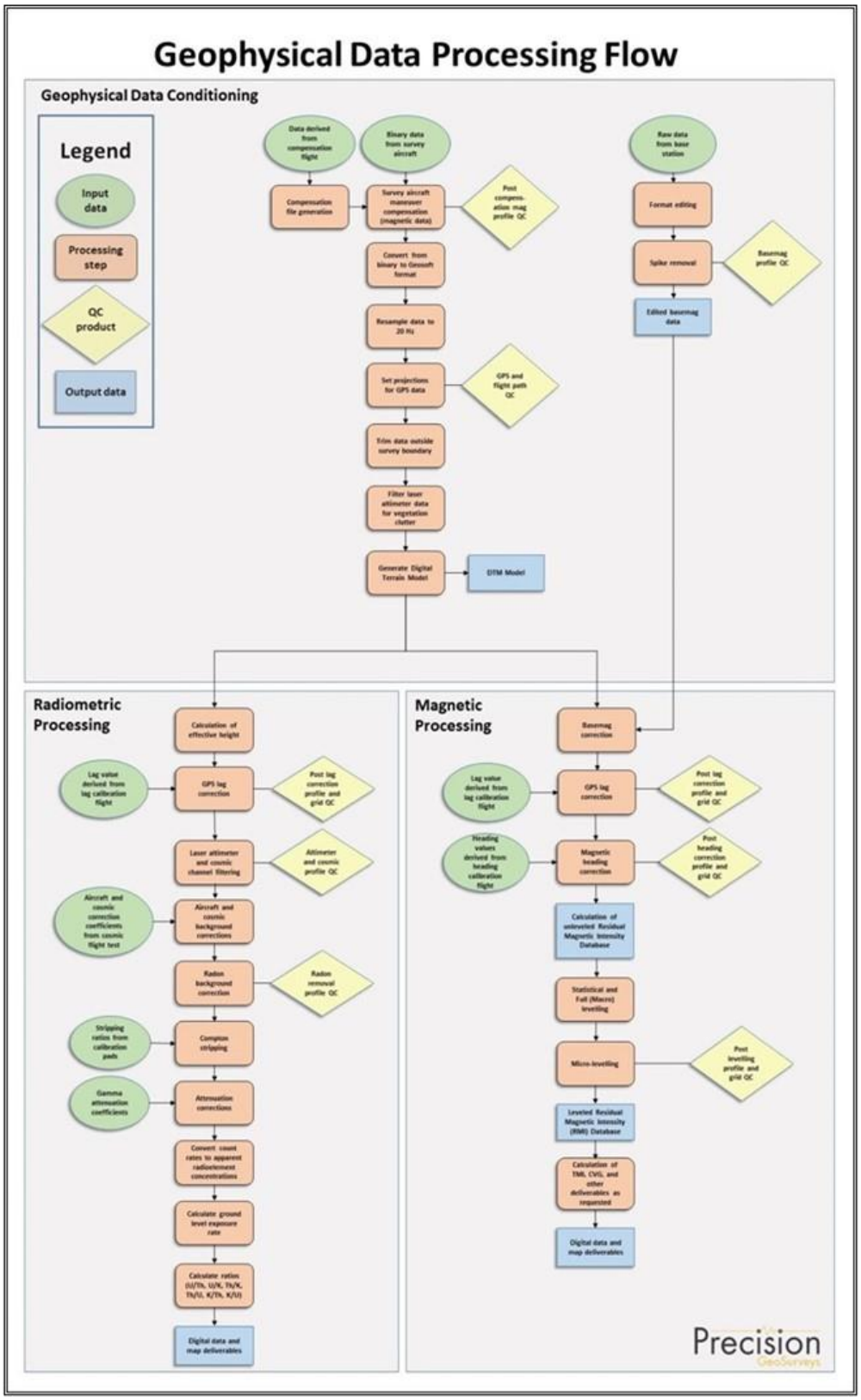


Figure 21: Magnetic and radiometric data processing flow.

6.1 Position Corrections

In order to collect high resolution geophysical data, the location at which the data were collected and recorded must be accurate.

6.1.1 Lag Correction

A correction for lag error was applied to the geophysical data recorded at each individual sensor to compensate for the lag caused by the distance between the GPS antenna, the recording system and the sensing instrument. Validity of the lag corrections was confirmed by the absence of grid corrugations in adjoining reciprocal lines.

6.2 Flight Height and Digital Terrain Model

Laser altimeters are unable to provide valid data over glassy water or fog which scatter the laser so that a "zero" reading is obtained. In these cases, estimates of correct height are inserted manually. Dense vegetation generates high frequency variations from leaf and branch reflections. A Rolling Statistics filter is applied to the lag corrected laser altimeter data to remove vegetation clutter followed by a Low Pass filter to smooth out the laser altimeter profile to eliminate isolated high frequency noise and generate a surface that closely corresponds to the actual ground profile.

As the GPS antenna is on the tail of the helicopter, altitude data were corrected by subtracting 3.1 m to place measured heights in the same plane as the laser altimeter. A Digital Terrain Model (DTM) was determined by subtracting the laser altimeter data from the filtered GPS altimeter data defined by the WGS 84 ellipsoidal height. DTM accuracy is affected by the attitude of the aircraft, slope of the ground, sample density, and satellite geometry. Small inconsistencies in recorded flight height at the intersection points of survey lines and tie lines resulted in small spatial variabilities in the Digital Terrain Model (DTM). Conventional leveling and micro-leveling were applied to correct for these variations and a fully leveled DTM was generated.

6.3 Magnetic Processing

Magnetic data were compensated and then corrected for temporal variations (including diurnal), lag, and heading. The data were examined for magnetic noise and spikes, which were removed as required. The background magnetic field, International Geomagnetic Reference Field (IGRF) of the Earth, was removed and survey and tie line data of the resulting residual magnetic field were then leveled.

6.3.1 Flight Compensation

Data obtained from the compensation flight test were applied to the raw magnetic data as the first step of data processing. A computer program called MAGComp was used to create a model from the compensation flight test for each survey to remove the noise induced by the aircraft and its movement; this model was applied to data from each survey flight.

6.3.2 Temporal Variation Correction

The intensity of Earth's magnetic field varies with position and time. The time variable, known as diurnal or more accurately as temporal variation, is removed from the recorded airborne data to provide the desired magnetic field at a specified position. Magnetic data from base station GEM 5 were used for correcting the airborne magnetic survey data, and GEM 3 data were retained for backup. The data were edited, plotted, and merged into a Geosoft database (.GDB) on a daily basis.

Base station measurements were averaged to establish a magnetic reference datum of 57088.61 nT. Magnetic deviations relative to the reference datum were used to calculate the observed variations of the Earth's magnetic field during the time it took to complete the survey. The airborne magnetic data were then corrected for temporal variations by subtracting the base station deviations from the data collected on the aircraft.

6.3.3 Heading Correction

For each survey heading, changes in instrument magnetic fields along a survey flight line are detected and these systematic shifts are recorded. These values are used to construct a heading table (.TBL) file. An intersection table was created, containing all magnetic field values where tie lines intersected the survey lines, and the overall average magnetic field value was calculated. For each of the four headings, the averages were calculated and then compared to the overall average to determine four values which were used to correct heading and offset errors in each flight direction.

6.3.4 IGRF Removal

The International Geomagnetic Reference Field (IGRF) model is the empirical representation of Earth's dynamic magnetic field (main core field without external sources) collected and disseminated from satellite data and from magnetic observatories around the world. The IGRF has historically been revised and updated every five years by a group of modellers associated with the International Association of Geomagnetism and Aeronomy (IAGA).

The initial unleveled Residual Magnetic Intensity (RMI) was calculated by taking the difference between the 13th generation IGRF (IGRF-13, released in December 2019) and the non-leveled

Total Magnetic Intensity (TMI) to create a more valid model of individual near-surface magnetic anomalies. This model is independent of time to allow for other magnetic data (previous or future) to be more easily incorporated into each survey database.

6.3.5 Leveling and Micro-leveling

Small inconsistencies in flight height and line orientation result in small spatial variabilities in magnetic intensity measured at the intersection points of survey lines and tie lines. Using the initial Total Magnetic Intensity (TMI) data, data from survey and tie lines were leveled to each other. Two types of leveling were applied to the corrected data: conventional leveling and micro-leveling. There are two components to conventional leveling: statistical leveling to level tie lines and full leveling to level survey lines. The statistical leveling method corrected the SL/TL intersection errors that follow a specific pattern or trend. Through the error channel, an algorithm calculated a least-squares trend line and derived a trend error curve, which was then added to the channel to be leveled. The second component was full leveling. This adjusted the magnetic value of the survey lines so that all lines matched the trended tie lines at each intersection point.

Following statistical and full leveling, micro-leveling was applied to the corrected conventional leveled data. This iterative grid-based process removes low amplitude components of flight line noise that remain in the data after tie line and survey line leveling and results in fully leveled TMI data.

6.3.6 Reduction to Magnetic Pole

Reduced to Magnetic Pole (RTP) data were determined from the leveled Residual Magnetic Intensity (RMI) data. The RTP filter was applied in the Fourier domain and rotates the observed magnetic inclination and declination field to what the field would look like at the north magnetic pole, to allow observation of magnetic trends and patterns independent of magnetic inclination and declination. Reducing the dipolar nature of magnetic anomalies is useful for interpretation because peak RTP magnetic values can be related to the centre of magnetic rock bodies and asymmetries in the RTP imagery closely reflect true dips and plunges.

Inclination and declination were calculated by using July 27, 2022, the last day of the survey. The derived values were used in the following formula:

$$RTP\ (\theta) = \frac{[\sin(I) - I\ \cdot \cos(I) \cdot \cos(D-\theta)]^2}{[\sin^2(I_a) + \cos^2(I_a) \cdot \cos^2(D-\theta)] \cdot [\sin^2(I) + \cos^2(I) \cdot \cos^2(D-\theta)]}$$

where: I is geomagnetic inclination in ° from horizontal
D is geomagnetic declination in ° azimuth from magnetic north

I_a is the inclination for amplitude correction (never less than I). Default is ± 20°. If $|I_a|$ is specified to be less than$|I|$, it is set to I

6.3.7 Horizontal Gradient

Calculated Horizontal Gradient (CHG) is the magnitude of the total horizontal gradient. It is used to estimate contact locations of magnetic bodies at shallow depths, reveal anomaly texture, and highlight anomaly-pattern discontinuities.

If M is the magnetic field, then the CHG is calculated as:

$$\mathrm{CHG}(x,y) = \sqrt{\left(\frac{\partial M}{\partial x}\right)^2 + \left(\frac{\partial M}{\partial y}\right)^2}$$

where: $\frac{\partial M}{\partial x}$ is the E-W gradient
$\frac{\partial M}{\partial y}$ is the N-S gradient

6.3.8 Calculation of Vertical Gradient

Calculated Vertical Gradient (CVG) is the first order vertical derivative of the leveled Residual Magnetic Intensity (RMI) data. It is the vertical rate of change in the magnetic field per unit distance. The vertical gradient is used to enhance shorter wavelength signals; therefore, edges of magnetic anomalies are highlighted, and deep geologic sources in the data are suppressed.

The filter, L, used to produce the nth vertical derivative is described by:

$$L(r) = r^n$$

where: r is the radial component in the wavenumber domain

6.3.9 Analytic Signal

Analytic Signal (AS) is the magnitude of the total magnetic gradient in three axes, determined as the square root of the sum of the squares of the horizontal gradients and vertical gradient. Analytic signal is useful in locating the edges of magnetic source bodies.

If M is the magnetic field, then Analytic Signal (AS) is calculated as:

$$\mathrm{AS}(x,y,z) = \sqrt{\left(\frac{\partial M}{\partial x}\right)^2 + \left(\frac{\partial M}{\partial y}\right)^2 + \left(\frac{\partial M}{\partial z}\right)^2}$$

where: $\frac{\partial M}{\partial x}$ is the E-W gradient
$\frac{\partial M}{\partial y}$ is the N-S gradient
$\frac{\partial M}{\partial z}$ is the vertical gradient

6.4 Radiometric Processing

Radiometric surveys map gamma rays from the concentration of natural radioelements at or near the Earth surface; typically within 1 m of the surface. Before airborne radiometric data are processed, the spectrometer system is calibrated with the calibration pad test, cosmic flight test, and altitude correction and sensitivity test. Once calibration of the system was completed, radiometric data were processed by windowing the full 256 channel spectrum to create individual channels for U, Th, K, and total count (TC).

Potassium (^{40}K) is measured directly at 1.461 MeV and is reported as %K. Secular equilibrium in the decay chains of uranium (^{238}U determined from the radon daughter ^{214}Bi) and thorium (^{232}Th determined from ^{208}Tl) is assumed and the ground concentration results are reported as equivalent uranium (eU, ppm) and equivalent thorium (eTh, ppm). Total gamma count (TC) data (energy range from 0.40 to 2.81 MeV) is reported in dose rate (nGy/hr).

Radiometric processing generally followed the procedures provided by the International Atomic Energy Agency (IAEA) report 1363, *Guidelines for Radioelement Mapping using Gamma Ray Spectrometry Data*.

6.4.1 Calculation of Effective Height

Effective height (h_{ef}) in meters was determined using laser/radar altimeter, temperature, and pressure data, according to the formula below:

$$h_{ef} = h * \frac{273.15}{T + 273.15} * \frac{P}{1013.25}$$

where: h is measured laser/radar altitude in meters
T is measured air temperature in degrees Celsius
P is barometric pressure in millibars

6.4.2 Aircraft and Cosmic Background Corrections

Aircraft background and cosmic stripping corrections are applied to total gamma count and all three individual radioelements using the following formula:

$$C_{ac} = \mathrm{a}_c + b_c * Cos_f$$

where: C_{ac} is the background and cosmic corrected channel
a_c is the aircraft background for this channel
b_c is the cosmic stripping coefficient for this channel
Cos_f is the filtered cosmic channel

6.4.3 Radon Background Correction

Atmospheric radon can influence the gamma response of airborne radiometric data. The upward-looking detector provides directional sensitivity and the ability to discriminate between radiation from the atmosphere and radiation from the ground, to allow the removal of atmospheric radon effects from the downward-looking detectors.

Radon contribution to the uranium window of the "downward" uranium window is given by:

$$U_r = \frac{u - a_1 U - a_2 T + a_2 b_t - b_u}{a_u - a_1 - a_2 a_t}$$

where: U_r is radon background in the "downward" U window
u is count rate in the "upward" U window
U is count rate in the "downward" U window
T is count rate in the "downward" Th window
a_1, a_2, a_u, a_t, b_u, and b_t are constants derived by calibration

6.4.4 Compton Stripping

Spectral overlap corrections are applied to potassium, uranium, and thorium as part of the Compton stripping process. This is done by using the stripping ratios that have been calculated for the spectrometer by prior calibration.

For each of the stripping ratios α, β, and γ, height corrections at STP are made by using the following formulas:

$$\alpha_h = \alpha + h_{ef} * 0.00049$$

$$\beta_h = \beta + h_{ef} * 0.00065$$

$$\gamma_h = \gamma + h_{ef} * 0.00069$$

where: $\alpha, \beta,$ and γ are the Compton stripping coefficients
$\alpha_h, \beta_h,$ and γ_h are the height-corrected Compton stripping coefficients
h_{ef} is the effective height above ground in metres at STP

Stripping corrections are then carried out using the following formulas:

$$Th_c = Th_{bc}(1 - g\beta_h) + U_{bc}(b\gamma_h - a) + K_{bc}(ag - b)/A$$

$$U_c = Th_{bc}(g\beta_h - \alpha_h) + U_{bc}(1 - b\beta_h) + K_{bc}(b\alpha_h - g)/A$$

$$K_c = [Th_{bc}(\alpha_h\gamma_h - \beta_h) + U_{bc}(a\beta_h - \gamma_h) + K_{bc}(1 - a\alpha_h)]/A$$

where: $U_c, Th_c,$ and K_c are stripping-corrected uranium, thorium, and potassium
$\alpha_h, \beta_h,$ and γ_h are height-corrected Compton stripping coefficients
$U_{bc}, Th_{bc},$ and K_{bc} are background corrected uranium, thorium, and potassium
a is the spectral ratio Th/U
b is the spectral ratio Th/K
g is the spectral ratio U/K
$A = 1 - g\gamma_h - (\alpha_h - g\beta_h) - b(\beta_h - \alpha_h\gamma_h)$ is the backscatter correction

6.4.5 Attenuation Corrections

Total count, potassium, uranium, and thorium data are then corrected to a nominal survey altitude (corrected to remove vegetation clutter from radar/laser altimeter data); in this case the nominal survey height was 50 m AGL. This is done according to the equation:

$$C_a = C * e^{\mu(h_{ef} - h_0)}$$

where: C_a is the output altitude-corrected channel
C is the input channel
μ is the attenuation correction for that channel
h_{ef} is the effective altitude
h_0 is the nominal survey altitude used as datum

6.4.6 Conversion to Apparent Radioelement Concentrations

With all corrections applied to the radiometric data, the final step is to convert the corrected potassium (^{40}K), uranium (from ^{214}Bi), and thorium (from ^{212}Tl) to apparent radioelement concentrations using the following formula:

$$eE = C_{cor}/S$$

where: eE is the element concentration of K (%) and equivalent element concentrations of U (ppm) & Th (ppm)
S is the experimentally determined sensitivity
C_{cor} is the fully corrected channel

Conversion of total count to natural exposure rate (Grasty et al, 1984) is determined by using the following formula:

$$\text{Natural Exposure} = [(1.505 * K) + (0.625 * eU) + (0.31 * eTh)]$$

where: Natural Exposure is in µR/hr
K is the concentration of potassium (%)
eU is the equivalent concentration of uranium (ppm)
eTh is the equivalent concentration of thorium (ppm)

6.4.7 Radiometric Ratios

Common radiometric ratios (U/Th, Th/K, U/K, and their inverses) were calculated using the guidelines of the IAEA. Due to statistical uncertainties in the individual radioelement measurements, care was taken during ratio calculation in order to obtain statistically significant values. The following guidelines were used to determine the ratios:

1. For each concentration, the lowest corrected count rate is determined.
2. Element concentrations of adjacent points on either side of each data point are summed until they exceed a pre-determined threshold value.
3. The ratios are calculated using the accumulated sums.

With these guidelines, errors associated with the calculated ratios are minimized and comparable for all data points.

6.4.8 Ternary Radioelement Image Map

Ternary images are a graphic representation of the relative proportion of the radioelement concentrations of %K, eTh, and eU components in proportion to the respective colours blue (cyan), red (magenta), and yellow. Since each distinct colour is used to represent each ternary ratio on the map, zones with similar ratios will be represented by a unique colour. This distinct relationship between colour and ternary ratio allows the map to show surficial radioelement concentration and distribution. Dark and light colours indicate high and low values for all three radionuclides, respectively. Areas of low radioactivity, and consequently low signal to noise ratios, can be masked and are shaded in white. Because the ternary image is a three-way ratio, topographic and

physiographic effects are suppressed and a visualization of the relative concentrations of the individual radioelements are presented to help discriminate between different zones lithologies and alteration patterns.

7.0 Deliverables

Rainbow survey data are presented as digital databases, grids, maps, and a logistics report.

7.1 Digital Data

Digital files have been provided in three formats:

- GDB file for use in Geosoft Oasis Montaj,
- XYZ file,
- CSV Excel comma separated file.

Full descriptions of the digital data and contents are included in Appendix D.

7.1.1 Grids

Digital data were represented as grids as listed below:

- Digital Terrain Model (DTM)
- Total Magnetic Intensity (TMI)
- Residual Magnetic Intensity (RMI) – removal of IGRF from TMI
- Reduced to Magnetic Pole (RTP) – reduced to magnetic pole of RMI
- Calculated Horizontal Gradient (CHG) – total magnitude of the horizontal gradients of RMI
- Calculated Vertical Gradient (CVG) – first order vertical derivative of RMI
- Analytic Signal (AS) – total gradient of RMI
- Potassium – Percentage (%K)
- Thorium – Equivalent Concentration (eTh)
- Uranium – Equivalent Concentration (eU)
- Total Count (TC)
- Total Count – Exposure Rate (TCexp)
- Potassium over Thorium Ratio (%K/eTh)
- Potassium over Uranium Ratio (%K/eU)
- Uranium over Thorium Ratio (eU/eTh)
- Uranium over Potassium Ratio (eU/%K)
- Thorium over Potassium Ratio (eTh/%K)
- Thorium over Uranium Ratio (eTh/eU)
- Ternary Image (TI)

Digital magnetic and radiometric data were gridded and displayed using the following Geosoft parameters:

- Gridding method: minimum curvature
- Grid cell size: 25 m (infill area), 37.5 m (main and infill), and 50 m (main)
- Low-pass desampling factor: 2
- Tolerance: 0.001
- % pass tolerance: 99.99
- Maximum iterations: 100
- Shading effect: sun inclination at 45° and declination at 045°

Descriptions of colour scales are presented in Appendix D.

7.2 KMZ

Gridded digital data were exported into .KMZ files which can be displayed using Google Earth. The grids can be draped onto topography and rendered to provide a 3D view.

7.3 Maps

The following digital map products were prepared for Rainbow and infill block:

Overview Maps (colour images with elevation contour lines):

- Actual flight lines, with topographic features
- DTM

Magnetic Maps (colour images with elevation contour lines):

- TMI, with topographic features and actual flight lines
- TMI
- RMI
- RTP
- CHG
- CVG
- AS

Radiometric Maps (colour images with elevation contour lines):

- %K – Percentage
- eTh – Equivalent Concentration
- eU – Equivalent Concentration
- TC

- TCexp – Exposure Rate
- %K/eTh Ratio
- %K/eU Ratio
- eTh/eU Ratio
- Ternary Image

All survey maps were prepared in WGS 84 in UTM Zone 8N.

7.4 Report

A .PDF copy of the logistics report is included along with digital data and maps. The report provides information on acquisition, processing, and presentation of the Rainbow survey data.

8.0 Conclusions and Recommendations

The Rainbow survey collected 379 line km of high resolution magnetic and radiometric data over one survey block. The data have been processed and plotted on maps as a representation of the features of the survey area.

When magnetic and radiometric data are integrated into a single-pass airborne survey, they provide complementary information that serves as a durable geophysical/geochemical framework. Therefore, the geophysical data will be useful in mapping lithology, structure, and alteration, which will benefit mineral exploration initiatives and geological studies.

Geophysical data processing, particularly leveling and data interpolation routines, tend to smooth the original data so that resolution is reduced. In addition, gridding algorithms are not always able to properly calculate grids where flight height between adjacent flight lines varied due to cultural obstacles or steep terrain, where geological structures are acute to flight lines, where line spacing exceeds the size of the causative anomaly, or near grid margins as in "edge effects." Therefore, subtle geophysical features observed near survey margins or in gridded and derivative-enhanced products must be evaluated with discretion.

The airborne data were acquired to map geophysical characteristics of the survey area, which are in turn related to the distribution of magnetic minerals and radioactive elements in the Earth. Magnetic patterns correspond to the concentration and distribution of magnetite and other magnetic minerals in Earth's subsurface. Radiometric data are influenced by topographic features and surficial effects, and ratios can be used to evaluate the near-surface radioelement geochemistry of the survey area.

Geophysical data are rarely a direct indication of mineral deposits and therefore interpretation and careful integration with existing and new geological, geochemical, and other geophysical data are recommended to maximize value from the survey investment.

Respectfully submitted,
Precision GeoSurveys Inc.

Jen D. Hanlon, M.Sc., P.Geo.
August 2022

Appendix A

Polygon Coordinates

Rainbow (Main) Survey Block – WGS 84 Zone 8N

Latitude (deg N)	Longitude (deg W)	Easting (m)	Northing (m)
63.64729	133.73546	562627	7058331
63.66124	133.69786	564457	7059922
63.65297	133.67942	565389	7059020
63.66520	133.64939	566847	7060414
63.65890	133.63702	567474	7059725
63.63495	133.58778	569970	7057109
63.64860	133.55334	571642	7058668
63.63705	133.52694	572979	7057411
63.62253	133.56257	571250	7055754
63.61504	133.58093	570359	7054899
63.60395	133.55692	571577	7053690
63.58305	133.60774	569107	7051306
63.59500	133.63133	567908	7052612
63.63198	133.70568	564136	7056655

Rainbow – Infill Survey Block – WGS 84 Zone 8N

Latitude (deg N)	Longitude (deg W)	Easting (m)	Northing (m)
63.63212	133.70575	564132	7056670
63.65894	133.63700	567475	7059729
63.62244	133.56246	571256	7055744
63.59503	133.63147	567901	7052615

Appendix B

Equipment Specifications

- GEM GSM-19T Proton Precession Magnetometer (Magnetic Base Station)
- Hemisphere R330 GPS Receiver
- Opti-Logic RS800 Rangefinder Laser Altimeter
- Scintrex CS-3 Magnetometer
- Billingsley TFM100G2 Ultra Miniature Triaxial Fluxgate Magnetometer
- Setra Model 276 Barometer
- Rotronic HygroClip HC-S3 Relative Humidity and Temperature Probe
- Nuvia Dynamics Advanced Gamma-Ray Spectrometer (AGRS-2)
- Nuvia Dynamics IMPAC data recorder system (for navigation and geophysical data acquisition)

GEM GSM-19T Proton Precession Magnetometer (Magnetic Base Station)

Sensitivity	0.15 nT @ 1 Hz
Resolution	0.01 nT (gamma), magnetic field and gradient
Absolute Accuracy	±0.2 nT @ 1 Hz
Operating Range	20,000 nT to 120,000 nT
Gradient Tolerance	Over 7,000 nT/m
Operating Ranges	Temperature: -40°C to +50°C Battery Voltage: 10.0 V minimum to 15 V maximum Humidity: up to 90% relative, non-condensing
Storage Temperature	-50°C to +50°C
Dimensions	Console: 223 x 69 x 40 mm Sensor Staff: 4 x 450 mm sections Sensor: 170 x 71 mm dia. Weight: console 2.1 kg, sensor and staff assembly 2.2 kg
Integrated GPS	Yes

Hemisphere R330 GPS Receiver

GPS Sensor	Receiver Type	L1 and L2 RTK with carrier phase	
	Channels	12 L1CA GPS 12 L1P GPS 12 L2P GPS 12 L2C GPS 12 L1 GLONASS (with subscription code) 12 L2 GLONASS (with subscription code) 3 SBAS or 3 additional L1CA GPS	
	Update Rate	10 Hz standard, 20 Hz available	
	Cold Start Time	<60 s	
	Warm Start Time 1	30 s (valid ephemeris)	
	Warm Start Time 2	30 s (almanac and RTC)	
	Hot Start Time	10 s typical (valid ephemeris and RTC)	
	Reacquisition	<1 s	
	Differential Options	SBAS, Autonomous, External RTCM, RTK, OmniSTAR (HP/XP)	
Horizontal Accuracy		RMS (67%)	2DRMS (95%)
	RTK [1, 2]	10 mm + 1 ppm	20 mm + 2 ppm
	OmniSTAR HP [1, 3]	0.1 m	0.2 m
	SBAS (WAAS) [1]	0.3 m	0.6 m
	Autonomous, no SA [1]	1.2 m	2.5 m
L-Band Sensor	Channel	Single channel	
	Frequency Range	1530 MHz to 1560 MHz	
	Satellite Selection	Manual or Automatic (based on location)	
	Startup and Satellite Reacquisition Time	15 seconds typical	
Communications	Serial Ports	2 full duplex RS232	
	Baud Rates	4800 – 115200	
	USB Ports	1 Communications, 1 Flash Drive data storage	
	Correction I/O Protocol	Hemisphere GPS proprietary, RTCM v2.3 (DGPS), RTCM v3 (RTK), CMR, CMR+NMEA 0183, Hemisphere GPS binary	
	Timing Output	1 PPS (HCMOS, active high, rising edge sync, 10 kΩ, 10 pF load)	
	Event Marker Input	HCMOS, active low, falling edge sync, 10 kΩ	
Environmental	Operating Temperature	-40°C to +70°C	
	Storage Temperature	-40°C to +85°C	
	Humidity	95% non-condensing	
Power GPS Sensor	Input Voltage Range	8 to 36 VDC	
	Consumption, RTK	<3.5 W (0.30 A @ 12 VDC typical)	
	Consumption, OmniSTAR	<4.3 W (0.36 A @ 12 VDC typical)	

[1]Depends on multipath environment, number of satellites in view, satellite geometry and ionospheric activity.
[2] Depends also on baseline length.
[3] Requires a subscription from OmniSTAR.

