



# YMEP Report for the Rosy Property

## Describing Prospecting and Soil Sampling

[Publish Date]

Rosy 1-20	YC18054-YC18073
Rosy 21-30	YC18159-YC18168
Rosy 31-90	YC83534-YC83593
Rosy 91-152	YF5652-YF56582
Sam 1-45	YF49455-YF49499
Sam 46-201	YF52516-YF52671

NTS 105N/13

Latitude 60°56'N; Longitude 133°45'W

Whitehorse Mining District, Yukon Territory

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## Table of Contents

Introduction .....	3
Property Location, Claim Data, Access, and Infrastructure .....	3
History and Previous Work .....	3
Geomorphology and Climate.....	8
Regional Geology .....	8
Property Geology .....	11
Mineralization .....	11
2023 Program.....	14
Discussion and Conclusions .....	26
References .....	34

## Introduction

The Rosy property covers gold-silver prospects which surround and extend 10 km to the south and 3.5 km to the north of the Red Mountain molybdenum porphyry deposit in southern Yukon. The property is 100% owned by Cascadia Minerals Ltd. (“Cascadia”), with no underlying royalties.

This report describes prospecting and soil sampling conducted between July 1<sup>st</sup> and August 10, 2023. Management of the work was conducted by Cascadia, with fieldwork carried out by Cascadia employees and Aurora Geosciences Ltd. The author reviewed all data relating to this work, and a Statement of Qualification appears in Appendix I.

## Property Location, Claim Data, Access, and Infrastructure

The Rosy property consists of 353 contiguous mineral claims located 77 km east-northeast of Whitehorse in southern Yukon, centered at latitude 60°56’ north and longitude 133°45’ west on NTS map sheet 105N/13 (Figure 1). The property covers an area of approximately 6100 ha (61 km<sup>2</sup>). The claims are registered with the Whitehorse Mining Recorder in the name of Cascadia Minerals Ltd. Claim data is listed below in Table 1, while locations of individual claims are shown on Figure 2.

**Table 1: Rosy Claim Information**

Claim	Numbers	Grants	Expiry
ROSY	1-20	YC18054-YC18073	March 21, 2026
ROSY	21-30	YC18159-YC18168	March 21, 2026
ROSY	31-90	YC83534-YC83593	March 21, 2026
ROSY	91-152	YF56521-YF56582	March 21, 2026
SAM	1-45	YF49455-YF49499	March 21, 2026
SAM	46-132	YF52516-YF52602	March 21, 2026
SAM	133-187	YF52603-YF52657	March 21, 2025
SAM	187-201	YF52658-YF52671	March 21, 2024

\* Expiry dates do not include 2023 work, which will be filed for assessment credit before expiry

The property can be accessed by helicopter from Whitehorse, or by four-wheel drive vehicle via the Red Mountain Road, which runs northwest from the South Canol Road. For the 2023 program, prospecting crews were housed in Whitehorse, and accessed the property via daily flights from Fireweed Helicopters’ Whitehorse hangar in a MD 520N NOTAR Helicopter. For the soils program, crews were mobilized into site via the Airbus AS350SD helicopter, from Horizon helicopters, and stayed at the Rosy camp location near the Red Mountain deposit and Slate MINFILE occurrence (Figure 3).

## History and Previous Work

The first recorded activity in the vicinity of the Rosy property occurred in 1935 when the silver-lead-zinc veins on the flanks of the Red Mountain Deposit were staked. These occurrences consist of galena and sphalerite in quartz-carbonate veins cutting metasedimentary rocks. Several operators explored these veins, eventually leading to the

145°0'W

140°0'W

135°0'W

130°0'W

125°0'W

65°0'N

Alaska

Northwest Territories

60°0'N

Alaska

Old Crow

Dawson City

Mayo

Pelly Crossing

Beaver Creek

Carmacks

Faro

Whitehorse

Rosy

Watson Lake

British Columbia

140°0'W

135°0'W

130°0'W






125°0'W

65°0'N

60°0'N



**Legend**

-  Cascadia Projects
-  Communities
-  Major Roads
-  Waterbodies
-  Parks and Protected Areas

0 50 100 150 200 km



1:5,400,000



**Rosy  
Property Location**

Datum

Latitude and Longitude

Date

07/12/2023

Fig. #

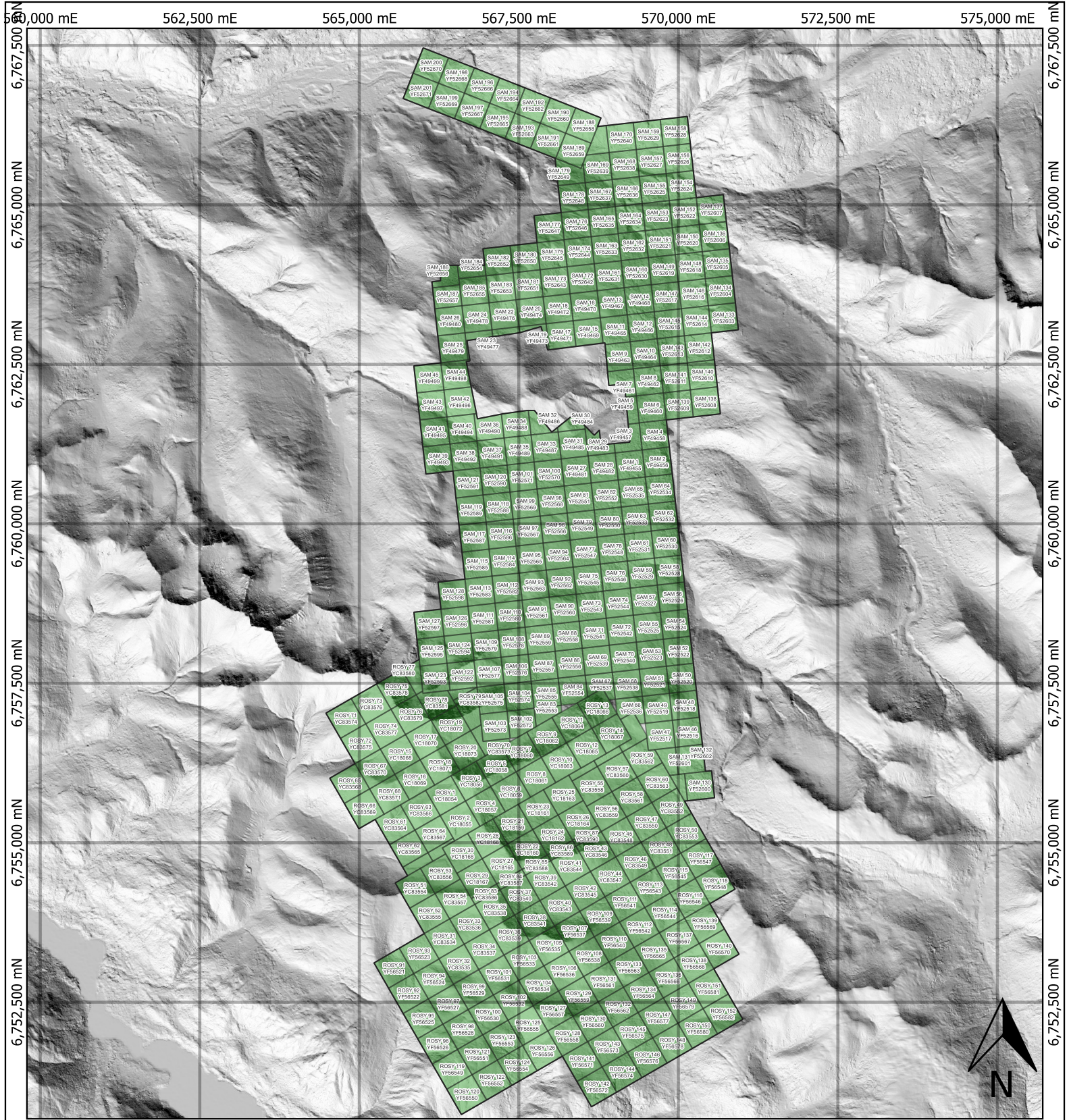
Figure 1

Author

JK

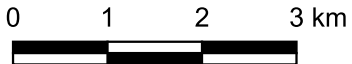
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**Legend**

Claims  
 Cascadia Minerals Ltd. - 100%



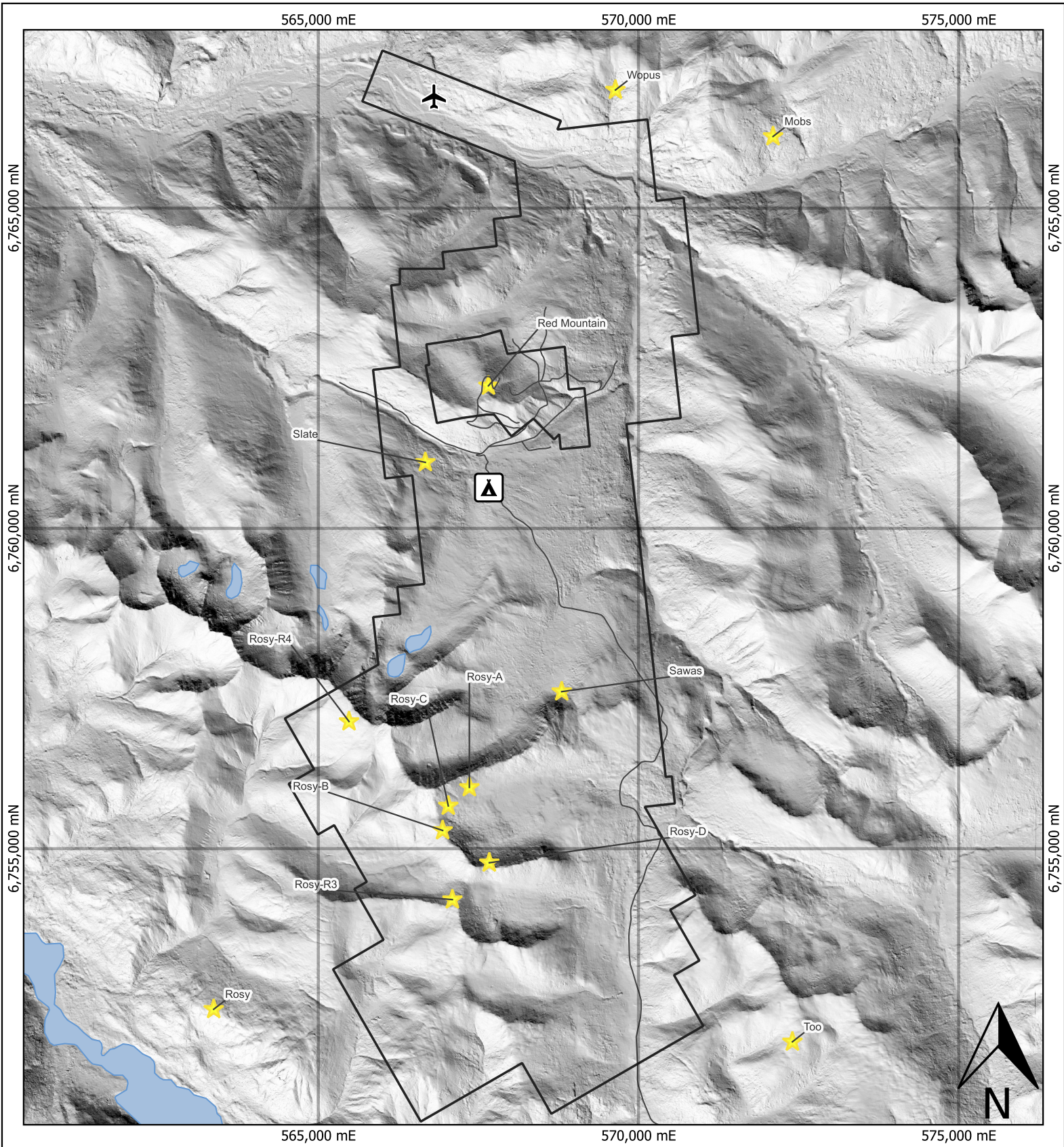
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**Rosy**  
**Claim Information**

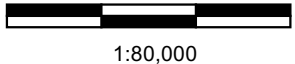
Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	07/12/2023	Figure 2	JK	A

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**Legend**

-  Rosy Claim Boundary
-  ATCO Camp
-  Red Mountain Road
-  Waterbodies
-  YGS MINFILE Occurrences



**Rosy  
MINFILE Showings**

Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	13/12/2023	Figure 3	JK	A

discovery of the Red Mountain Deposit. The Red Mountain deposit is currently owned by Tintina Mines, while the silver-lead-zinc anomaly is unclear, although the Slate occurrence relates to silver-lead-zinc mineralization hosted in graphitic breccias.

In 1986, the first staking on the Rosy property itself was reported, immediately following the release of geochemical results from a reconnaissance stream sediment sampling program conducted by the Geological Survey of Canada (Open File 517). All-North Resources Ltd. staked the Was 1-6 claims in the headwaters of a creek, which returned 95th percentile values for gold (0.036 g/t), arsenic (121 ppm) and antimony (2.8 ppm). Concurrently, Noranda Exploration Company Limited staked the Saw 1-6 claims on a north-facing slope further downstream to cover another part of the anomalous drainage. Recent prospecting on the Rosy property discovered numerous old claim posts that likely date back to the 1930s or 1940s, however there is no record of this staking or any associated exploration.

In 1987, both All-North and Noranda conducted reconnaissance mapping and soil sampling. All-North reported quartz vein float that assayed up to 1.30 g/t gold and 102 g/t silver associated with a soil anomaly containing values up to 0.145 g/t gold and 9 g/t silver (Garagan, 1987). Noranda found quartz-carbonate alteration zones, samples of which returned low values of gold and silver. No further work was done on the either property and the claims were allowed to lapse.

In 1999, ATAC Resources Ltd. ("ATAC") staked the Rosy 1-30 claims and conducted prospecting and soil geochemical sampling. That work outlined several veins marked by recessive linears and strongly anomalous gold, silver and arsenic geochemical results (Eaton, 1999).

In 2007, ATAC conducted a property-wide helicopter-borne total field magnetic and versatile time domain electromagnetic (VTEM) survey. Neither geophysical survey defined specific targets. Total field magnetics showed a strong correlation to geological units (Wengzynowski, 2008). VTEM produced a few discrete conductors, some of which are in the vicinity of mineralized veins, but none of those features are well defined.

