

**TECHNICAL REPORT**

**On the**

**KAP Property  
Mackenzie Mountains  
Northwest Territories, Canada**

**Prepared for:**

**INTEGRAL METALS CORP.  
#610 505 3rd Street SW,  
Calgary, Alberta  
T2P 3E6**

**Prepared by:**

**Kristian Whitehead, P.Geo.,  
Consulting Geologist,  
2763 Panorama Drive, North Vancouver, BC, V7G 1V7**

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## 1.0 SUMMARY

Kristian Whitehead, P.Geo., (the “author”) was retained by Integral Metals Corp. (“Integral” or the “Company”) to prepare an independent Technical Report on the KAP Property (the “Property”). This report is intended to provide a summary of material scientific and technical information concerning the Property and, in so doing, fulfill the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101 (“NI 43-101”). This report is also being prepared to support a listing of the Company’s shares on the Canadian Securities Exchange (CSE).

The Property, 100% owned by Integral and situated in the Mackenzie Mountains of the Northwest Territories, encompasses 7,500 hectares and features mineral showings characteristic of Mississippi Valley Type (“MVT”) carbonate-hosted zinc-lead mineralization. The primary mineralization identified are sphalerite (ZnS) and galena (PbS), with notable concentrations of gallium and germanium. Mineralization is predominantly hosted within the Landry Formation, particularly within the Recrystallized Zone, characterized by granular dolomitization and euhedral quartz needle silicification.

The Property is located approximately 160 kilometers west of Wrigley and 220 kilometers south of Norman Wells and is accessible primarily by helicopter. There is currently no ground access to the project; however, winter road construction along the Redstone River valley is thought to be feasible, providing potential ground access in the future. The Property is supported by the logistical infrastructure of Norman Wells, which serves as a base for exploration operations.

Geologically, the Property is situated in the Mackenzie Fold Belt which comprises the eastern component of the Cordilleran Orogenic Zone. The sediments of the belt were deposited in an environment of recurrent emergence and submergence controlled by a Proterozoic basement core called the Mackenzie Arch. The Mackenzie and Redstone Arches form the backbone of the central and southern Mackenzie Mountains. The Property lies on the east flank of the Proterozoic Redstone Arch. Locally, a thin sequence of Arnica and Landry formations overlies the Sombre formation. The Arnica formation comprises 150 m-to-180 m of fetid bituminous dolarenites. These are fine-to-medium grained laminated crystalline dolomites which contain local crackle breccias, spar-lined vugs, and minor secondary zinc mineralization.

The Property features stratigraphy that is prospective for MVT lead-zinc mineralization with associated gallium and germanium. Mineralized showings occur in the basal unit of the Landry Formation called the Manetoe facies and occasionally transcend the unconformable contact with the underlying Arnica Formation. The occurrences are epigenetic, occur along the contact of two sedimentary packages, and hosted within an extensively dolomitized, locally brecciated and silicified carbonate host that can reach up to 80 meters in thickness. The Property exhibits a diverse and complex geological framework, characterized by several distinct rock formations. The overburden layer, composed of unconsolidated materials such as soil, sand, and gravel, is typically encountered at the surface, covering the underlying bedrock.

Exploration on the Property dates back to 1975, initiated by Cominco Ltd., who conducted geological mapping, rock channel sampling, soil sampling, trenching, and drilling. Subsequent

exploration phases were undertaken by various companies, including significant contributions from Firesteel Resources Inc. in the mid-1990s, who undertook gravity geophysical surveys and drilling. Recent exploration in 2024 by the Company involved re-analysis of historical drill core, geochemical sampling, and 3D plotting of historical data.

In May 2024, the Company conducted an exploration program, including the digitization and modelling of historical drill holes and gravity surveys, and mapping of historical soil surveys. Fieldwork included the collection of historical drill core and representative hand samples for geochemical analysis, as well as ground-truthing of historical drill collars. The findings from this work confirmed the presence of gallium and germanium associated with sphalerite, validating historical data and highlighting the potential for further exploration.

The author visited the Property on August 07, 2024, to verify historical and recent exploration work, to examine mineralized outcrops, to collect necessary geological data, to take infrastructure and other technical observations and to assess the potential of the Property for discovery of lead, zinc, gallium, germanium and other mineralization.

The author's conclusion is that the Property is a property of merit with good potential to host meaningful lead, zinc, gallium, germanium and other mineralization due to the documented mineral showings, historical and recent exploration work results and favorable geological setting. In addition, the interplay of structural, stratigraphic, and geochemical controls enhances the potential for discovering additional mineralization. Based on these findings and historical data, the following recommendations are made for future exploration:

### ***1. Phase 1: Soil Geochemical Survey***

- Conduct a comprehensive soil geochemical survey across the Property to delineate anomalous zones and identify potential targets for drilling.
- Focus on areas with historical soil geochemical anomalies and potential extensions of known mineralized zones.

### ***2. Phase 2: Diamond Drilling Program***

If results from the first phase are positive, then a Phase 2 drilling program would be warranted to check the most promising targets identified because of geochemical surveys, geological mapping, and sampling work in Phase 1. A preliminary scope of work for 2,000 metres diamond proposed drilling should include:

- Re-log and re-assay select historical drill holes to update and validate historical data according to modern standards.
- Implement a targeted diamond drilling program with the intention of extending known mineralized zones.
- Drill priority targets identified from the gravity surveys and soil geochemical surveys, with particular consideration for the "Grav\_Main\_3" anomaly, which presents a strong untested target.

## **2.0 INTRODUCTION**

### **2.1 Purpose of Report**

Kristian Whitehead, P.Geo., (the “author”) was retained by Integral Metals Corp. (“Integral” or the “Company”) to prepare an independent Technical Report on the Property. This report is intended to provide a summary of material scientific and technical information concerning the Property and, in so doing, fulfill the Standards of Disclosure for Mineral Projects according to NI 43-101. This report is also being prepared to support a listing of the Company’s shares on the Canadian Securities Exchange (CSE).

To the knowledge of the author, no prior 43-101 compliant technical report has been prepared with regards to the Property and this report is the only current technical report on the Property.

### **2.2 Sources of Information**

This report is based upon scientific and technical information known to the author at the effective date of this report, being August 9<sup>th</sup>, 2024. All consulted sources are listed in the References section.

A site visit was carried out by the author on August 07, 2024. The purpose of the Property inspection was to verify historical and recent exploration work, to examine mineralized outcrops, to make geological, infrastructure, and other technical observations on the Property, and to assess the potential of the Property for the discovery of transitional metals (zinc), post-transitional metals (gallium and lead), and metalloids (germanium). The geological work performed to verify the existing data consisted of visiting reported approachable historical exploration work areas.

### **3.0 RELIANCE ON OTHER EXPERTS**

In preparing this report for the Property, the author has relied upon the Company and its management for the information regarding the status of the mineral tenures comprising the Property contained in Section 4 of this Technical Report. Specifically, the author has relied upon a Claim Status Report from the Mining Recorder in the Northwest Territories, dated Wednesday, April 24, 2024, provided to him by the Company, setting out information regarding the mineral tenures comprising the Property.

## 4.0 PROPERTY DESCRIPTION AND LOCATION

The Property is comprised of 6 mineral claims covering approximately 7,500 hectares of land in the Mackenzie Mountains, Northwest Territories, Canada. The Property is located approximately 160 kilometers west of Wrigley, Northwest Territories and approximately 220 kilometers south of Norman Wells, Northwest Territories. The Property area is covered by NTS map sheets 95M06 and 95M07, and is centered at the geographic coordinate of UTM NAD 83, Zone 9N, 607167mE and 7018574mN. Integral is the 100% owner of the Property, and there are no royalties associated with the Property. Figure 1 presents the regional location of the Property, and Figure 2 presents the local location and mineral claims.