Opti-Logic RS800 Rangefinder Laser Altimeter

Accuracy	±1 m on 1x1 m^2 diffuse target with 50% reflectivity, up to 700 m
Resolution	0.2 m
Communication Protocol	RS232-8, N, 1 ASCII characters
Baud Rate	19200
Data Raw Counts	~200 Hz
Data Calibrated Range	~10 Hz
Data Rate	~200 Hz raw counts for un-calibrated operation; ~10 Hz for calibrated operation (averaging algorithm seeks 8 good readings)
Calibrated Range Units	Feet, Meters, Yards
Laser	Class I (eye-safe), 905 nm ± 10 nm
Power	7 - 9 VDC conditioned required, current draw at full power (~ 1.8 W)
Laser Wavelength	RS100 905 nm ± 10 nm
Laser Divergence	Vertical axis – 3.5 mrad half-angle divergence; Horizontal axis – 1 mrad half-angle divergence; (approximate beam “footprint” at 100 m is 35 cm x 5 cm)
Dimensions	32 x 78 x 84 mm (lens face cross section is 32 x 78 mm)
Weight	<227 g (8 oz)
Casing	RS100/RS400/RS800 units are supplied as OEM modules consisting of an open chassis containing optics and circuit boards. Custom housings can be designed and built on request.

Scintrex CS-3 Magnetometer

Operating Principal	Self-oscillating split-beam Cesium Vapor (non-radioactive ^{133}Cs)
Operating Range	15,000 nT to 105,000 nT
Gradient Tolerance	40,000 nT/m
Operating Zones	15° to 75° and 105° to 165°
Hemisphere Switching	a) Automatic b) Electronic control actuated by the control voltage levels (TTL/CMOS) c) Manual
Sensitivity	0.0006 nT / √Hz rms
Noise Envelope	Typically 0.002 nT peak to peak, 0.1 to 1 Hz bandwidth
Heading Error	±0.20 nT (inside the optical axis to the field direction angle range 15° to 75° and 105° to 165°)
Absolute Accuracy	<2.5 nT throughout range
Output	a) Continuous signal at the Larmor frequency which is proportional to the magnetic field (proportionality constant 3.49857 Hz/nT) sine wave signal amplitude modulated on the power supply voltage b) Square wave signal at the I/O connector, TTL/CMOS compatible
Information Bandwidth	Only limited by the magnetometer processor used
Sensor Head	Diameter: 63 mm (2.5”) Length: 160 mm (6.3”) Weight: 1.15 kg (2.6 lb)
Sensor Electronics	Diameter: 63 mm (2.5”) Length: 350 mm (13.8”) Weight: 1.5 kg (3.3 lb)
Cable, Sensor to Sensor Electronics	3 m (9’ 8”), lengths up to 5 m (16’ 4”) available
Operating Temperature	-40°C to +50°C
Humidity	Up to 100%, splash proof
Supply Power	24 to 35 VDC
Supply Current	Approx. 1.5 A at start up, decreasing to 0.5 A at 20°C
Power Up Time	Less than 15 minutes at -30°C

Billingsley TFM100G2 Ultra Miniature Triaxial Fluxgate Magnetometer

Axial Alignment	Orthogonality better than ±1°
Input Voltage Options	15 to 34 VDC @ 30 mA
Field Measurement Range Options	±100 µT = ±10 V
Accuracy	±0.75% of full scale (0.5% typical)
Linearity	±0.015% of full scale
Sensitivity	100 µV/nT
Scale Factor Temperature Shift	0.007% full scale/°C
Noise	≤12 pT rms/√Hz @ 1 Hz
Output Ripple	3 mV peak to peak @ 2nd harmonic
Analog Output at Zero Field	±0.025 V
Zero Shift with Temperature	±0.6 nT/°C
Susceptibility to Perming	±8 nT shift with ± 5 Gs applied
Output Impedance	332 Ω ± 5%
Frequency Response	3 dB @ >500 Hz (to >4 kHz wide band)
Over Load Recovery	±5 Gs slew <2 ms
Random Vibration	>20 G rms 20 Hz to 2 kHz
Temperature Range	-55°C to +85°C
Acceleration	>60 G
Weight	100 g
Size	3.51 cm x 3.23 cm x 8.26 cm
Connector	Chassis mounted 9 pin male "D" type

Setra Model 276 Barometer

Performance	Accuracy RSS[1] (at constant temp)	±0.25% FS[2]
	Non-Linearity (BSFL)	±0.22% FS
	Hysteresis	0.05% FS
	Non-Repeatability	0.05% FS
	Thermal Effects[3]	Compensated range: 0°C to +55°C (+30°F to +130°F) Zero shift (over compensated range): 1% FS Span shift (over compensated range): 1% FS
	Resolution	Infinite, limited only by output noise level (0.0005% FS)
	Time Constant	10 msecs to reach 90% final output with step function pressure input
	Long Term Stability	0.25% FS / 6 months
Environmental	Temperature	Operating[4]: -18°C to +79°C (0°F to +175°F) Storage: -55°C to +121°C (-65°F to +250°F)
	Vibration	2 g from 5 Hz to 500 Hz
	Shock	50 g (Operating, 1/2 sine 10 ms)
	Acceleration	10 g
Electrical	Circuit	3-Wire[5] (Exc, Out, Com)
	Power Consumption	0.20 W (24 VDC)
	Output Impedance	5 Ω
	Output Noise	<200 µV RMS (0 to 100 Hz)

[1] RSS of non-linearity, hysteresis, and non-repeatability.
[2] FS = 300 mb for 800 – 1100 mb range; 500 for 600 – 1100 mb range; and 20 PSI for 0 to 20 PSIA.
[3] Units calibrated at nominal 70°F. Maximum thermal error computed from this datum.
[4] Operating temperature limits of the electronics only. Pressure media temperatures may be considerable higher or lower.
[5] The separate leads for +EXC, -EXC, +Out, -Out are commoned internally. The shield is connected to the case. For best performance, either the -Exc or -Out should be connected to the case. Unit is calibrated at the factory with -Exc connected to the case. The insulation resistance between all signal leads are tied together and case ground is 100 Ω minimum at 25 VDC.

Rotronic HygroClip HC-S3 Relative Humidity and Temperature Probe

Relative Humidity	Operating Range	0 to 100% RH
	Accuracy at 23°C	±1.5% RH
	Output	0 – 1 VDC
	Typical Long-Term Stability	Better than ±1% RH per year
Temperature	Measurement Range	-40°C to +60°C
	Temperature Accuracy	-30°C to +60°C ±0.2°C -50°C to +60°C ±0.6°C (worst case)
	Output	0 – 1 VDC
Power	Supply Voltage	3.5 to 50 VDC (typically powered by data logger's 12 VDC supply)
	Current Consumption	<4 mA
Dimensions	Diameter	1.53 cm (0.60")
	Length	16.8 cm (6.6")
	Housing Material	Polycarbonate

Nuvia Dynamics Advanced Gamma-Ray Spectrometer (AGRS-2)

Crystal Volume	Two 4.2 L NaI(Tl) synthetic downward-looking crystals. Total volume of 8.4 L
Resolution	256/512/1024 channels
Data Handling	Individual detector processing and calibration
Energy Resolution	< 9% (@ 662 keV)
Differential Non-linearity	< 0.1%
Integral Non-linearity	< 0.01%
Gain Stabilization	Automatic multi-peak on natural radioisotopes
Calibration	Automatic using natural background radiation
Dynamic Input Range	250,000 cps (counts/sec) per detector
Baseline Restoration	Digital Individual Pulse Baseline Restoration (IPBR). The baseline is established for each individual pulse for maximum pulse height accuracy
Sampling Rate	0.1 – 10 secs user defined
Pulse Shaping	Digital Pulse Shaping
Power	9 to 40 VDC, 15 W
Detector Power	3 W per detector
Operating Temperature	-20°C up to +50°C
Upward Shielding	RayShield® non-radioactive shielding on downward-looking crystals
Spectra	20 keV to 3 MeV (plus cosmic)
System Stabilization	Cold start-up: less than 40 secs on the ground
GPS Connectivity	Time and position synchronization; additional add-on
Weight	~115 kg

Nuvia Dynamics IMPAC data recorder system

(for navigation and geophysical data acquisition)

Functions	Integrated Multi-Parameter Airborne Console (IMPAC) with integrated dual Global Positioning System Receiver (GPS) and all necessary navigation guidance software. Inputs for geophysical sensors - portable gamma ray spectrometer GRS-10/AGRS, MMS4/MMS8 Magnetometer, Herz Totem-2A EM, A/D converter, temperature/humidity probe, barometric pressure probe, and laser/radar altimeter. Output for the multi-parameter PGU (Pilot Guidance Unit)
Display	Monitor display 600 x 800 pixels; customized keypad and operator keyboard. Multi-screen options for real-time viewing of all data inputs, fiducial points, flight line tracking, and GPS channels by operator
Navigation	Pilot/operator navigation guidance. Software supports preplanned survey flight plan, along survey lines, way-points, preplanned drape profile surfaces
Data Sampling	Sensor dependent
Data Synchronization	Synchronized to GPS position. Supports dual GPS
Data File	PEI Binary data format
Storage	80 GB
Software	DataView: Allows fast data verification and conversion of PEI binary data to Geosoft GBN or ASCII formats MAGConv: For survey preparation, calibration and conversion of maps, and survey plot after data acquisition MAGComp: For calculation of magnetic compensation coefficients AGRS/GRS10 Calibration: High voltage adjustment, linearity correction coefficients calculation, and communication test support AGIS: Real time data acquisition and navigation system. Displays chart/spectrum view in real-time for fast data Quality Control (QC)
Electrical	Multiple ethernet connections, RS232 serial ports, USB ports, and 16-bit differential analog input channels. It can support up to 4 magnetometer sensors
Power Requirement	24 VDC

Appendix C

Radiometric Correction Coefficients

Radiometric Correction Coefficients:

Cosmic Correction Coefficients		
	Cosmic Stripping	**Aircraft Background**
TC	0.5295	31.0380
K	0.04395	4.6840
U	0.03860	1.9192
Th	0.06830	0.3513

Altitude Attenuation Coefficients	
TC	-0.005
K	-0.007
U	-0.004
Th	-0.004

Compton Stripping	
Alpha	0.3191
Beta	0.4465
Gamma	0.8521
GrastyBackscatter_a	0.0518
GrastyBackscatter_b	0.0058
GrastyBackscatter_g	0.0024

Sensitivities	
TC	23.00
K	76.39
U	6.435
Th	3.454

Appendix D

Digital File Descriptions

- Magnetic Database
- Radiometric Database
- Geosoft Grids
- Maps

Magnetic Database:

Abbreviations used in the GDB/XYZ/CSV files are listed below:

CHANNEL	UNITS	DESCRIPTION
X_WGS84	m	UTM Easting – WGS84 Zone 8N
Y_WGS84	m	UTM Northing – WGS84 Zone 8N
Lat_deg	Decimal degree	Latitude – WGS84
Lon_deg	Decimal degree	Longitude – WGS84
Date	yyyy/mm/dd	Dates of the survey flight(s) – Local
FLT		Flight number(s)
LineNo		Line numbers
STL		Number of satellite(s)
GPSfix		1 = non-differential 2 = WAAS/SBAS differential
Heading	degree	Heading of the aircraft
GPStime	HH:MM:SS	GPS time (UTC)
Geos_m	m	Geoidal separation
XTE_m	m	Cross track error
Galt	m	GPS height – WGS84 Zone 8N (ASL)
Lalt	m	Laser altimeter readings (AGL)
DTM	m	Digital Terrain Model
Sample_Density	m	Horizontal distance in meters between adjacent measurement locations; sample frequency is 20 Hz
Speed_km_hr	km/hr	Ground speed of aircraft in km/hr
basemag	nT	Base station temporal variation data
IGRF	nT	International Geomagnetic Reference Field, IGRF-13
Declin	Decimal degree	Calculated declination of magnetic field
Inclin	Decimal degree	Calculated inclination of magnetic field
XFg_Step	step	X - fluxgate
YFg_Step	step	Y - fluxgate
ZFg_Step	step	Z - fluxgate
Mag_Head	nT	Diurnal, lag, and heading corrected
TMI	nT	Total Magnetic Intensity
RMI	nT	Residual Magnetic Intensity

Radiometric Database:

Abbreviations used in the GDB/XYZ/CSV files listed below:

CHANNEL	UNITS	DESCRIPTION
X_WGS84	m	UTM Easting – WGS84 Zone 8N
Y_WGS84	m	UTM Northing – WGS84 Zone 8N
Lat_deg	Decimal degree	Latitude – WGS84
Lon_deg	Decimal degree	Longitude – WGS84
Date	yyyy/mm/dd	Date of the survey flight(s) – Local
FLT		Flight Line numbers
LineNo		Line numbers
STL		Number of satellite(s)
GPStime	HH:MM:SS	GPS time (UTC)
Geos_m	m	Geoidal separation
GPSFix		1 = non-differential 2 = WAAS/SBAS differential
Heading	degree	Heading of the aircraft
XTE_m	m	Cross track error
Galt	m	GPS height – WGS84 Zone 8N (ASL)
Lalt	m	Laser altimeter height (AGL)
DTM	m	Digital Terrain Model
Sample_Density	m	Horizontal distance in metres between adjacent measurement locations; sample frequency is 20 Hz
Speed_km_hr	km/hr	Ground speed of aircraft in km/hr
BaroSTP_kPa	kPa	Barometric altitude (pressure and temperature corrected)
Temp_degC	°C	Air temperature
COSFILT	counts/sec	Spectrometer – Filtered Cosmic
Kcor	%	Concentration in Percentage - Potassium
Thcor	ppm	Equivalent Concentration - Thorium
Ucor	ppm	Equivalent Concentration - Uranium
TCcor	nGy/hour	Total Count
TCexp	µR/hour	Exposure Rate
KThratio		Spectrometer –%K/eTh ratio
KUratio		Spectrometer –%K/eU ratio
ThKratio		Spectrometer – eTh/%K ratio
ThUratio		Spectrometer – eTh/eU ratio
UKratio		Spectrometer – eU/%K ratio

Grids:

Rainbow, WGS 84 Zone 8N, sun inclination at 45° and declination at 045°

File Name	Description	Cell Size (m)
22149_Rainbow_DTM_25m.grd	Digital Terrain Model	25
22149_Rainbow_TMI_25m.grd	Total Magnetic Intensity	25
22149_Rainbow_RMI_25m.grd	Residual Magnetic Intensity	25
22149_Rainbow_RTP_25m.grd	Reduced to Magnetic Pole of RMI	25
22149_Rainbow_CHG_25m.grd	Calculated Horizontal Gradient of RMI	25
22149_Rainbow_CVG_25m.grd	Calculated Vertical Gradient of RMI	25
22149_Rainbow_AS_25m.grd	Analytic Signal of RMI	25
22149_Rainbow_K_25m.grd	Potassium (%K) – in percentage	25
22149_Rainbow_eTh_25m.grd	Thorium (eTh) – equivalent concentration	25
22149_Rainbow_eU_25m.grd	Uranium (eU) – equivalent concentration	25
22149_Rainbow_TC_25m.grd	Total Count (TC)	25
22149_Rainbow_TCexp_25m.grd	Total Count (TCexp) – exposure rate	25
22149_Rainbow_KThRatio_25m.grd	Potassium over Thorium ratio (%K/eTh)	25
22149_Rainbow_KURatio_25m.grd	Potassium over Uranium ratio (%K/eU)	25
22149_Rainbow_UThRatio_25m.grd	Uranium over Thorium ratio (eU/eTh)	25
22149_Rainbow_UKRatio_25m.grd	Uranium over Potassium ratio (eU/%K)	25
22149_Rainbow_ThKRatio_25m.grd	Thorium over Potassium ratio (eTh/%K)	25
22149_Rainbow_ThURatio_25m.grd	Thorium over Uranium ratio (eTh/eU)	25

Maps:

Rainbow, WGS 84 Zone 8N, sun inclination at 45° and declination at 045°
(JPEG, PDF, and georeferenced PDF)

Plate Num	Plate Name	File Name	Description	Cell Size (m)	Colour Scale	Colour Shade
1	FL	22149_Rainbow_ActualFlightLines	Plotted actual flown flight lines	NA	NA	NA
2	DTM	22149_Rainbow_DTM_25m	Digital Terrain Model	25	Linear	NA
3	TMI_wFL	22149_Rainbow_TMI_wFL_25m	Total Magnetic Intensity with actual flown flight lines	25	Histogram -equalized	RGB
4	TMI	22149_Rainbow_TMI_25m	Total Magnetic Intensity	25	Histogram -equalized	RGB
5	RMI	22149_Rainbow_RMI_25m	Residual Magnetic Intensity	25	Histogram -equalized	RGB
6	RTP	22149_Rainbow_RTP_25m	Reduced to Magnetic Pole of RMI	25	Histogram -equalized	RGB
7	CHG	22149_Rainbow_CHG_25m	Calculated Horizontal Gradient of RMI	25	Histogram -equalized	Wet-look
8	CVG	22149_Rainbow_CVG_25m	Calculated Vertical Gradient of RMI	25	Histogram -equalized	Wet-look
9	AS	22149_Rainbow_AS_25m	Analytic Signal of RMI	25	Histogram -equalized	Wet-look
10	%K	22149_Rainbow_K_25m	Potassium (%K) – in percentage	25	Histogram -equalized	RGB
11	eTh	22149_Rainbow_eTh_25m	Thorium (eTh) – equivalent concentration	25	Histogram -equalized	RGB
12	eU	22149_Rainbow_eU_25m	Uranium (eU) – equivalent concentration	25	Histogram -equalized	RGB
13	TC	22149_Rainbow_TC_25m	Total Count (TC)	25	Histogram -equalized	RGB
14	TCexp	22149_Rainbow_TCexp_25m	Total Count (TCexp) – exposure rate	25	Histogram -equalized	RGB
15	%K/eTh	22149_Rainbow_KThRatio_25m	Potassium over Thorium ratio (%K/eTh)	25	Histogram -equalized	RGB
16	%K/eU	22149_Rainbow_KURatio_25m	Potassium over Uranium ratio (%K/eU)	25	Histogram -equalized	RGB
17	eTh/eU	22149_Rainbow_ThURatio_25m	Thorium over Uranium ratio (eTh/eU)	25	Histogram -equalized	RGB
18	TI	22149_Rainbow_TernaryImage_25m	Ternary ratio of all three elements (%K, eTh, eU)	25	Histogram -equalized	RGB inverted

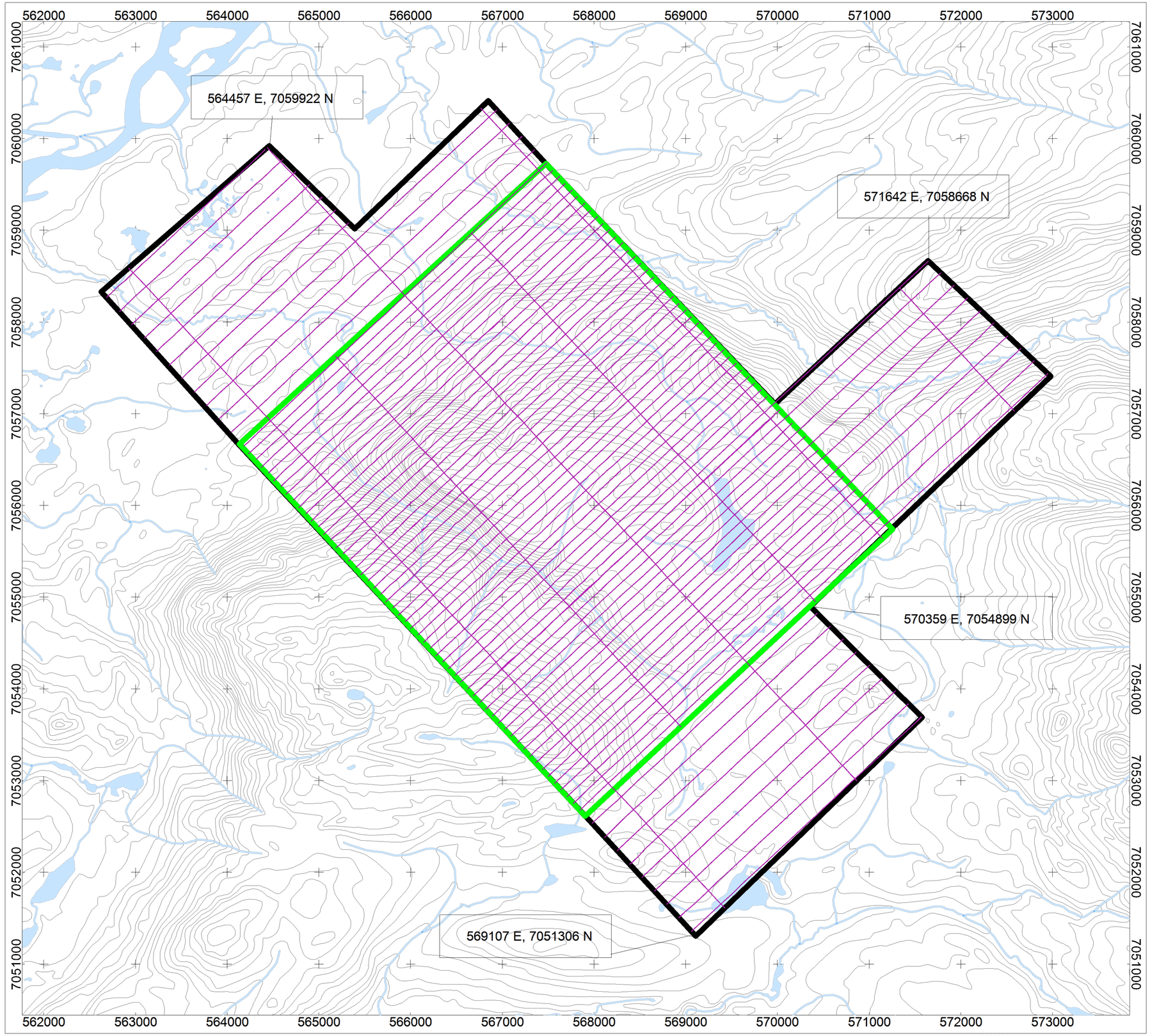
*Grids displayed on the maps are exported as GeoTIFFs (.tiff) and KMZs.

Plates

Rainbow Survey Block

- Plate 1: Rainbow – Actual Flight Lines (FL)
- Plate 2: Rainbow – Digital Terrain Model (DTM)
- Plate 3: Rainbow – Total Magnetic Intensity with Actual Flight Lines (TMI_wFL)
- Plate 4: Rainbow – Total Magnetic Intensity (TMI)
- Plate 5: Rainbow – Residual Magnetic Intensity (RMI)
- Plate 6: Rainbow – Reduced to Magnetic Pole (RTP) of RMI
- Plate 7: Rainbow – Calculated Horizontal Gradient (CHG) of RMI
- Plate 8: Rainbow – Calculated Vertical Gradient (CVG) of RMI
- Plate 9: Rainbow – Analytic Signal (AS) of RMI
- Plate 10: Rainbow – Potassium - Percentage (%K)
- Plate 11: Rainbow – Thorium - Equivalent Concentration (eTh)
- Plate 12: Rainbow – Uranium - Equivalent Concentration (eU)
- Plate 13: Rainbow – Total Count (TC)
- Plate 14: Rainbow – Total Count - Exposure Rate (TCexp)
- Plate 15: Rainbow – Potassium over Thorium Ratio (%K/eTh)
- Plate 16: Rainbow – Potassium over Uranium Ratio (%K/eU)
- Plate 17: Rainbow – Thorium over Uranium Ratio (eTh/eU)
- Plate 18: Rainbow – Ternary Image (TI)

11. Appendix N—Geophysics Maps



Scale 1:20000

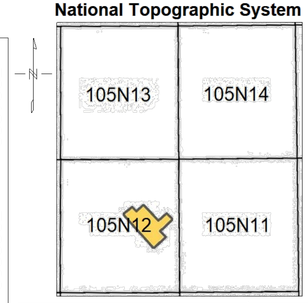
250 0 250 500 750 1000 1250 1500

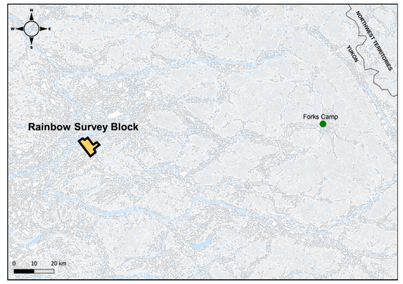
(meters)

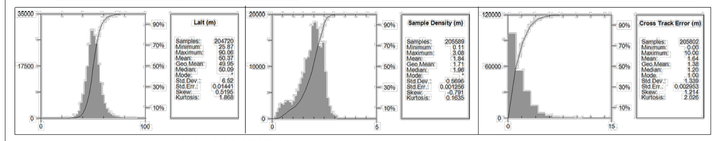
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

National Topographic System







MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

- Water Bodies
- Elevation Contours, 20 m Intervals
- Rainbow Survey Block Boundary
- Rainbow Infill Survey Block Boundary
- Actual Flight Lines

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information. URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Overview Map

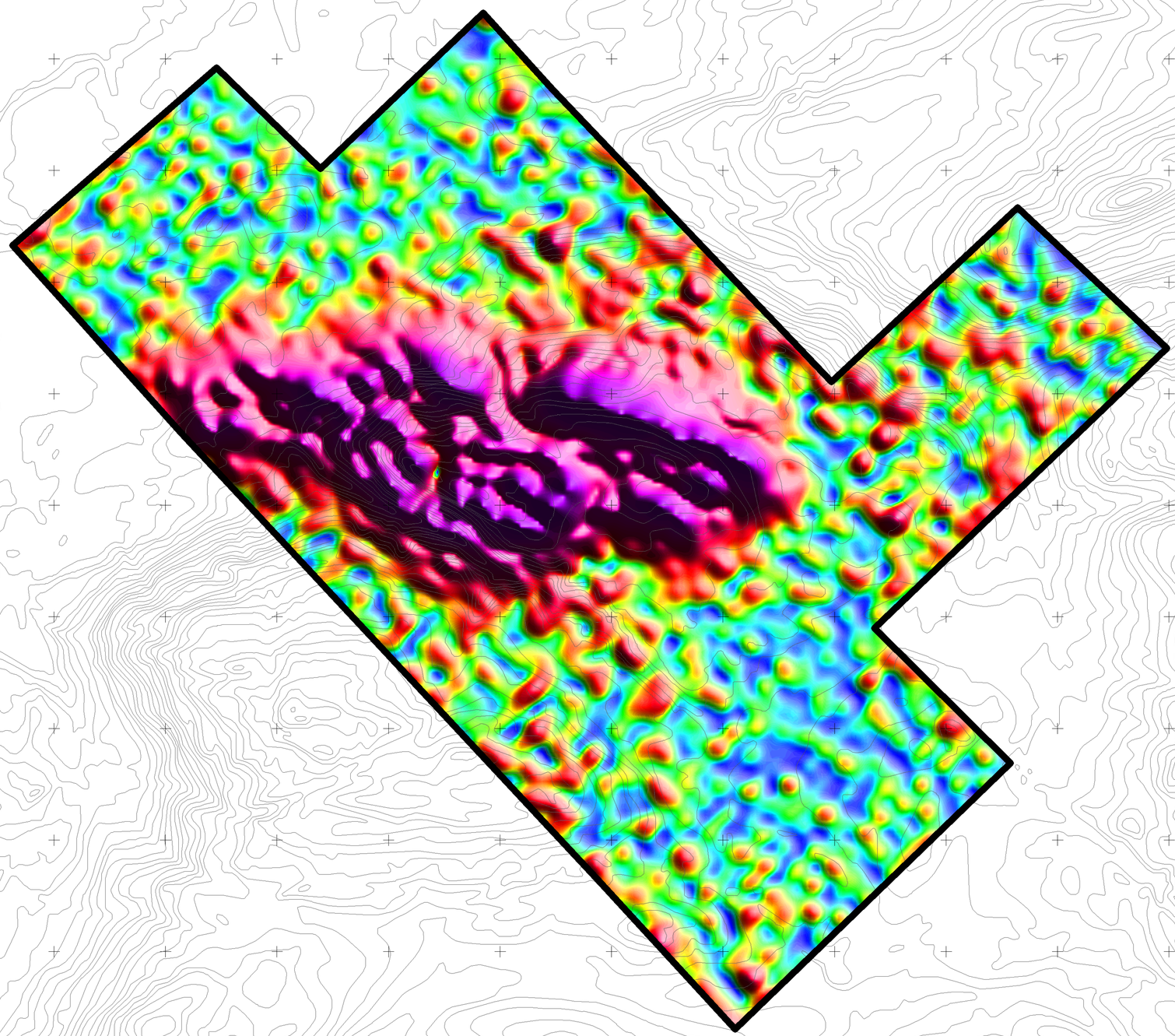
Actual Flight Lines

Precision GeoSurveys

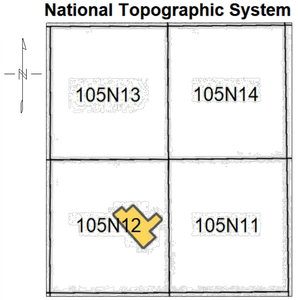
Plate 1
FL

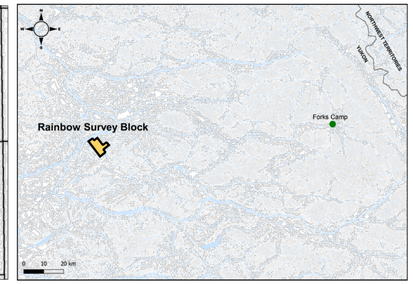
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