In 2008, Valere Mining Limited optioned the property and completed geochemical sampling, geological mapping and prospecting (Smith, 2008). This work identified one new vein zone (R1), followed-up on a known vein zone (R2) and outlined four gold-in-soil anomalies (A to D). Valere dropped its option in early 2009.

In 2009, ATAC explored with more soil sampling and prospecting (Smith, 2010). This exploration resulted in the discovery of two additional vein zones (R3 and R4). In fall 2009, ATAC staked the Rosy 31-90 claims.

In 2010, Bonaparte Capital Corp. optioned the Rosy property and conducted a small diamond drill program in June of that year. Hole Rosy-10-01 intersected the R1 vein close to surface where it is weathered and altered. Hole Rosy-10-02 cut the vein deeper in section and returned 1.28 g/t gold, 2.63 g/t silver and 3328 ppm arsenic over 2.29 m. The R1 vein lies alongside a barren quartz feldspar porphyry dyke (Smith, 2010). Bonaparte Capital dropped its option on the Rosy property in December of 2010.

In July 2016, ATAC conducted a two-day prospecting and soil sampling program, collecting 32 rock samples and 115 soil samples. Three of the vein samples collected 350 m north of the R3 vein zone returned 12.55, 6.52, and 5.20 g/t gold and 93.10, 13.85, and 11.05 g/t

silver, respectively. Two rock samples collected 295 m north of the R2 vein returned 5.86 and 2.57 g/t gold and 3.76 and 73.10 g/t silver, respectively. These samples coincide with the surface trace of a previously identified northwesterly trending linear in the vicinity of Anomaly C. Soil sampling in 2016 was conducted north and west of the R3 vein zone and to the east and southeast of Anomaly A (Lane and Walsh, 2016). The soil results returned encouraging values for gold and moderate values for silver north of the R3 vein zone.

In winter 2016, ATAC staked the Sam 1-201 claims.

In spring 2017, ATAC staked the Rosy 91-152 claims. Crews collected 767 soil samples with a highlight result of 0.13 ppm Au, and 33 rock samples which returned a highlight sample of 4.57 g/t Au with 83.90 g/t Ag (Walsh, 2018).

In 2021, ATAC completed five days of soil sampling, collecting 472 soil samples. Work in the central part of the property identified clusters of anomalous gold, silver, copper lead and zinc, with peak values of 573 ppb Au, 5.12 ppm Ag, 195 ppm Cu, 964 ppm Pb and 1,000 ppm Zn. The main gold-in-soil anomaly was extended to approximately 2 km by 3.5 km (Schneebeli, 2022).

Figure 3 shows the Yukon Geological Survey MINFILE occurrences on the Rosy property, including Red Mountain, the silver-lead-zinc vein slate occurrence, the R-series of veins, and the Rosy soil anomalies.

## Geomorphology and Climate

The Rosy property is located along the eastern edge of the Sawtooth range. It is drained by creeks that flow north into the Teslin River, via the Boswell River, which is a part of the Yukon River watershed. There is water in the creeks for camp and diamond drilling on the property. The southern portion of the property is composed of northwest-facing ridges and glacial valleys. Thickly treed valley floors give way to steep slopes vegetated with moss and lichen. Elevation generally lies between 920 (along the Boswell River) to 1,900 m along ridge tops, with a prominent peak reaching 2,094 m.

The northern part of the property is thickly vegetated, with more subdued slopes compared to the southern portion. Valley floors are generally narrow in their headwaters, where talus encroaches from surrounding slopes, but become broad and relatively flat bottomed further downstream.

## Regional Geology

The Rosy Property lies in a structurally complex area where large faults have juxtaposed various metamorphosed volcanic, sedimentary and intrusive rocks, belonging to the Yukon-Tanana, Slide Mountain, Cassiar and Stikinia terranes (Figure 4). Previous mappers have interpreted this area to be a steeply dipping suture zone marking accretion of an island arc to North America during the Jurassic (Tempelman-Kluit, 1979). More recent detailed mapping has led to a reinterpretation, which indicates that the steep dips are the results of a large-scale fold (de Keijzer et al., 1999). The region contains multiple Mesozoic (Cretaceous and Jurassic aged) felsic intrusions, including weakly metamorphosed granodiorite, monzogranite and leucogranite plutons and a monzogranite to granodiorite batholith (Figure 4). Figure 5 contains descriptions of regional geologic units in Figures 4.

560,000 mE

570,000 mE

6,760,000 mN

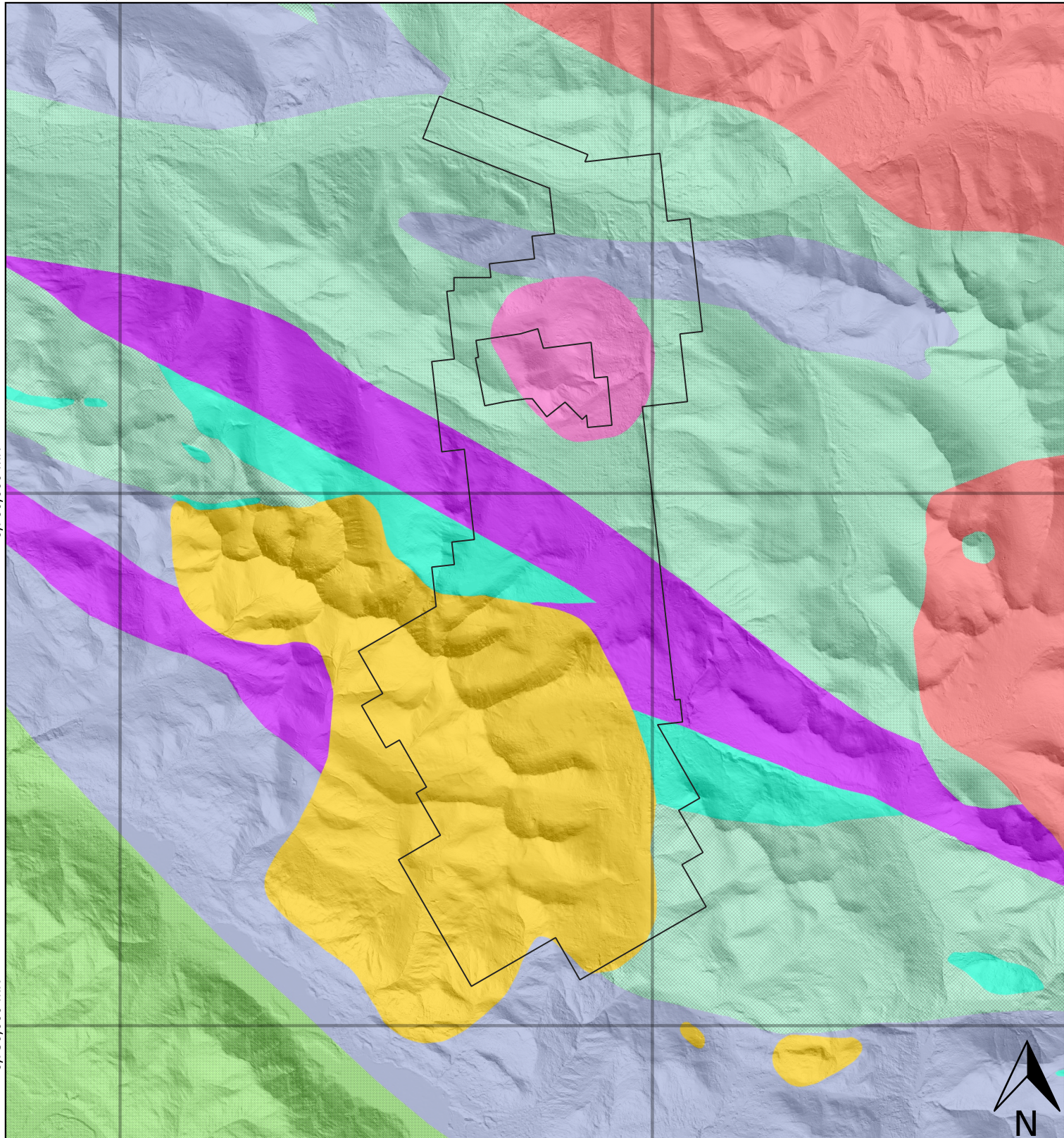
6,760,000 mN

6,750,000 mN

6,750,000 mN

560,000 mE

570,000 mE



### Legend

Rosy Claim Boundary 



1:100,000












## Rosy

### Regional Geology

Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	11/12/2023	Figure 4	JK	A

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# Regional Geology - Legend

-  Rancheria Suite: Biotite-muscovite leucogranite and monzogranite
-  Cassiar Suite: Biotite and hornblende bearing monzogranite to granodiorite
-  Cassiar Suite: Biotite and hornblende bearing monzogranite to granodiorite
-  Snowcap Suite: Quartzite, psammite, pelite and marble with lesser greenstone and amphibolite
-  Finlayson Suite: Ultramafic Rocks, serpentinite, metagabbro
-  Finlayson Suite: Light grey to white marble, local crinoidal
-  Long Lake Suite: Massive to weakly foliated biotite-hornblende granodiorite
-  Laberge Suite: Turbiditic sandstone-siltstone-mudstone and conglomerate
-  Open Creek Suite: Quartz-phyric dacite flow, ash and lapili tuff

The metamorphic rocks in the vicinity of the property include schist, gneiss, quartzite and marble that range from Neoproterozoic Snowcap Assemblage to Mississippian Simpson Range Suite. They are intruded by Early Jurassic and Cretaceous plutons. The youngest rocks are a Late Cretaceous quartz monzonite stock and related miarolitic quartz-feldspar porphyry dykes. This stock hosts the Red Mountain Deposit. The Rosy property is dominantly underlain by the Sawtooth Pluton, regionally described as a massive to weakly foliated, fine to coarse grained biotite, biotite-muscovite and biotite-hornblende quartz monzonite to granite.

Structurally, three main faults juxtapose the various terranes seen in the property. The northwest trending, dextral, strike-slip Teslin Fault marks the boundary between Stikine and Yukon-Tanana rocks and lies just outside of the property. (Sack et al., 2020).

## Property Geology

The property geology discussed below is largely taken from Sack et al., 2020. Figure 6 presents a detailed map modified from Moynihan (Unpublished, 2023), with descriptions of property wide geologic units in Figure 7.

The Rosy project is predominantly underlain by Paleozoic metamorphic rocks of the Yukon-Tanana terrane, which includes quartz-mica schists of the Snowcap assemblage (PDS1), and mafic metavolcanic rocks, mafic to ultramafic metaplutonic rocks and marble of the Finlayson assemblages (DMF1,-3,-5,-6). The above rock units are intruded by the Early Jurassic Sawtooth Pluton (EJgLk). The Teslin fault located ~1 km southwest of the margin of the property separates Richthofen formation sedimentary rocks of the Lower to Middle Jurassic Laberge Group of the Stikinia terrane and the Yukon-Tanana terrane.

The Sawtooth Pluton forms jagged ridges and is the majority of the Sawtooth Range. The pluton is composed of mesocratic, medium grained and equigranular diorite to monzodiorite containing hornblende with subordinate pyroxene and biotite. Biotite is commonly intensely chlorite altered. Multiple age dates have been taken on the Sawtooth Pluton, however a weighted average of four zircon grains provided a  $206\text{Pb}/238\text{U}$  age of  $184.28 \pm 0.007$  Ma, which is considered the best estimate for crystallization of the monzonite (Sack et al., 2020).

In the northern part of the property, Yukon-Tanana rocks are cut by  $81.2 \pm 0.9$  Ma (Joyce et al., 2015). Late Cretaceous Boswell Pluton (LKqR), which is the host of the Red Mountain Molybdenum Deposit. A contact aureole of rusty fractured hornfels surround the Boswell Pluton.

Numerous cream-to-pink weathering quartz-feldspar porphyry dykes (LKqR) cut the Sawtooth pluton. These dykes are generally less than 10 m thick and can be traced along strike for tens to a few hundred meters. They exhibit a variety of strikes but all dip steeply. Many of the dykes have a strong recessive linears associated with them and are flanked by quartz-carbonate veins and/or carbonate altered wallrocks.

## Mineralization

The Rosy property mineralization demonstrates an epithermal gold-silver character with two main types of mineralization discovered to date. The first consists of more than 35 low sulphidation, epithermal, quartz-carbonate veins that have been mapped on the southern part of the property, which have returned highlight results of 35.92 g/t gold-in-rock and 1,835 g/t silver-in-rock, from different veins approximately 1.6 km apart. These veins consist of arsenopyrite, pyrite and rare chalcopyrite or malachite, typically totalling 1 to 10% of the