The claims were staked in-person on behalf of Integral Metals on February 8<sup>th</sup>, 2024. Each claim is 1,250 hectares and rectangular in shape, with the sides running north, south, east and west. Table 1 presents a list of the mineral claims that form the Property. As the sole holder of the mineral claims comprising the Property, the Company has the exclusive right to prospect on the Property, apply for recording and prospecting permits, take existing claims to mineral leases, and attempt to acquire a surface lease to support potential future mining activities. The Company obtained a Prospector's Licence (#N34874) on April 17, 2024, which permits the Company to enter, prospect and locate mineral claims on Commissioner's Land that is available to be staked in the Northwest Territories.

Once recorded, a mineral claim is valid for a period of two years, provided that \$10/hectare of eligible work is completed and recorded per claim during those two years (resulting in a total work commitment for the Property of \$75,000 in the first two years). For each subsequent year, the work requirement is \$5/hectare (\$37,500/year total for the Property). As a result, to keep the Property in good standing, a work report must be filed with the MRO at the end of each period, along with a filing fee of \$0.25/hectare (\$1,875/report). Mineral claims can be combined into groupings of no larger than 5,000 hectares (i.e., four full-sized claims), to which eligible work expenditures can be distributed amongst claims within a grouping.

A payment in lieu of work - also referred to as an extension - can be filed with the Mining Recorder in the prescribed form, along with the filing fee of \$0.25/hectare and the deposit in lieu of work. Current regulations allow for a maximum of three consecutive extensions before work must be filed.

If the mineral claims that form the Property are validly maintained, these mineral claims can be held by the Company for up to 10 years, at which point the mineral claims must either be converted into mining leases or relinquished. Examples of eligible work include: the examination of outcrops and surficial deposits; geological mapping; sampling; geochemical analysis; geophysical analysis; drilling; excavation; remote sensing; placing of grid lines in the field; petrography; data analysis; map generation and preparation of reports; building roads, airstrips or docks to provide claim access; and environmental baseline studies.

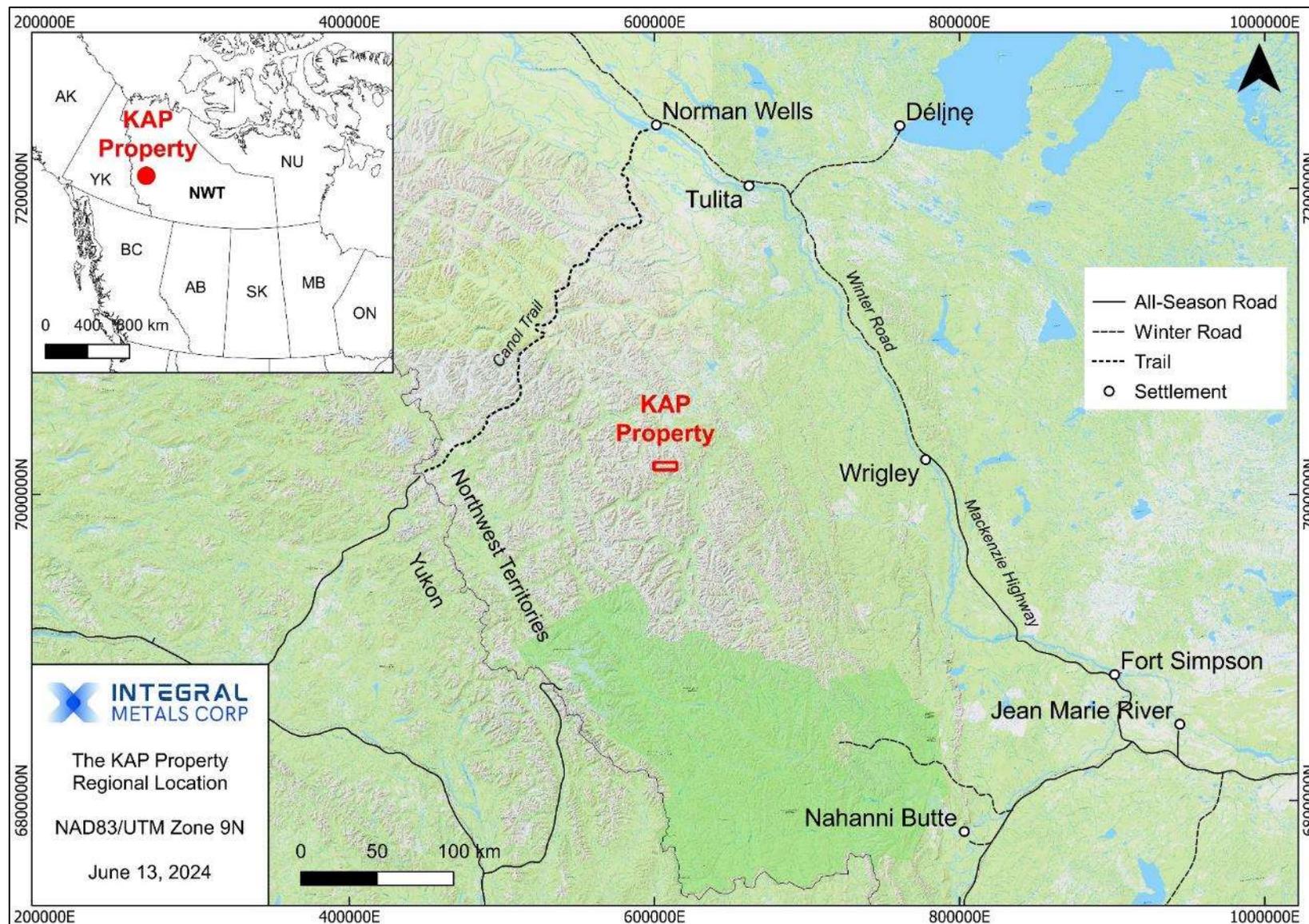


Figure 1: Regional location of the Property.