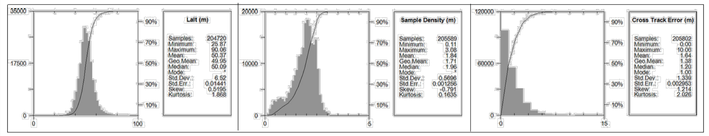
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000



National Topographic System







2.111
0.964
0.615
0.400
0.258
0.170
0.127
0.106
0.093
0.085
0.078
0.072
0.067
0.063
0.060
0.056
0.053
0.050
0.048
0.045
0.043
0.040
0.038
0.035
0.032
0.030
0.026
0.023
0.017

AS
(nT/m)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Analytic signal (AS) is the square root of the sum of the squares of the vertical and horizontal gradients. Refer to report for details. AS is represented as a grid and drawn with a histogram-equalized wet-look colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information. URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

SNOWLINE GOLD CORP

Rainbow

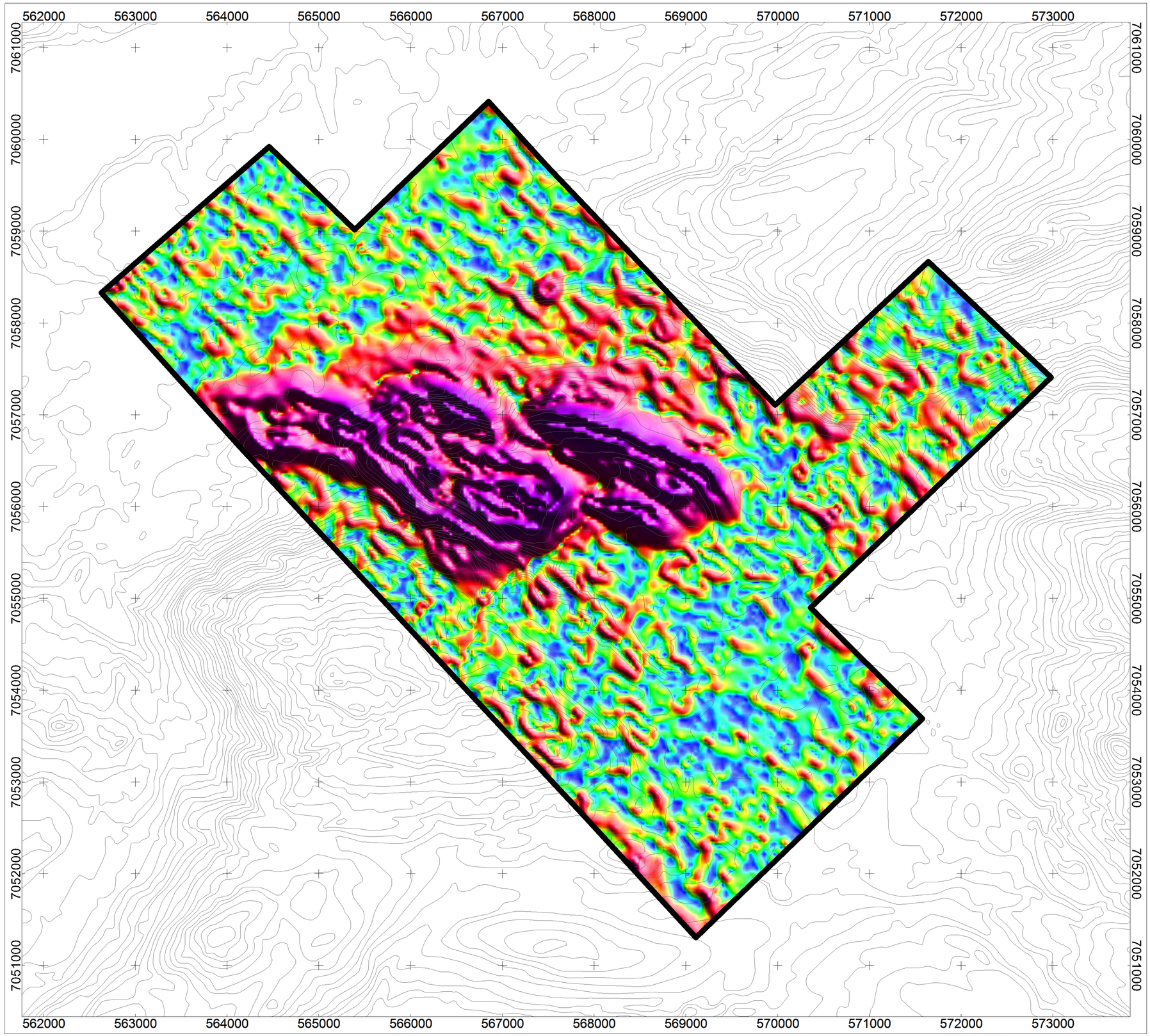
Magnetic Map

Analytic Signal

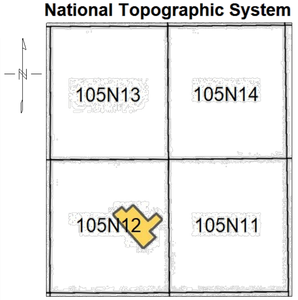
Precision GeoSurveys

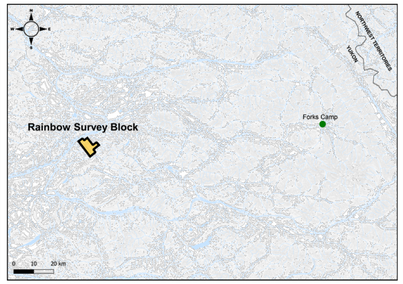
Job #22149_RB
August 17, 2022

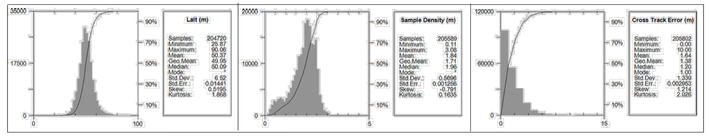
Plate 9
AS

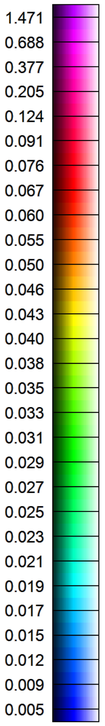


National Topographic System









CHG
(nT/m)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....
Rainbow Survey Block Boundary.....

DATA REFERENCE
Calculated Horizontal Gradient (CHG) is the magnitude of the horizontal components of Residual Magnetic Intensity (RMI). Refer to report for details. CHG is represented as a grid and drawn with a histogram-equalized wet-look colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Calculated Horizontal Gradient

Precision GeoSurveys

Scale 1:20000

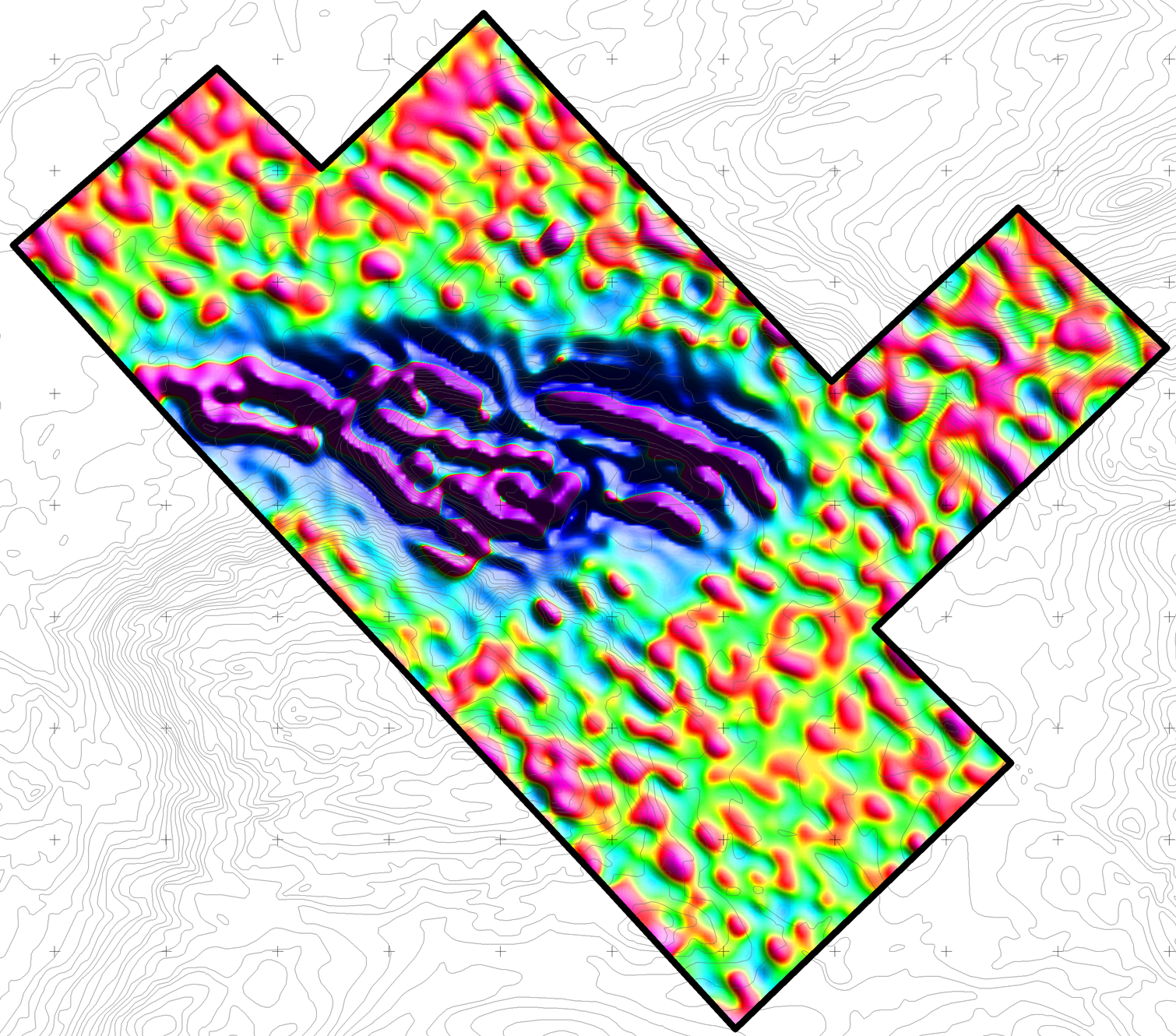
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

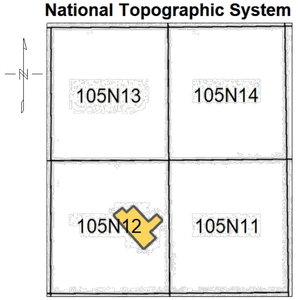
Plate 7
CHG

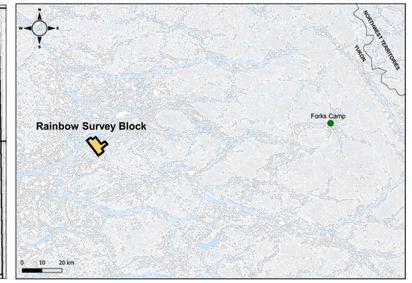
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

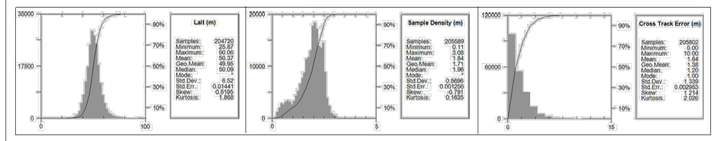
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000



National Topographic System







CVG (nT/m)
1.097
0.194
0.056
0.038
0.029
0.021
0.016
0.011
0.006
0.002
-0.001
-0.005
-0.009
-0.012
-0.015
-0.019
-0.022
-0.026
-0.030
-0.034
-0.039
-0.044
-0.051
-0.062
-0.081
-0.112
-0.181
-0.304
-0.614

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Calculated Vertical Gradient (CVG) is the first order vertical component of Residual Magnetic Intensity (RMI). Refer to report for details. CVG is represented as a grid and drawn with a histogram-equalized wet-look colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

Scale 1:20000

250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

SNOWLINE GOLD CORP

Rainbow

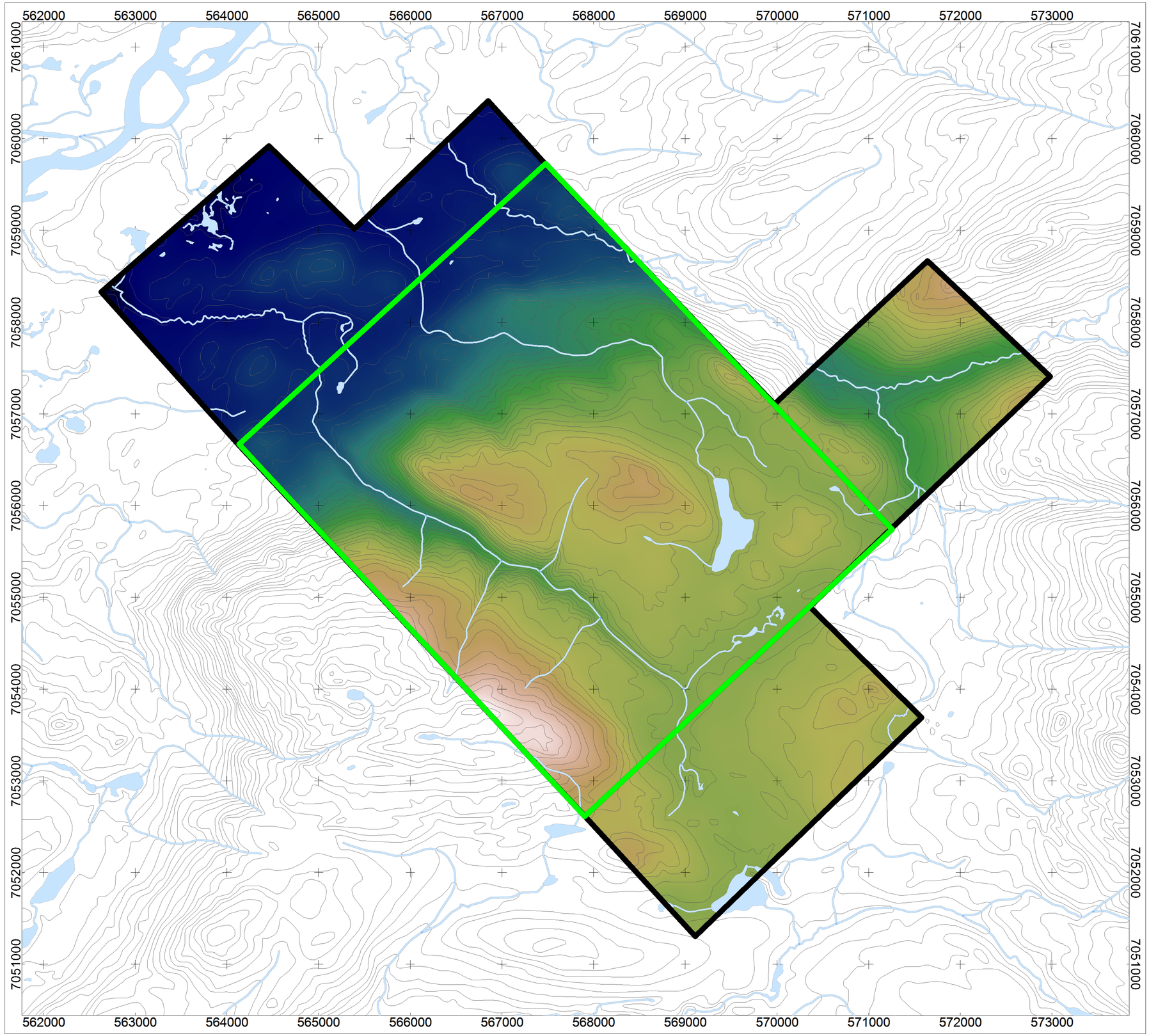
Magnetic Map

Calculated Vertical Gradient

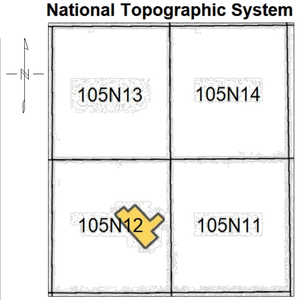
Precision GeoSurveys

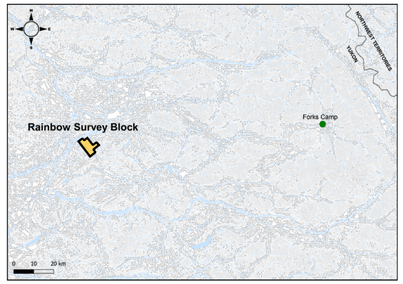
Job #22149_RB
August 17, 2022

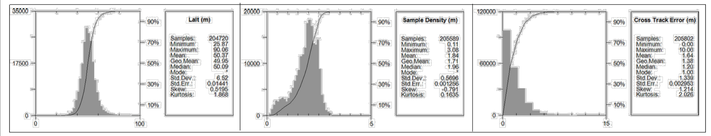
Plate 8
CVG



National Topographic System







1270.92
1253.74
1236.57
1219.40
1202.22
1185.05
1167.88
1150.70
1133.53
1116.35
1099.18
1082.01
1064.83
1047.66
1030.49
1013.31
996.14
978.96
961.79
944.62
927.44
910.27
893.09
875.92
858.75
841.57
824.40
807.23
790.05
772.88
755.70
738.53
721.36
704.18
687.01
669.84
652.66
635.49
618.31
601.14
583.97

DTM
(m)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
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Sample Rate:	1 Hz (resampled to 20Hz)

Legend

- Water Bodies
- Elevation Contours, 20 m Intervals
- Rainbow Survey Block Boundary
- Rainbow Infill Survey Block Boundary

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information. URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

SNOWLINE GOLD CORP

Rainbow

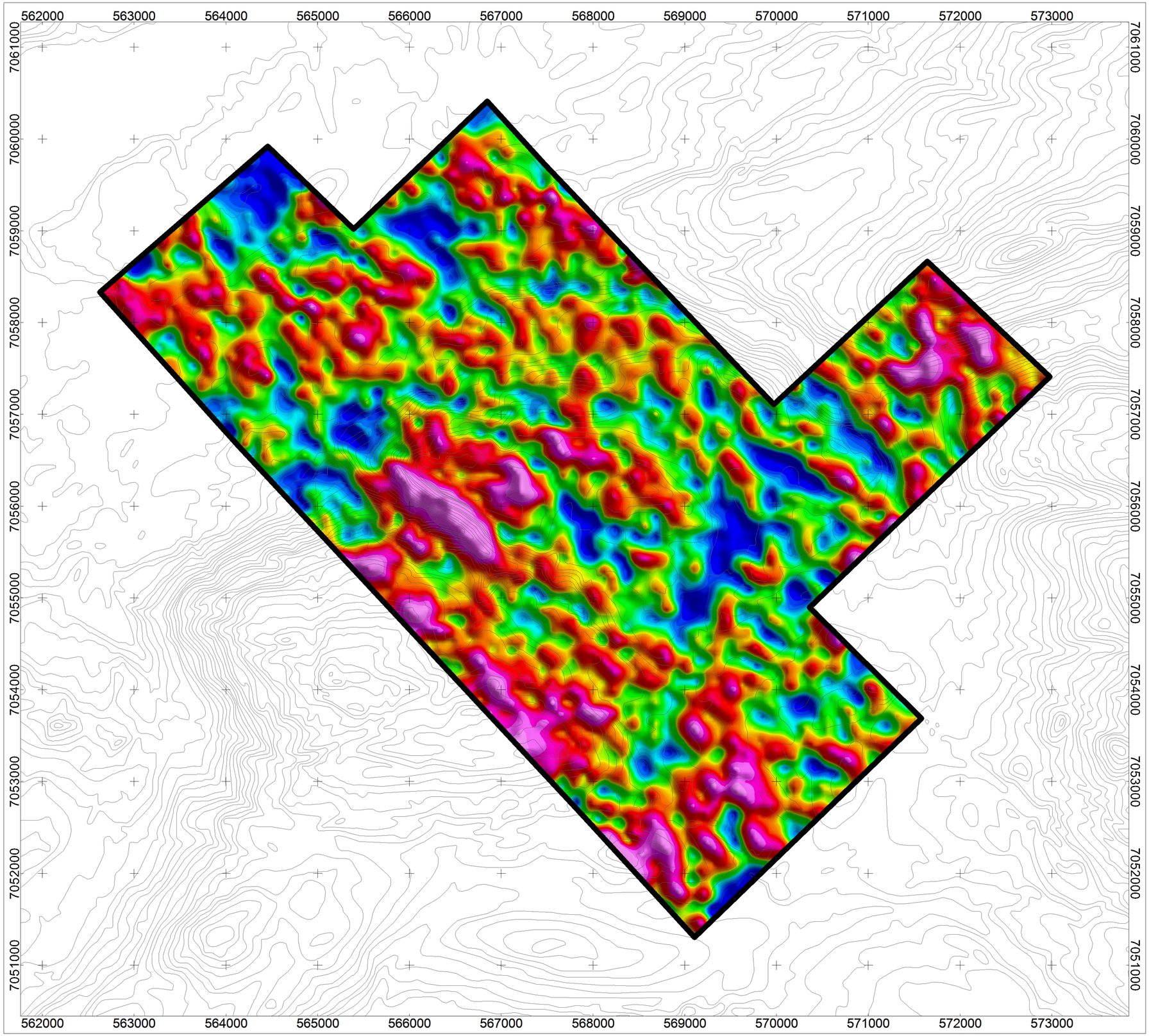
Overview Map

Digital Terrain Model

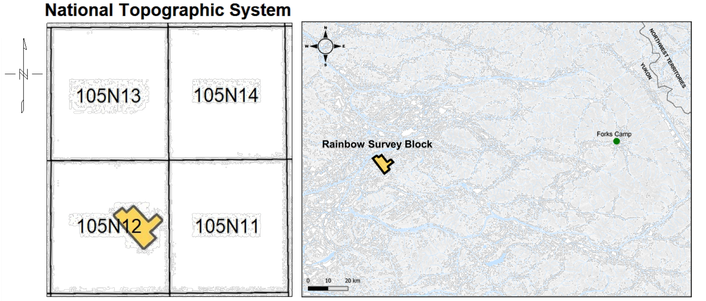
Precision GeoSurveys

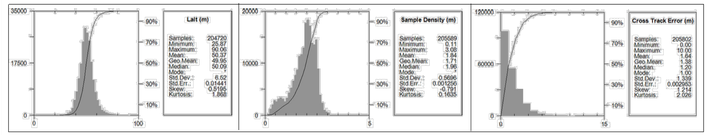
Job #22149_RB
August 17, 2022

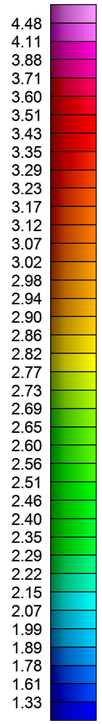
Plate 2
DTM



National Topographic System







eTh
(ppm)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

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SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Thorium - Equivalent Concentration

Precision GeoSurveys

Scale 1:20000

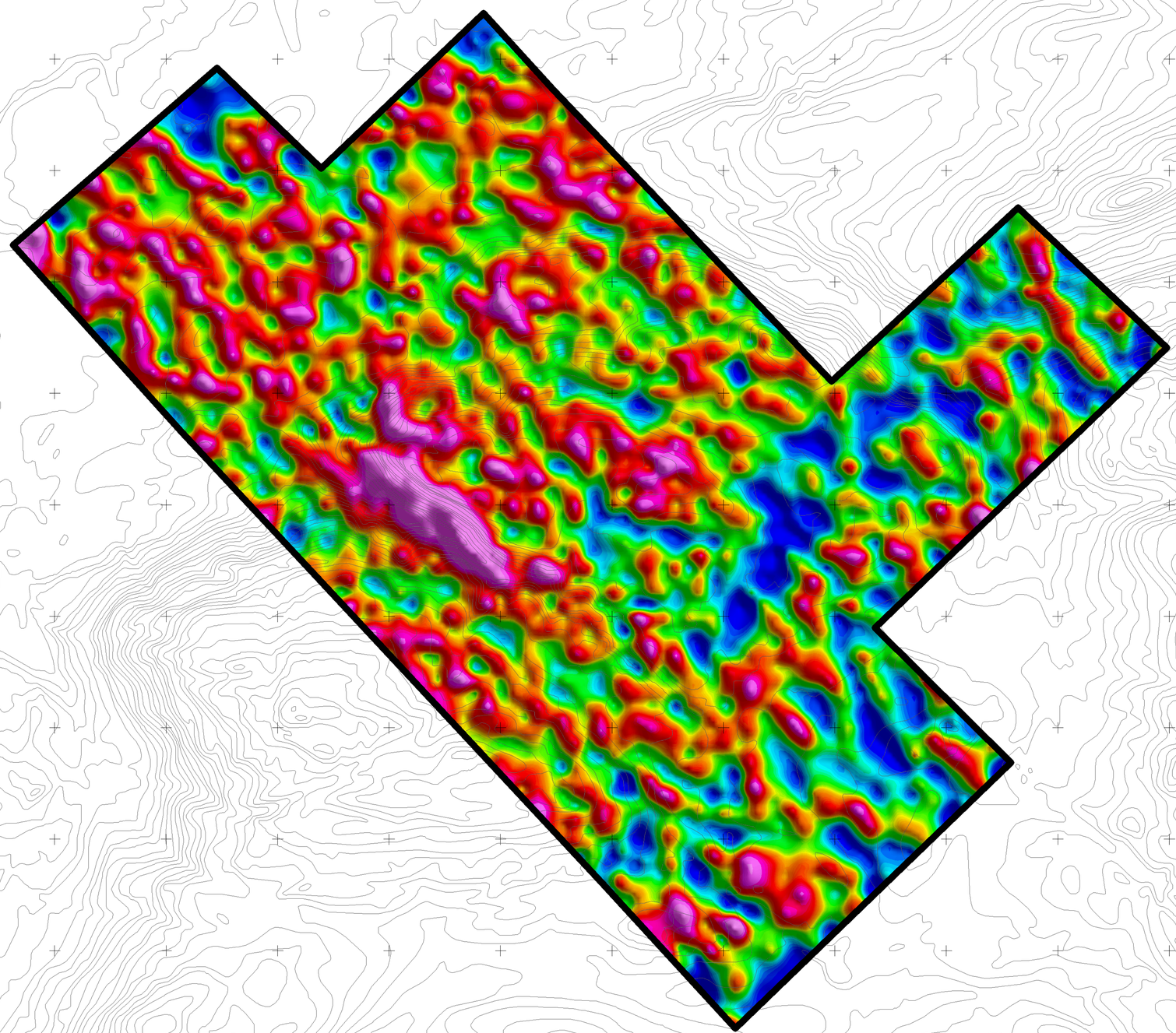
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

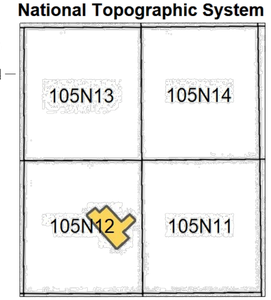
Plate 11
eTh

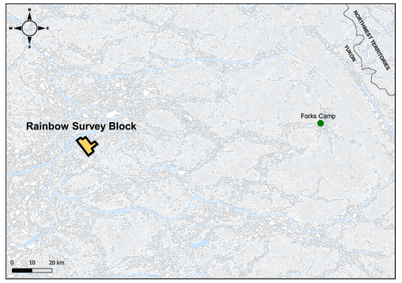
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

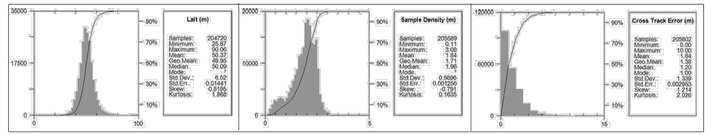
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

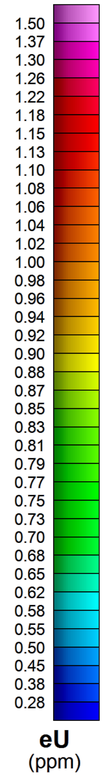


National Topographic System









eU
(ppm)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

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URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Uranium - Equivalent Concentration

Precision GeoSurveys

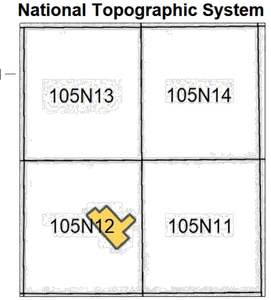
Scale 1:20000

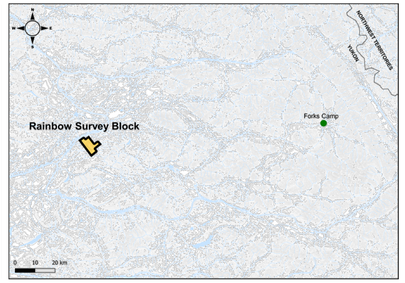
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