562,500 mE

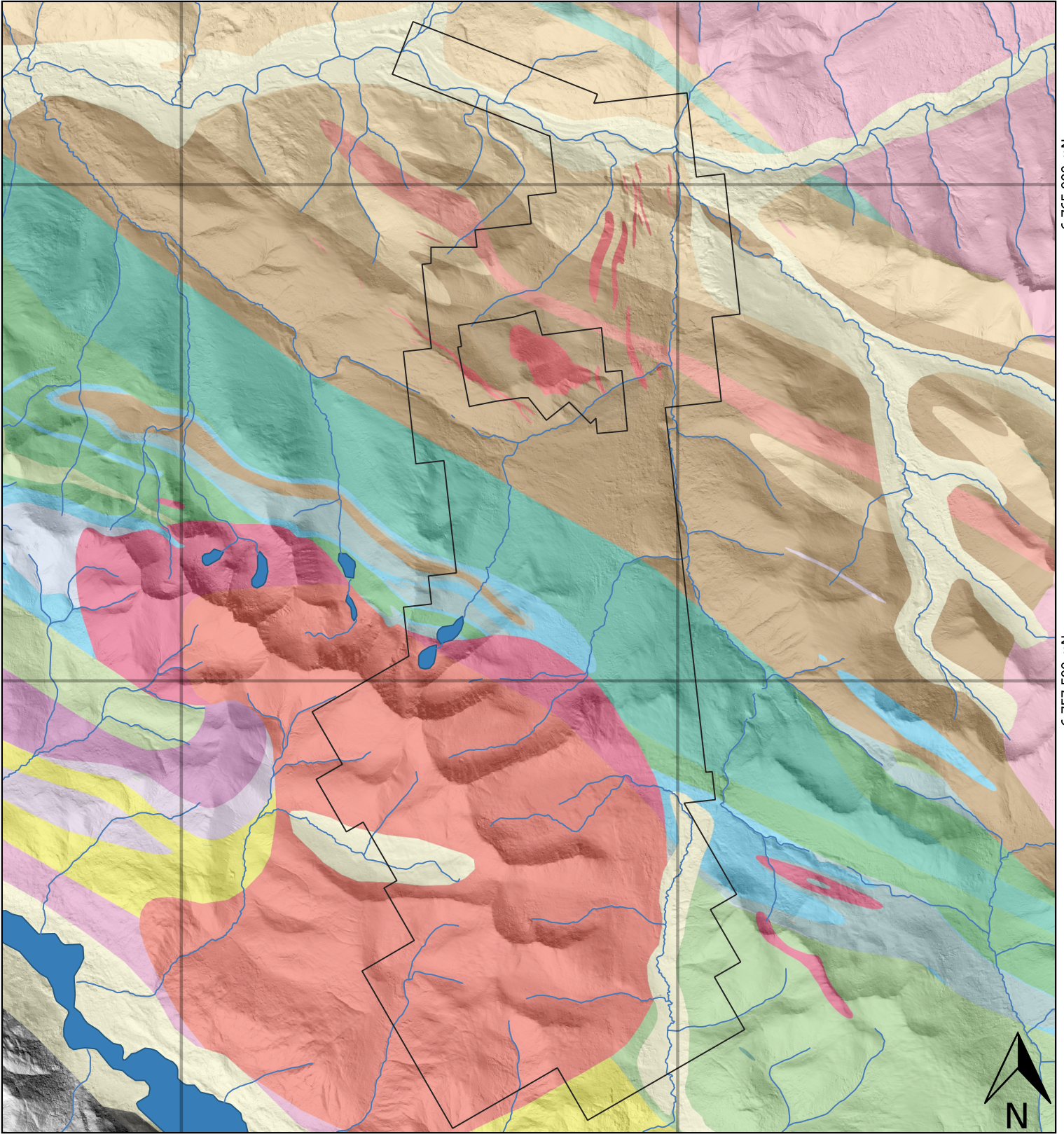
570,000 mE

6,765,000 mN

6,765,000 mN

6,757,500 mN

6,757,500 mN



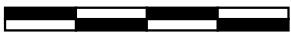
562,500 mE

570,000 mE

### Legend

- Rosy Claim Boundary
- Watercourse
- Waterbodies

0 0.75 1.5 2.25 3 km



1:80,000



## Rosy

### Detailed Property Geology

Datum

NAD 83  
Zone 8N

Date

22/12/2023

Fig. #

Figure 6
















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# Property Geology - Legend

-  Wiley Creek Formation: Greenschist
-  Asken Group: Quartzites and calc-silicate schists
-  Quarternary Cover
-  Earn Group: Siltstone, carbonaceous phyllite, and siliceous argillite
-  Red Mountain Formation: Rhyolite
-  Yukon Tanana Terrane: Quartz-plagioclase augen schist
-  Sawtooth Succession: Metagabbro
-  Rosy Succession: Marble and calc silicate rocks
-  Rosy Succession: Banded quartzite with amphibole rich layers, greenschist, marble and calc silicate
-  Sawtooth Succession: Greenschist
-  Lokken Suite: Hornblendite, gabbro, granodiorite
-  Lokken Suite: Hornblende bearing granodiorite, hornblendite, diorite
-  Gunsight Succession: Lapilli tuff, boulder tuff, greenschist, and epiclastic sandstone
-  Snowcap Assemblage: Micaceous quartzite, quartzite, semi-pelite
-  Simpson Range: Hornblende bearing metatonalite, metadiorite and quartz diorite

veins, and occur as fine disseminations, blebs and stringers. On weathered surfaces, the primary sulphide minerals have been oxidized and leached to produce limonitic pits. Alteration envelopes peripheral to veins generally contain abundant white quartz veinlets which contain 1 to 5% finely disseminated pyrite and arsenopyrite. Veins are rarely seen in outcrop, however, those that are exposed in bedrock are typically less than 80 cm wide and contain milky to light grey, often chalcedonic quartz which weathers orange due to carbonate content in the veins.

The second style of mineralization is found in intrusive rocks of EJgL which contains trace pyrite and rare arsenopyrite that weathers to give the unit a gossanous appearance. This style of mineralization is generally low-grade, in the 0.50-1.50 g/t gold-in-rock range (Lane, 2016).

Key mineral showings on the Rosy claims include the R1 to R4 series of veins and the A to D soil anomalies (Figure 3) (Eaton, 2004). The surface expressions of the R1, R2 and R3 veins are 15 to 20 m wide dark orange soil colour anomalies within the high alpine talus slopes. The strike lengths of these veins range from 800 m at the R1, up to 1600 m at the R3, although some of the terrain around R1 limits safely exploring along strike. Float samples taken from these soil anomalies are primarily quartz-carbonate vein material and mineralized with up to 20% arsenopyrite and 5% pyrite. These veins yield a historical high of 35.92 g/t gold with 32.40 g/t silver-in-rock (Eaton, 2000), and up to 1,835 g/t silver-in-rock. Soil anomalies A-D combine to delineate a 3 km by 2.5 km gold-in soil anomaly which has returned a maximum of 1829 ppb gold-in-soil from Anomaly A (Smith, 2008).

Diamond drilling in 2010 was designed to test the R1 and R2 veins. All three diamond drill holes intersected mostly competent metadiorite with varying degrees of clay alteration. Mineralization was most prevalent in Rosy-10-02 where it intersected the R1 vein, with the interval containing medium to grey quartz with minor carbonate veinlets and weak to moderate disseminated pyrite and trace arsenopyrite. Mineralization in this hole flanks a syngenetic quartz-feldspar porphyry dyke. Highlight intervals from the diamond drilling include 4.15 g/t gold and 1.9 g/t silver over 0.42 m from 85.36 m; and 2.12 g/t gold and 9.10 g/t silver over 0.56 m from 87.09 m, both in hole Rosy-10-02.

## 2023 Program

The 2023 program was split into two phases, with prospecting occurring from July 1<sup>st</sup> to 14<sup>th</sup>, and soil sampling from August 1 to August 10, 2023. The prospecting program was undertaken to confirm and extend the mineralization of the R-series of veins, with an emphasis on the structural geology and epithermal textures of the veins, to better understand the mineralizing system. The soil program was undertaken to follow up on copper-in-soil anomalies along the margins of the Sawtooth pluton and fill a gap in the property wide data.

### *Prospecting*

In total 287 prospecting samples were collected, focusing on the 3 x 2.5 km gold-in-soil anomaly. This work identified several new veins, as well as extending the inferred strike length of the R1 and R3 veins. Peak values of 9.79 g/t Au, and separately 103 g/t Ag, were encountered, generally associated with boulders up to 1 m in diameter of highly oxidized chalcedonic quartz-carbonate-arsenopyrite-pyrite vein material. These peak values were associated with the R2 vein (gold) and a new vein showing 100 m to the east of the northern extension of the R1 vein (silver).

Structural analysis is still in its early stages, as outcrop is sparse throughout the focus area,

however where outcrop was found, two main sets of veins were observed. The first was a northeast trending, steeply dipping set, which is associated with the surface expressions of R2 and R3. The second was a less consistent, northwest trending, steeply dipping set associated primarily with the R1 vein.

A secondary goal of the prospecting program was to test the 2 km long, contour line copper-in-soil anomaly to the east of the Sawtooth pluton. This copper-in-soil contour anomaly was unexplained, as it sat on the margins of the intrusive body, but within the surrounding volcanics. Prospecting found multiple gossans up to 5 m wide, mineralized with pyrite, chalcopyrite, and malachite. A highlight table below summarizes the significant results from both prospecting targets.

**Table 2: Highlight 2023 Rock Samples**

Sample ID	Easting	Northing	Elevation (m)	Ag (g/t)	Au (g/t)	Cu (ppm)	Pb (ppm)
F312113	567356	6755952	1691	2.90	2.17	5.7	14.6
F312114	567355	6755962	1695	3.38	2.09	3.8	8.3
F312115	567369	6755939	1681	3.58	3.11	13.2	8.4
F312116	567371	6755946	1683	3.40	5.51	20.6	6
F312117	567374	6755929	1675	3.19	3.99	11.1	9.6
F312119	567414	6755918	1654	3.65	4.38	23.1	7.5
F312124	567100	6754226	1700	7.44	4.60	5.4	5.0
F312125	567065	6754186	1711	7.11	2.81	5.2	9.5
F312126	567085	6754169	1734	6.09	2.89	4.1	6.4
F312130	567018	6754111	1727	22.60	2.15	4.7	6.5
F312131	566467	6754270	1615	5.91	2.01	5.5	5.2
F312132	566503	6754210	1628	20.40	2.13	6.7	13.9
F312148	566991	6755320	1721	47.00	0.83	336	35.7
F312149	566988	6755325	1722	27.30	9.79	23.3	9.9
F312154	567200	6754337	1692	41.80	3.33	5.8	12.4
F312169	567052	6755721	---	47.60	1.82	44.7	10.1
F312175	566286	6756393	---	23.10	0.30	26.8	12.3
F312186	566687	6757308	---	11.90	6.10	12.4	5.9
F312202	567332	6755983	1717	4.34	2.17	16.8	7.0
F312203	567337	6755969	1708	3.26	2.35	25.3	7.2
F312206	567097	6754205	1725	19.0	4.52	10.1	9.1
F312217	567018	6755236	1735	3.34	4.57	18.9	6.8
F312223	567204	6756343	1650	21.10	2.37	32.7	12.7
F312239	569655	6757242	1575	0.43	---	2370.0	1.3
F312305	567339	6755975	1714	3.74	2.18	23.7	8.8
F312308	567128	6754258	1696	1.69	2.20	2.6	6.8
F312309	567122	6754270	1694	3.50	5.66	3.2	5.6
F312330	566982	6755591	1735	27.80	1.15	22.1	7.9
F312332	567031	6755688	1745	3.27	4.91	94.2	13.0

F312335	566979	6755710	1779	5.33	3.75	12.9	9.5
F312338	567016	6755781	1795	17.45	2.51	11.0	9.0
F312345	567195	6756313	1666	103.00	1.51	24.6	19.9
F312346	567227	6756321	1663	29.50	4.16	44.4	16.7
F312347	567227	6756321	1663	1.27	3.89	6.0	2.8
F312442	570118	6757170	1494	0.14	--	594.0	0.6
F312471	567178	6757439	1590	1.68	0.23	13.9	609.0
F312476	566729	6757335	1588	7.60	0.27	102.5	2190.0
F312483	568731	6756883	1679	0.18	---	528.0	1.5
F312801	567612	6756459	1576	1.31	6.22	13.2	7.3
F312862	568684	6757289	1460	0.49	---	848.0	1.4

Sample locations are presented in Figures 8 through 12, while prospecting results are presented in Figures 13 through 16. A digital copy of rock sample descriptions is in Appendix II. Certificates of Analyses are in Appendix III.

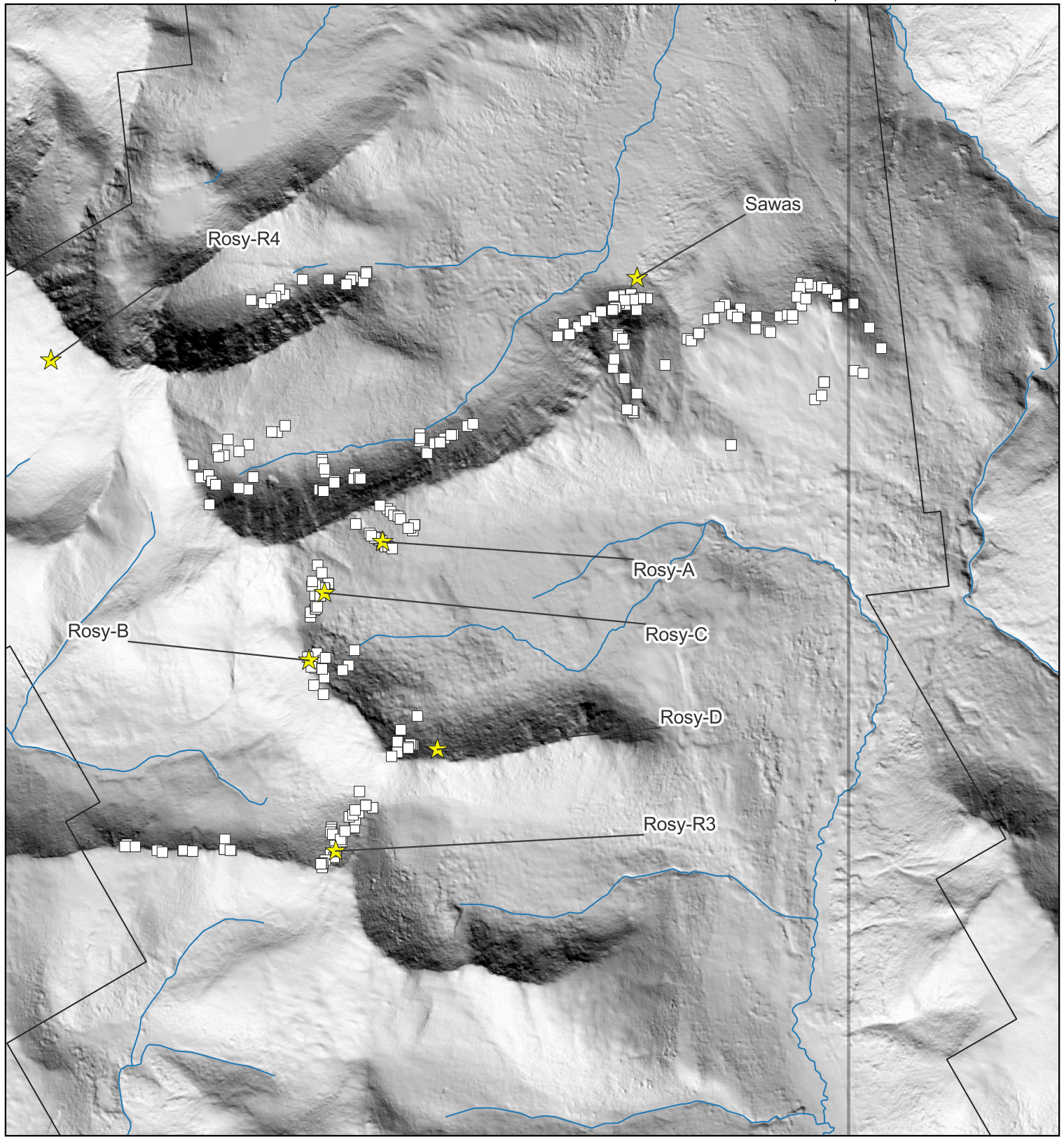
### Soil Sampling

Soil sampling was conducted from August 1 to August 10, 2023 and was planned by Cascadia Minerals staff, with onsite supervision and execution by Aurora Geosciences Inc. 686 soils were taken on an 200 m by 50 m grid covering the Sawtooth pluton to the Red Mountain deposit. A highlight table below summarized the significant results.