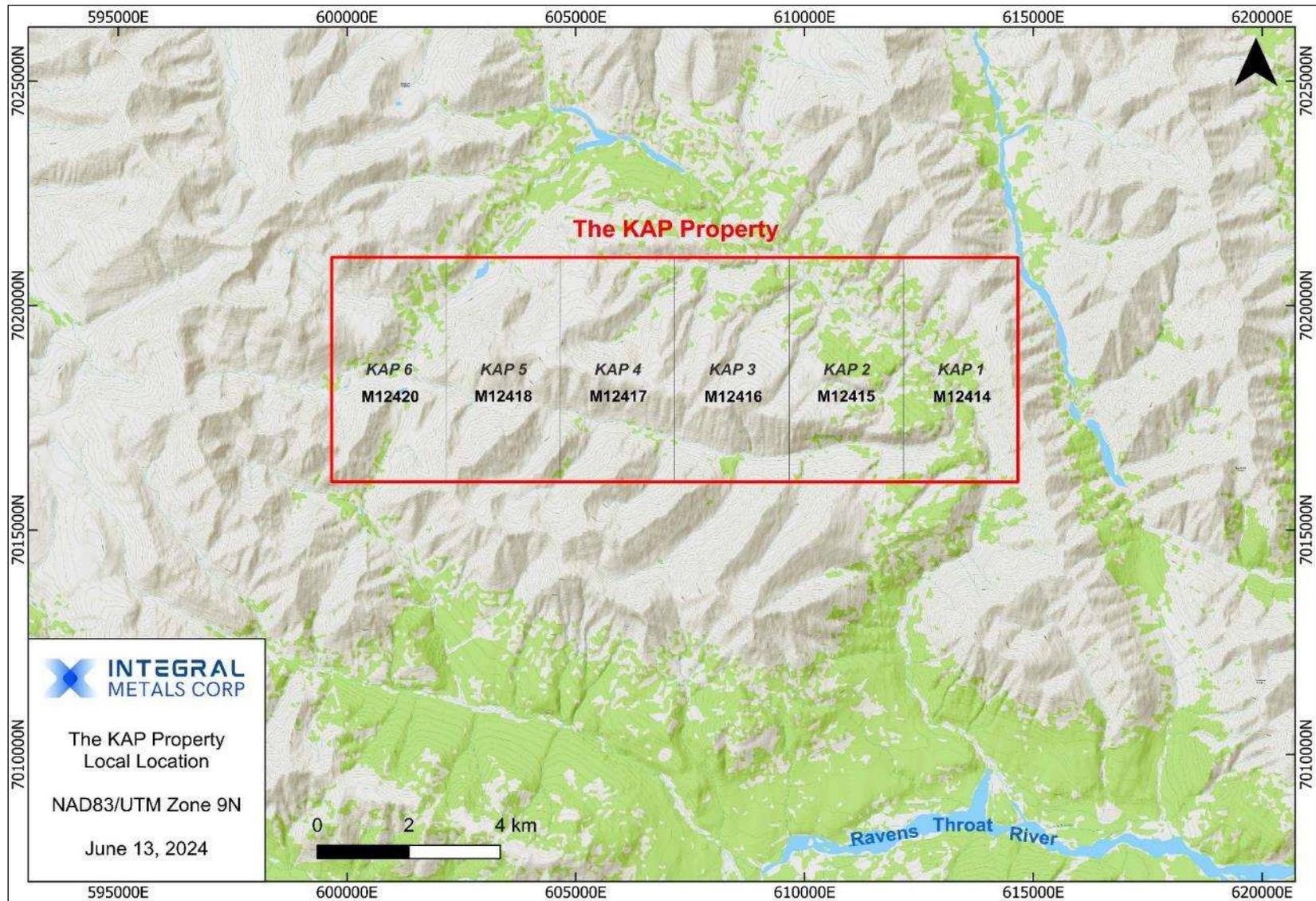


Figure 2: Local location of the Property and mineral claims.

Table 1: List of the mineral claims that form the Property.

<b>Tenure</b>	<b>Name</b>	<b>Owner</b>	<b>Issue Date</b>	<b>Anniversary Date</b>	<b>NTS Map Sheets</b>	<b>Status</b>	<b>Hectares</b>
M12414	KAP 1	Integral Metals Corp. 100.00%	2024-02-08	2026-02-08	095M07	Active	1,250
M12415	KAP 2	Integral Metals Corp. 100.00%	2024-02-08	2026-02-08	095M07	Active	1,250
M12416	KAP 3	Integral Metals Corp. 100.00%	2024-02-08	2026-02-08	095M07	Active	1,250
M12417	KAP 4	Integral Metals Corp. 100.00%	2024-02-08	2026-02-08	095M07	Active	1,250
M12418	KAP 5	Integral Metals Corp. 100.00%	2024-02-08	2026-02-08	095M07	Active	1,250
M12420	KAP 6	Integral Metals Corp. 100.00%	2024-02-08	2026-02-08	095M07, 095M06	Active	1,250
<b>Total</b>							<b>7,500</b>

As discussed in Section 25 of this report, there are risks that may affect the right or ability to access and perform work on the Property, which include continued community consultation and infrastructure development and improvement at each stage of exploration and development. Specifically, the lack of road access to the Property may adversely impact access to the Property and the Company's ability to perform work on the Property, in particular when weather prevents an aircraft from accessing the Property and will impact the cost of exploration activities carried out on the Property.

#### **4.1 Environmental Concerns**

There is no historical production from mineralized zones on the Property, and the author is not aware of any environmental liabilities which have accrued from historical exploration activity.

#### **4.2 First Nations**

The First Nation communities within or near to the project area include the Tulita Dene, Norman Wells Métis, and Fort Norman Métis. Any exploration and mining work on the Property will need to be carried out in consultation with these communities.

#### **4.3 Permits**

The mineral claims M12414, M12415, M12416, M12417, M12418, and M12420 were recorded on February 8, 2024, and allow low-impact activities, including the work proposed in Phase 1:

- Prospecting and sampling which involves the collection of small rock and soil samples using hand tools or light equipment (e.g., hand augers, hammers, channel saws);
- Geological surveying which includes mapping and surface sampling for geological studies; and,
- Non-invasive geophysical surveying, such as magnetic, gravity, or electromagnetic studies.

A Land Use Permit – Type A was applied for on April 29, 2024, covering Property, and a final permit (S24C-004) was issued with effective date of July 30, 2024, to July 29, 2029. The permit allows the work proposed in Phase 2 to be performed, including the following activities:

- 2 diamond or reverse circulation drills;
- 2 pieces of heavy equipment (i.e., dozer, large genset);
- 2 light vehicles (i.e., ATVs, snowmobiles);
- 6 small generators or pumps;
- 30,750 L of hydrocarbon storage;
- 63m<sup>3</sup> of drilling muds;
- 10 tent structures;
- 100 m<sup>2</sup> of other temporary structures;
- 1,200 person days per season of non-burnable solid waste; and,
- 1,200 person days per season of burnable solid waste.

## **5.0 ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES, AND INFRASTRUCTURE**

### **5.1 Access**

The Property is located in the Mackenzie Mountains of the Northwest Territories. The Property is located approximately 160 kilometers west of Wrigley, Northwest Territories, and approximately 220 kilometers south of Norman Wells. The Property can be accessed by helicopter from Norman Wells or Wrigley, both located alongside the Mackenzie River. The all-weather Mackenzie Highway extends up to Wrigley and is serviceable throughout the year. An extension of this highway to Norman Wells is currently under review. Float-equipped aircraft can land at Hayhook Lake (25 kilometers north of the Property) and Dal Lake (22 kilometers southeast of the Property). Winter road access to the Property along the Redstone River valley may be possible.

### **5.2 Climate**

There is limited climatic data available in the Mackenzie Mountains. The area is characterized by a subarctic climate that results in long, extremely cold winters and short, cool to mild summers. Temperatures in the winter can drop below  $-30^{\circ}\text{C}$ , and the area often experiences severe frost and snow, which can persist from October to May. In contrast, summer temperatures are milder, typically ranging from  $10^{\circ}\text{C}$  to  $20^{\circ}\text{C}$ , although occasionally they may rise above  $25^{\circ}\text{C}$  during brief warm spells. Precipitation in the area is moderate but can vary significantly from one location to another due to the orographic effect—the influence of the mountainous terrain on weather patterns. Snowfall is the predominant form of precipitation during the winter months, contributing to significant snowpack. During the summer, rainfall is more common and can lead to rapid changes in river and stream levels, especially during periods of intense downpour. Exploration work such as geological mapping, prospecting, trenching, and sampling can be effectively carried out from mid-May to mid-September, whereas drilling and geophysical surveying may be possible year-round.

### **5.3 Physiography**

This area forms part of the broader Canadian Cordillera, extending from a series of thrust faulted and folded rocks that have been significantly shaped by tectonic activities. Glacial activity has played a crucial role in forming the modern topography, as the Property is characterized by moderately steep terrain with incised streams. A shallow valley lies to the northeast of the mineralized showings and is oriented in a southeast direction. Smaller northeast-trending creeks flow into this valley. Water is present throughout the summer in most streams; however, flow rates are seasonal. Elevations range from 1,000 meters in the main valley floor to 2,000 meters on ridge crests. Slopes average  $10^{\circ}$  to  $30^{\circ}$  and represent dip slopes over most of the Permit area. The terrain remains largely covered by sparse vegetation due to the harsh climate, with areas of alpine tundra and scattered patches of boreal forest in more protected valleys. A transitional tree line occurs near 1,200 meters above sea level.

## 5.4 Local Resources and Infrastructure

The Mackenzie Mountains region is marked by its remoteness and limited infrastructure. The area is sparsely populated, with few settlements and indigenous communities who partly rely on traditional livelihoods such as hunting, fishing, and foraging. The oil and gas industry led to the industrial growth and development of several communities in the region, including Norman Wells, Tulita, and Wrigley. Non-technical services (e.g., air support, equipment rentals) that are needed to support mineral exploration activities are able to be sourced from these communities, while technical services (e.g., geophysical surveys) will need to be brought in from outside the region.