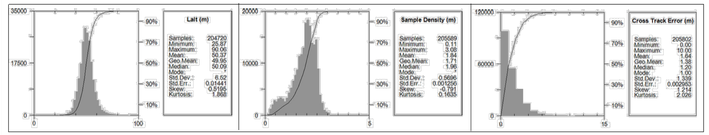
Job #22149_RB
August 17, 2022

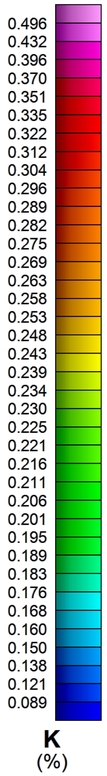
Plate 12
eU

National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
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URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

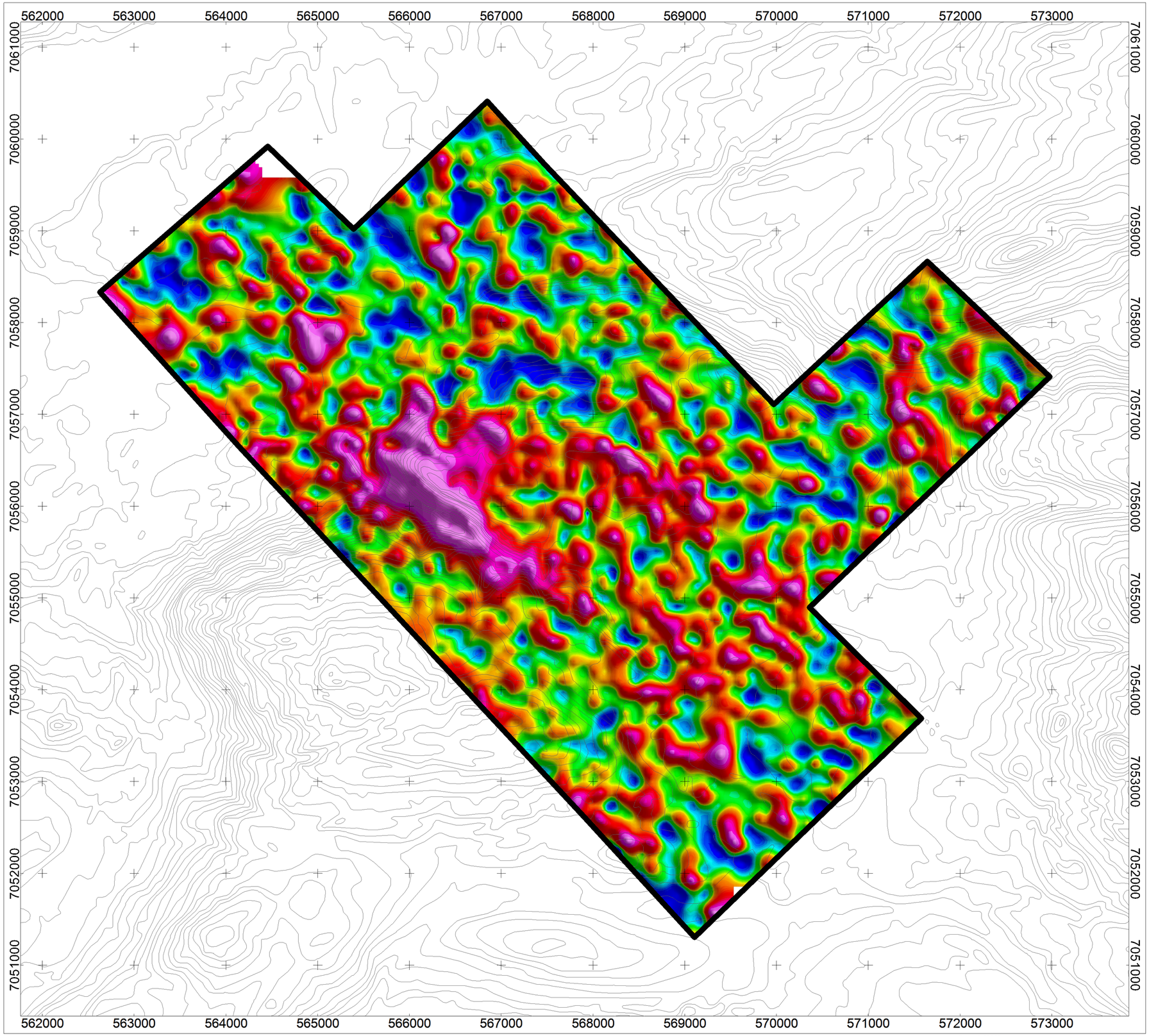
Potassium - Percentage

Precision GeoSurveys

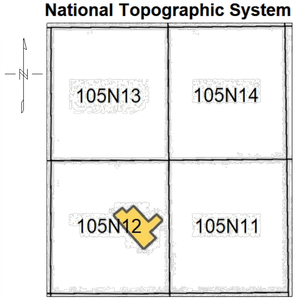
Plate 10
%K

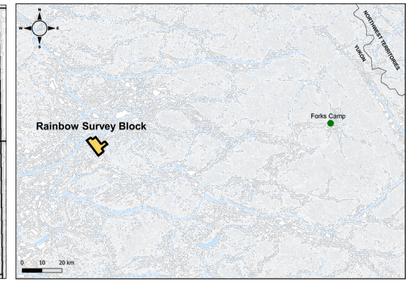
Job #22149_RB
August 17, 2022

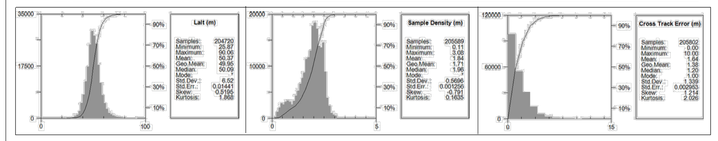
Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

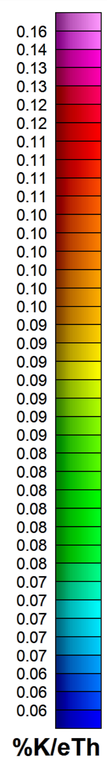


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
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URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

SNOWLINE GOLD CORP

Rainbow

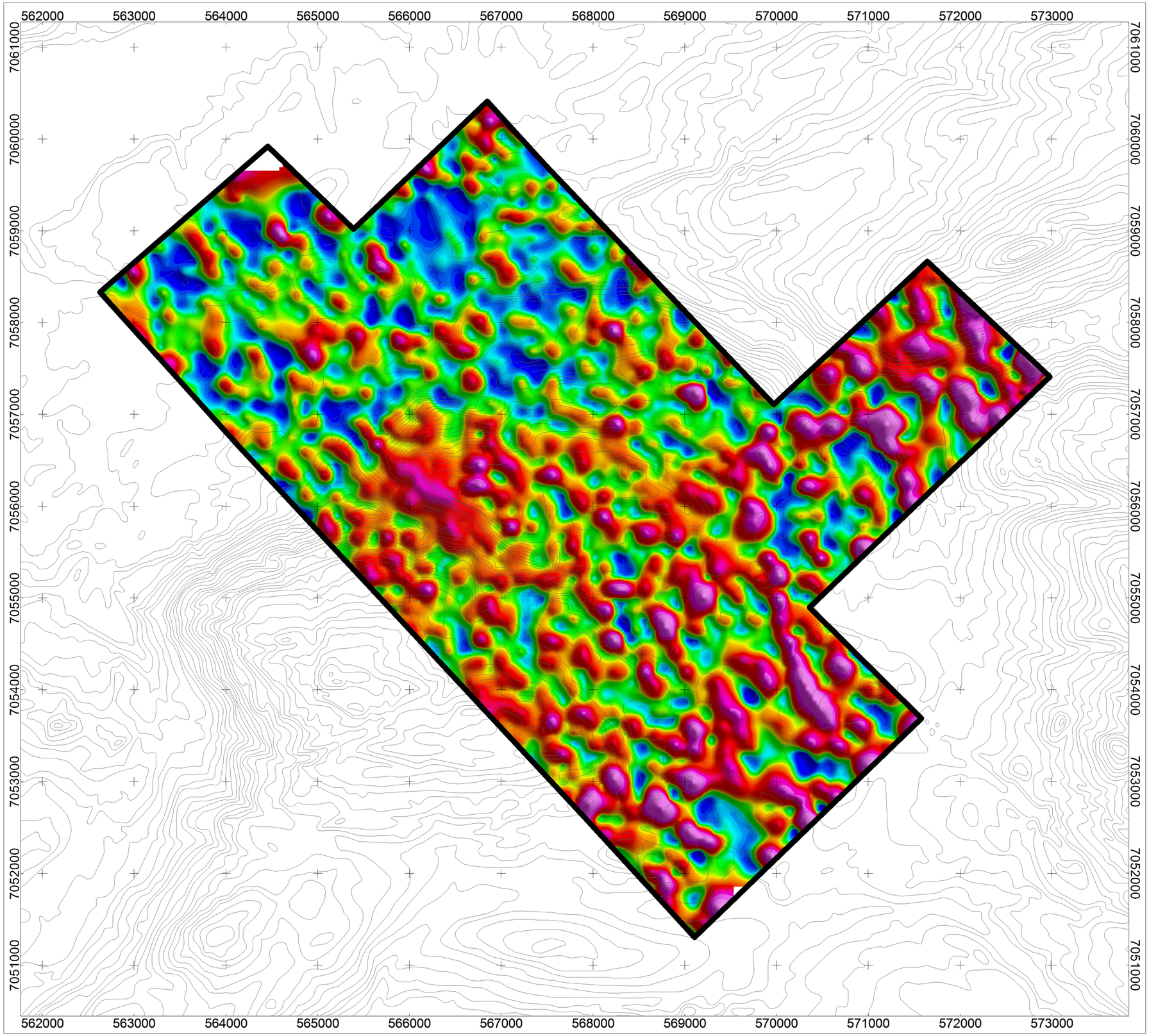
Radiometric Map

Potassium over Thorium Ratio

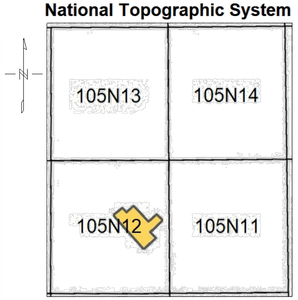
Precision GeoSurveys

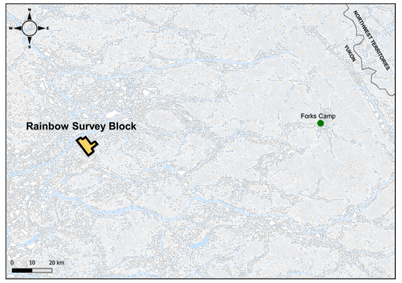
Job #22149_RB
August 17, 2022

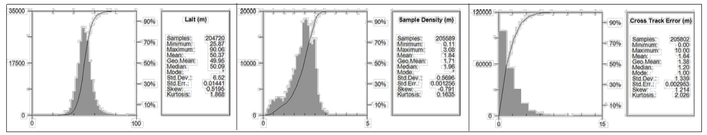
Plate 15
%K/eTh

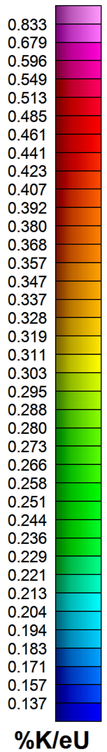


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
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URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

SNOWLINE GOLD CORP

Rainbow

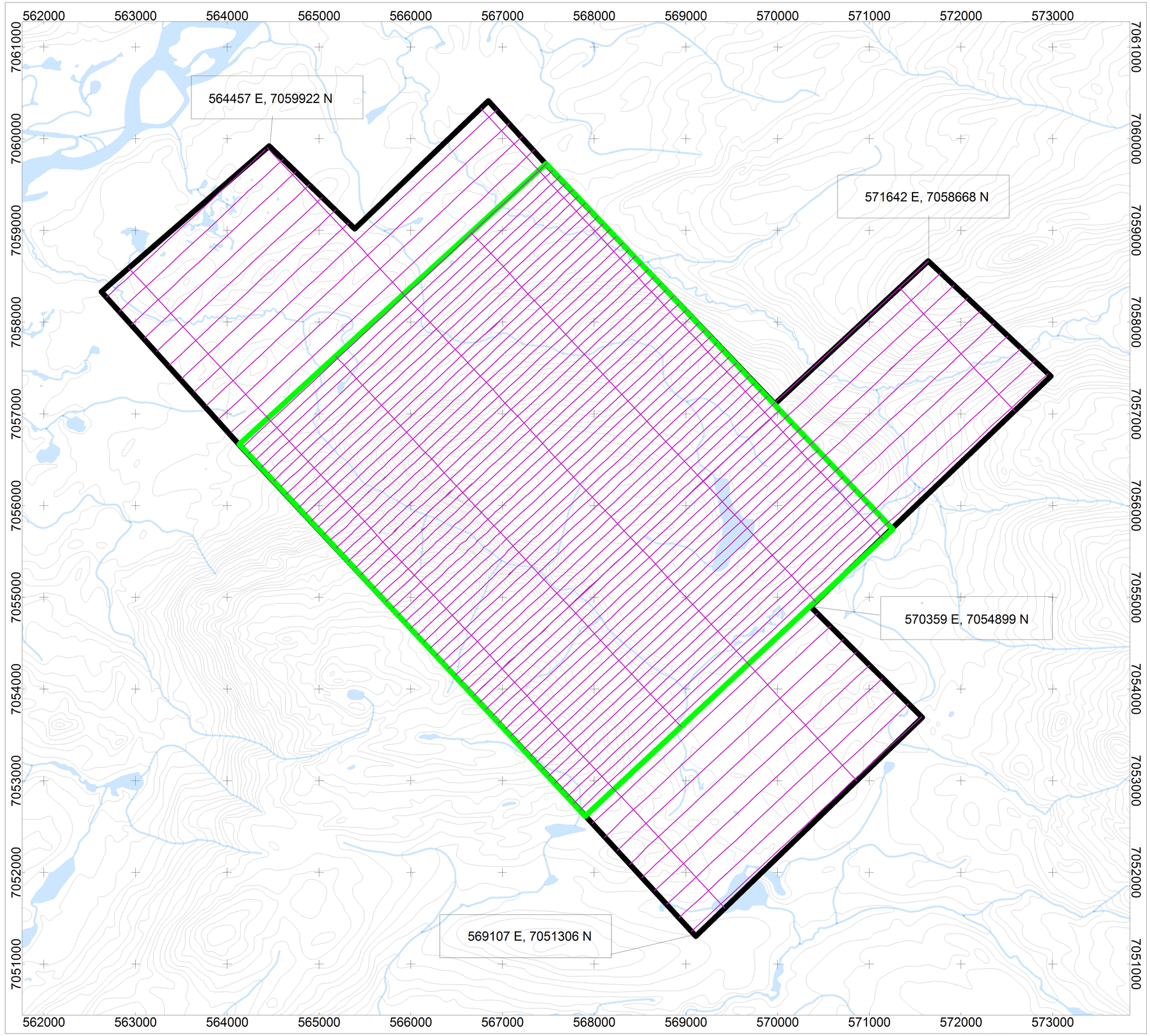
Radiometric Map

Potassium over Uranium Ratio

Precision GeoSurveys

Job #22149_RB
August 17, 2022

Plate 16
%K/eU



Scale 1:20000

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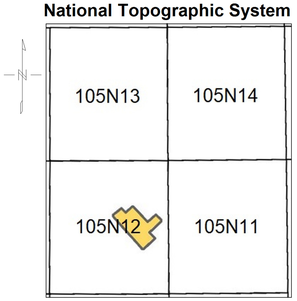
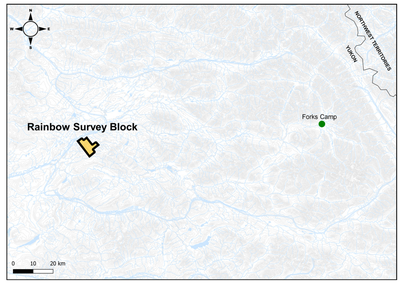
(meters)

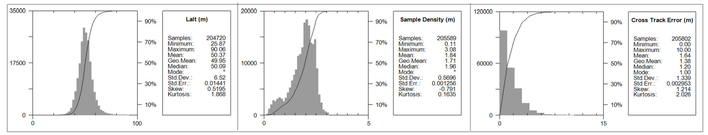
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

National Topographic System







MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
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Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

- Water Bodies
- Elevation Contours, 20 m Intervals
- Rainbow Survey Block Boundary
- Rainbow Infill Survey Block Boundary
- Actual Flight Lines

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Overview Map

Actual Flight Lines

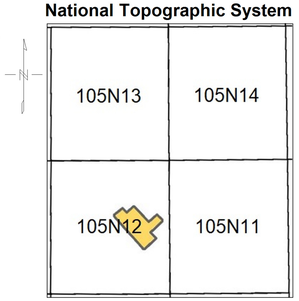
Precision GeoSurveys

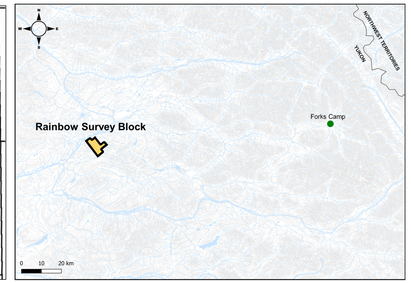
Plate 1
FL

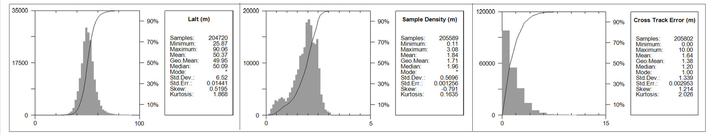
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

National Topographic System







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790.05
772.88
755.70
738.53
721.36
704.18
687.01
669.84
652.66
635.49
618.31
601.14
583.97

DTM
(m)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Water Bodies.....
Elevation Contours, 20 m Intervals.....
Rainbow Survey Block Boundary.....
Rainbow Infill Survey Block Boundary.....

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Overview Map

Digital Terrain Model

Precision GeoSurveys

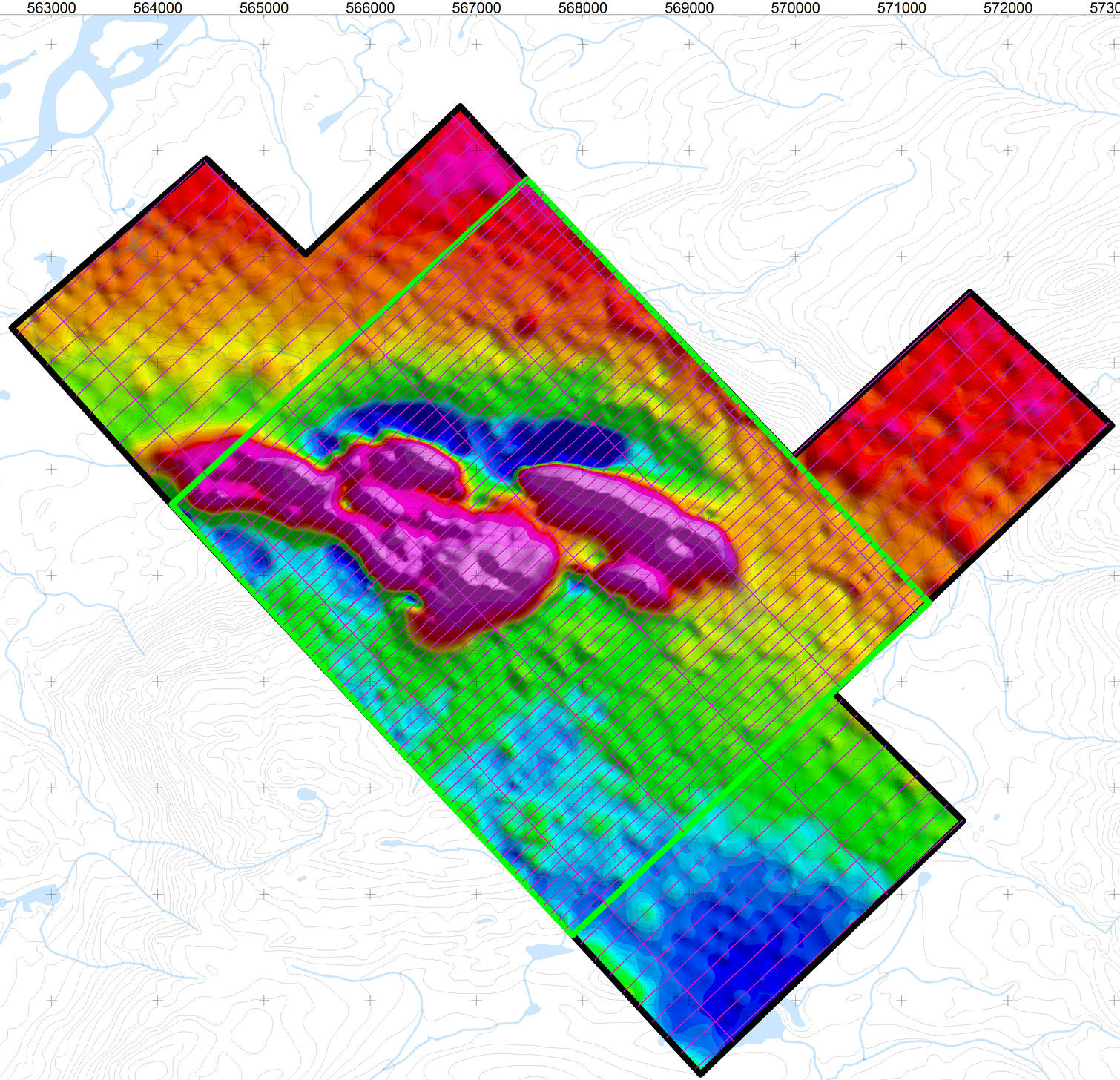
Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

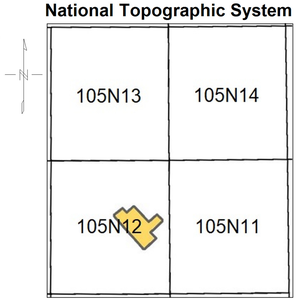
Plate 2
DTM

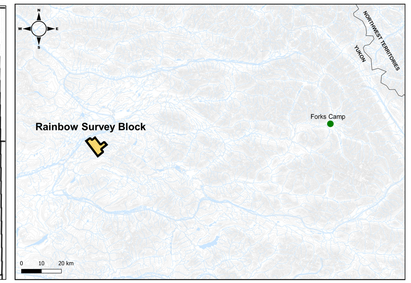
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

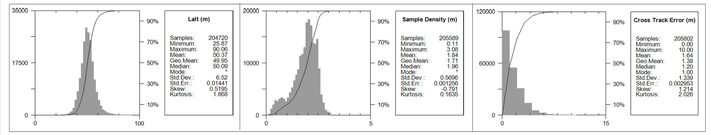
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000



National Topographic System







TMI (nT)
56976.28
56902.89
56864.59
56847.24
56843.95
56841.64
56839.66
56837.60
56835.43
56833.00
56830.55
56827.66
56824.64
56821.50
56817.96
56815.52
56813.03
56810.21
56807.93
56805.60
56802.91
56800.23
56797.31
56794.78
56791.97
56789.37
56786.52
56784.12
56781.98
56779.84
56778.23
56776.72
56775.36
56773.72
56771.77
56769.35
56765.80
56759.73

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

- Water Bodies
- Elevation Contours, 20 m Intervals
- Rainbow Survey Block Boundary
- Rainbow Infill Survey Block Boundary
- Actual Flight Lines

DATA REFERENCE
Magnetic data have been compensated and corrected for temporal variations, lag, and heading; then leveled to generate the Total Magnetic Intensity (TMI) grid. Refer to report for details. TMI is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Total Magnetic Intensity with Actual Flight Lines

Precision GeoSurveys

Scale 1:20000

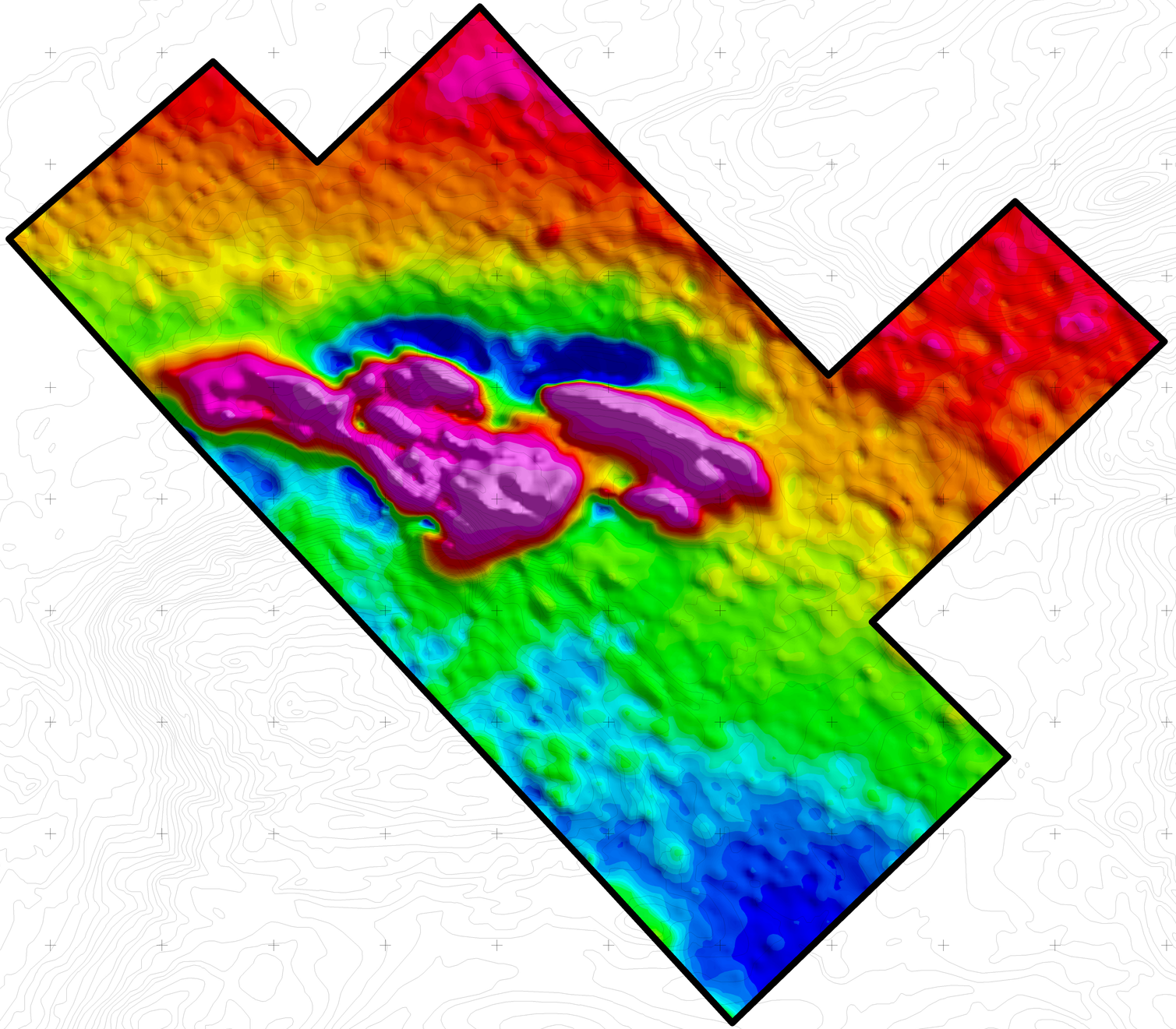
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

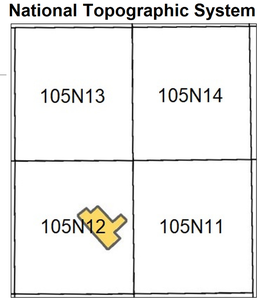
Plate 3
TMI_wFL

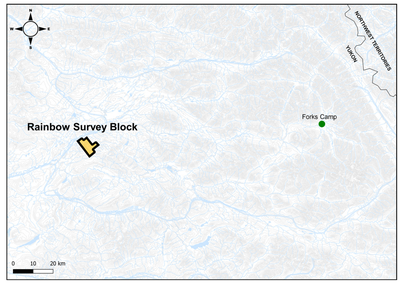
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

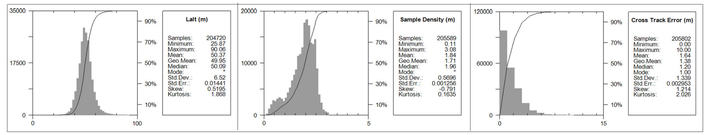
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

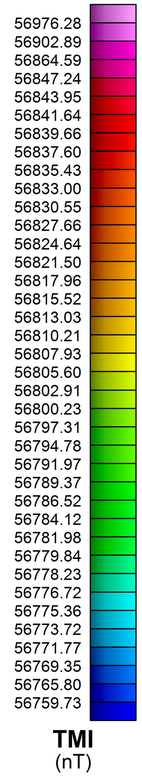


National Topographic System









TMI
(nT)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Magnetic data have been compensated and corrected for temporal variations, lag, and heading; then leveled to generate the Total Magnetic Intensity (TMI) grid. Refer to report for details. TMI is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Total Magnetic Intensity