**Table 3: Highlight 2023 Soil Samples**

Sample ID	Easting	Northing	Elevation (m)	Ag (ppm)	Au (ppb)	Pb (ppm)	Zn (ppm)
D002034	568394	6761598	1326	2.20	5	365	40
D002038	568404	6761355	1289	0.10	241	15.8	70
D002052	568400	6760496	1414	0.13	158	14.2	174
D002110	566595	6762502	1541	2.01	1	360	466
D002126	566602	6761802	1511	2.04	6	309	368
D002252	567398	6761559	1506	0.74	3	30	903
D002258	567000	6761444	1446	10.20	10	158	479
D002259	567004	6761353	1392	5.04	8	645	893
D002332	566002	6762152	1479	1.32	89	53	496
D002344	566401	6761554	1436	2.33	14	313	1035
D002345	566400	6761596	1401	13.85	25	4670	2580
D002346	566398	6761646	1410	1.47	12	273	854
D002351	566800	6761797	1556	2.23	19	139	1660
D002356	566799	6761538	1470	2.01	15	83	938
D002510	567198	6761346	1417	0.98	3	70	974
D002528	567999	6761451	1368	4.36	4	199	167
D002529	567996	6761298	1321	1.00	5	72	965
D002589	566202	6762254	1543	0.85	9	57	772

570,000 mE



570,000 mE

### Legend

- MINFILE Occurences ★
- Rock Sample Locations
- Watercourse —
- Rosy Claim Boundary

0 0.25 0.5 0.75 1 km



1:250,000

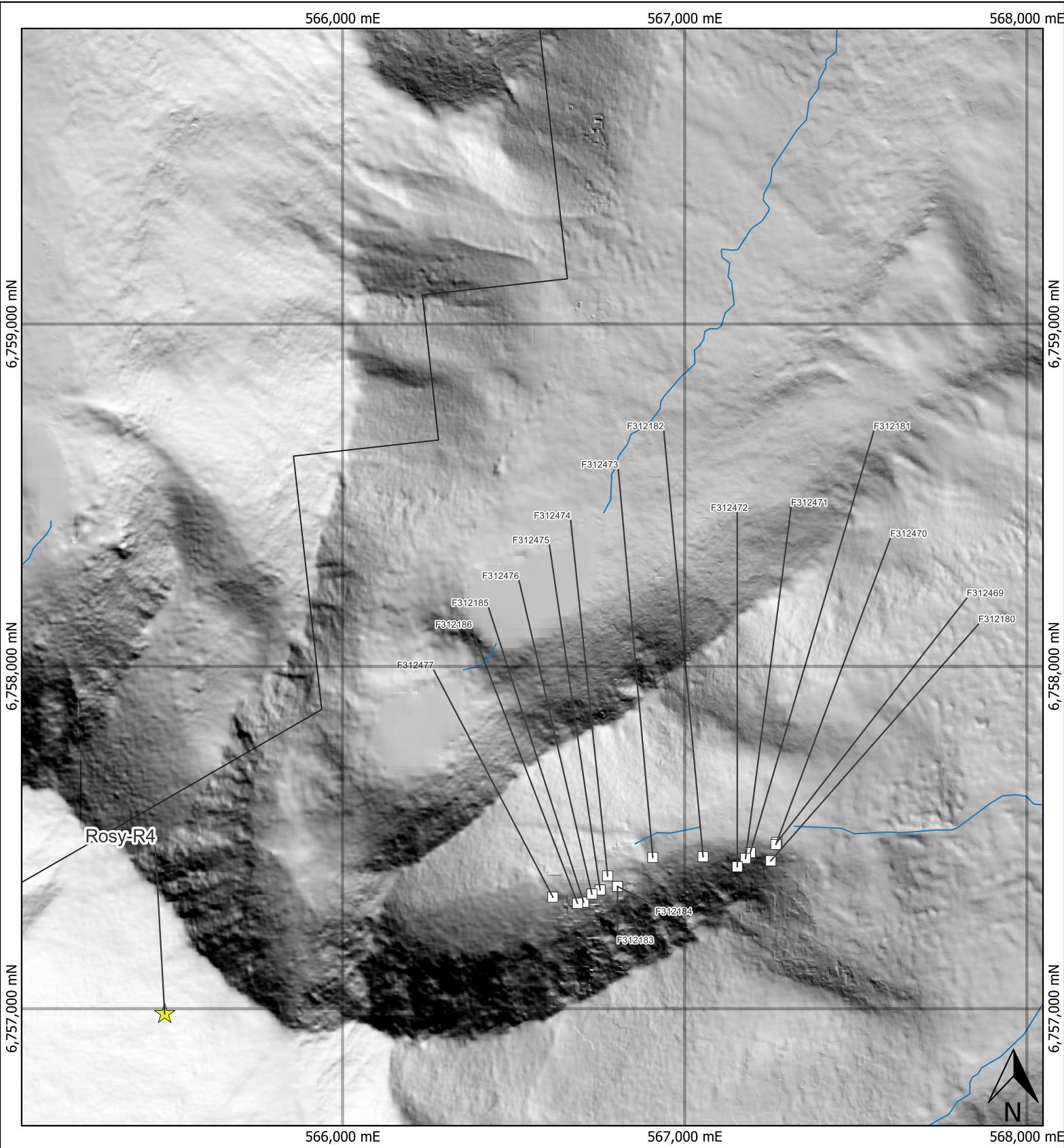


## Rosy

### Rock Sample Locations

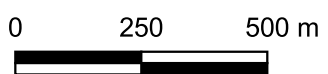
Datum <b>NAD 83 Zone 8N</b>	Date <b>11/12/2023</b>	Fig. # <b>Figure 8</b>	Author <b>JK</b>	Rev <b>A</b>
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C:\Users\JohnKelley\Desktop\Rosy Maps\Figure 8 -Prospecting\Figure X - Prospecting.gqz



**Legend**

- MINFILE Occurences ★
- Rock Sample Locations
- Watercourse —
- Rosy Claim Boundary



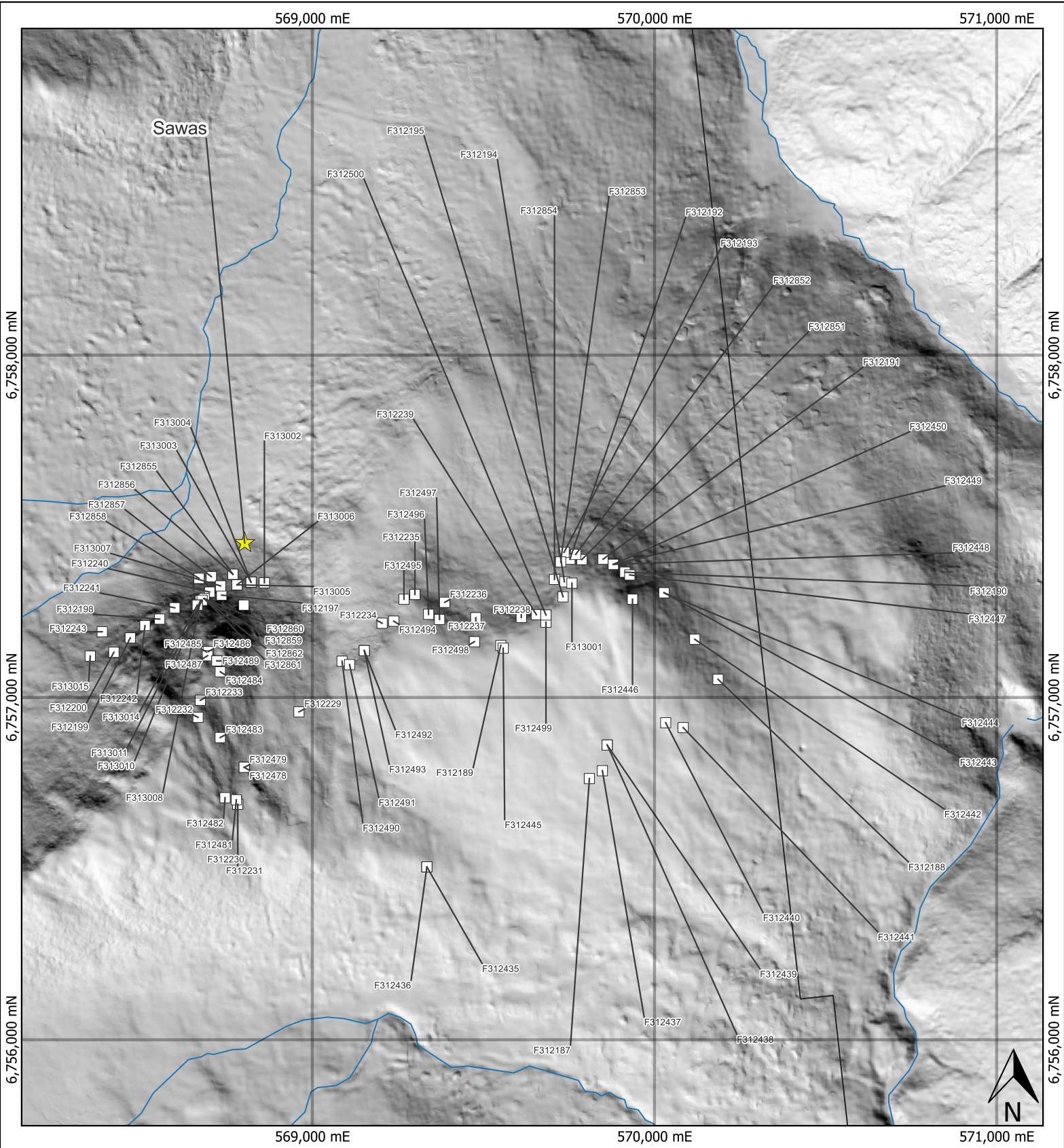
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

**Rosy**  
**R4 Area Prospecting Samples**

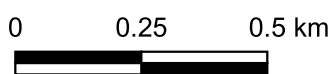
Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	11/12/2023	Figure 9	JK	A

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**Legend**

- MINFILE Occurences 
- Rock Sample Locations 
- Watercourse 
- Rosy Claim Boundary 



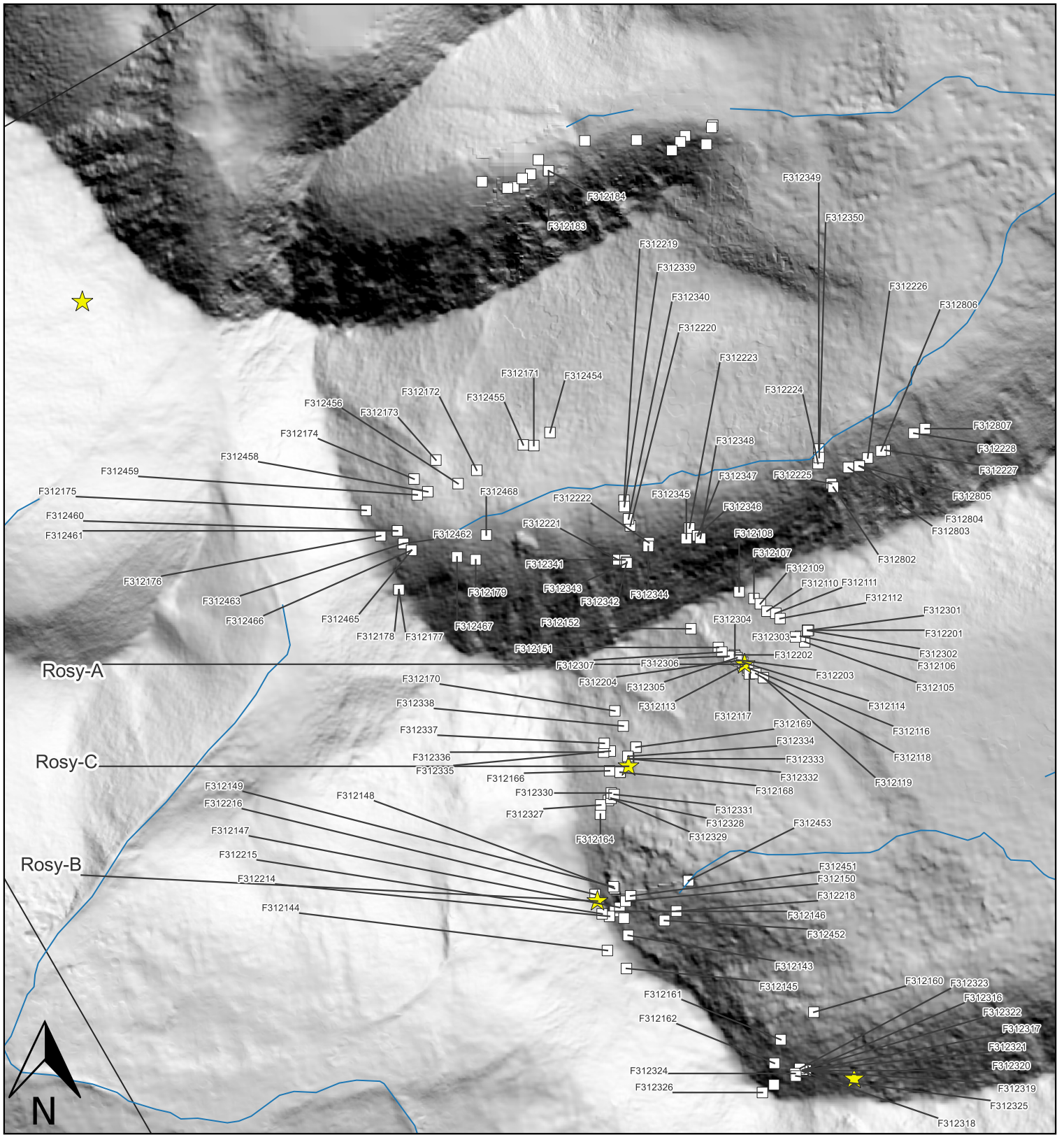
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**Rosy**  
**Sawas Area Prospecting Samples**