The Town of Norman Wells (pop. 673 in 2021) is one of the essential logistical bases for operations and exploration activities in the surrounding regions. Located along the Mackenzie River valley and accessible via winter road, Norman Wells serves as a crucial regional hub and provides a relatively higher level of infrastructure and resources compared to the more remote areas of the Mackenzie Mountains. The town has a full-service airport, which is used for connecting the area with larger urban centers, such as Yellowknife, and facilitating the transport of people and supplies. In addition to air transport facilities, Norman Wells features several essential services such as accommodations, local retail stores, and medical services, which are critical for supporting both the local population and the workforce involved in various industrial activities, including oil and gas operations and mineral exploration. The presence of Esso (Imperial Oil), Canadian Natural Resources, and Petro for oil extraction and processing infrastructure in the town also underscores its strategic importance.

The Hamlet of Tulita (pop. 396 in 2021) is located at the confluence of the Great Bear River and the Mackenzie River. It is a small but vital community in the region that serves as an important local center for the Sahtu Dene and Metis people. While Tulita is more modest in scale compared to larger centers like Norman Wells, it provides essential services that are crucial for regional activities, including mineral exploration. Although the infrastructure is not extensive, the strategic location of Tulita makes it a significant point for staging and logistics in support of exploration and other economic activities in the surrounding areas. Its cultural significance and local knowledge base also provide valuable insights and collaboration opportunities for companies engaged in resource development within the region.

The Settlement of Wrigley (pop. 117 in 2021) is located on the east bank of the Mackenzie River, north of Fort Simpson. This community, while small, plays a significant role in the region, especially for operations that require local knowledge and a strategic staging point along the Mackenzie River corridor. Infrastructure in Wrigley is quite basic, with the primary mode of access being via air through a small airstrip that accommodates light aircraft, and the year-round, all-weather Mackenzie Highway.

While the infrastructure supporting these communities and any exploration activities is minimal, there is active interest in improving local infrastructure from the territorial government, which is evaluating the upgrade of 321 kilometers of winter road from Wrigley to Norman Wells into an

all-weather, two-lane gravel highway. Air transportation is a primary means of access for both people and supplies in the area, with small airstrips for fixed-wing aircraft and helicopters scattered in and around the mountains. The Hook Lake camp operated by Redbed Resources is located approximately 85 kilometers south of the Property, and has a small historical landing strip that was constructed to support exploration activities. Closer to the Property is an old hunting camp located on the north end of Dal Lake, approximately 22 kilometers from the Main showing, which is currently under lease by Raven's Throat Outfitters and consists of a helicopter landing pad, boat dock, two sleeping cabins, and a kitchen building. Maintenance and upgrades are recommended if the camp is used to support mineral exploration activities.

There are no major rail or port facilities within a practical distance, and logistical support comes mainly from regional centers located over one hundred kilometers away. This lack of infrastructure necessitates thorough planning and significant investment in logistics and support systems for any substantial exploration or mining activities. Companies operating in the area typically need to establish temporary camps, bring in all necessary equipment and provisions by air, and generate their own power on-site. Such was the case on the Property during historical exploration programs that included drilling activities. A flat, level area was observed near the Main showing, containing enough space for a camp to be built and a helicopter to easily land. The Property size is expected to be large enough to sustain future mining and development work. Nearby, 1<sup>st</sup> and 2<sup>nd</sup> order streams appear to provide enough water flow to sustainably support drilling activities, while the Ravens Throat River located 7 kilometers south of the Property boundary is a major high-order river that feeds into the Mackenzie River 150 kilometers to the east.

## 6.0 HISTORY

### 6.1 Historical Work

#### 6.1.1 Summary

Table 2 presents a summary of the historical work performed on the area covered by the current mineral claims. There have been several exploration programs performed on the Property, including:

- 1975-76: Cominco Ltd. discovered the Main, Breccia Creek, Steep Creek, and Adyjo mineral showings, and performed geological mapping, rock channel sampling and hand sampling geochemistry, soil sample geochemistry, trenching, and drilling.
- 1977-81: Prospectors (including R. Cook) discovered the Blanche and Olaxis mineral showings and performed rock hand sampling geochemistry and geological mapping.
- 1986-87: Equinox Resources Ltd. performed rock hand sample geochemistry.
- 1995-98: Firesteel Resources Inc. performed gravity geophysical surveys, drilling, and soil geochemistry.
- 2005-07: A prospector (P. Risby) staked the area.
- 2009: Andesite Capital Corp. acquired the claims from P. Risby.
- 2010-12: Stoneshield Capital Corp. acquired the claims from Andesite Capital Corp. and performed rock hand sample geochemistry.

Table 2: Historical exploration work performed on the current Property area.

<b>Year</b>	<b>Owner/Operator</b>	<b>Work</b>	<b>Reference</b>
1975	Cominco Ltd.	Geological mapping	Olfert, 1976a
1976	Cominco Ltd.	Geological mapping; Rock geochemistry; Soil geochemistry; Trenching; Drilling	Olfert, 1976b
1977	R. Cook	Rock geochemistry	Cook, 1979
1981	R. Cook	Geological assessment	Cook, 1981
1987	Equinox Resources Ltd.	Rock geochemistry	Leighton, 1987
1995	Firesteel Resources Inc.	Gravity geophysical surveying	McCartney and Olfert, 1995
1996	Firesteel Resources Inc.	Gravity geophysical surveying; Soil geochemistry; Drilling	McCartney, 1996
1998	Firesteel Resources Inc.	Soil geochemistry	DuPre, 1998
2011	Stoneshield Capital Corp.	Rock geochemistry	Vivian and White, 2012

### 6.1.2 Cominco Ltd. – 1975-76

In 1975, Cominco carried out geological mapping on a scale of 1:500 covering the Adyjo mineral showing (approximately 9 km west of the Main showing). The Adyjo showing extended over a 300-m x 300-m area that was found to contain lead-zinc mineralization, hosted in a sequence of faulted and folded Devonian carbonates between 5-m-to-50-m thick, and situated on the eastern flanks of the Proterozoic Redstone Arch.

In 1976, Cominco carried out geological mapping, soil geochemistry, trenching, rock hand sampling and channel sampling geochemistry, and drilling. The mapping was performed at a 1:10,000 scale across the entire Property, and then at scales of 1:1,000, 1:200, and 1:100 in certain smaller areas. Significant lead-zinc mineralization was discovered in the Main, Breccia Creek, and Steep Creek showings. Detailed soil geochemistry sampling over the Main showing area revealed a number of anomalous zones that were enriched in lead (over 2,000 ppm Pb) and/or zinc (over 1,000 ppm Zn).

Trenching was performed on eight areas around the Main mineral showing, ranging from 1 m-to-13 m in length, 0.6 m-to-1.8 m in width, and 0.6 m-to-1.2 m in depth. In total there was 47.5 m<sup>3</sup> of material excavated. Rock geochemistry was performed in and around the trenches, defining the “A-Showing”: where a 4.5-meter x 19-meter area had an average grade of 18.5% Zn; the “B-Showing”: where a 2.5-meter x 12-meter area had an average grade of 32.3% Zn; and the “W-Showing”: where a 0.7-meter channel cut had an average grade of 25.6% Zn. The Steep Creek mineral showing (located 1.6 km northwest of the Main showing) reported a 3-m x 3-m area with an average grade of 36% Pb and 24.5% Zn; a 2.5-m x 33-m area with an average grade of 2.4% Zn; and, a 0.3-meter channel cut with an average grade of 22.0% Zn. The Breccia Creek mineral showing (located 2.8 km northwest of the Main showing) reported a 0.6-meter channel cut with an average grade of 34.4% Pb; and a 75-m x 20-m area that was described as “< 5% Pb + Zn”.