Precision GeoSurveys

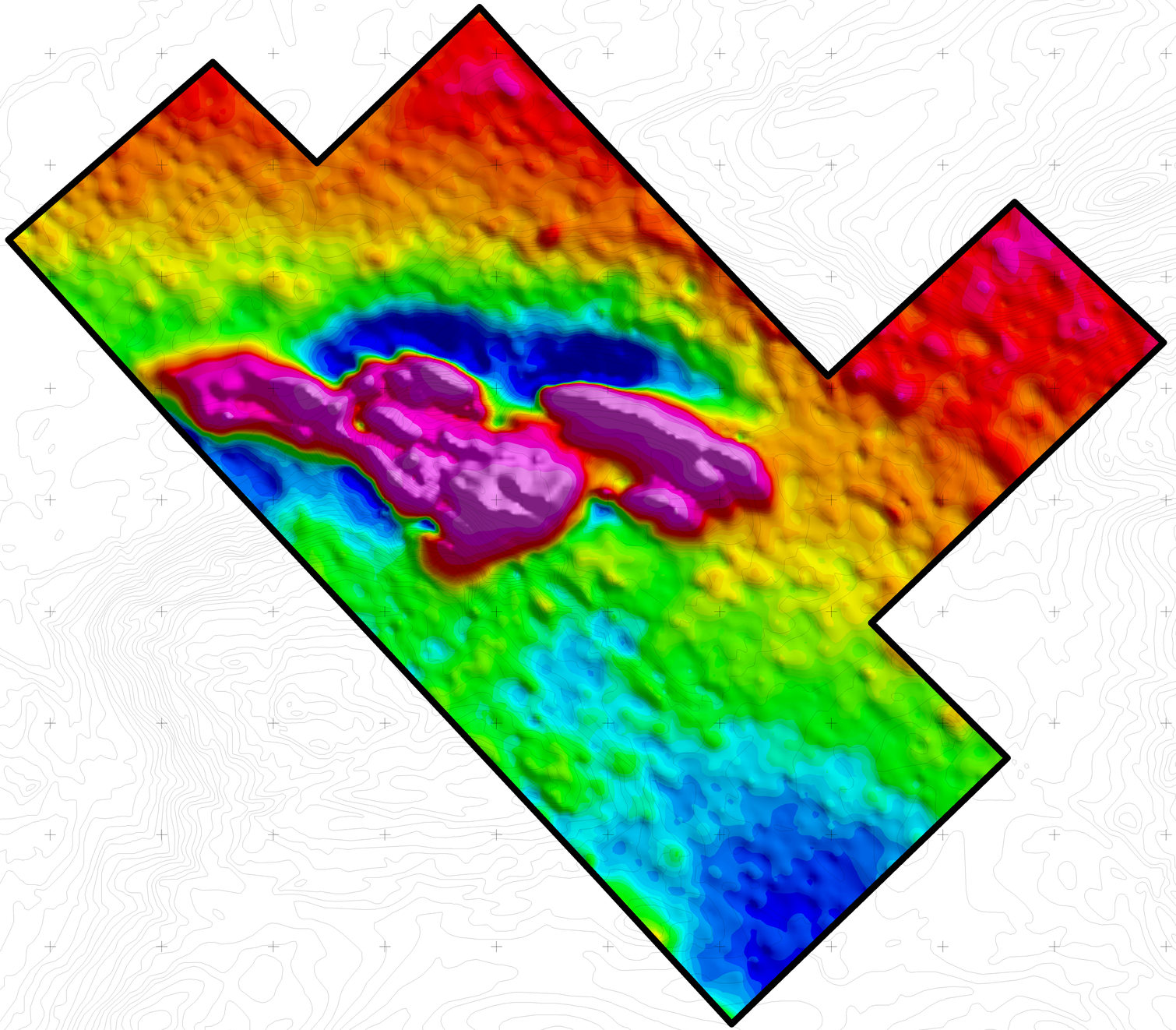
Job #22149_RB
August 17, 2022

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

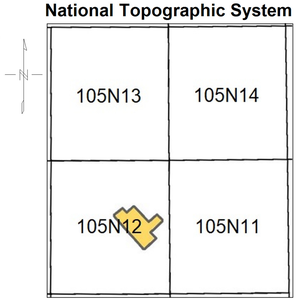
Plate 4
TMI

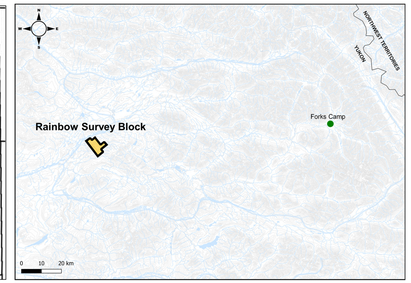
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

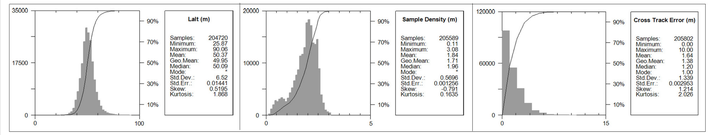
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

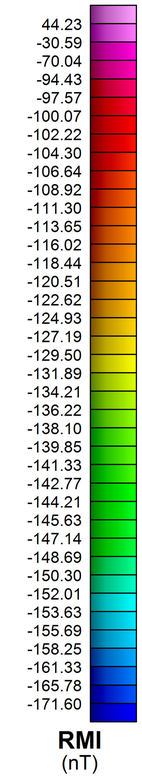


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Residual Magnetic Intensity (RMI) is derived by taking the difference between Total Magnetic Intensity (TMI) and IGRF. Refer to report for details. RMI is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Residual Magnetic Intensity

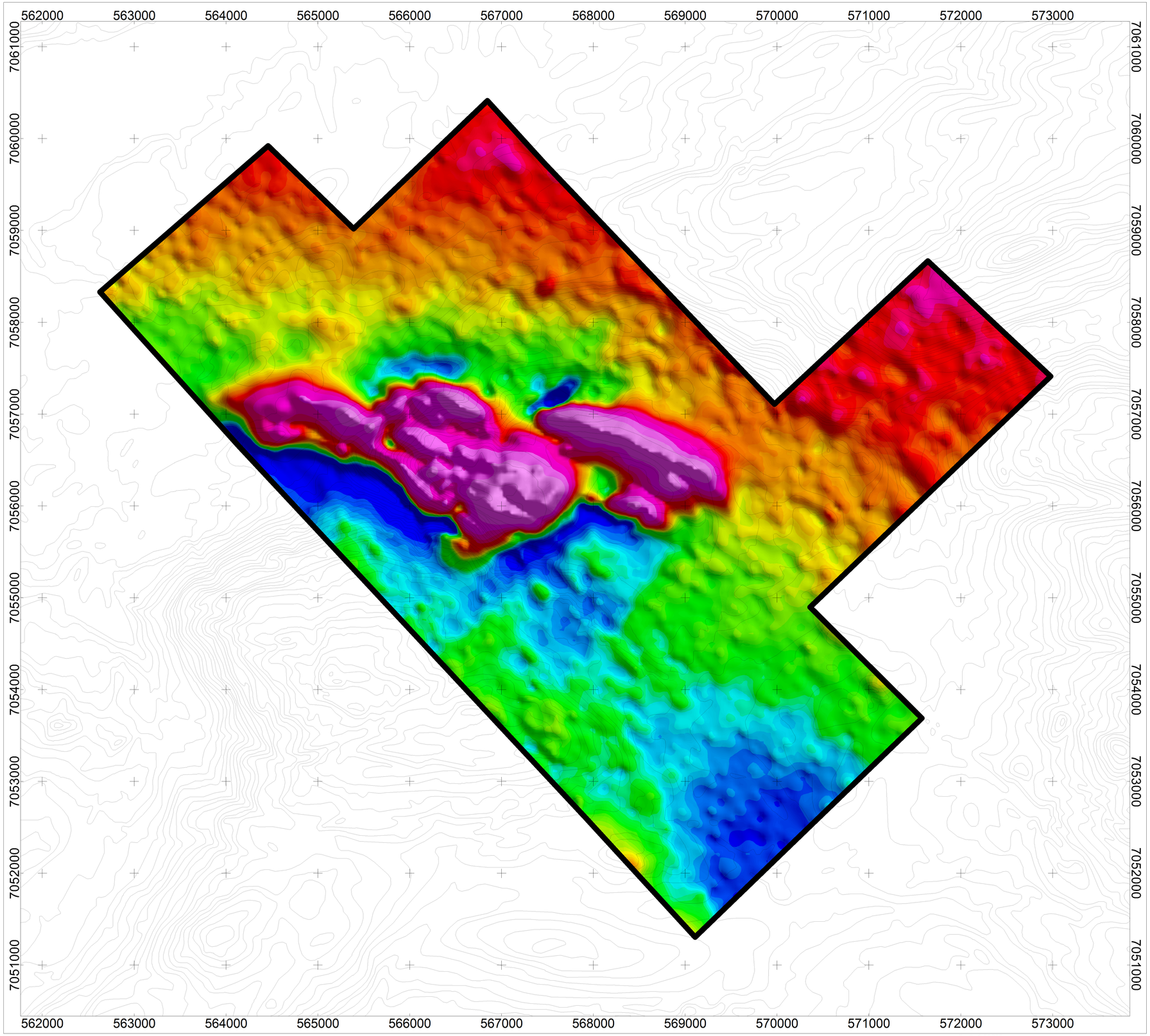
Precision GeoSurveys

Scale 1:20000

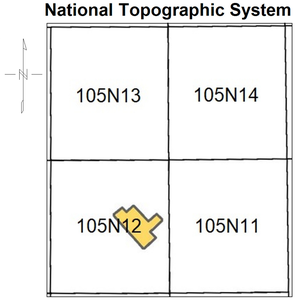
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

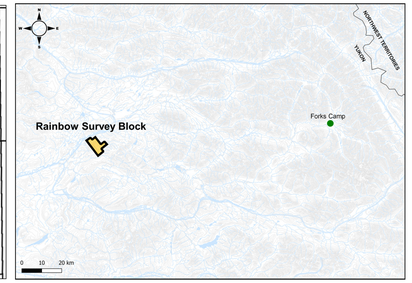
Job #22149_RB
August 17, 2022

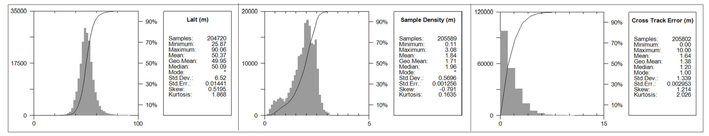
Plate 5
RMI

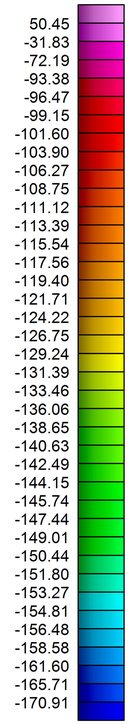


National Topographic System









RTP
(nT)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Reduced to Magnetic Pole (RTP) is computed from Residual Magnetic Intensity (RMI). Refer to report for details. RTP is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Reduced to Magnetic Pole

Precision GeoSurveys

Scale 1:20000

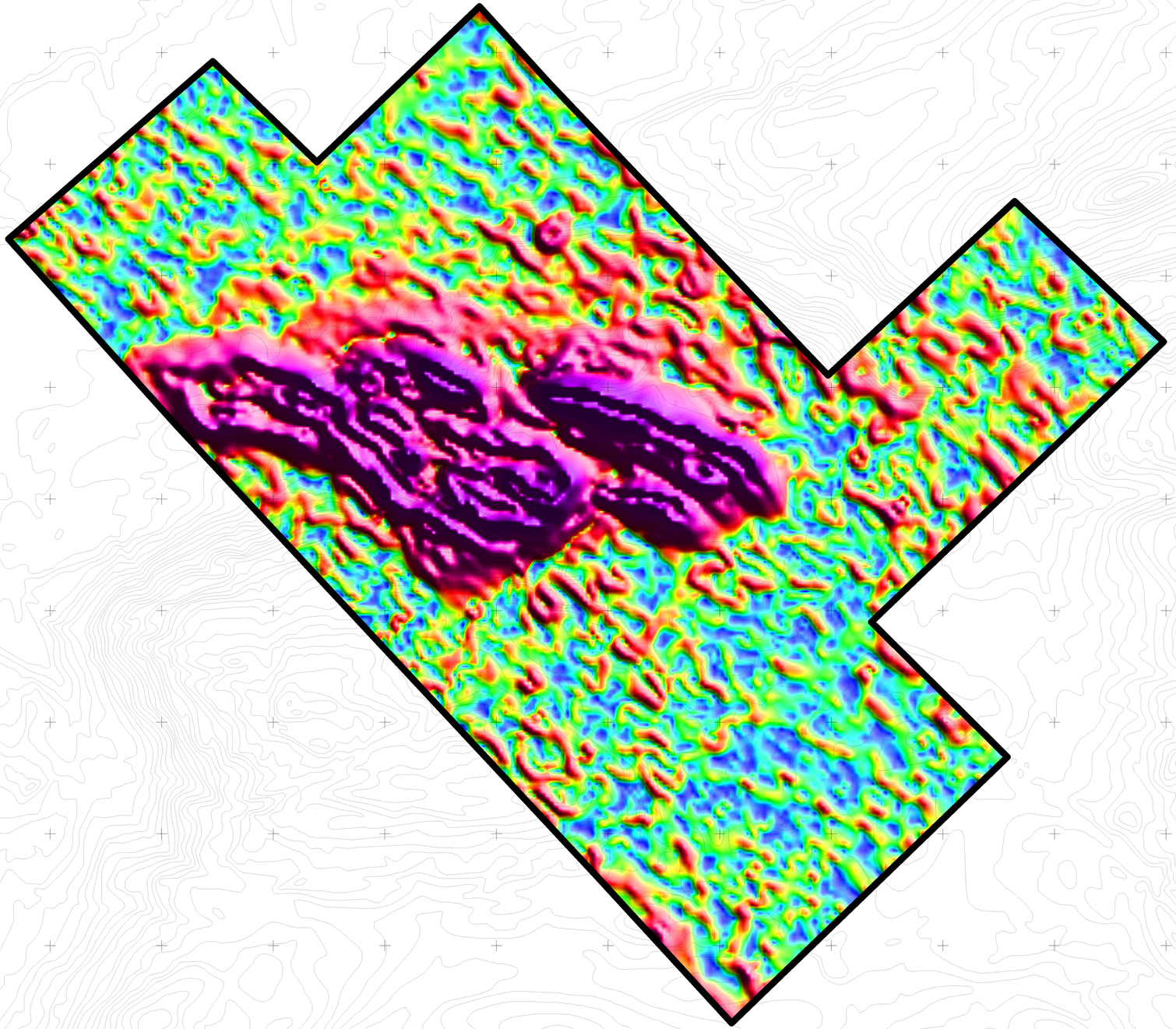
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

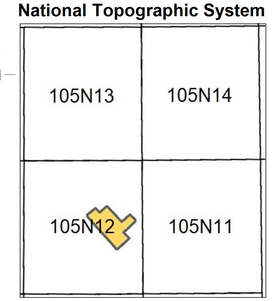
Plate 6
RTP

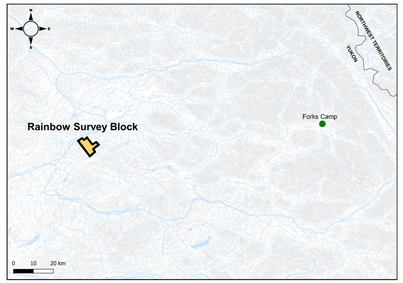
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

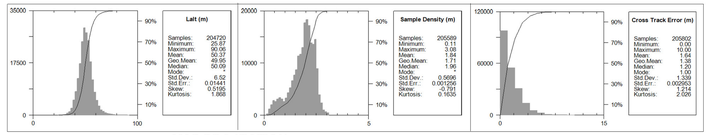
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

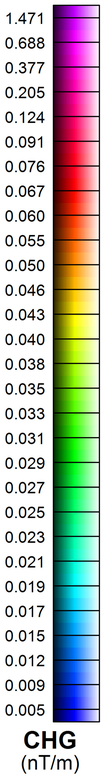


National Topographic System









CHG
(nT/m)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Calculated Horizontal Gradient (CHG) is the magnitude of the horizontal components of Residual Magnetic Intensity (RMI). Refer to report for details. CHG is represented as a grid and drawn with a histogram-equalized wet-look colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information. URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Calculated Horizontal Gradient

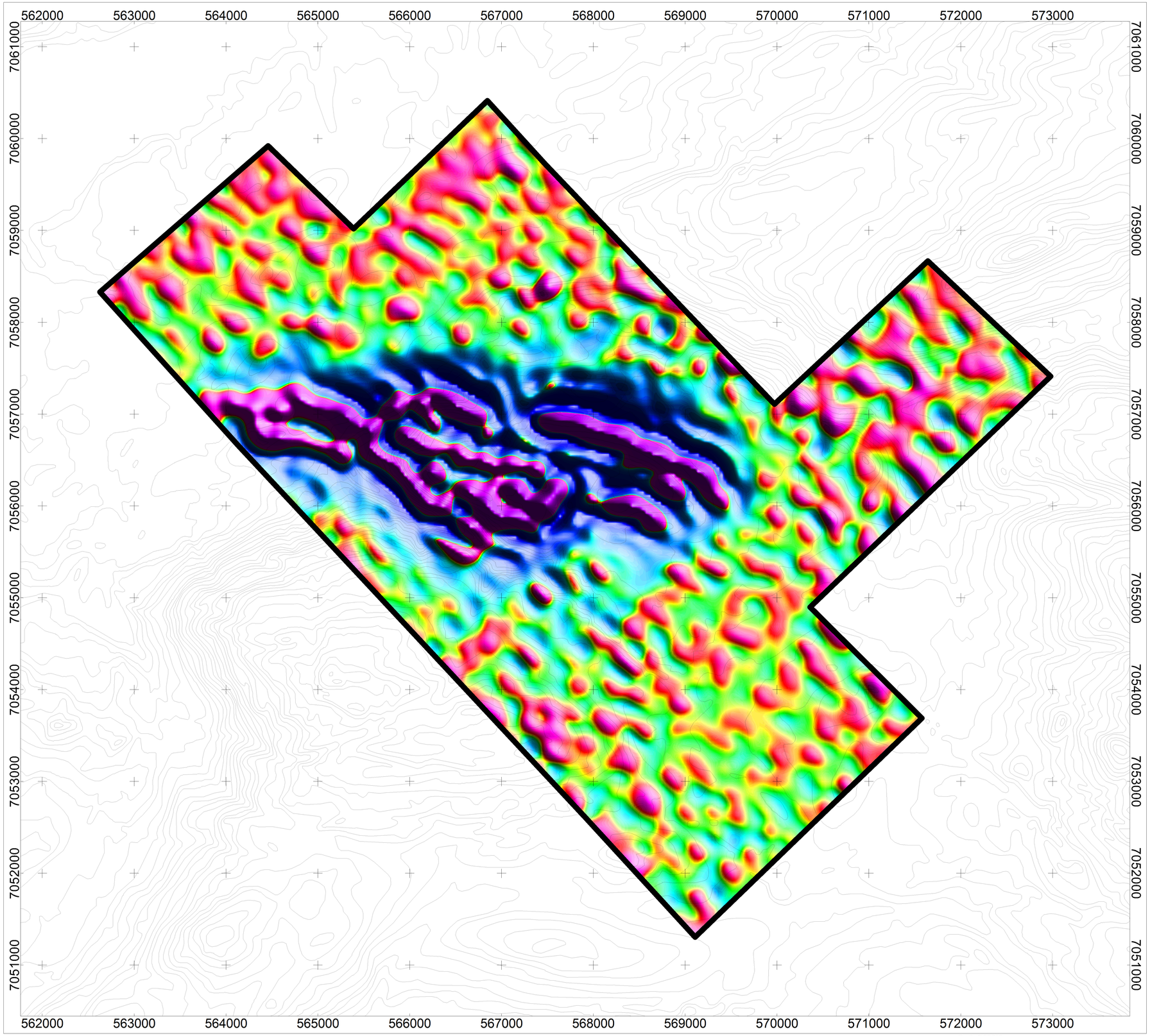
Precision GeoSurveys

Scale 1:20000

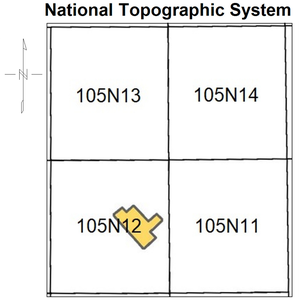
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

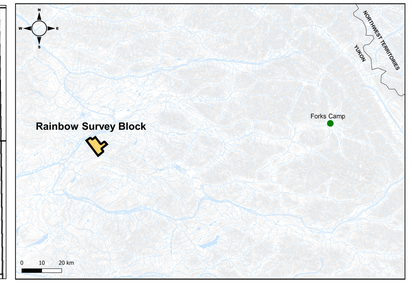
Job #22149_RB
August 17, 2022

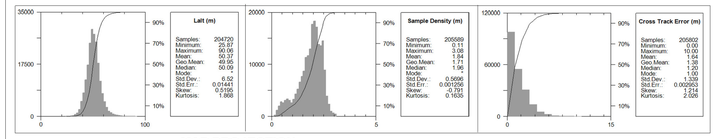
Plate 7
CHG

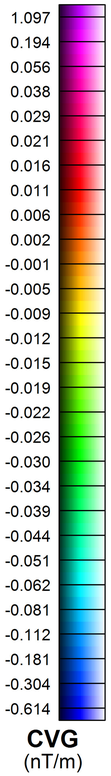


National Topographic System









CVG
(nT/m)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Calculated Vertical Gradient (CVG) is the first order vertical component of Residual Magnetic Intensity (RMI). Refer to report for details. CVG is represented as a grid and drawn with a histogram-equalized wet-look colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Calculated Vertical Gradient

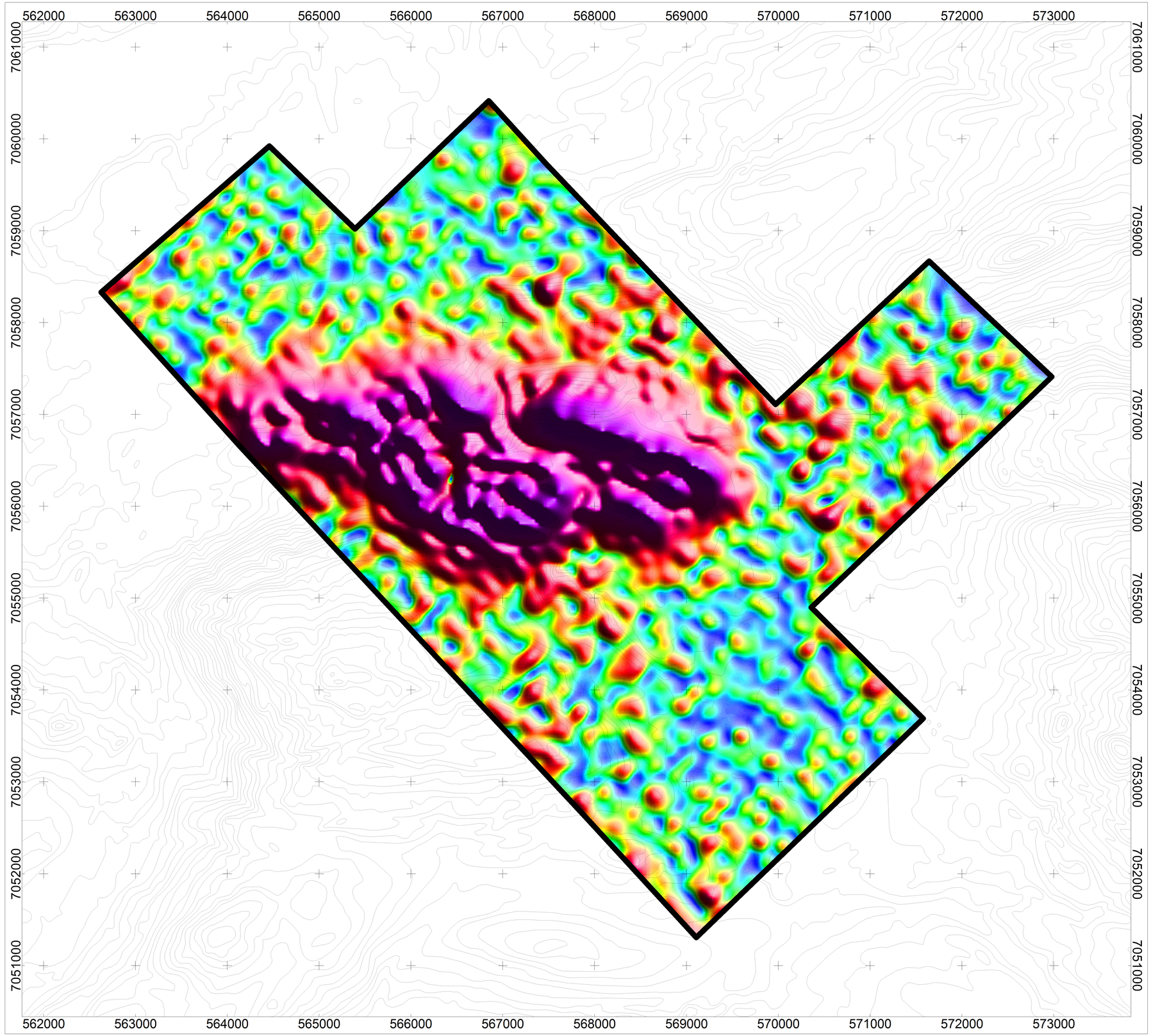
Precision GeoSurveys

Scale 1:20000

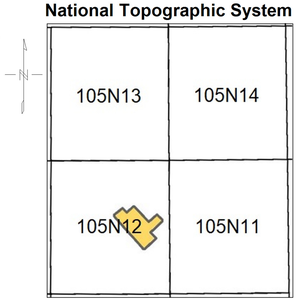
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

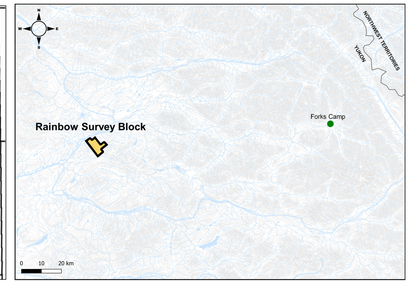
Job #22149_RB
August 17, 2022

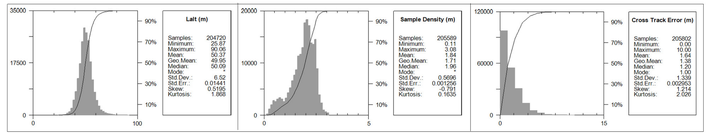
Plate 8
CVG

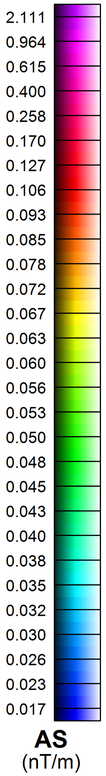


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Analytic signal (AS) is the square root of the sum of the squares of the vertical and horizontal gradients. Refer to report for details. AS is represented as a grid and drawn with a histogram-equalized wet-look colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Analytic Signal