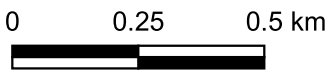
Datum <b>NAD 83 Zone 8N</b>	Date <b>11/12/2023</b>	Fig. # <b>Figure 10</b>	Author <b>JK</b>	Rev <b>A</b>
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**Legend**

- MINFILE Occurences
- Rosy\_Rock\_Nov2023
- Watercourse
- Rosy Claim Boundary

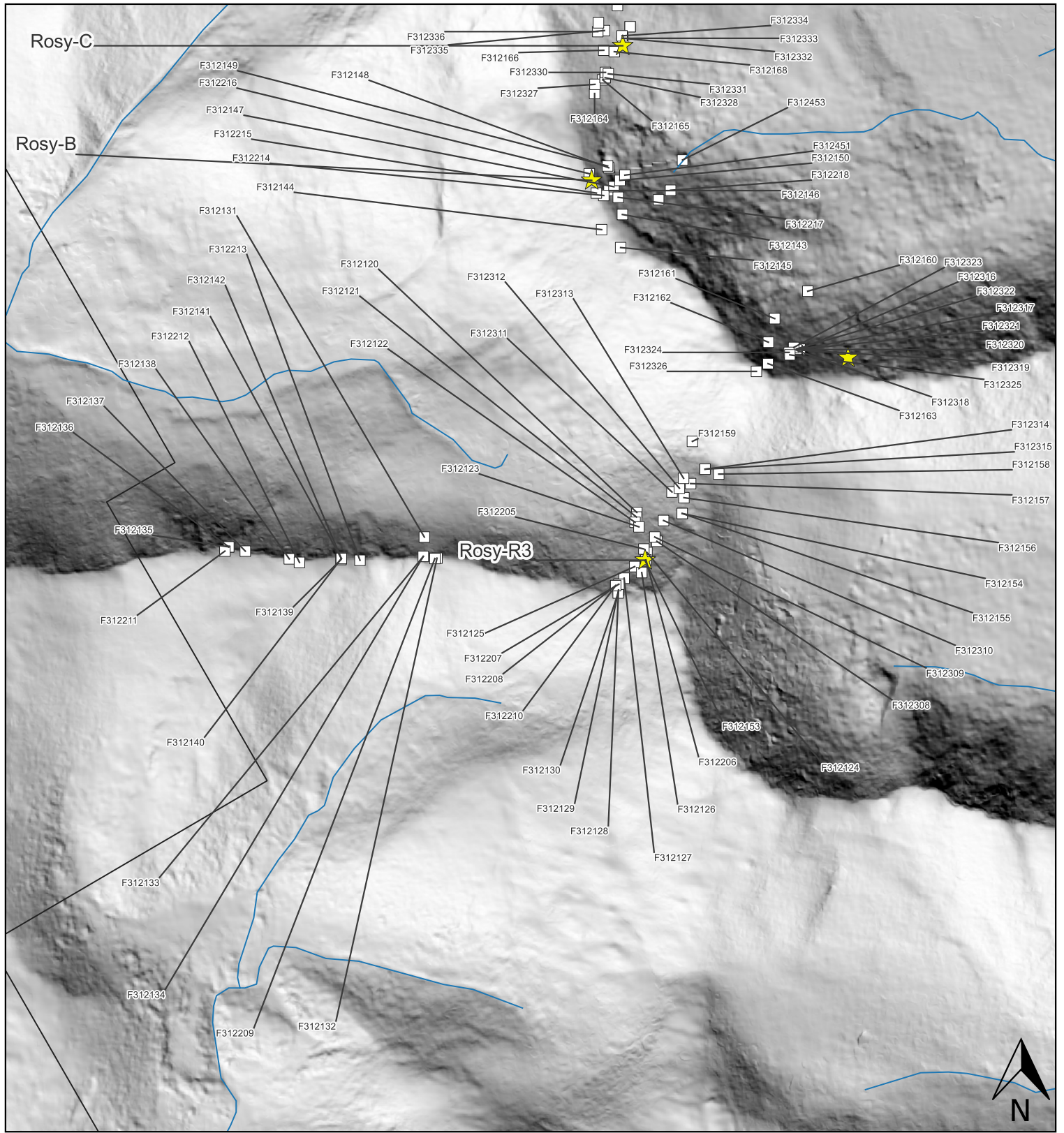


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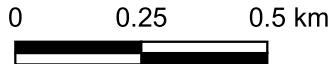
**Rosy**  
**R1/R2 Area Prospecting Samples**

Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	11/12/2023	Figure 11	JK	A



**Legend**

- MINFILE Occurences
- Rock Sample Locations
- Rosy Claim Boundary

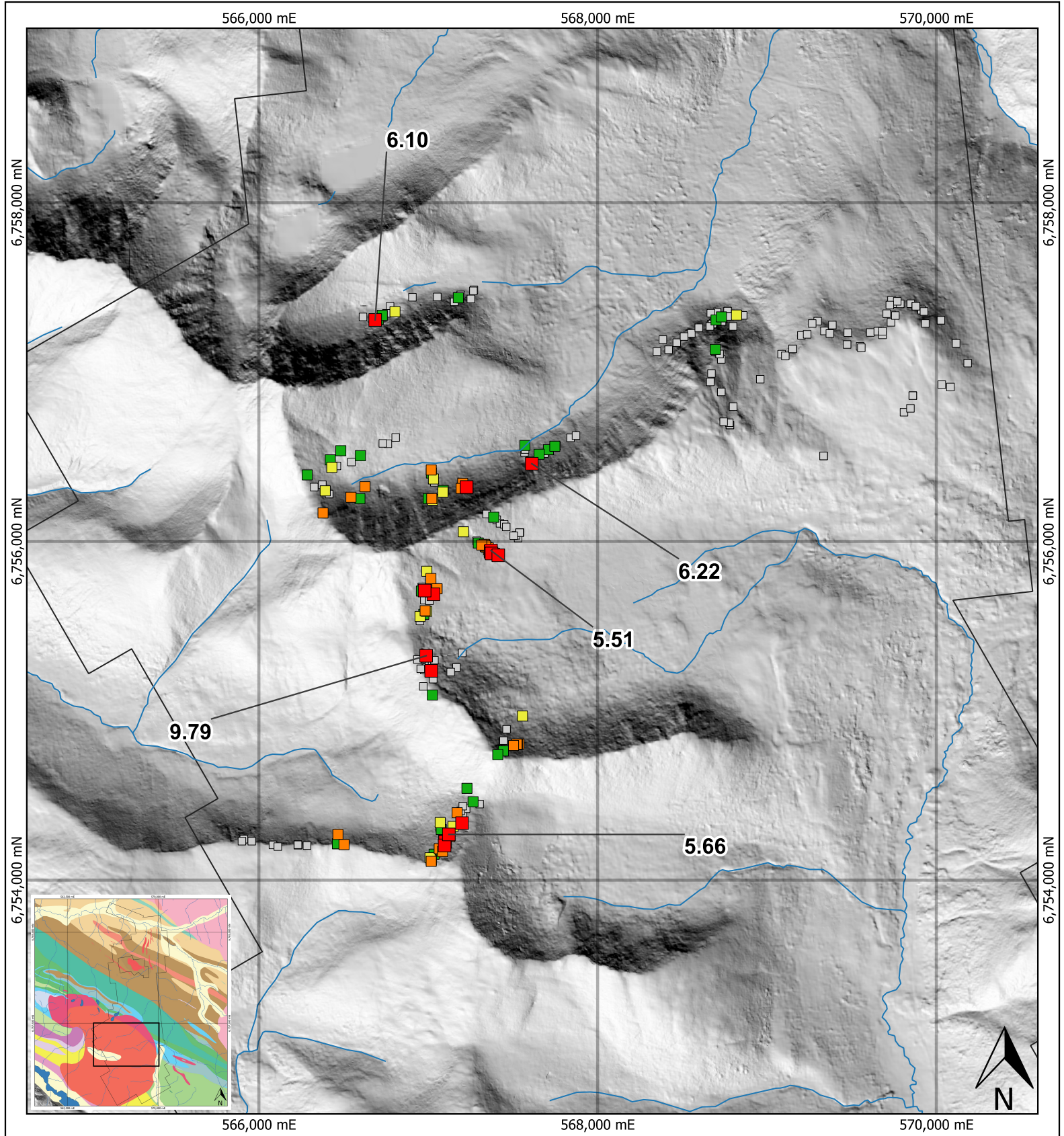


1:15,000



**Rosy  
R3 Area Prospecting Samples**

Datum <b>NAD 83 Zone 8N</b>	Date <b>11/12/2023</b>	Fig. # <b>Figure 12</b>	Author <b>JK</b>	Rev <b>A</b>
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**Legend**

- Gold-in-Rock (g/t)
- < 0.10
  - 0.10 - 0.50
  - 0.50 - 1.00
  - 1.00 - 3.00
  - 3.00 - 9.79
- 0 0.25 0.5 0.75 1 km
- 
- 1:30,000



**Rosy  
Gold-in-Rock**

Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	11/12/2023	Figure 13	JK	A

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566,000 mE

568,000 mE

570,000 mE

6,758,000 mN

6,758,000 mN

6,756,000 mN

6,756,000 mN

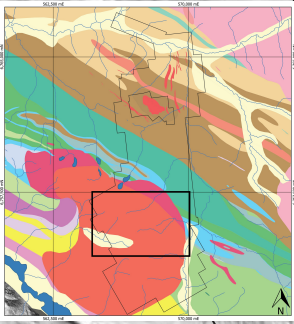
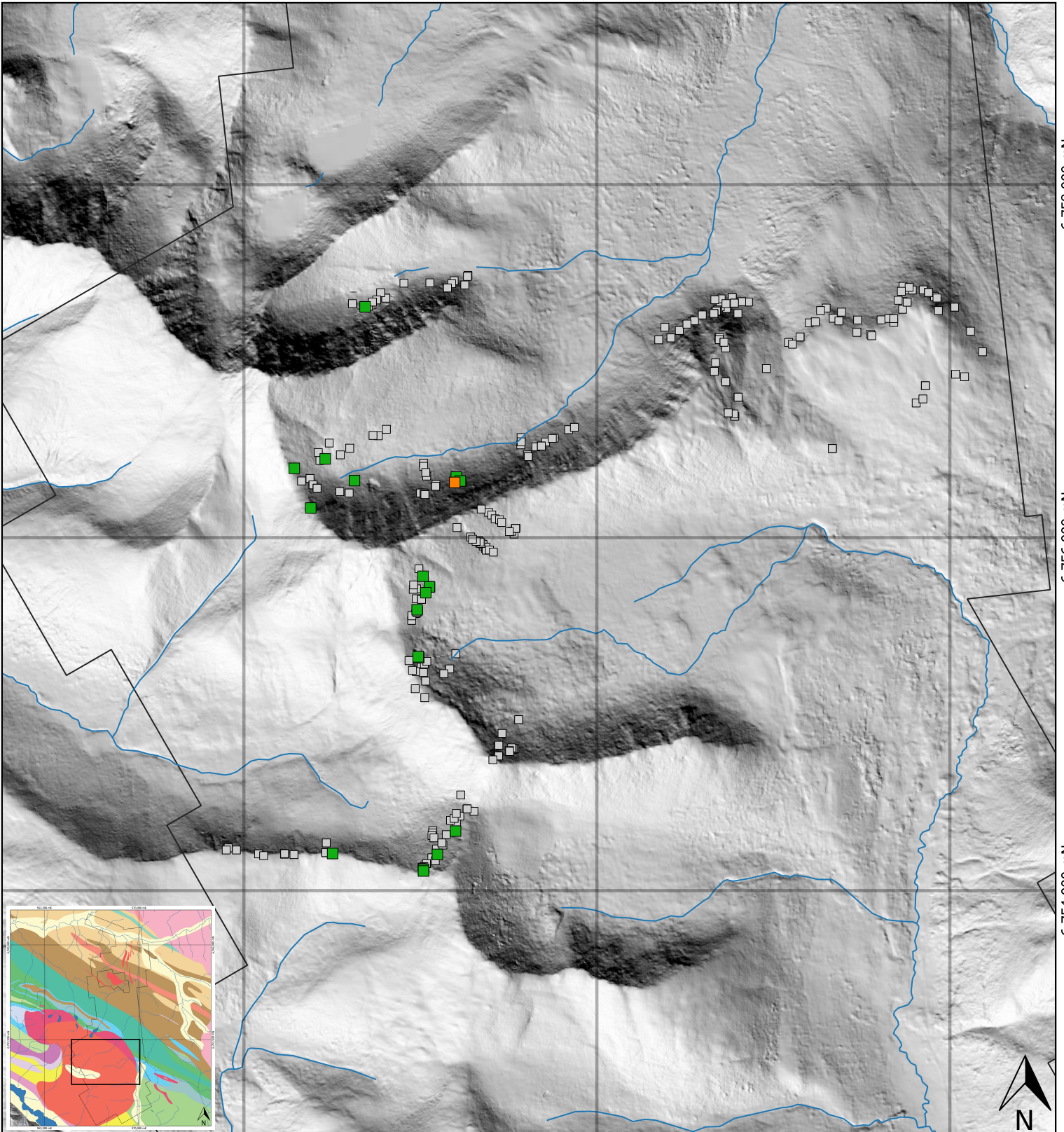
6,754,000 mN

6,754,000 mN

566,000 mE

568,000 mE

570,000 mE



### Legend

Silver-in-Rock (g/t)