Table 3 presents the most significant drill intersections on the Main showing area in 1976. The drilling was performed across thirteen diamond drill holes (approximately 18 mm core diameter) that were closely spaced (spread across a 60-m x 70-m area) and shallow (maximum of 40-meter depth), testing the “A-Showing”, “B-Showing”, and “W-Showing” in the immediate vicinity of the Main showing. In total, there was 373.67 meters drilled.

*Table 3: Significant 1976 drill intersections on the Main showing area.*

Hole Number	Uncorrected Mineralized Thickness (m)	Zinc (%)
C-76-1	3.6	10.3
C-76-2	13.5	16.5
C-76-3	9.5	25.2

### 6.1.3 Raymond Cook – 1977-81

In 1977, prospectors (including Raymond Cook) acquired the Blanche Claims, and in 1979 performed rock hand sampling geochemistry, and discovered what is now referred to as the Blanche and Olaxis mineral showings. The Blanche showing (approximately 2.4 kilometers east of the Main showing) reported a 40-m x 40-m area in which sphalerite occurred sporadically over a thickness of 22 m. There were 19 rock hand samples collected, in which one sample returned 169 ppm Ag and 61.03% Pb; and three more individual samples returned 54.79% Zn, 47.90% Zn, and 33.40% Zn, respectively. The Olaxis showing (approximately 3.2 kilometers southeast of the Main showing) had mineralization that occurred in pods over a thickness of 20-m-to-30-m and continued for 50-m-to-60-m along strike.

### 6.1.4 Equinox Resources Ltd. – 1986-87

In 1986, Equinox Resources acquired a Prospecting Permit that covered approximately 43,000 hectares, including the mineral showings on the Property, and in 1987 they performed rock hand sampling geochemistry. The intent of exploration was to assess previously identified lead-zinc occurrences for gallium-germanium content.

Table 4 presents the significant results of the sampled mineral showings on the Property. As a part of the reconnaissance exploration program, nine rock hand samples were collected from across the Adyjo, Main, Steep Creek, and Blanche showings were sampled, of which eight reported high levels of gallium (average 0.014% Ga) and germanium (average 0.051% Ge) presumed to be hosted in sphalerite. It was concluded that considerable potential existed for establishing high-grade mineralization via grid-drilling, but this would require higher metal prices to off-set the remote nature of the Property.

*Table 4: Significant 1987 hand sample results across the Property.*

<b>Mineral Showing</b>	<b>Zinc (%)</b>	<b>Lead (%)</b>	<b>Gallium (%)</b>	<b>Germanium (%)</b>
Adyjo	13.47	0.04	0.001	0.020
Adyjo	49.60	0.02	0.005	0.062
Blanche	59.11	0.01	0.009	0.080
Main	30.12	0.25	0.018	0.036
Main	46.40	0.01	0.025	0.038
Main	17.75	0.01	0.002	0.018
Steep Creek	55.80	0.01	0.039	0.077
Steep Creek	59.18	0.01	0.025	0.075

### 6.1.5 Firesteel Resources Ltd. – 1995-98

In 1995, Firesteel Resources performed a ground-based gravity geophysical survey across the Main showing, and resource modelling/forecasting based upon historical drilling and recent surveying. The geophysical survey covered a 1.8-km x 1.6-km area and included a detailed orientation study to define the specific gravity of the rocks surrounding the mineralization, as well as the mineralized rock. There were six significant gravity anomalies identified (Anomalies A – F), in which the target horizon was within 170 meters from the surface in each case. All the anomalies were interpreted to represent shallow, blind Zn ( $\pm$ Pb) sulfide mineralization. The principal anomalies (A and B) were located below a plateau area several hundred meters to the north and along trend with the Main showing area. Anomaly F was smaller; however, it was located immediately adjacent to the west of the 1976 drill holes.

Table 5 presents a geological resource calculation for zinc on the Main showing area based upon the 1976 drilling and sampling results prepared by Firesteel Resources. The resource estimated 50,523 tonnes at 17.8 % Zn with an average thickness of 6.6 meters and estimated that the resource was geologically open to the south, east, and northwest.

*Table 5: A geological resource calculation by Firesteel Resources in 1995 for the Main showing area based upon the modelled 1976 drilling and sampling results.*

Hole/Showing	Thickness (m)	Zinc (%)	Lead (%)	Area (m <sup>2</sup> )	Tonnage (t)
C-76-1	3.6	10.3	0.0	725	9,135
C-76-2	13.5	16.5	0.0	475	22,444
C-76-11	9.5	25.2	0.0	275	9,144
Showing "A"	4.5	18.5	0.0	525	8,269
Showing "B"	2.5	32.3	0.0	175	1,531
Total	6.6*	17.8*	0.0*	2,175	50,523

\* Average value.

The geological resource calculation discussed above and presented in Table 5 is a “historical estimate” as defined in National Instrument 43-101. The historical estimate for the Property is based upon Cominco's 1976 drilling and sampling of surface showings (Olfert, 1976b). This estimate was later produced in an assessment report by Firesteel Resources in 1995 (McCartney and Olfert, 1995). The estimate is considered relevant to the Property as it provides preliminary context to the mineralized subsurface potential of the Property and is considered to be reasonably reliable, as the location of the historical estimate was included in the area of the Company’s recent exploration work at the Property, such that outcropping mineralization was observed and sampled, drill collar locations were validated and the original core was found in a mostly preserved state.

That said, the historical estimate does not use the resource categories set out in sections 1.2 and 1.3 of NI 43-101 (i.e., “Measured”, “Indicated”, and “Inferred” mineral resources); rather, it provides a rough estimate of the geological resource without specific classification. This means

the estimate can not and should not be directly compared with current standards without proper re-evaluation and reclassification.

This historical estimate is presented for context and information purposes only. There have been no more recent estimates or data provided that supersede this historical estimate. The potential quantity and grade are conceptual in nature, and there has been insufficient exploration to define a mineral resource under NI 43-101. It is uncertain if further exploration will result in the targets being delineated as a mineral resource. Additional work would be necessary to update and validate these estimated figures as current mineral resources under 43-101, including re-logging, re-assaying and modeling historical drill information, in addition to twin drilling select historical drill holes with a modern program. As neither the author nor the Company has done sufficient work to classify these historical estimates as current mineral resources or mineral reserves, the Company is not treating these historical estimates as current mineral resources or mineral reserves.

In 1996, Firesteel Resources performed an extension to the previous ground-based gravity geophysical survey and drilling along structural and geophysical targets. The geophysical gravity survey comprised selected fill-in lines, in addition to northwest and southeast extensions to the previous 1995 survey. The survey covered an area of approximately 4-km x 1.5-km. There were no new significant gravity anomalies detected; however, it was noted that the gravity map was strongly affected by the complex topography, and that further work should include the generation of a detailed digital terrane model to be used to correct the dataset.

Table 6 presents the most significant drill intersections on the Main showing area encountered by Firesteel Resources in 1996. The drilling comprised thirteen diamond drill holes of approximately NQ diameter drill core. The results showed a pattern of varying geological and mineralogical characteristics. Hole 1 was drilled in the Main showing area, and presented results comparable to historical intersections from 1976, showing consistency in the mineralization of the area. Holes 2 and 3 were drilled as a fence from a shared collar and revealed a gradual southern cutoff to the high-grade values intersected in Hole 1. Hole 4 was positioned south of Holes 1-to-3, and targeted a weak geophysical feature, but failed to intersect significant sulfides. Holes 1-to-4 suggested a limit to southern mineralization beyond the Main showing zone and indicated that the high-grade mineralization was contained within a tabular karst feature on the southern flank of a collapse breccia unit. Hole 5 intersected a low-grade zinc section within a major collapse breccia unit, and Hole 6 (drilled from the same collar as Hole 5) defined a sharp lateral limit. This indicated substantial potential for discovery of high-grade zinc within the collapse breccia unit, or along similar geological structures, and the inferred extension of the breccia unit to the north-northwest under a plateau hint at further exploration prospects towards the Breccia Creek and Steep Creek showings (McCartney, 1996). Holes 7-to-10 tested gravity anomalies A, B, and F; however, overall did not return significant Zn-Pb results. Hole 11 was abandoned due to technical issues. Holes 10, 12, and 13 further explored the west and south flanks of the collapse breccia unit, respectively, and found similar geological structures to earlier holes, but with no significant new metal zones, which highlighted the localized nature of mineralization.