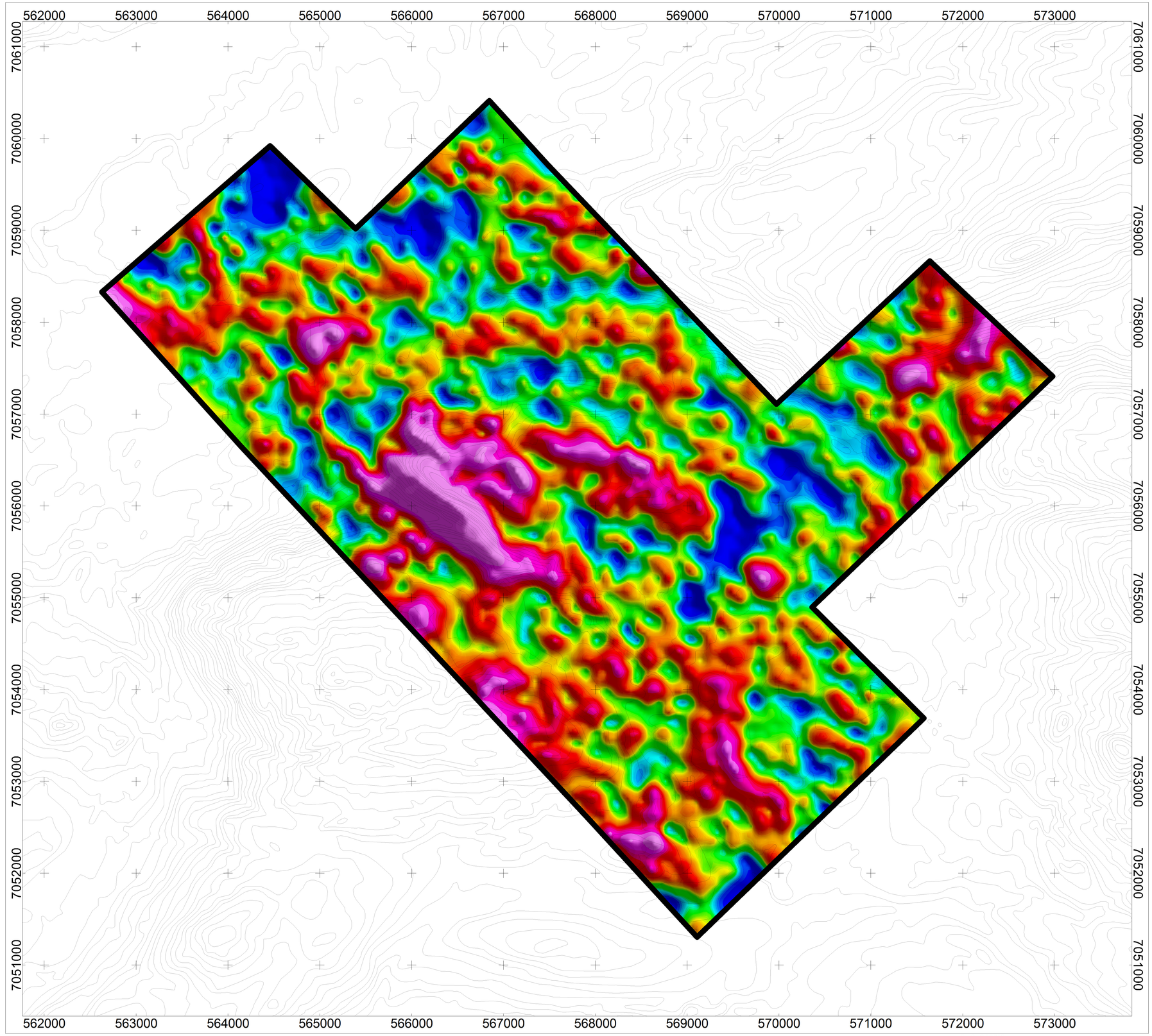
Precision GeoSurveys

Scale 1:20000

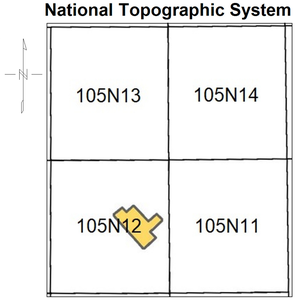
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

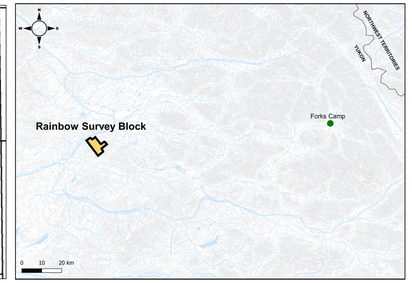
Job #22149_RB
August 17, 2022

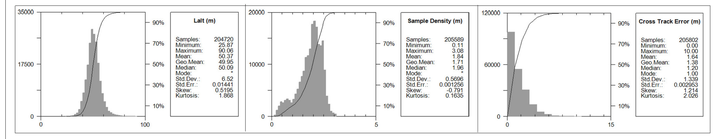
Plate 9
AS

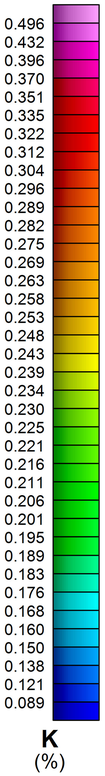


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....
Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Potassium - Percentage

Precision GeoSurveys

Scale 1:20000

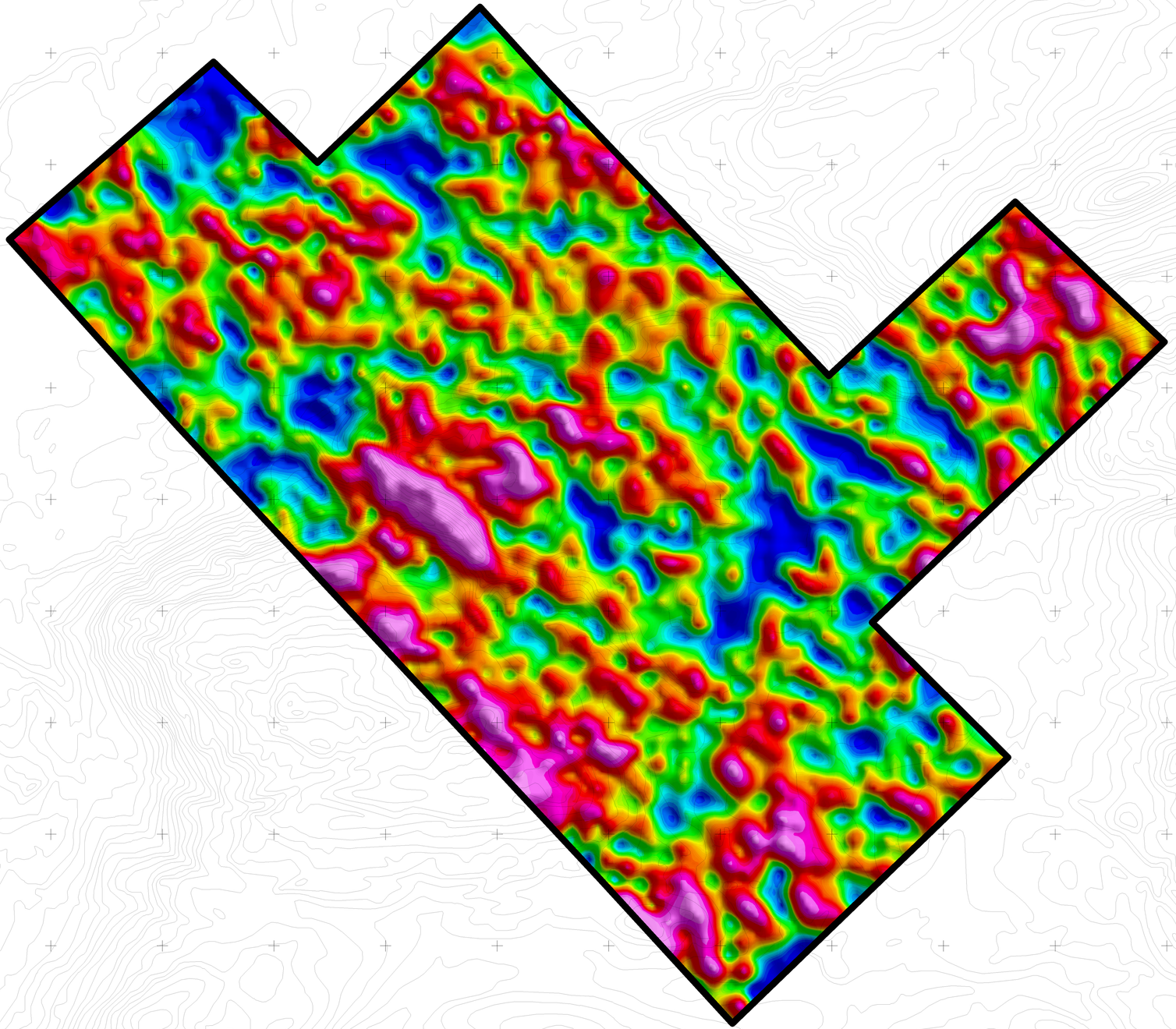
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

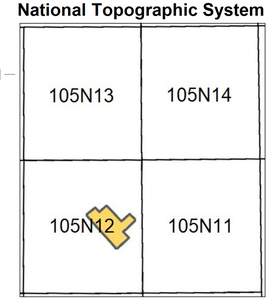
Plate 10
%K

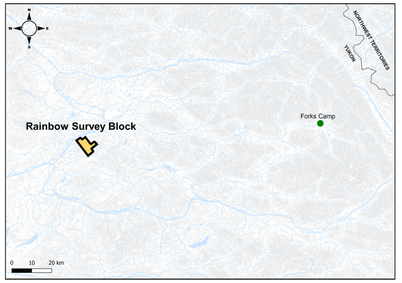
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

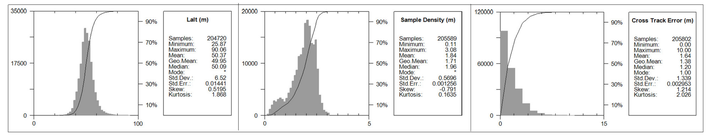
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

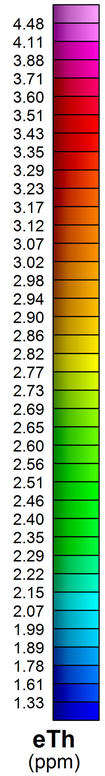


National Topographic System









eTh
(ppm)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

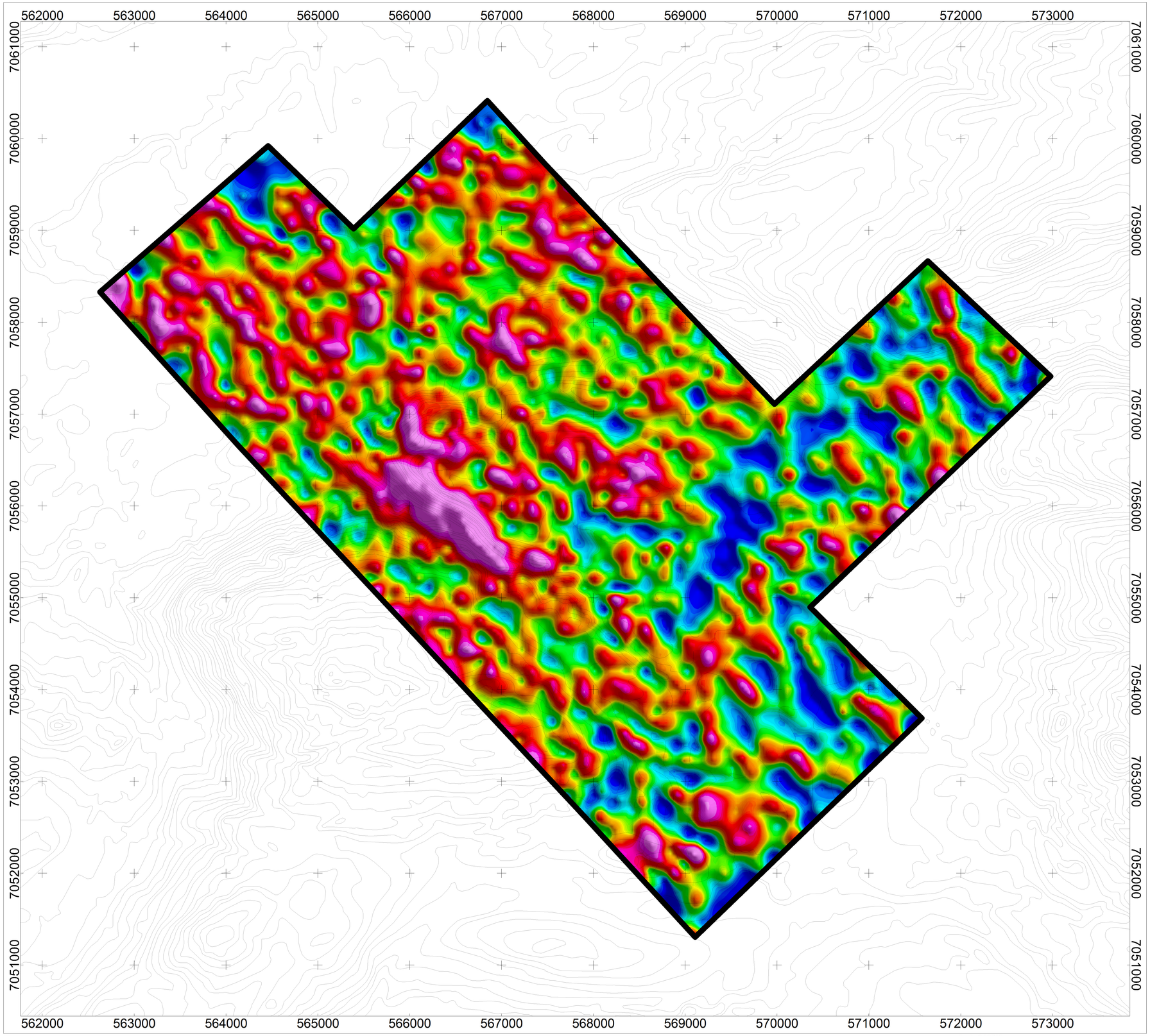
Thorium - Equivalent Concentration

Precision GeoSurveys

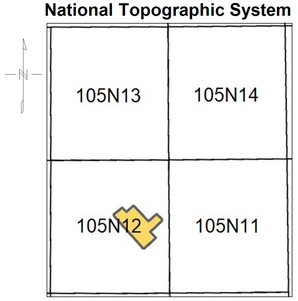
Job #22149_RB
August 17, 2022

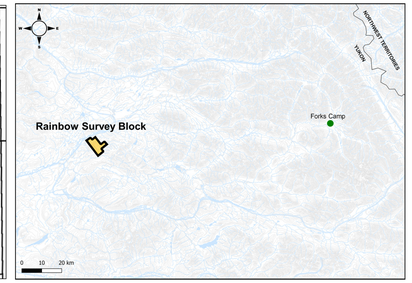
Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

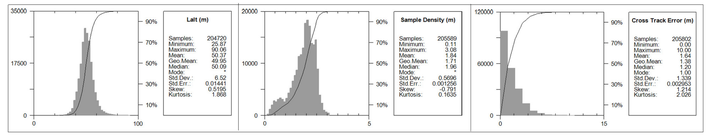
Plate 11
eTh

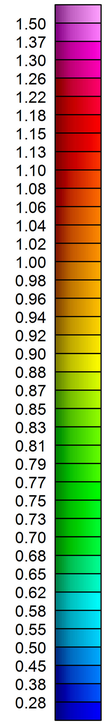


National Topographic System









eU
(ppm)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Uranium - Equivalent Concentration

Precision GeoSurveys

Scale 1:20000

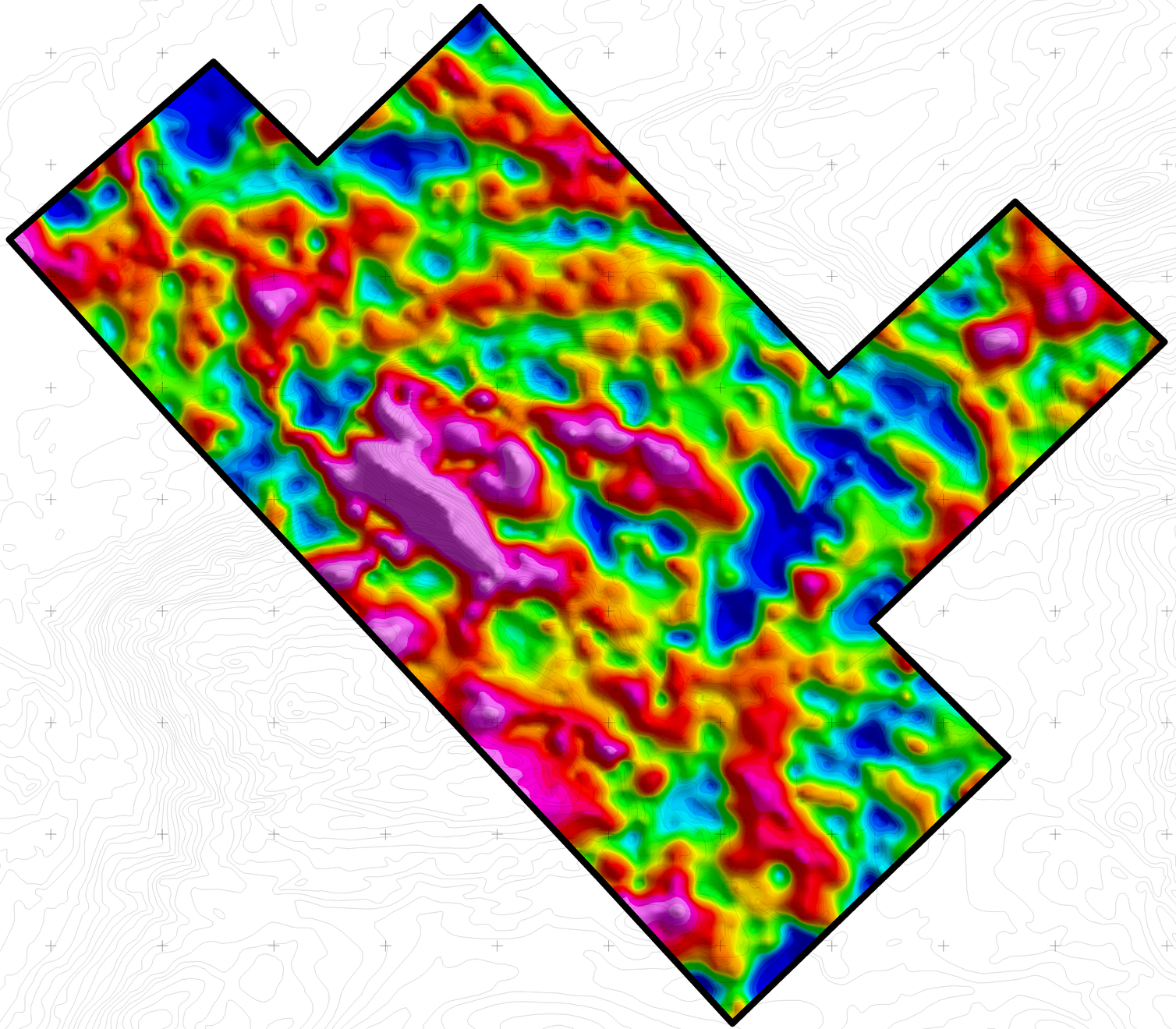
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

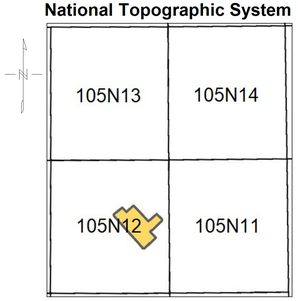
Plate 12
eU

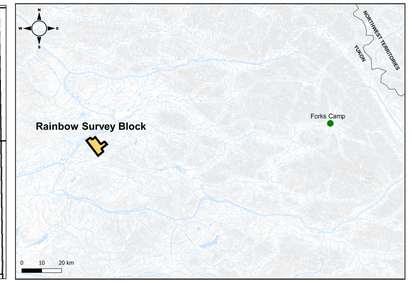
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

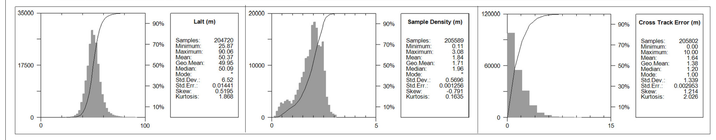
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000



National Topographic System







TC (nGy/hr)
24.45
22.69
21.49
20.62
20.00
19.51
19.11
18.77
18.49
18.24
17.99
17.75
17.52
17.31
17.09
16.88
16.69
16.50
16.31
16.12
15.93
15.75
15.57
15.39
15.21
15.01
14.81
14.60
14.39
14.14
13.89
13.62
13.28
12.89
12.41
11.83
10.93
9.19

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

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URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Total Count

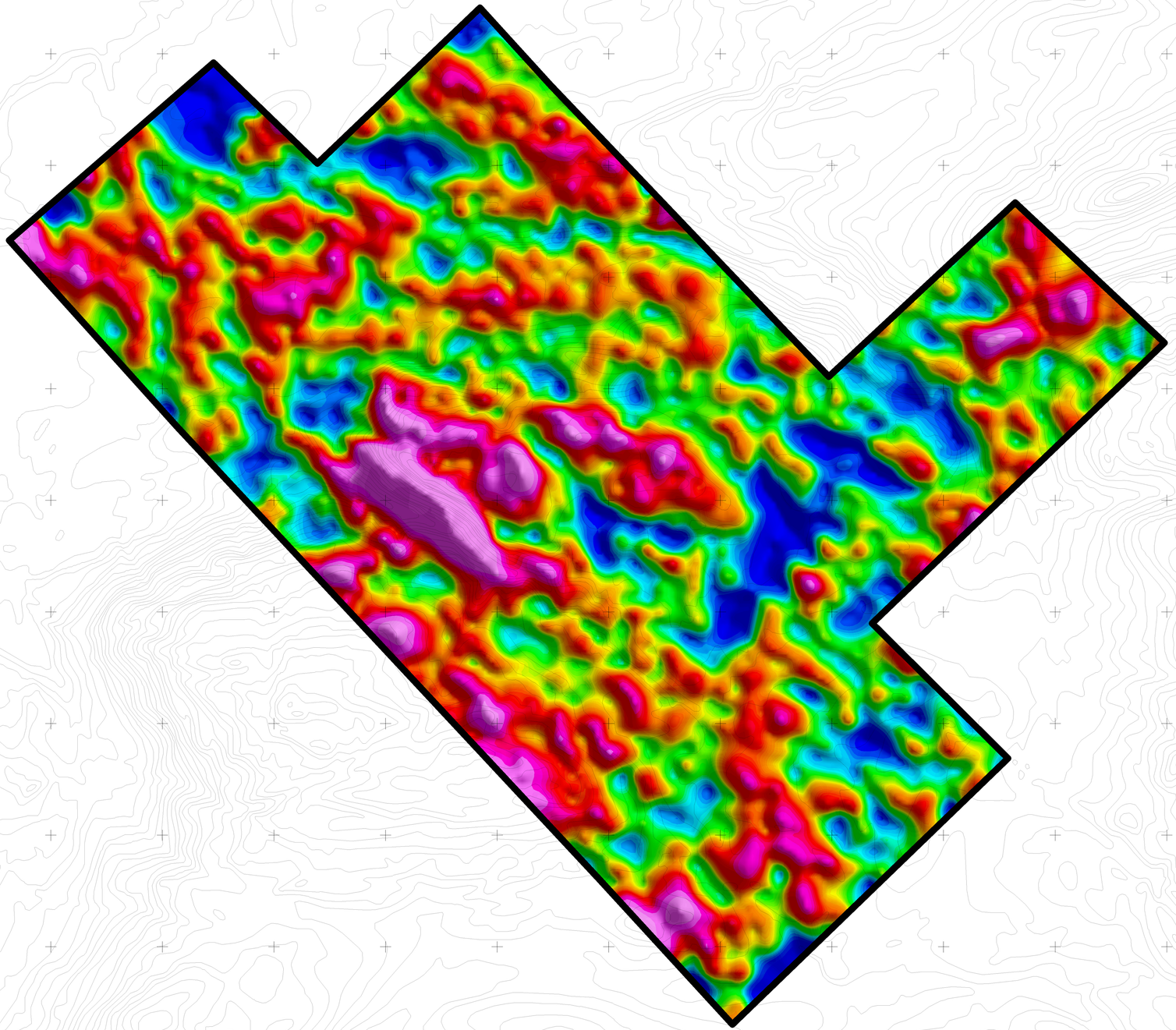
Precision GeoSurveys

Job #22149_RB
August 17, 2022

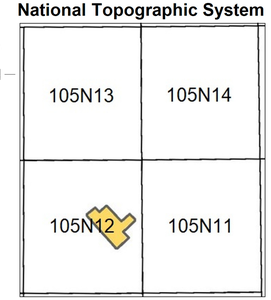
Plate 13
TC

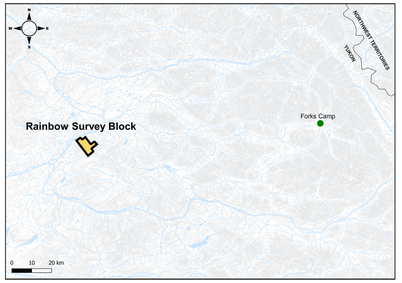
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

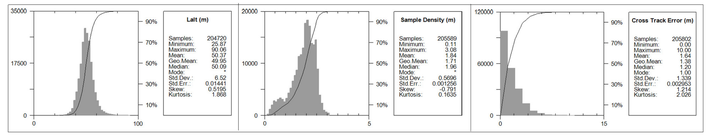
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

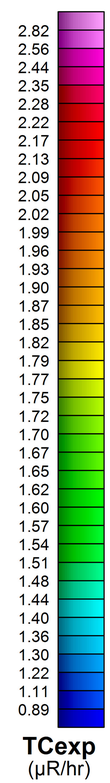


National Topographic System









TCexp
(µR/hr)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Total Count - Exposure Rate

Precision GeoSurveys

Scale 1:20000

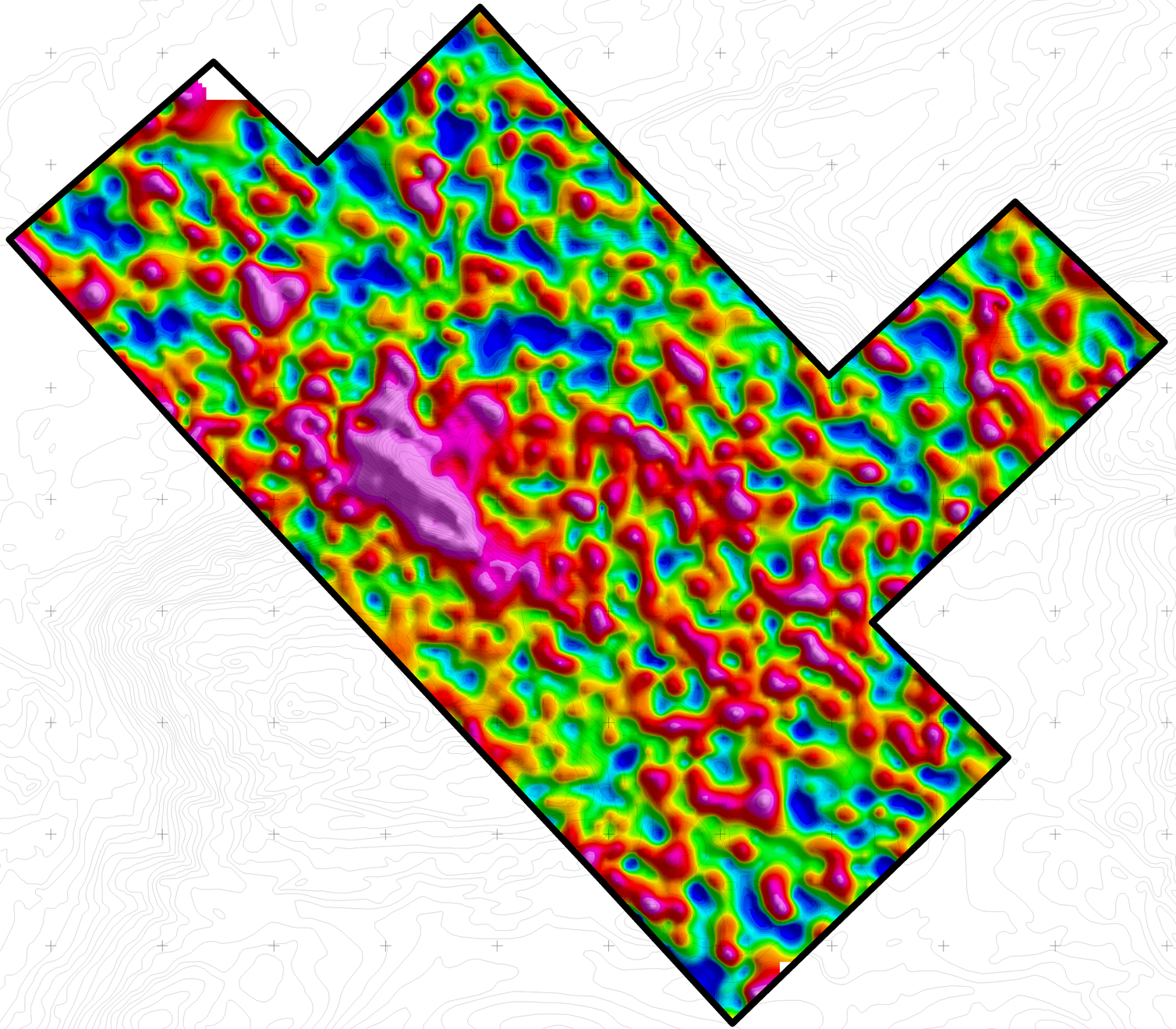
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

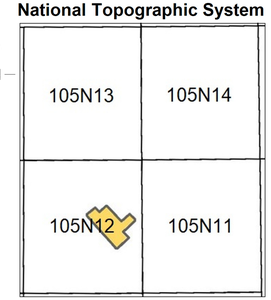
Plate 14
TCexp

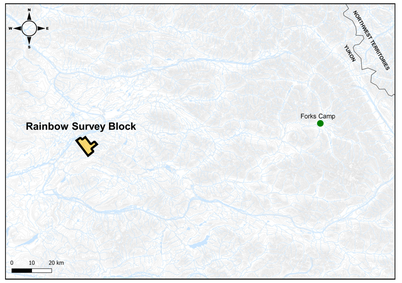
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