- <10
- 10 - 50
- 50 - 100
- 100 - 500
- >500

0 0.25 0.5 0.75 1 km



1:30,000



## Rosy Silver-in-Rock

Datum

NAD 83  
Zone 8N

Date

11/12/2023

Fig. #

Figure 14

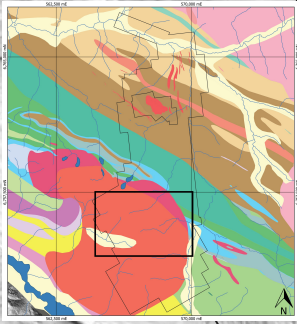
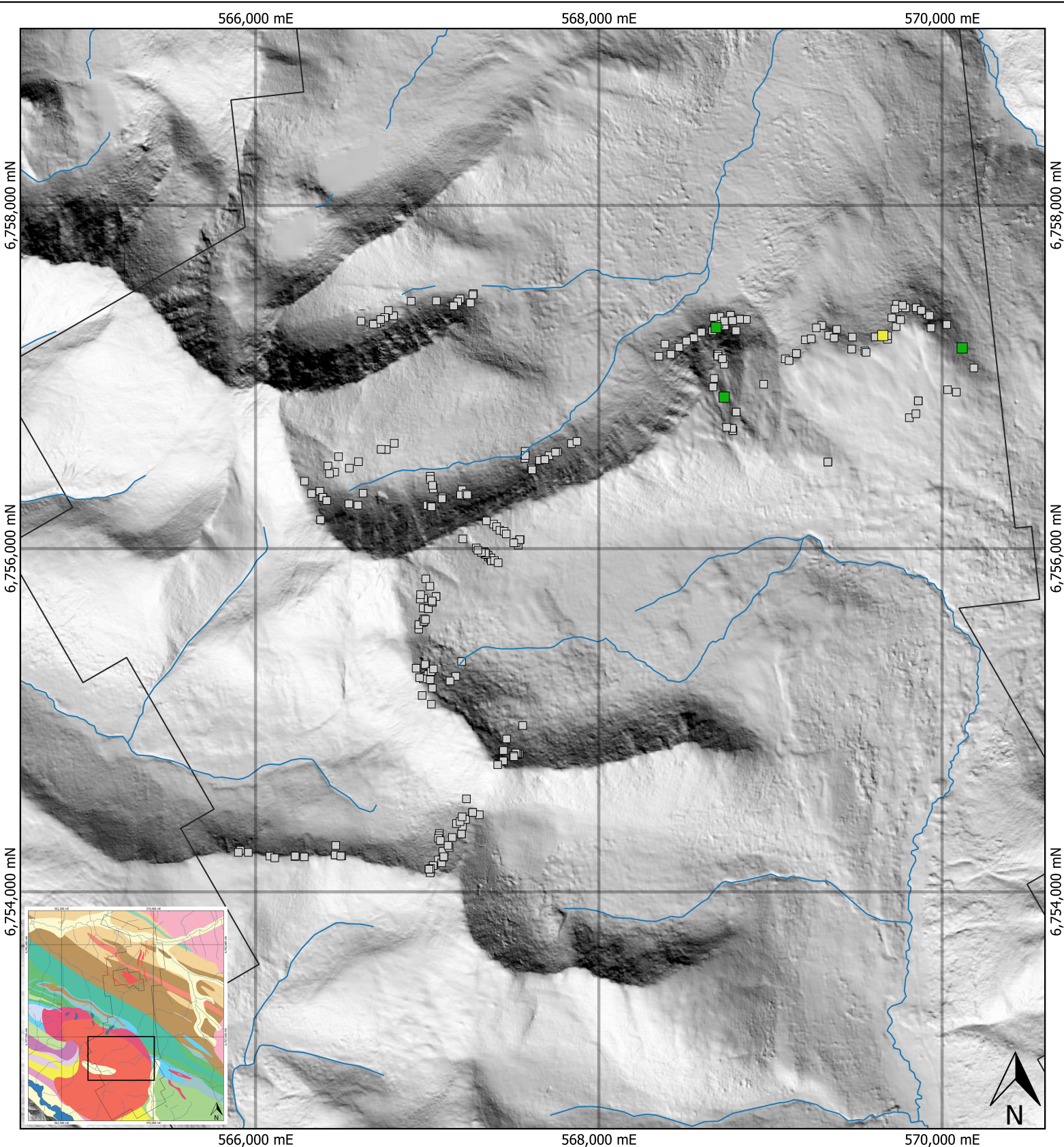
Author

JK

Rev

A

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**Legend**

Copper-in-Rock (%)

- <0.05
- 0.05 - 0.10
- 0.10 - 0.50
- 0.50 - 1.00
- >1.00

0 0.25 0.5 0.75 1 km



1:30,000



**Rosy  
Copper-in-Rock**

Datum

NAD 83  
Zone 8N

Date

11/12/2023

Fig. #

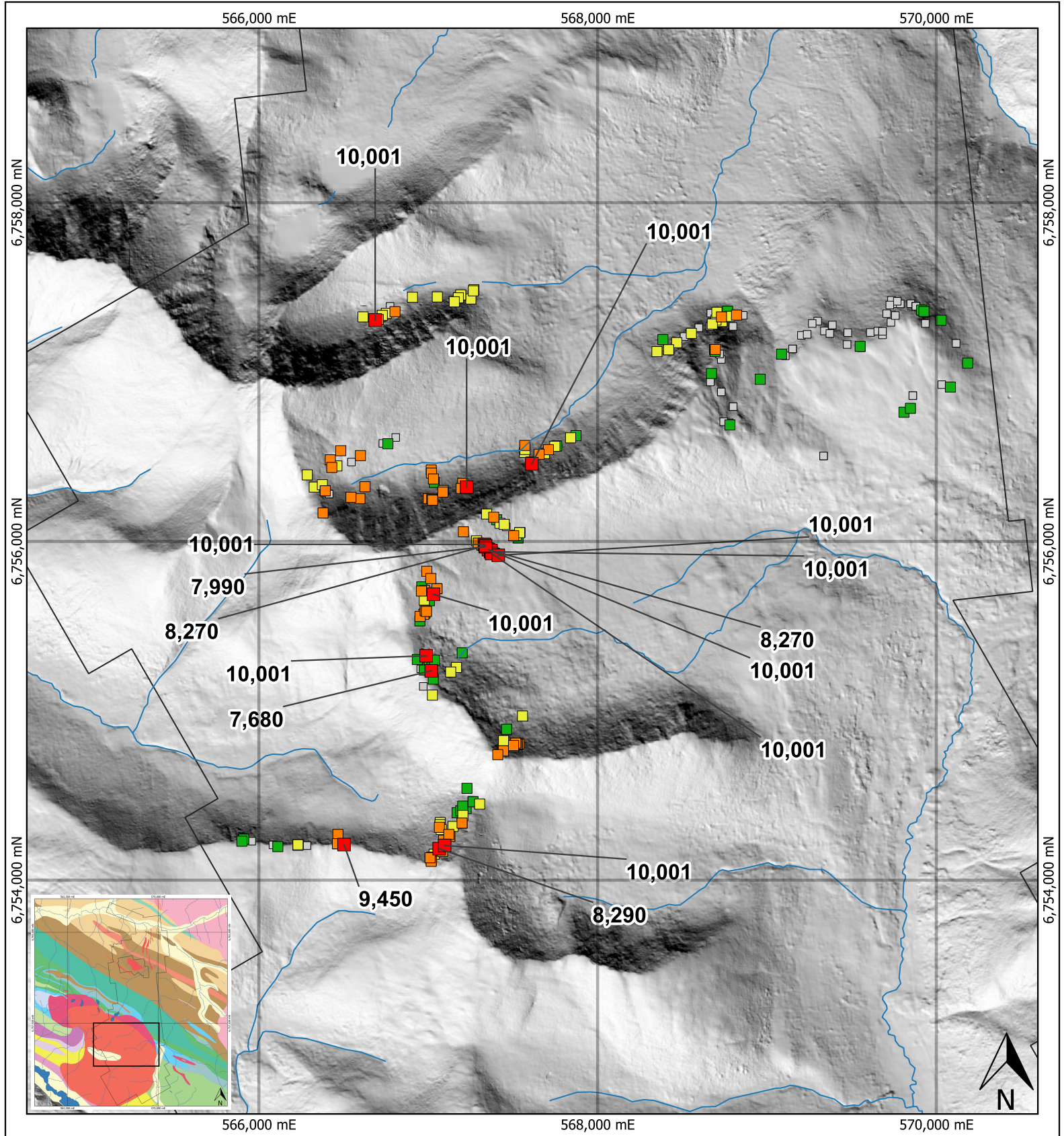
Figure 15

Author

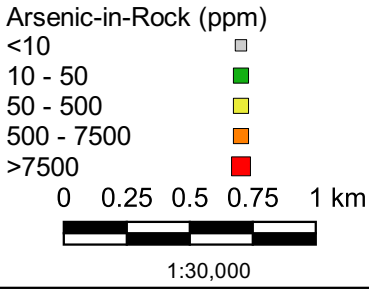
JK

Rev

A



**Legend**



**Rosy**  
**Arsenic-in-Rock**

Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	11/12/2023	Figure 16	JK	A

C:\Users\JohnKelley\Desktop\Rosy Maps\Figure 8 -Prospecting\Figure X - Prospecting.gqz

D002593	566197	6762050	1478	1.29	93	252	352
D002605	566599	6761396	1424	8.17	6	1435	575
D002606	566599	6761450	1404	10.85	11	2180	2050
D002607	566614	6761503	1482	3.06	4	549	460
D002772	567800	6761500	1435	4.17	1	985	1295
D002774	567803	6761355	1369	1.62	4	256	835
D002814	568806	6760059	1376	0.16	50	14.8	96
D002821	566402	6762494	1568	2.34	23	586	659
D002824	566400	6762656	1543	1.18	2	142	1070
D002839	566397	6761852	1452	2.74	4	272	380
D002842	566803	6761396	1399	12.90	21	2820	1585

A subset of these high samples relate to a newly discovered ~750 m long silver lead zinc anomaly, which is concurrent with the Slate MINFILE occurrence. Results from soil sampling are presented in Figures 17 through 22. A digital copy of soil sample descriptions is attached in Appendix IV, and certificates of analyses are in appendix V.

### *Analytical Information*

Rock samples were transported from the property to Whitehorse, YT by Cascadia staff, where they were prepared for shipping to Langley, BC via Manitouslin. Analytical work was completed by ALS Minerals, with sample preparation in Langley, BC and geochemical analyses in North Vancouver, BC.

Soil samples were transported from the property to ALS Minerals in Whitehorse, YT in the custody of Aurora Geoscience Inc. employees. Analytical work for soil samples was completed by ALS Minerals, with sample preparation in Whitehorse, Yukon and geochemical analyses in North Vancouver, British Columbia.

Rock samples were analyzed for gold by the Au-AA24 procedure which involves fire assay preparation using a 50-gram charge with an inductively coupled plasma – atomic emission spectrometry finish. Soil samples were analyzed for gold by the Au-ICP21 procedure which involves fire assay preparation using a 30-gram charge with an inductively coupled plasma – atomic emission spectrometry finish. Rock and soil multi-element data for 48 elements was determined by the ME-MS61 procedure, which involves a four-acid digestion followed by inductively coupled plasma – atomic emission spectroscopy and inductively coupled plasma – mass spectrometry.

## Discussion and Conclusions

The Rosy property hosts widespread gold and silver bearing veins which are spatially associated with Jurassic and Late Cretaceous intrusive activity. Textural features observed in mineralized samples, and geochemical signatures suggest they are developed in the distal part of a large, low sulphidation epithermal system. Although the Red Mountain deposit is hosted in a significantly younger intrusive, it is potentially associated with the same system.

The 2023 prospecting and soil program extended the surface expression of the R1 and R3 veins, while discovering new surface expressions of previously unknown gold and silver bearing veins. Soil sampling identified a new silver-, lead- and zinc-in-soil anomaly in a

previously unsampled area. Soil sampling also confirmed the copper-in-soil anomaly east of the Sawtooth pluton has coincident copper mineralization in rock, its origin is currently unknown.

Work on the Rosy property should be continued, due to the size, abundance, and ongoing discovery of the gold-silver anomalies. Additionally, the copper-in-soil anomaly remains underexplored, and requires further follow up work. Future programs should include further prospecting of the R-series of veins, with a focus on collecting structural data to help delineate targets for a future drill program. The regional copper and silver-lead-zinc anomalies warrant further prospecting and geologic mapping. Finally, the continued discovery of polymetallic anomalies in different lithologies throughout the property indicate that further grid soil sampling to cover the rest of the property should be undertaken.