Table 6: Significant 1996 drill intersections on the KAP/Main showing area.

Hole	Thickness m	Zinc %	Lead ppm	Copper ppm	Iron %	Cadmium ppm
F-96-01	17.85	13.57	69	531	0.16	415
F-96-01	7.70	24.68	127	1,000	0.22	740
F-96-05	58.99	1.75	126	101	0.18	50
F-96-05	19.75	2.51	35	173	0.14	81
F-96-05	11.15	3.31	-	-	-	-
F-96-05	4.07	4.66	-	-	-	-
F-96-05	5.40	2.27	40	76	0.16	40
F-96-05	8.89	2.68	464	119	0.16	74
F-96-05	5.35	3.36	-	-	-	-
F-96-12	2.50	2.70	-	-	-	-

“-” = not reported

In 1998, Firesteel Resources performed an extension to the original soil geochemistry survey performed in 1976 by Cominco. The program defined a moderate soil anomaly with values of 563 ppm zinc and lead from two separate sample sites. The anomalous geochemistry zones are all associated with the collapse breccia unit which has a continuous outcrop exposure from the Main showing area to Hole 10 and extends into the subsurface towards the north-northwest under a plateau area. The notable soil geochemical anomalies positioned directly over the mineralized collapse breccia unit confirm this technique is an effective exploration tool on the Property.

#### 6.1.6 Peter Risby, Andesite Capital Corp., and Stoneshield Capital Corp. – 2005-2012

Between 2005 and 2007, a prospector (P. Risby) acquired “postage stamp” sized claims over the Adyjo and Main showings. No work was documented to have been performed by P. Risby. In 2009, Andesite Capital Corp. acquired the claims from Mr. Risby. No work was documented to have been performed by Andesite Capital. In 2010, Stoneshield Capital Corp. entered into an option agreement with Andesite Capital Corp. Under the terms of the option agreement, Stoneshield could acquire up to a 100% undivided interest in the project by incurring exploration expenditures on the project (Vivian and White, 2011). In 2011, Aurora Geoscience was contracted by Stoneshield to perform a small prospecting and sampling program in an attempt to find significant occurrences of zinc, lead, and copper. One sample was collected from the Adyjo showing (>10,000 ppm Zn, 900 ppm Pb, and 548 ppm Cu), and one was collected from the Main showing (>10,000 ppm Zn, 3 ppm Pb, and 346 ppm Cu).

## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

Figure 3 presents a regional geologic map of the project area, and Table 7 presents details on the lithological legend (after Okulitch and Irwin, 2014). The Property is situated in the Mackenzie Fold Belt which comprises the eastern component of the Cordilleran Orogenic Zone (Ootes et al., 2012). The Paleozoic supracrustal sediments deposited in this zone underwent decollement deformation with little or no structural disruption, volcanism or plutonism during the orogenic phase (Mair et al., 2006). Broad, simple folds with intervening zones of complex folding and faulting developed. The principle structural elements were derived from the Laramide and Columbian (Cretaceous) Orogenies. The sediments of the belt were deposited in an environment of recurrent emergence and submergence controlled by a Proterozoic basement core called the Mackenzie Arch. The Mackenzie and Redstone Arches form the backbone of the central and southern Mackenzie Mountains.

The Property lies on the east flank of the Proterozoic Redstone Arch, which acted as a positive feature during the early part of the Proterozoic (Norris, 1997). Thick pre-Whittaker formation clastic sediments were eroded and derived from this high during Cambrian to Lower Ordovician time. A prominent unconformity developed at the base of the Ordovician-Silurian Whittaker formation, marking the end of clastic sedimentation and the beginning of extensive carbonate sedimentation (Norris, 1997). A thick sequence of Ordovician shelf carbonates was deposited on the eastern edge of the Redstone Arch while coeval shales were deposited farther east in the adjacent Root Basin. The Arch became gradually submerged during Silurian/Devonian time resulting in a thin veneer of carbonate deposition over the top of the arch (Williams, 1987). This thin cover of Devonian carbonates contains several unconformable horizons and is the most favorable target zone for MVT lead/zinc orebodies in the Mackenzie Mountains and adjacent interior platform (Dewing et al., 2006). In Upper Devonian and Mississippian time, the increased submergence of the whole Mackenzie belt led to extensive argillaceous carbonate and shale deposition and the shelf carbonate/shale facies front migrated several hundred kilometers east, to the Pine Point area.

Table 8 presents the stratigraphic sequence in the region. The Paleozoic sequence contains a number of features normally associated with carbonate hosted lead/zinc deposits. These include abrupt carbonate to clastic facies changes, unconformities and related karst surfaces, arching, development of breccias in carbonate rocks, reef facies, and granular dolomitization. Penecontemporaneous basement faulting is also believed to have occurred in the area and to have locally influenced sedimentation.