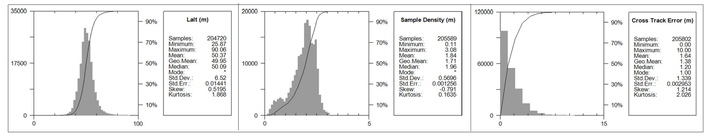
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

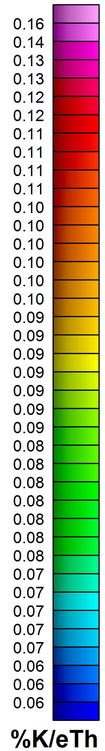


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Potassium over Thorium Ratio

Precision GeoSurveys

Scale 1:20000

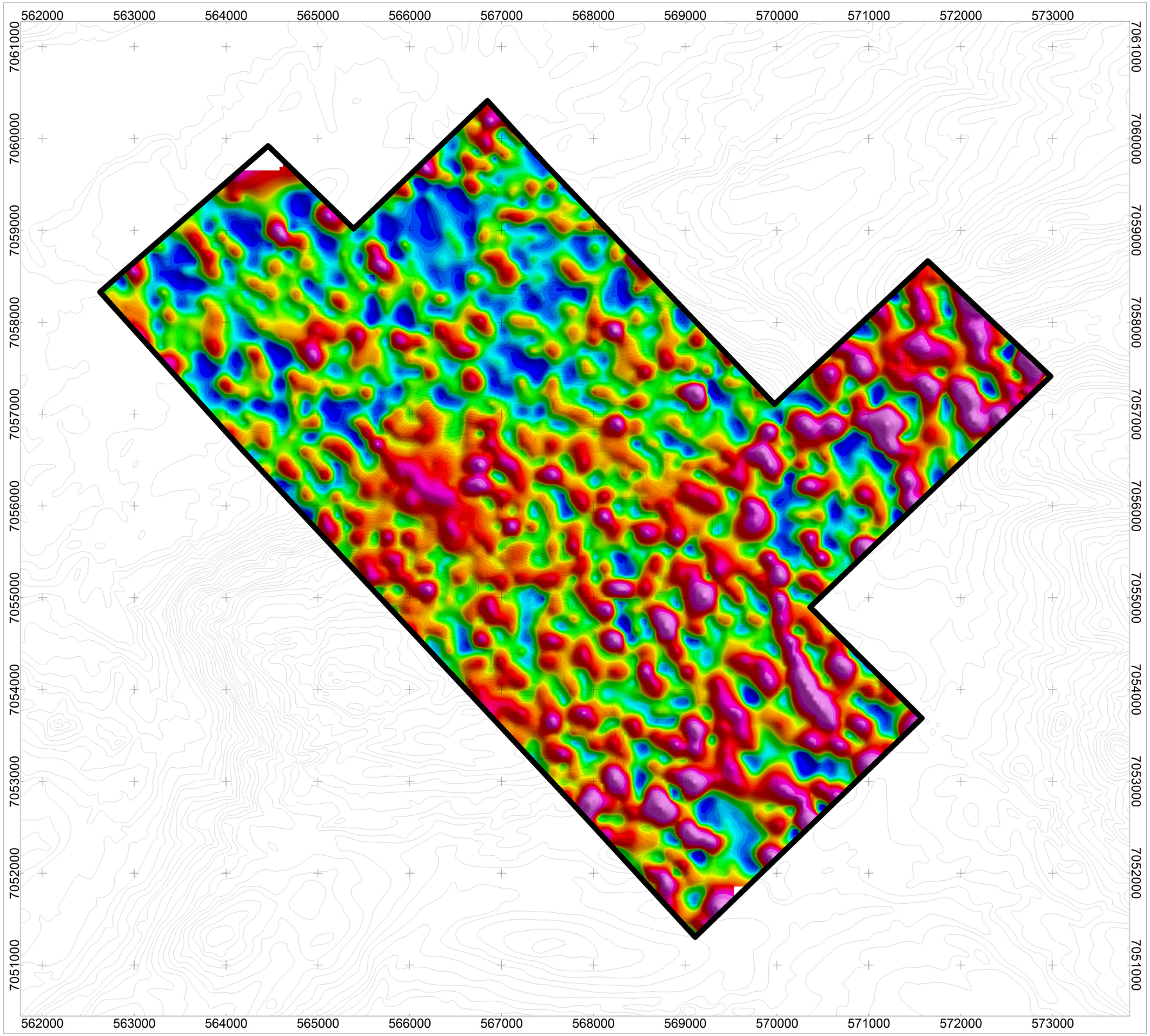
250 0 250 500 750 1000 1250 1500

(meters)

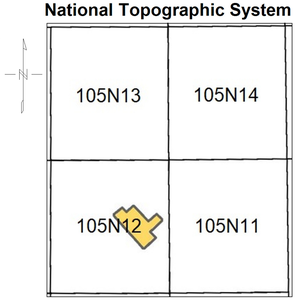
WGS 84 / UTM zone 8N

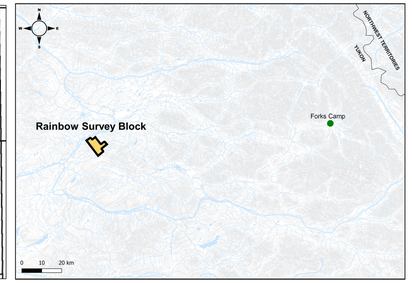
Job #22149_RB
August 17, 2022

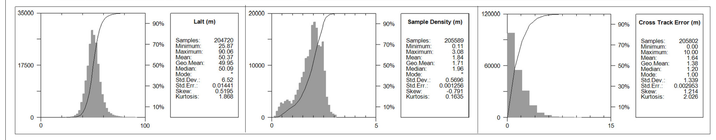
Plate 15
%K/eTh

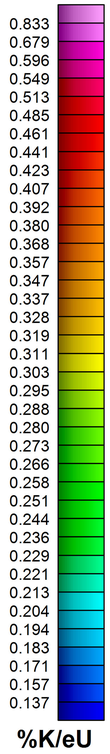


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

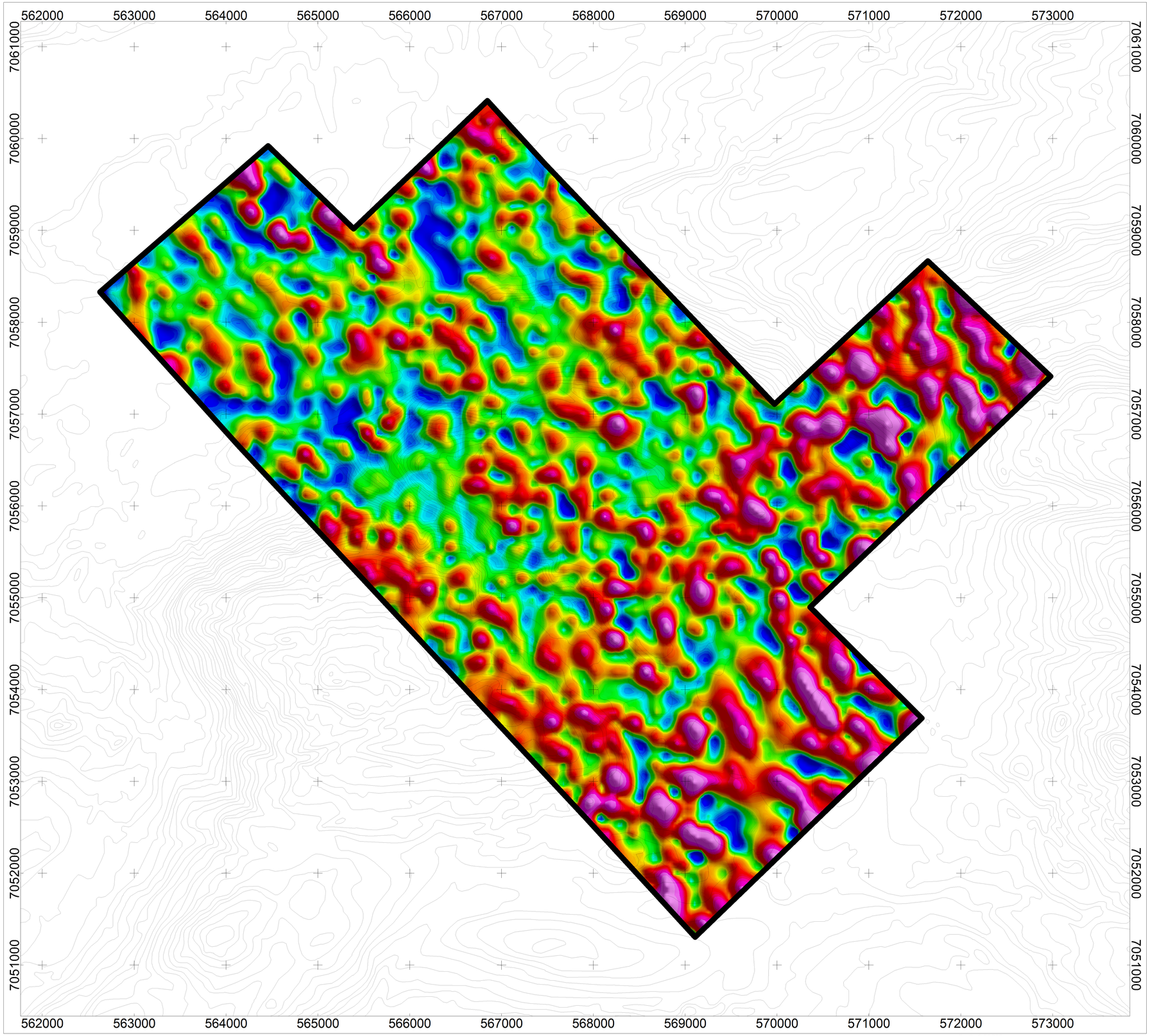
Potassium over Uranium Ratio

Precision GeoSurveys

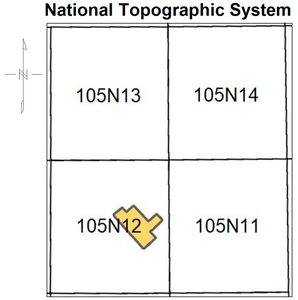
Job #22149_RB
August 17, 2022

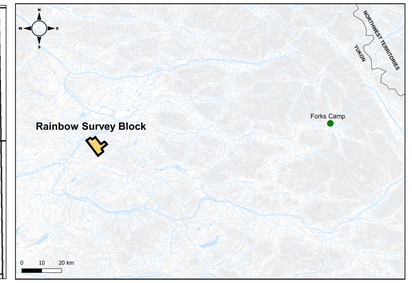
Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

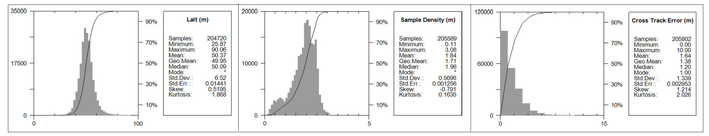
Plate 16
%K/eU

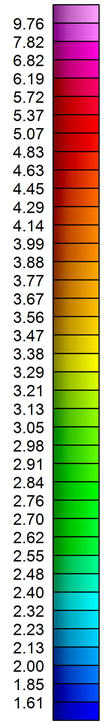


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

SNOWLINE GOLD CORP

Rainbow

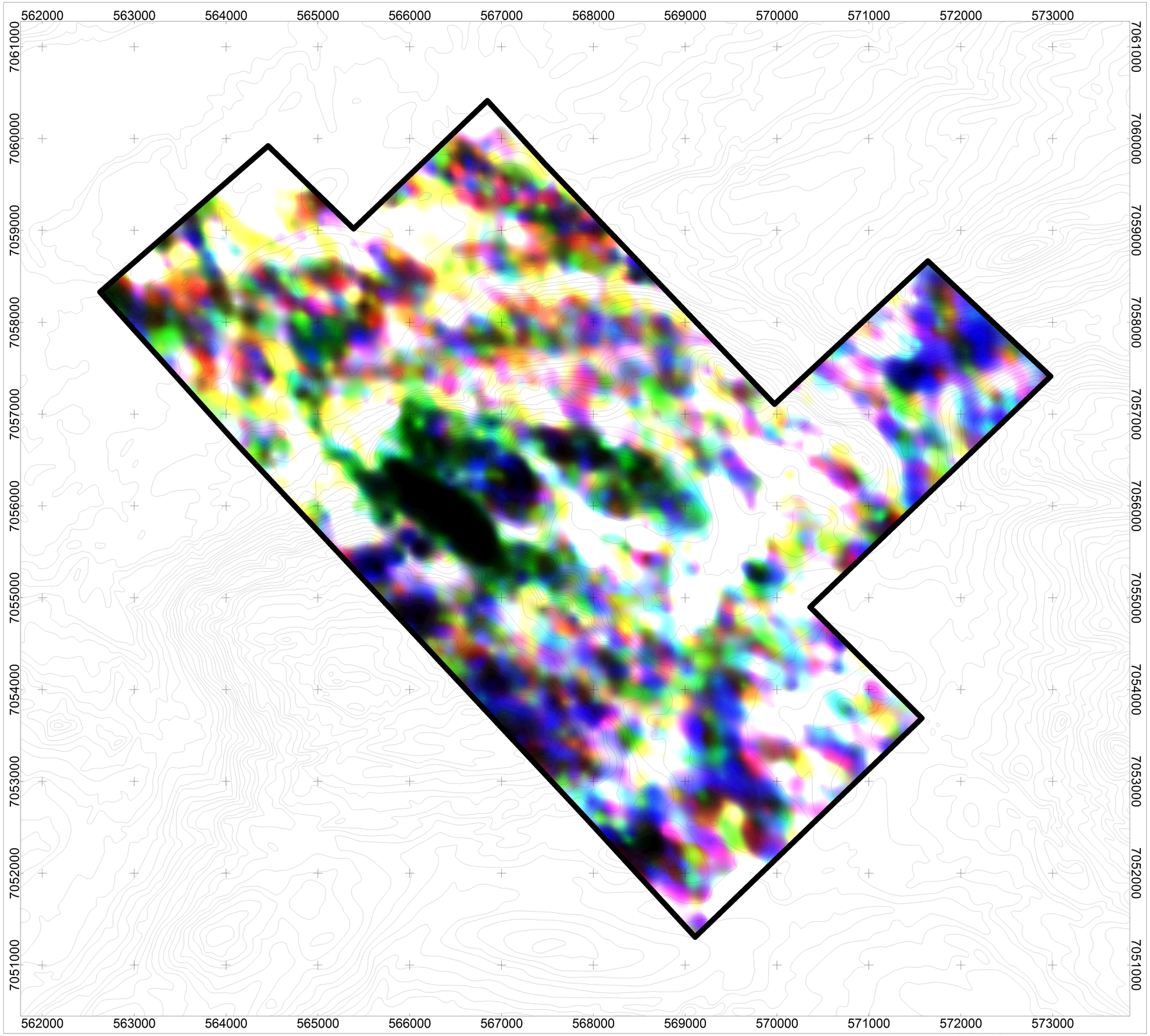
Radiometric Map

Thorium over Uranium Ratio

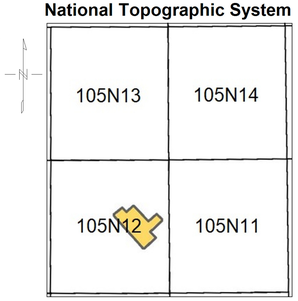
Precision GeoSurveys

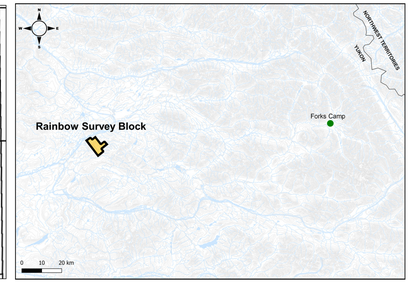
Job #22149_RB
August 17, 2022

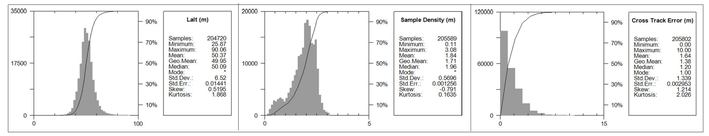
Plate 17
eTh/eU



National Topographic System







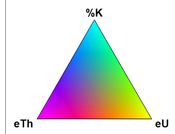
MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)



Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_mcan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Ternary Image

Precision GeoSurveys

Scale 1:20000

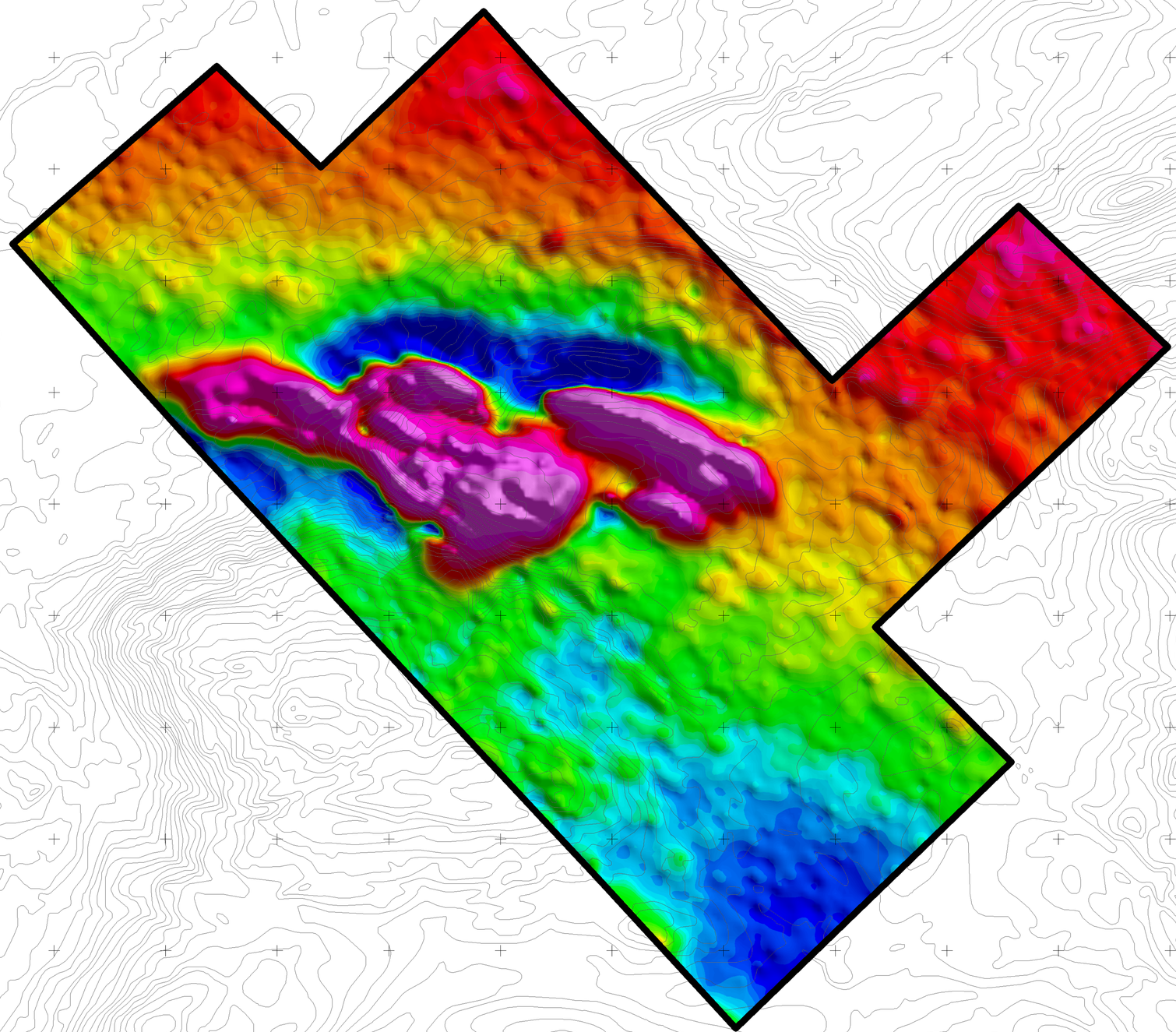
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

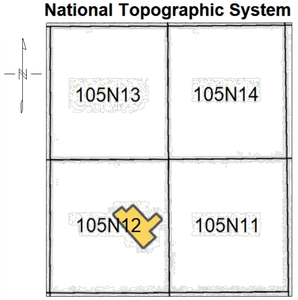
Plate 18
TI

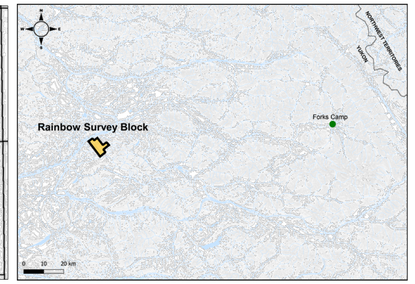
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

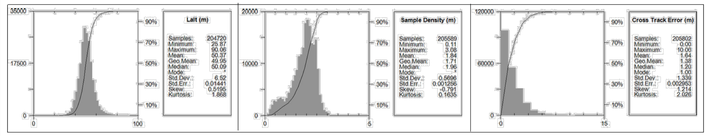
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000



National Topographic System







RMI (nT)
44.23
-30.59
-70.04
-94.43
-97.57
-100.07
-102.22
-104.30
-106.64
-108.92
-111.30
-113.65
-116.02
-118.44
-120.51
-122.62
-124.93
-127.19
-129.50
-131.89
-134.21
-136.22
-138.10
-139.85
-141.33
-142.77
-144.21
-145.63
-147.14
-148.69
-150.30
-152.01
-153.63
-155.69
-158.25
-161.33
-165.78
-171.60

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Residual Magnetic Intensity (RMI) is derived by taking the difference between Total Magnetic Intensity (TMI) and IGRF. Refer to report for details. RMI is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Residual Magnetic Intensity

Precision GeoSurveys

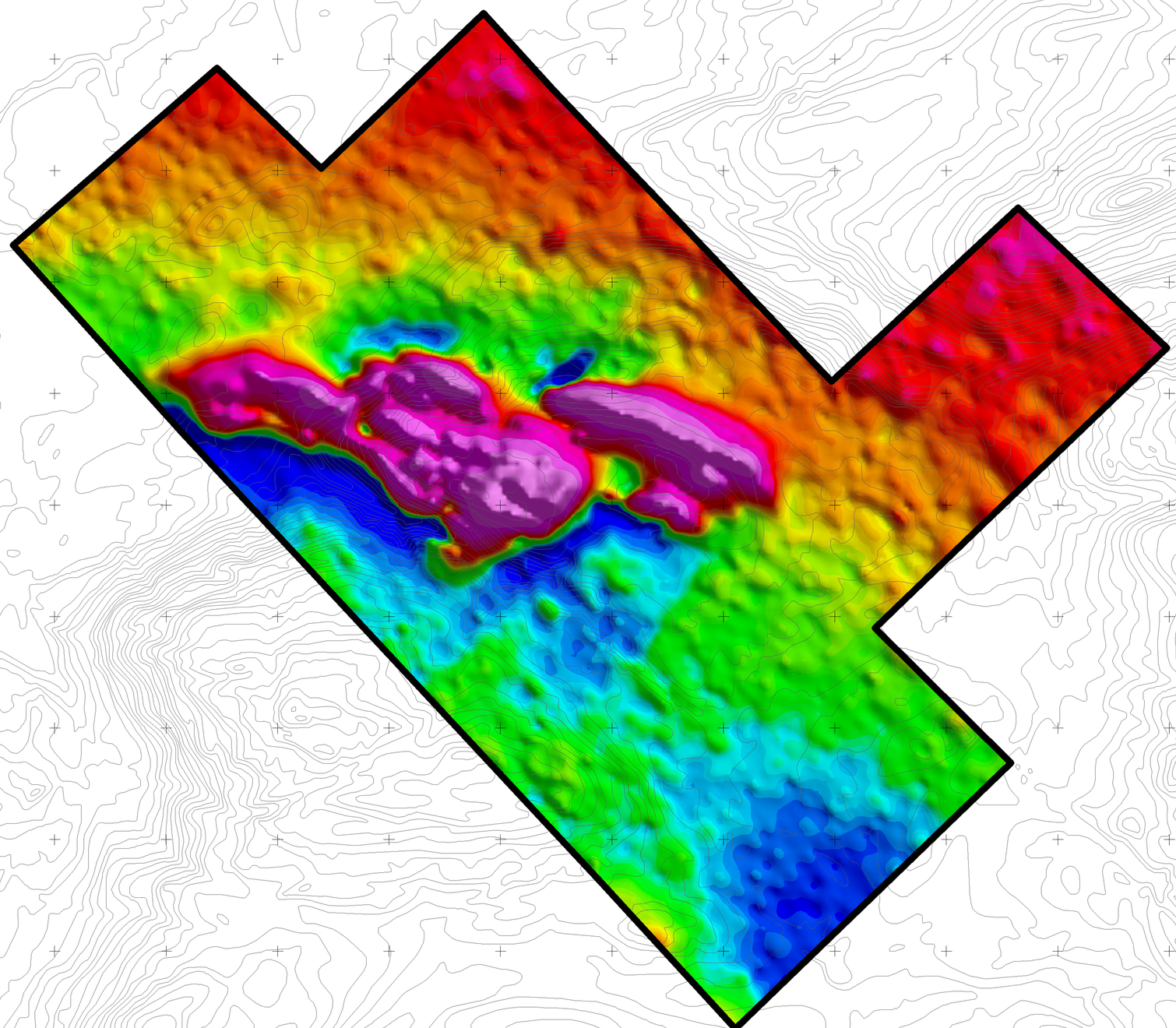
Job #22149_RB
August 17, 2022

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

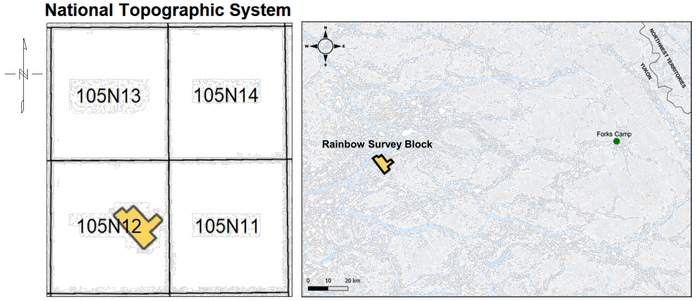
Plate 5
RMI

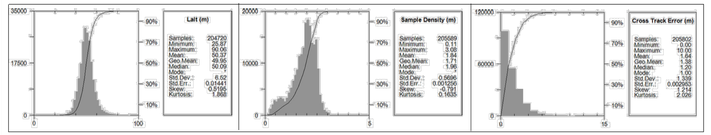
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000



National Topographic System





50.45
-31.83
-72.19
-93.38
-96.47
-99.15
-101.60
-103.90
-106.27
-108.75
-111.12
-113.39
-115.54
-117.56
-119.40
-121.71
-124.22
-126.75
-129.24
-131.39
-133.46
-136.06
-138.65
-140.63
-142.49
-144.15
-145.74
-147.44
-149.01
-150.44
-151.80
-153.27
-154.81
-156.48
-158.58
-161.60
-165.71
-170.91

RTP
(nT)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Reduced to Magnetic Pole (RTP) is computed from Residual Magnetic Intensity (RMI). Refer to report for details. RTP is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Reduced to Magnetic Pole