567,500 mE

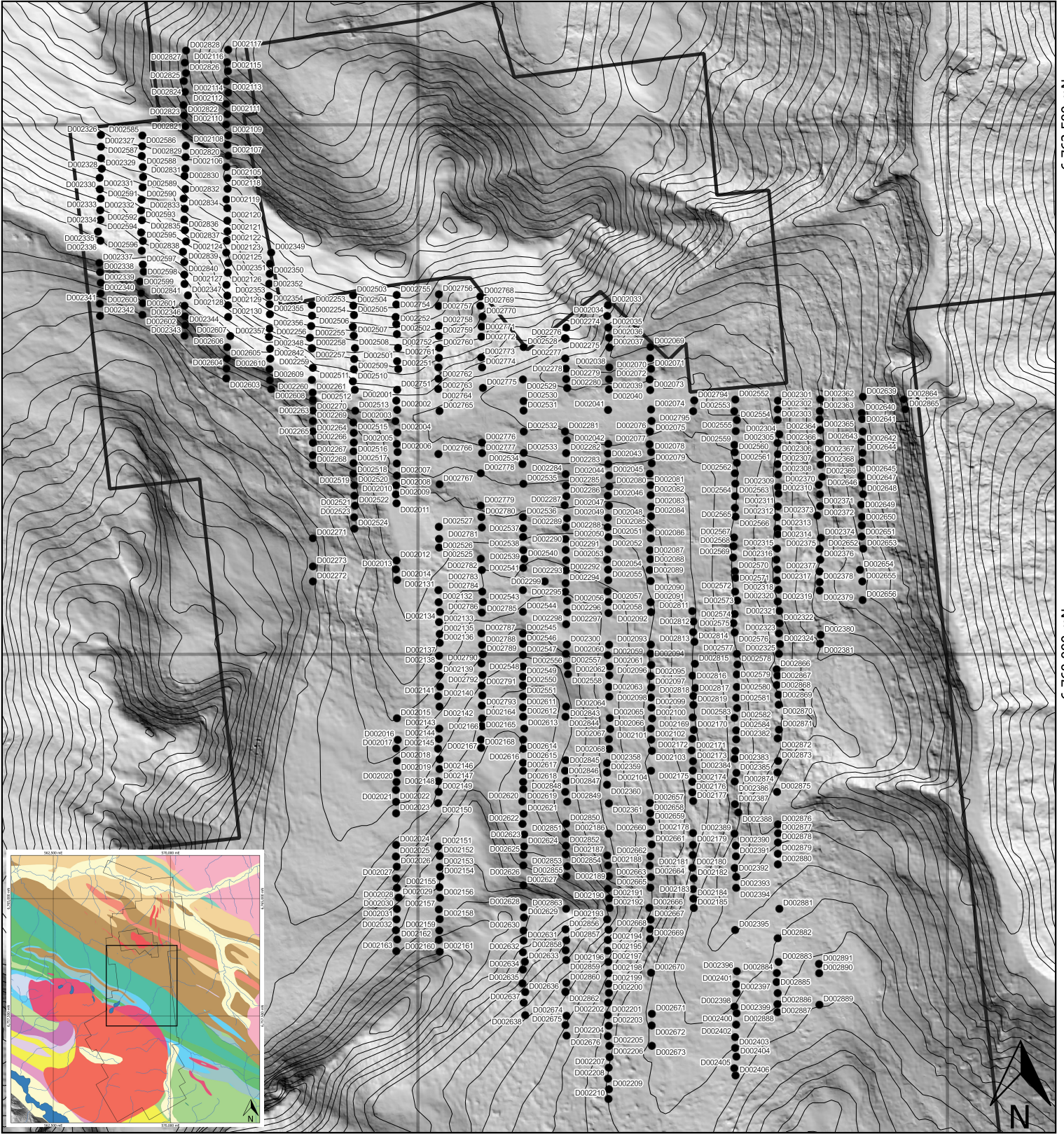
570,000 mE

6,762,500 mN

6,762,500 mN

6,760,000 mN

6,760,000 mN

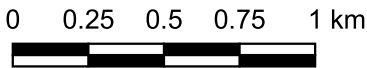


567,500 mE

570,000 mE

### Legend

- Soil Sample Locations •
- 100' Contours —
- Rosy Claim Boundary □



1:25,000



## Rosy

### Soil Sample Locations

Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	11/12/2023	Figure 17	JK	A

C:\Users\JohnKelley\Desktop\Rosy Maps\Figure 13 - Soils\Figure X - Soils.gqz

567,500 mE

570,000 mE

6,762,500 mN

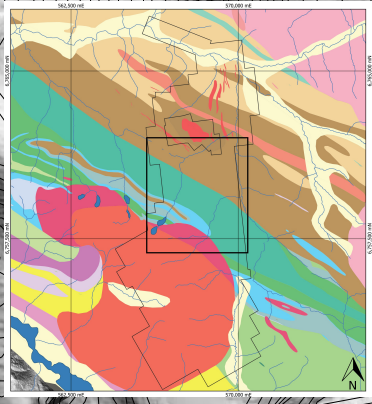
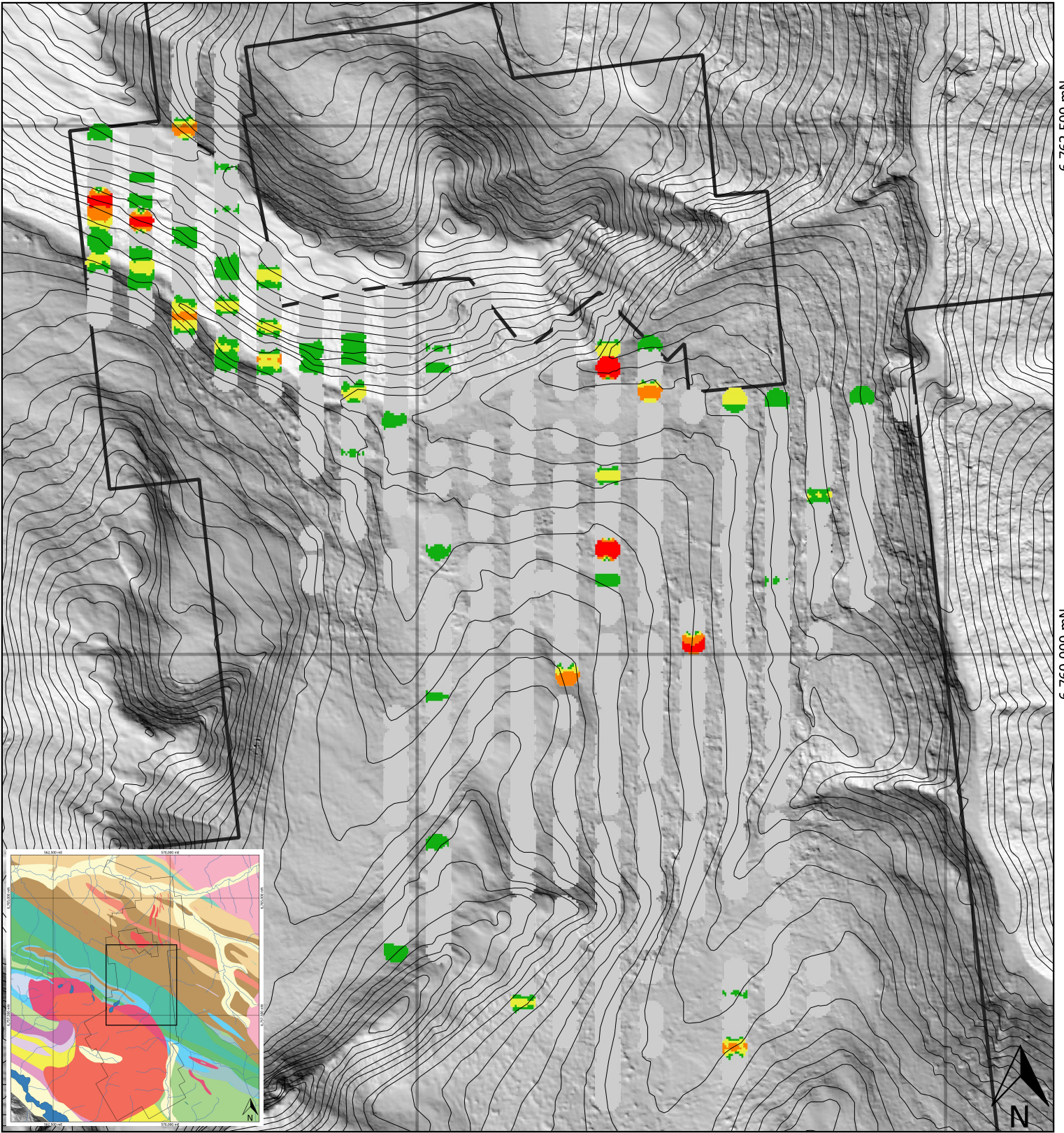
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6,760,000 mN

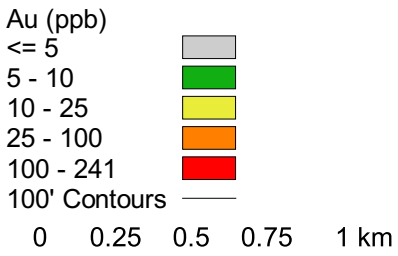
6,760,000 mN

567,500 mE

570,000 mE



### Legend



## Rosy

### Gold-in-Soil

1:25,000

Datum <b>NAD 83 Zone 8N</b>	Date <b>11/12/2023</b>	Fig. # <b>Figure 18</b>	Author <b>JK</b>	Rev <b>A</b>
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C:\Users\JohnKelley\Desktop\Rosy Maps\Figure 13 - Soils\Figure X - Soils.qgz

567,500 mE

570,000 mE

6,762,500 mN

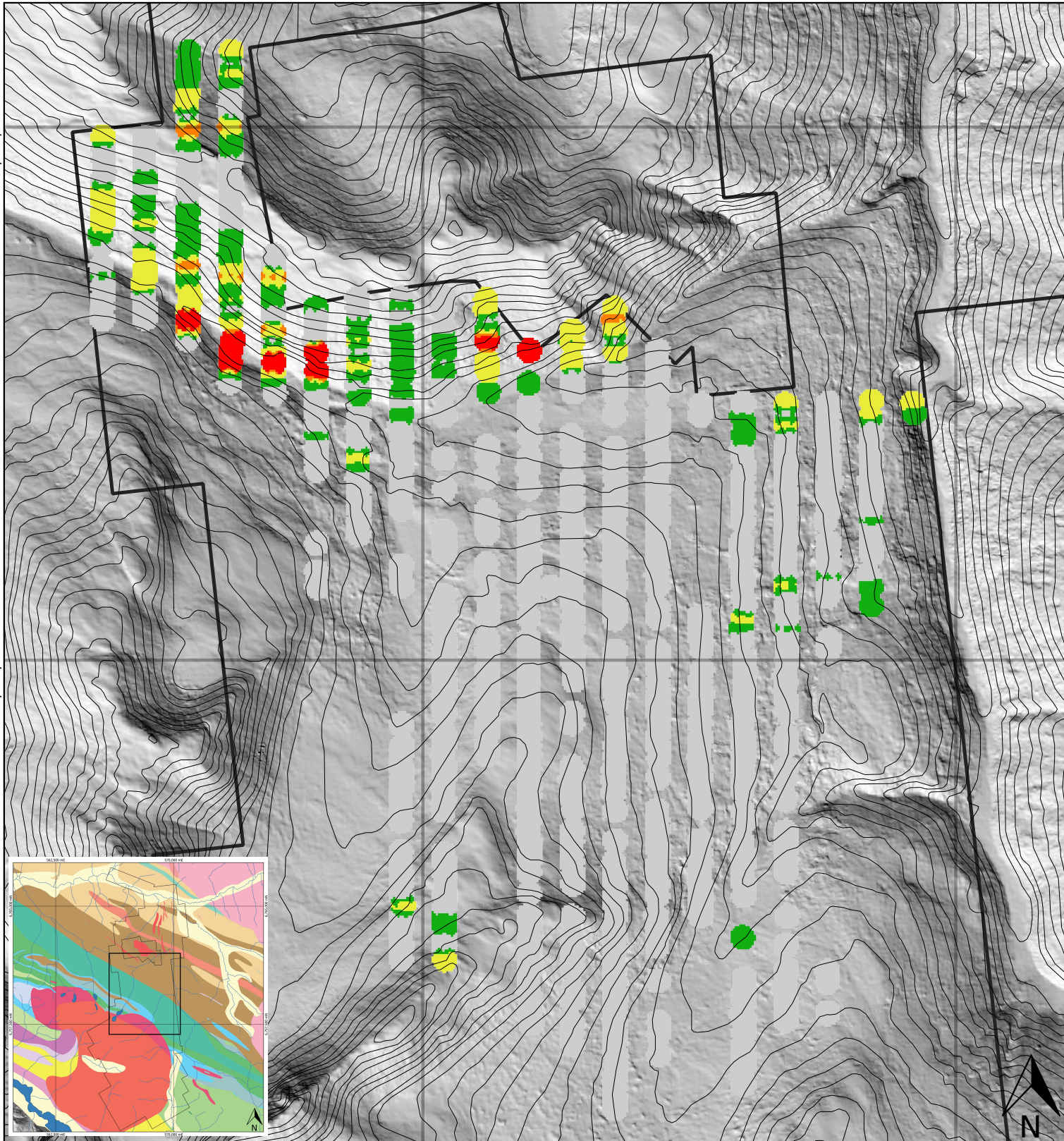
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6,760,000 mN