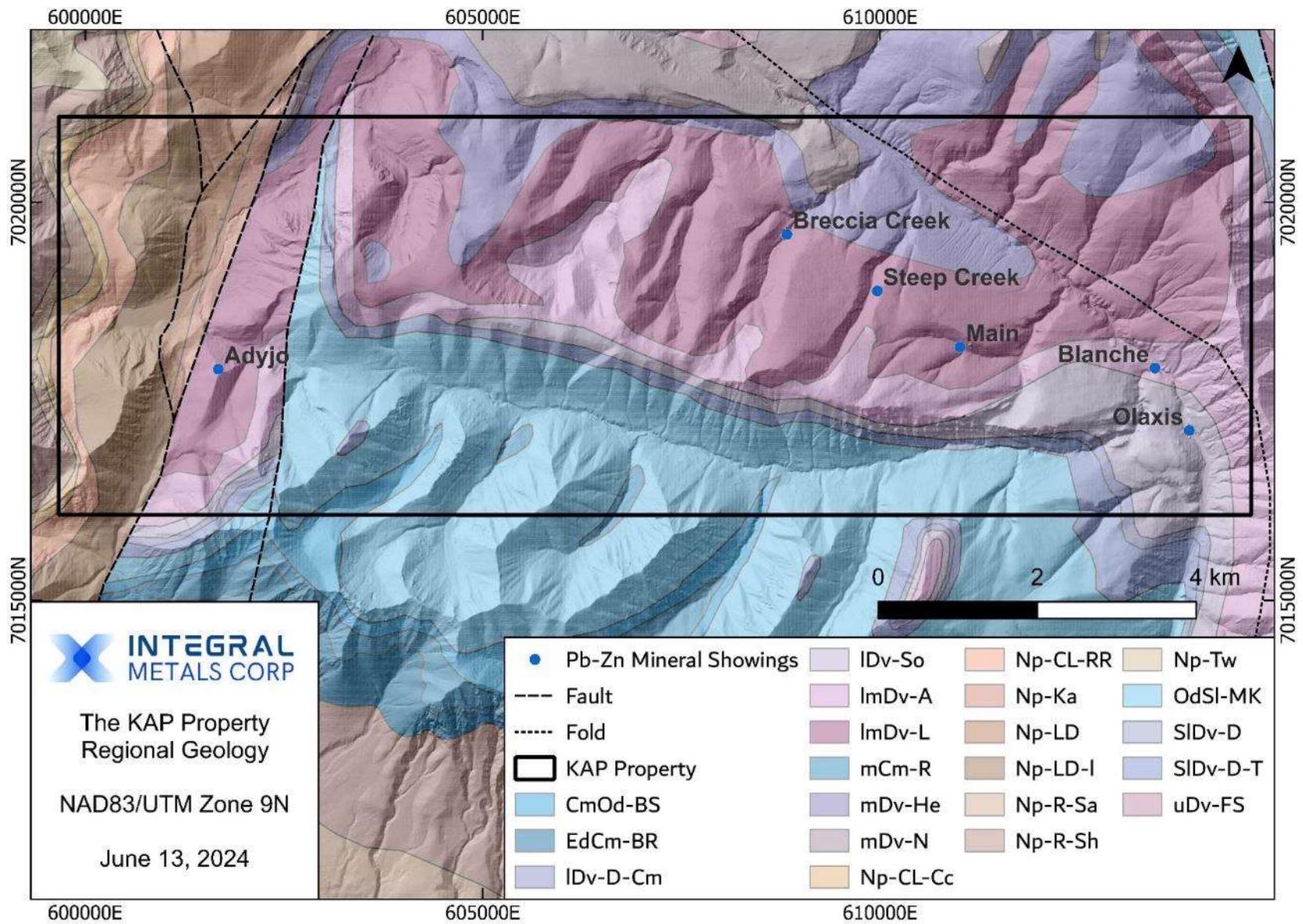


Figure 3: Regional geology of the Property area

Table 7: Detailed lithological units appearing in Regional Geology Map (after Okulitch and Irwin, 2014).

Unit Code	Unit Name	Lithology Details
CmOd-Bs	Broken Skull Formation	Basal: sandstone; dolostone, sandy. Upper: dolostone; limestone; minor shale.
EdCm-BR	Backbone Ranges Formation	Sandstone, pink, purple, grey, brown; siltstone; conglomerate, pebble.
IDv-D-Cm	Camsell Formation	Dolostone, grey, medium-bedded, fine-crystalline; limestone; limestone breccia, buff.
IDv-So	Sombre Formation	Dolostone, grey, thick-bedded, fine-crystalline.
ImDv-A	Arnica Formation	Dolostone, minor gypsum, solution breccia.
ImDv-L	Landry Formation	Limestone, thick-bedded, cryptogranular; mudstone, dark grey, lime, argillaceous, thin-bedded.
mCm-R	Rockslide Formation	Limestone, dark grey, sooty, argillaceous; siltstone, calcareous; shale; minor sandstone; dolostone, silty; siltstone, dolomitic and calcareous.
mDv-He	Headless Formation	Shale, grey; limestone, argillaceous, silty, thin to medium-bedded, nodular, bioclastic; minor dolostone; limestone, fine-to-crypto-crystalline, thin-bedded.
mDv-N	Nahanni Formation	Fine-to-coarse-grained dark grey medium-to-thick bedded bioclastic limestone.
Np-CI-Cc	Coppercap Formation	Limestone, silty; siltstone, calcareous; limestone, dark grey, fetid; shale, calcareous; minor conglomerate, limestone clasts.
NP-CI-RR	Red River Formation	Siltstone, pink, slaty; mudstone, red, dolomitic, gypsum-anhydrite; minor conglomerate, carbonate clasts.
Np-Ka	Katherine Group	Sandstone, mudstone, siltstone, dolostone.
Np-LD	Little Dal Group	Carbonate, evaporite and clastic sediments.
Np-LD-l	Lower Little Dal Group	Dolostone, limestone, shale, sandstone.
Np-R-Sa	Sayuni Formation	Mudrock, interbedded with sandstone and conglomerate; ironstone with glacial dropstones; diamictite.
Np-R-Sh	Shezal Formation	Diamictite, matrix sandy, silty, dolomitic; minor sandstone, laminated; mudstone.
Np-Tw	Twitya Formation	Mudrock, grey; Basal: minor limestone, fetid. Middle: subordinated sandstone, turbiditic. Upper: minor grit, conglomerate.
OdSI-MK	Mount Kindle Formation	Dolostone, fossiliferous, siliceous, brownish-grey; minor chert.
SIDv-D	Delorme Group	Basal: sandstone. Lower: sandstone, limonitic, dolomitic; siltstone, thin-bedded, argillaceous; sandstone; mega-breccia, oligomictic, carbonate. Upper: siltstone, limonitic, dolomitic, pink; dolostone, silty, thick interbeds of limestone and dolostone.

SIDv-D-T	Tsetso Formation	Dolostone, grey; sandstone, dolomitic; dolostone, argillaceous, grey; shale, brown; minor anhydrite.
uDv-FS	Fort Simpson Formation	Shale, siltstone, limestone, green and grey.

Table 8: Stratigraphic sequence in the region of the Property area (from McCartney, 1995).

<b>Formation</b>	<b>Age</b>	<b>Thickness (m)</b>	<b>Description</b>
Nahanni Formation	Middle Devonian	53	Limestone; Resistant; Cliff-forming; Fine-grained.
Headless Formation	Middle Devonian	84	Limestone; Recessive; Argillaceous; Fossiliferous.
Landry Formation	Middle Devonian	170	Resistant micritic limestone; Restricted lagoon environment (?)
Recrystallized Zone <sup>1</sup>	-	Up to 80	The main lead-zinc hosting unit. Altered, recrystallized basal part of the Landry formation. Locally extends downwards (across unconformity?) in Arnica formation. Most strongly developed in mineralized area. Contains collapse breccia, karst, sparry dolomite-calcite, quartz needle silicification.
<i>Unconformity</i>			
Arnica Formation	Middle Devonian	170	Dolomite; Bituminous; Medium-to-Fine grained.
Sombre Formation	Lower Devonian	230	Dolomite; Fine-grained.
<i>Unconformity</i>			
Delorme Formation	Lower Devonian/Silurian	325	Ferruginous dolomite; Fine-grained.
Whittaker Formation	Ordovician/Silurian	330	Fossiliferous dolomite; Vuggy; Cherty.
<i>Unconformity</i>			
L. Paleo/Proterozoic	-	-	Clastics.

<sup>1</sup> An alteration feature, not a formation.

“-“ = Not applicable or not reported.

## 7.2 Local Geology

In the local area, a thin sequence of Arnica and Landry formations overlies the Sombre formation. The Arnica formation comprises 150 m-to-180 m of fetid bituminous dolarenites. These are fine-to-medium grained laminated crystalline dolomites which contain local crackle breccias, spar-lined vugs, and minor secondary zinc mineralization. The Arnica formation is overlain by 150 m-to-173 m of calcilutites assigned to the Landry Formation. Further east, away from the axis of the Redstone Arch, the Arnica-Landry section thickens abruptly to 500 m-to-600 m of similar carbonate stratigraphy. The mineralization is hosted by the Recrystallized Zone, which exhibits brecciation, fracturing, granular (Pine Point Presquile-type) dolomite, bitumen coated quartz needle silicification, dolspar, and calspar. This zone forms as replacement of limestone in the basal part of the Landry formation, and has an irregular upper contact. Locally, the recrystallized zone forms the base level for large upwards stopping zones of collapse breccia in the Landry formation. Galena, sphalerite and secondary zinc minerals occur in the recrystallized zone. In the Property area, the Arnica-Landry contact is obscured by the recrystallization, but regionally it is an unconformity. The Headless formation overlies the Landry formation, and consists of argillaceous limestones and shales. The Nahanni formation limestone comprises the top of the Middle Devonian carbonate sequence. The Fort Simpson formation shales and siltstones conformably overlie the Nahanni formation, and are the uppermost Givetian age rocks in the area (McCartney, 1995).