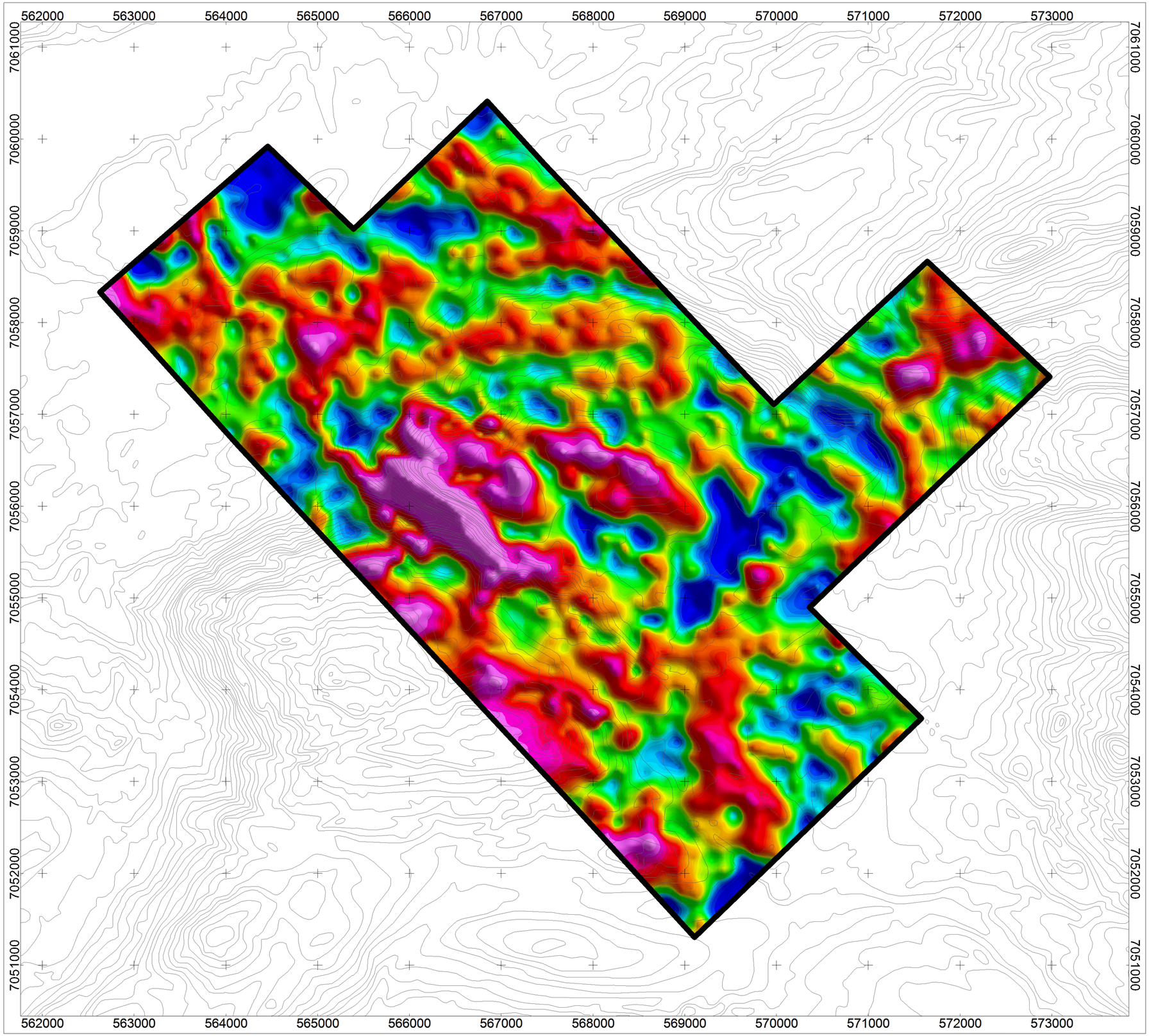
Precision GeoSurveys

Scale 1:20000

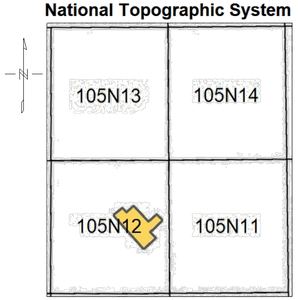
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

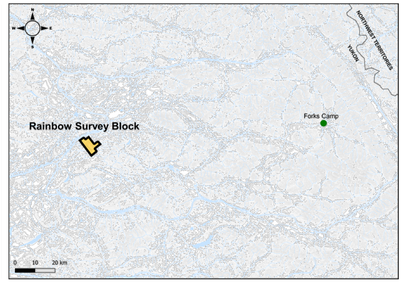
Job #22149_RB
August 17, 2022

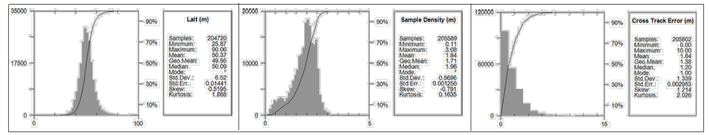
Plate 6
RTP

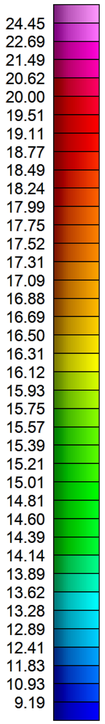


National Topographic System









TC
(nGy/hr)

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Total Count

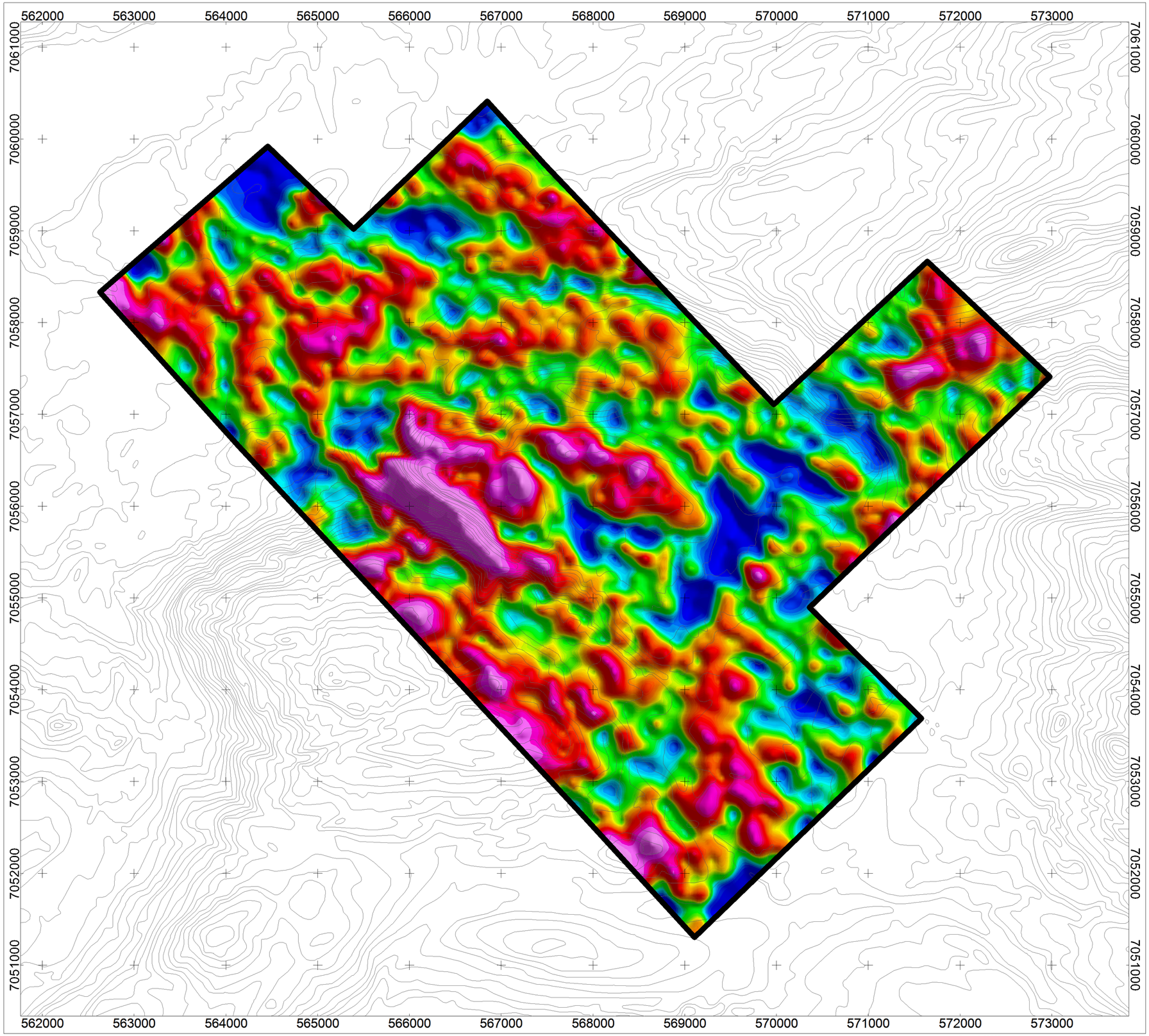
Precision GeoSurveys

Scale 1:20000

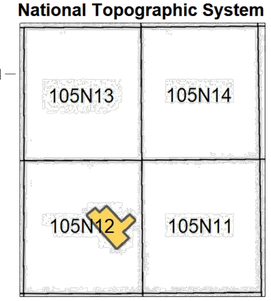
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

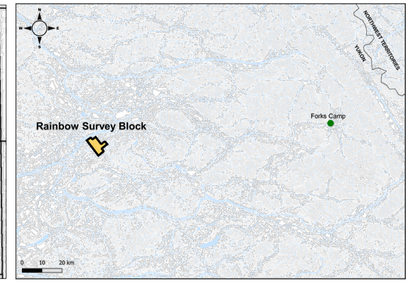
Job #22149_RB
August 17, 2022

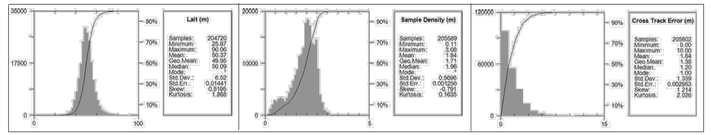
Plate 13
TC

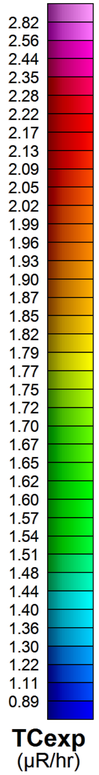


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....
Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_mcan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Total Count - Exposure Rate

Precision GeoSurveys

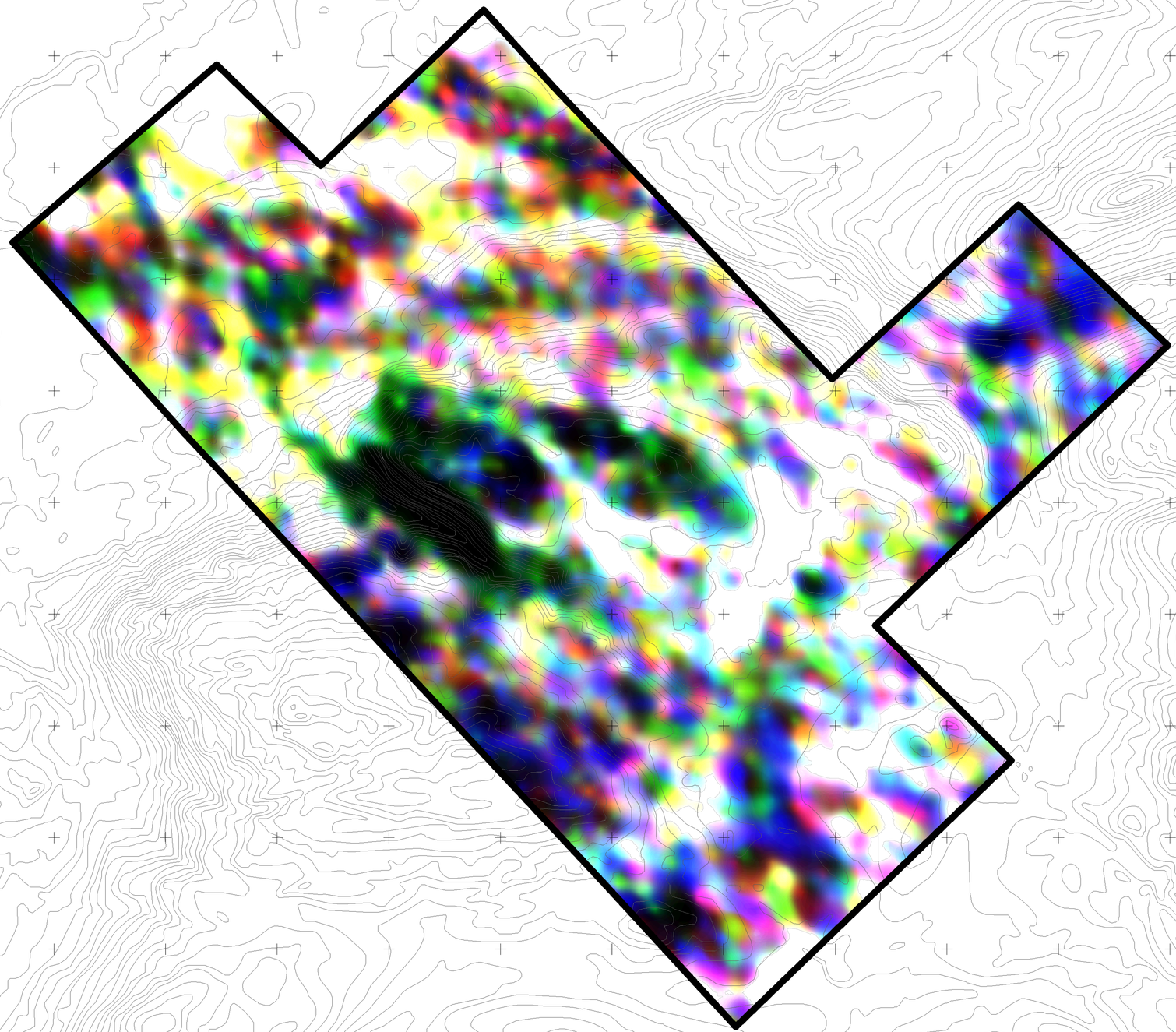
Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

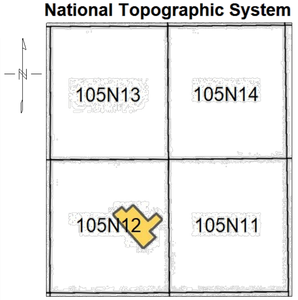
Plate 14
TCexp

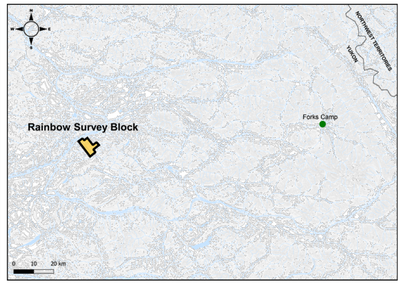
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

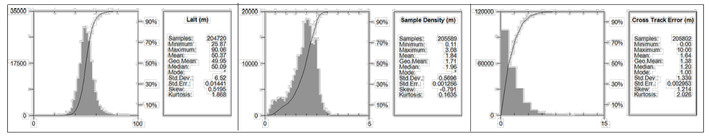
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000



National Topographic System







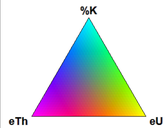
MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)



Legend

Elevation Contours, 20 m Intervals.....
Rainbow Survey Block Boundary.....

DATA REFERENCE
Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

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URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Ternary Image

Precision GeoSurveys

Scale 1:20000

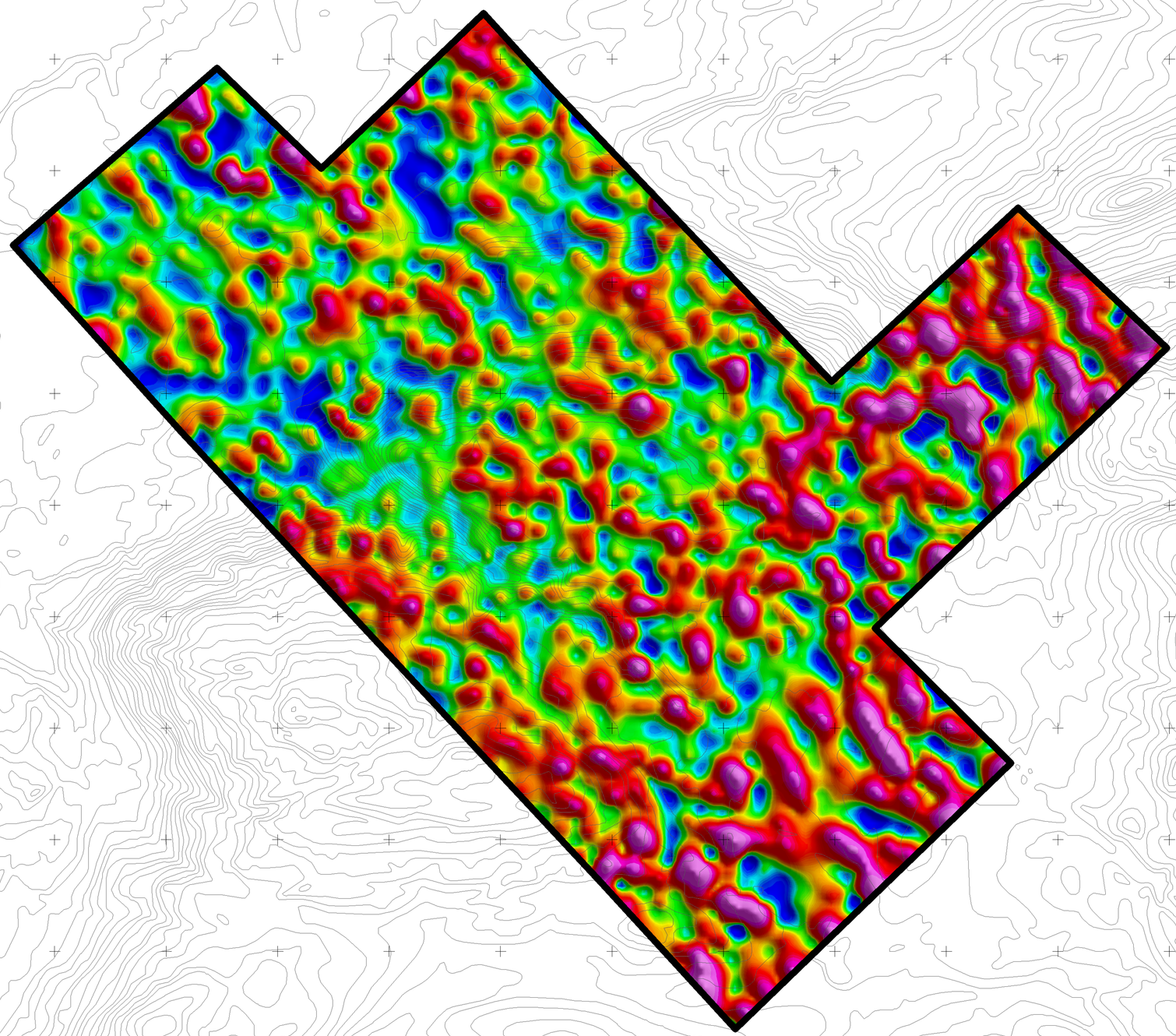
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

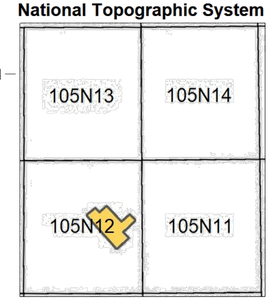
Plate 18
TI

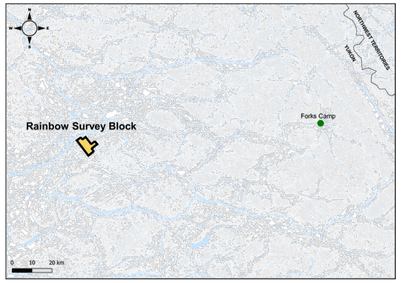
562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

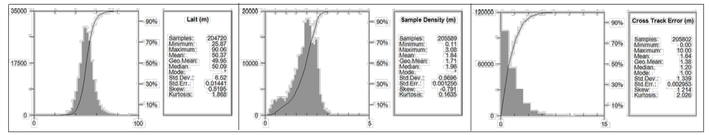
7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

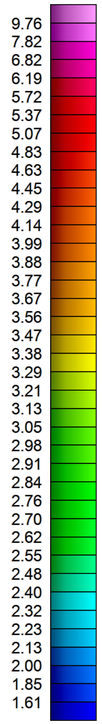


National Topographic System









eTh/eU

MAP PROJECTION

Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE

Radiometric data have been corrected for effective height, lag, aircraft, cosmic, radon, stripped ratios, and attenuations, and then converted to apparent radioelement concentrations. Refer to report for details. Radiometric data are represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

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SNOWLINE GOLD CORP

Rainbow

Radiometric Map

Thorium over Uranium Ratio

Precision GeoSurveys

Scale 1:20000

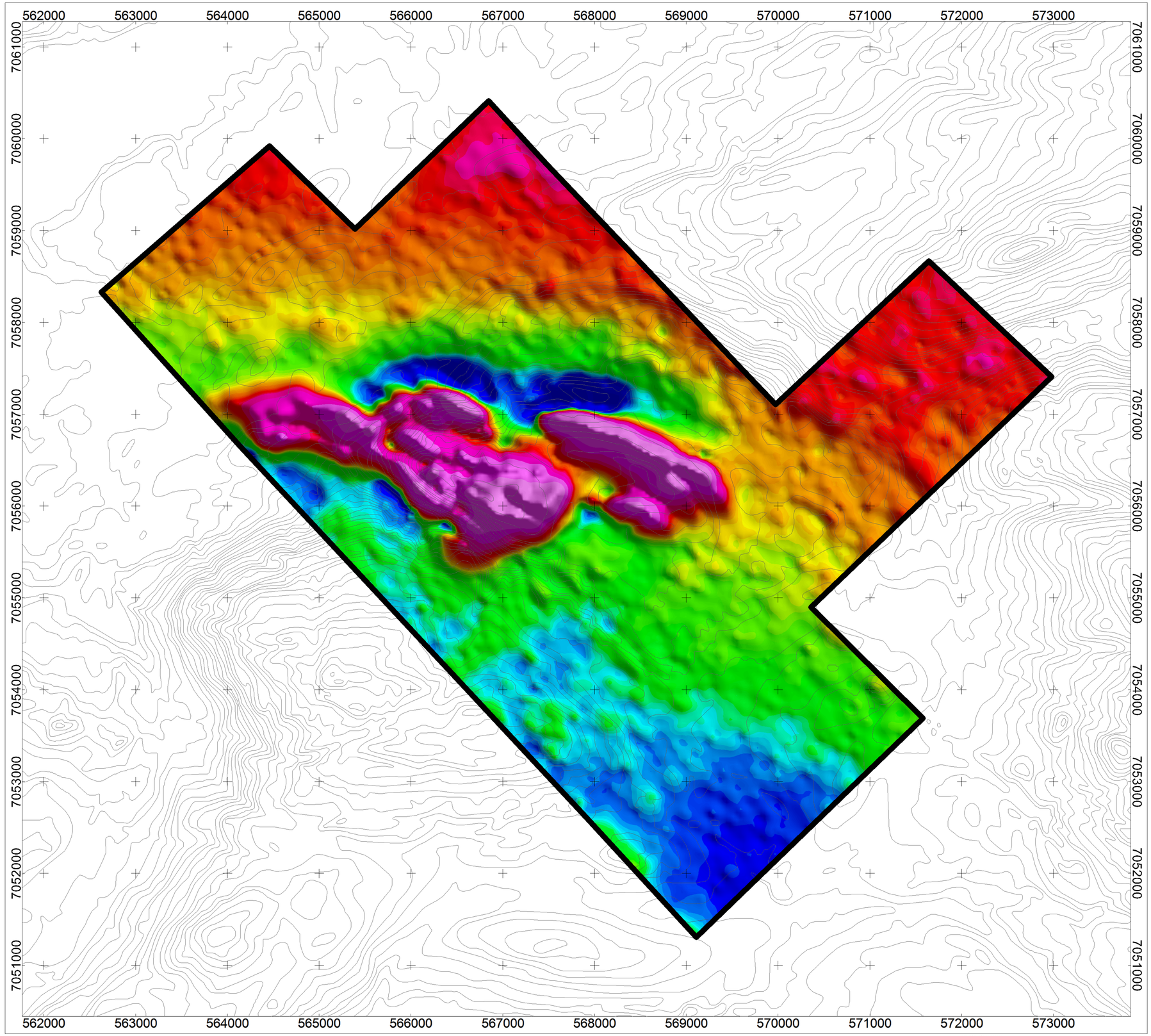
250 0 250 500 750 1000 1250 1500

(meters)

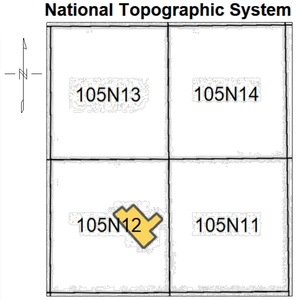
WGS 84 / UTM zone 8N

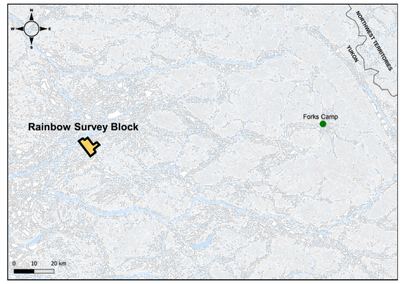
Job #22149_RB
August 17, 2022

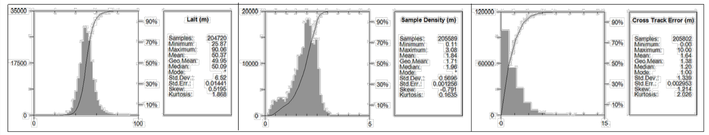
Plate 17
eTh/eU

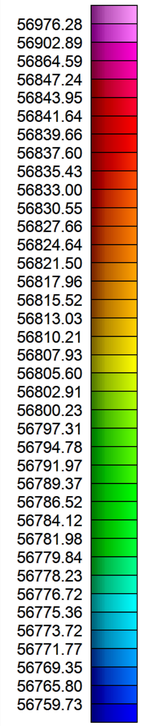


National Topographic System









MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
Total Line km:	379 km
Mean Survey Height:	50.4 meters
Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

Elevation Contours, 20 m Intervals.....

Rainbow Survey Block Boundary.....

DATA REFERENCE
Magnetic data have been compensated and corrected for temporal variations, lag, and heading; then leveled to generate the Total Magnetic Intensity (TMI) grid. Refer to report for details. TMI is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Total Magnetic Intensity

Precision GeoSurveys

Scale 1:20000

250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

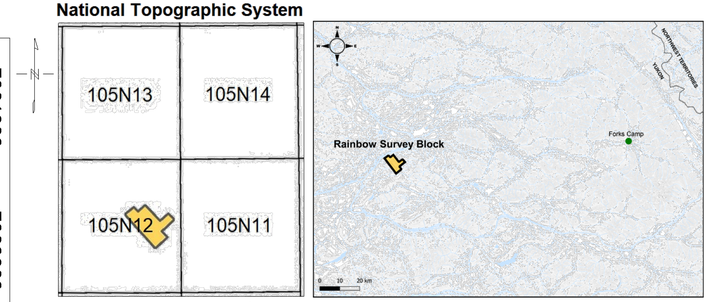
Job #22149_RB
August 17, 2022

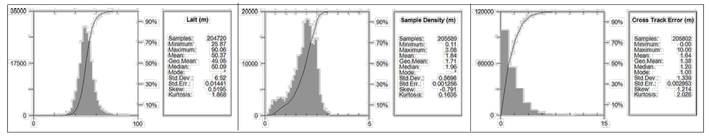
Plate 4
TMI

562000 563000 564000 565000 566000 567000 568000 569000 570000 571000 572000 573000

7061000 7060000 7059000 7058000 7057000 7056000 7055000 7054000 7053000 7052000 7051000

National Topographic System





TMI (nT)
56976.28
56902.89
56864.59
56847.24
56843.95
56841.64
56839.66
56837.60
56835.43
56833.00
56830.55
56827.66
56824.64
56821.50
56817.96
56815.52
56813.03
56810.21
56807.93
56805.60
56802.91
56800.23
56797.31
56794.78
56791.97
56789.37
56786.52
56784.12
56781.98
56779.84
56778.23
56776.72
56775.36
56773.72
56771.77
56769.35
56765.80
56759.73

MAP PROJECTION
Projection: Universal Transverse Mercator Zone 8N
Datum: WGS 84
Local Datum Transform: World

RAINBOW SURVEY SPECIFICATIONS

Survey Technology:	Magnetic and Radiometric Survey
Survey Dates:	July 26 and July 27, 2022
Survey Base:	Forks Camp, YT
Aircraft Type:	Airbus AS350 helicopter
Registration:	C-GOHK
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Survey Line Spacing:	100 / 200 meters
Survey Line Direction:	003°/183°
Tie Line Spacing:	1000 / 2000 meters
Tie Line Direction:	093°/273°

AIRBORNE SURVEY SYSTEM

Magnetometer Sensor:	Scintrex CS-3 Cesium
Configuration:	Stinger with 3 axis compensation
Sample Rate:	20 Hz
Sensitivity:	0.0006 nT √Hz rms
Gamma Ray Spectrometer:	Pico Envirotec AGRS-2
Downward-Looking Crystals:	8.4 litres of NaI(Tl)
Sample Rate:	1 Hz (resampled to 20Hz)

Legend

- Water Bodies
- Elevation Contours, 20 m Intervals
- Rainbow Survey Block Boundary
- Rainbow Infill Survey Block Boundary
- Actual Flight Lines

DATA REFERENCE
Magnetic data have been compensated and corrected for temporal variations, lag, and heading; then leveled to generate the Total Magnetic Intensity (TMI) grid. Refer to report for details. TMI is represented as a grid and drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
URL <http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/ntdb_bndt/>[2007]

SNOWLINE GOLD CORP

Rainbow

Magnetic Map

Total Magnetic Intensity with Actual Flight Lines

Precision GeoSurveys

Scale 1:20000
250 0 250 500 750 1000 1250 1500
(meters)
WGS 84 / UTM zone 8N

Job #22149_RB
August 17, 2022

Plate 3
TMI_wFL