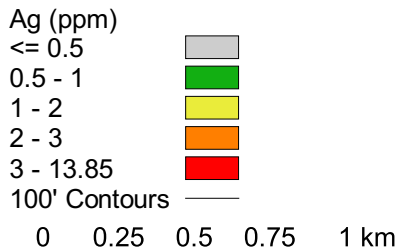
6,760,000 mN

567,500 mE

570,000 mE



### Legend



## Rosy

### Silver-in-Soil

1:25,000

Datum

NAD 83  
Zone 8N

Date

11/12/2023

Fig. #

Figure 19

Author

JK

Rev

A

567,500 mE

570,000 mE

6,762,500 mN

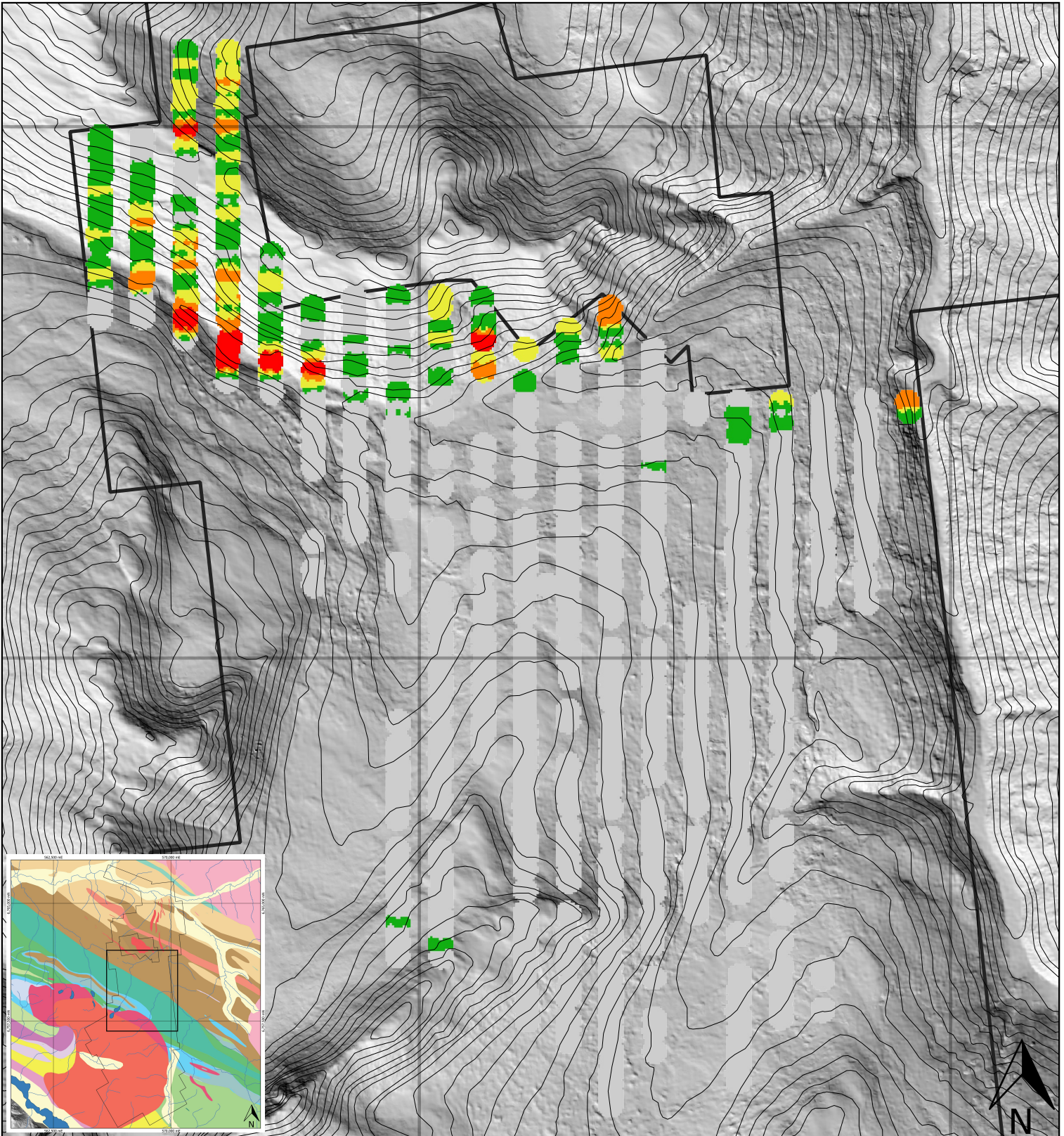
6,762,500 mN

6,760,000 mN

6,760,000 mN

567,500 mE

570,000 mE



### Legend

Pb_ppm	
<= 50	
50 - 100	
100 - 200	
200 - 500	
500 - 4670	
100' Contours	

0 0.25 0.5 0.75 1 km



## Rosy

### Lead-in-Soil

1:25,000

Datum	Date	Fig. #	Author	Rev
NAD 83 Zone 8N	11/12/2023	Figure 20	JK	A

C:\Users\JohnKelley\Desktop\Rosy Maps\Figure 13 - Soils\Figure X - Soils.qgz

567,500 mE

570,000 mE

6,762,500 mN

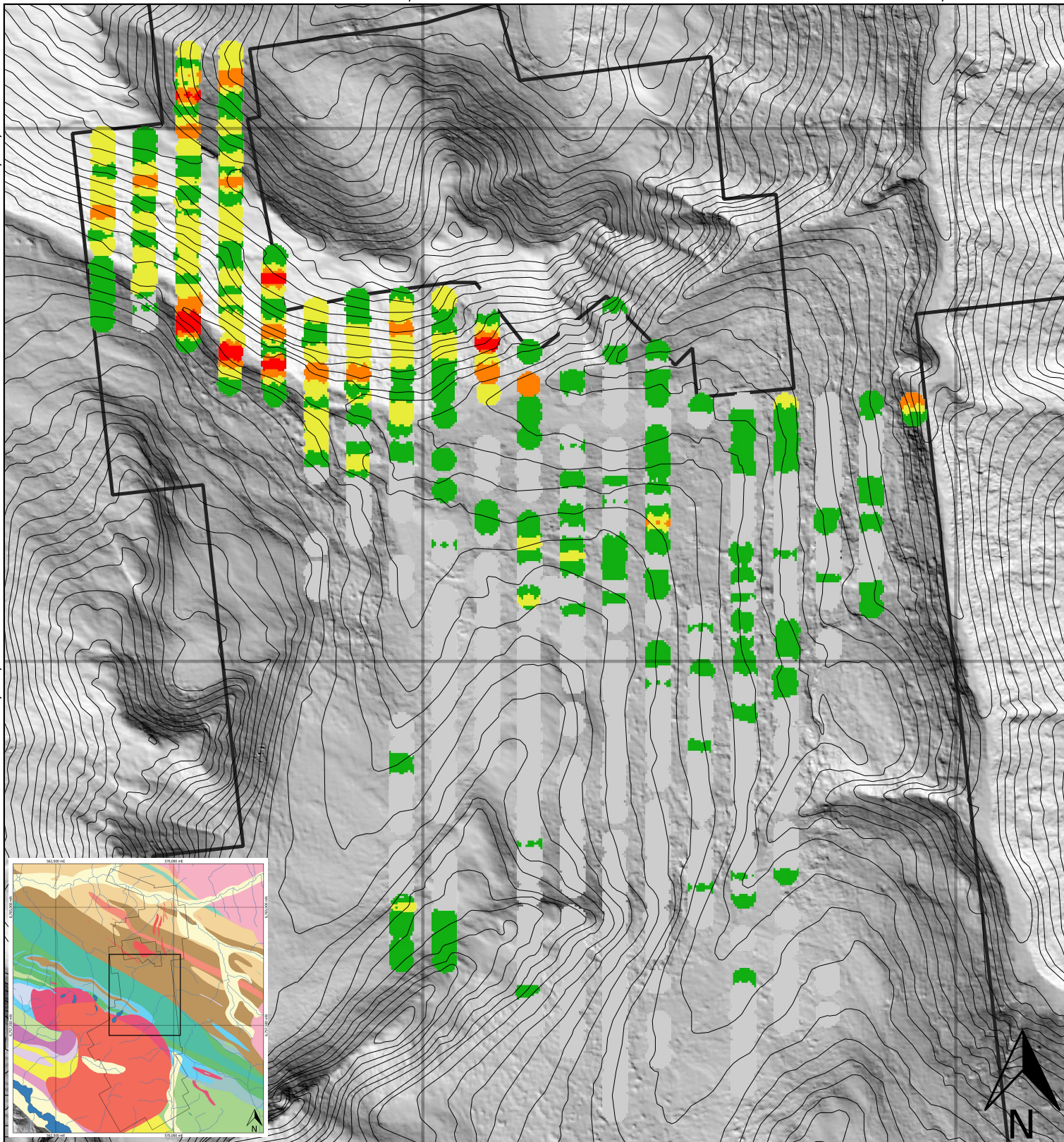
6,762,500 mN

6,760,000 mN

6,760,000 mN

567,500 mE

570,000 mE



### Legend

- Zn (ppm)
- <= 100
- 100 - 250
- 250 - 500
- 500 - 1,000
- 1,000 - 2,580
- 100' Contours

0 0.25 0.5 0.75 1 km



## Rosy

### Zinc-in-Soil

1:25,000

Datum

NAD 83  
Zone 8N

Date

11/12/2023

Fig. #

Figure 21

Author

JK

Rev

A

567,500 mE

570,000 mE

6,762,500 mN

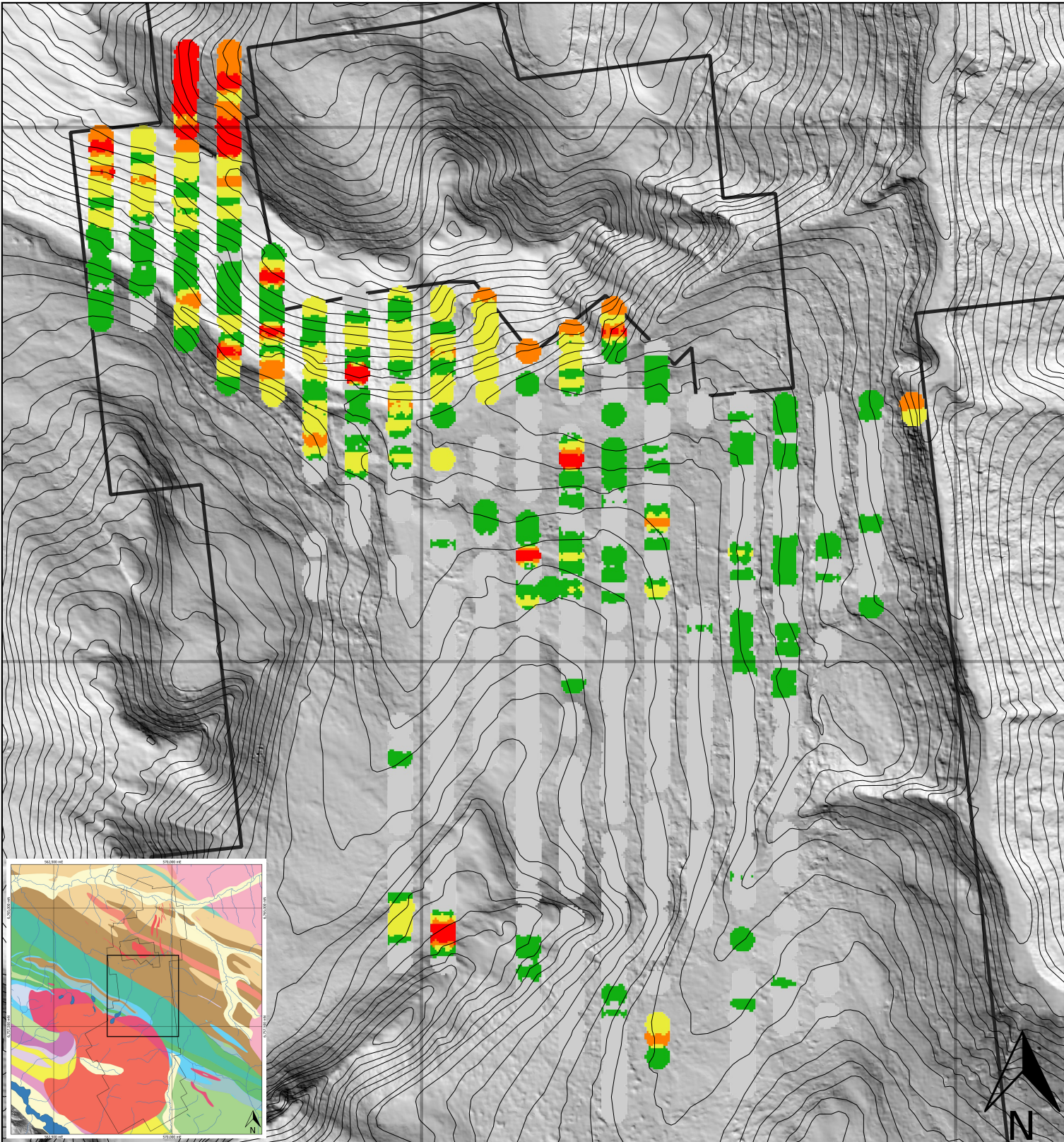
6,762,500 mN

6,760,000 mN

6,760,000 mN

567,500 mE

570,000 mE



### Legend

Mo (ppm)

- <= 2
- 2 - 5
- 5 - 10
- 10 - 15
- 15 - 50
- 100' Contours

0 0.25 0.5 0.75 1 km



## Rosy

### Molybdenum-in-Soil

1:25,000

Datum

NAD 83  
Zone 8N

Date

11/12/2023

Fig. #

Figure 22

Author

JK

Rev

A

## References

- de Keijzer, M., Williams, P.F. and Brown, R.L., 1999. Kilometre-scale folding in the Teslin Zone, northern Canadian Cordillera and its tectonic implications for the accretion of the Yukon-Tanana Terrane to North America; *Canadian Journal of Earth Science*, Volume 30, Number 3, March 1999.
- Eaton, W.D., 2000. Prospecting and Soil Geochemistry on the Rosy Property; Assessment Report prepared for ATAC Resources Ltd.
- Eaton, W.D., 2004. Prospecting and Soil Geochemistry on the Rosy Property; Assessment Report prepared for ATAC Resources Ltd., p.6. Garagan, T., 1987. Geology and Geochemistry of the Was Claims; Assessment Report prepared for AllNorth Resources Ltd., p.7.
- Joyce, N., Ryan, J., Colpron, M., Hart, C.J.R., and Murphy, D., 2015. A compilation of <sup>40</sup>Ar/<sup>39</sup>Ar age determinations for igneous and metamorphic rocks, and mineral occurrences from central and southeast Yukon; Geological Survey of Canada, Open File 7924, 2015, 229 pages, <https://doi.org/10.4095/297446>.
- Lane, J. and Walsh, D., 2016. Geochemical Sampling, Geological Mapping and Prospecting on the Rosy Claims; Assessment Report prepared for ATAC Resources Ltd.
- Moynihan, D., 2023. Unpublished map. Yukon Geological Survey.
- Sack, P., Colpron, M., Crowley, J., Ryan, J., Allan, M., Bernanek, L., and Joyce, N., 2020. Atlas of Late Triassic to Jurassic pluton in the Intermontane terranes of Yukon; Yukon Geological Survey Open File 2020-1.
- Schneebeli, A., 2021. Technical Report describing Geochemical Sampling at the Rosy Property.
- Smith, H., 2008. Geochemical Sampling, and Prospecting on the Rosy Claims; Assessment Report prepared for ATAC Resources Ltd. and Valere Mining Limited.
- Smith, H., 2010. Geochemical Sampling and Prospecting on the Rosy Claims; Assessment Report prepared for ATAC Resources Ltd. and Bonaparte Capital Corp
- Tempelman-Kluit, D.J., 1979. Transported Cataclastic, Ophiolitic and Granodiorite in Yukon: Evidence of Arc-Continental Collision, GSC Paper 79-14.
- Walsh, D., 2018. Soil Geochemical Sampling and Prospecting; Assessment Report prepared for ATAC Resources Ltd.
- Wengzynowski, W.A., 2008. Geophysical Survey on the Rosy Claims; Assessment Report prepared for ATAC Resources Ltd.
- Yukon Geological Survey, 2020. Yukon Digital bedrock geology. Yukon Geological Survey, <http://data.geology.gov.yk.ca/Compilation/3> [03, 05, 2021].

# Appendix I

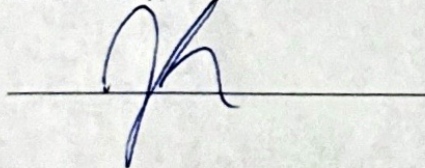
Statement of Qualifications

## Statement of Qualifications

I, John Kelley, Professional Geoscientist with business address in Vancouver, British Columbia and residential address in Regina, Saskatchewan do hereby certify that:

1. I graduated in 2018 from the University of Regina with a B.Sc. in Geology.
2. I am currently registered as a Professional Geoscientist (P.Geo) with Engineers and Geoscientists British Columbia (License 57191) and the Association of Professional Engineers and Geoscientists Saskatchewan (Member 46120).
3. I have worked in mineral exploration throughout Canada since 2017.
4. I began working in mineral exploration within the Yukon Territory in 2022.
5. I personally reviewed all data provided by Aurora Geoscience and Quantec Geoscience related to this program.
6. I participated in the mapping, prospecting and drilling programs.

John Kelley, P.Geo



# Appendix II

Rock Sample Descriptions

# Appendix III

Rock Sample Certificates of Analyses

# Appendix IV

Soil Sample Descriptions

# Appendix V

Soil Sample Certificates of Analyses