## 7.3 Property Geology

The Property exhibits a diverse and complex geological framework, characterized by several distinct rock formations. The overburden layer, composed of unconsolidated materials such as soil, sand, and gravel, is typically encountered at the surface, covering the underlying bedrock. Beneath the overburden, the Arnica and Landry Formations dominate, featuring extensive deposits of limestone and dolomite. The limestone is primarily composed of calcium carbonate, often containing fossils and exhibiting various textures like lamination and massive structure. The dolomite, on the other hand, is found in fine-grained, granular, and laminated forms, indicative of hydrothermal alteration and replacement processes.

Siliceous rocks, including quartz needle rocks and black siliceous dolomite, represent significant silicification processes associated with secondary mineralization zones. Breccias, including collapse breccia and fault zone breccia, are prevalent and indicative of intense fracturing and hydrothermal activity, often found in the Landry Formation. Elevated zinc mineralization is a notable feature of the Property, with zones of sphalerite (zinc sulfide) and other zinc minerals identified through historical drilling and sampling. These sphalerite zones, visually distinct and of significant economic interest, are commonly associated with brecciated and veined structures in formations like the Manetoe Facies. Additionally, occurrences of calcite veining, representing secondary mineralization and fluid flow pathways, are found within dolomite and breccia zones, further contributing to the Property's geological complexity and mineral potential (McCartney, 1995).

## 7.4 Mineralization

Extensive granular dolomitization and euhedral quartz needle silicification of the Recrystallized Zone occurs in the lower part of the Landry Formation and spans the contact between the Arnica and Landry formations. Mineralization is stratabound within the Recrystallized Zone. Numerous occurrences of disseminated and massive sphalerite and galena have been historically discovered in this horizon over a 12 km x 3 km area (including the Adyjo (Olfert, 1976a), Breccia Creek (McCartney, 1995), Steep Creek (McCartney, 1995), Main (DuPre, 1998), Blanche (Cook, 1979; Cook, 1981), and Olaxis (Cook, 1979) mineral showings). Concentric solution collapse breccia developments appear to have a lower base in the Recrystallized Zone and extend upwards into the Landry limestone. Dark gray banded internal sediments are associated with high-grade zinc mineralization. Documented mineralization across the Property area tends to occur within or near to steeply incised stream valleys which cut down from a plateau area to expose the Arnica-Landry contact sequence (McCartney, 1995). The abundance of known mineral showings wherever this contact is exposed indicates high potential for additional blind mineralization beneath the plateau areas.

## 7.5 Structure

The region is deformed into broad gentle anticlines and synclines with low angle thrust faults present on the limbs of folds (Okulitch and Irwin, 2014). The Property and the mineral showings are located on the southwest limb of a broad syncline. The west side of this structure is bounded by the Plateau Thrust Fault, and the east side is bounded by normal block faulting. The fold axis strikes 120° and plunges gently northwest (Okulitch and Irwin, 2014). Bedding is gently dipping with a strike and dip of approximately 130°/14° at the Main showing. Much of the topography is characterized by dip slopes, and consequently the Recrystallized Zone is situated below 250 meters of overlying sedimentary layers and scree over extensive areas of the Property (McCartney, 1995).

## **8.0 DEPOSIT TYPES**

### **8.1 Gallium Deposit Types**

Gallium is a metal found in the Earth's crust but is not typically found in isolation or in large quantities as a primary mineral. Gallium is usually produced as a byproduct from the mining and processing of other metals and is traditionally obtained through the extraction process of sphalerite and bauxite (Frenzel et al., 2016; Moskalyk, 2003; Piercey et al., 2010).

#### **8.1.1 Sphalerite Deposits**

Zinc deposits, particularly those containing the mineral sphalerite, are a significant source of gallium. Sphalerite is found in several deposit models, including MVT, Sedimentary Exhalative (SEDEX), Volcanogenic Massive Sulfide (VMS), skarn, carbonate-hosted lead-zinc (Irish type), replacement deposits, and epithermal vein systems. These models represent diverse geological settings such as carbonate formations, sedimentary basins, submarine volcanic environments, and hydrothermal systems. Gallium typically occurs in zinc ores at variable concentrations and is extracted as a byproduct of zinc processing. The process of gallium recovery from zinc involves treating the sphalerite ore during the smelting and refining stages, where gallium is collected from the processing residues or leachates. Similar to bauxite processing, the extraction methods might include solvent extraction or electrolysis to purify and concentrate gallium into a usable form (Frenzel et al., 2016; Moskalyk, 2003).

### **8.2 Germanium Deposit Types**

Germanium is a lustrous, hard, grayish-white metalloid in the carbon group, chemically similar to its group neighbors tin and silicon. It is found in various ore minerals, predominantly in trace amounts, and is primarily recovered as a byproduct of zinc ore processing and coal combustion. The primary sources of germanium include sphalerite and coal (Foley et al., 2012; U.S. Geological Survey, 2020).

#### **8.2.1 Sphalerite Deposits**

Germanium is commonly associated with zinc ores, particularly sphalerite. Sphalerite is found in several deposit models, including MVT, Sedimentary Exhalative (SEDEX), Volcanogenic Massive Sulfide (VMS), skarn, carbonate-hosted lead-zinc (Irish type), replacement deposits, and epithermal vein systems. These models represent diverse geological settings such as carbonate formations, sedimentary basins, submarine volcanic environments, and hydrothermal systems. Germanium is present in minor concentrations within these deposits, typically substituting for zinc in the sphalerite lattice. The recovery of germanium from sphalerite involves the treatment of zinc ores during the smelting and refining process. During the roasting of sphalerite concentrates, germanium can be volatilized and captured in the flue dust, from which it is subsequently extracted. This extraction process may involve leaching, solvent extraction, and precipitation to isolate and purify germanium (Frenzel et al., 2014; Proux et al., 2017).

### 8.3 Deposit Model

MVT deposits are a significant source of lead and zinc, formed within platform carbonate rocks such as dolostones and limestones. In the Mackenzie Mountain region of the Northwest Territories, these deposits are epigenetic, meaning they form from mineral precipitation from low-temperature hydrothermal fluids, typically between 50°C to 200°C, which migrate through an extensive network of fractures and pore spaces in the host rock (Leach et al., 2010).

In this region, MVT deposits primarily develop in stable continental platform environments. The host carbonate rocks are often deposited in shallow marine settings, creating ideal conditions for mineralization (Leach et al., 2010). The presence of extensive carbonate platforms or ramps, proximity to evaporite deposits or basinal brines, and tectonic settings that promote the development of extensive fracture and fault systems are crucial geological features that facilitate fluid migration and subsequent mineral deposition (Leach & Sangster, 1993).

The mineralization process in MVT deposits in the Mackenzie Mountain region begins with the migration of metal-bearing brines through permeable zones within the carbonate rocks. These brines, enriched in metals and sulfides, often originate from evaporated seawater or basinal fluids (Kesler, 1996). As these brines move through the host rocks, they mix with sulfur-rich fluids or encounter conditions that reduce sulfate to sulfide, leading to the precipitation of sulfide minerals, primarily galena (PbS) and sphalerite (ZnS) (Leach et al., 2005). The low-temperature and low-pressure conditions are critical for the deposition of these minerals, distinguishing MVT deposits from other hydrothermal deposit types (Leach et al., 2010). Additionally, gallium and germanium can be associated with these deposits, occurring as trace elements within the sphalerite, contributing to their economic value (Frenzel et al., 2014; Proux et al., 2017).

The host rocks in this region are typically platform carbonates that have undergone varying degrees of dolomitization. These rocks are well-bedded to massive dolostones and limestones, often featuring evaporite layers or remnants and secondary porosity developed through dissolution and dolomitization processes. This secondary porosity is crucial for fluid flow and mineral precipitation (Leach & Sangster, 1993).

The mineralogical composition of MVT deposits in the Mackenzie Mountain region is distinct. The primary ore minerals are sphalerite and galena, often accompanied by minor amounts of pyrite, marcasite, and chalcopyrite. The primary gangue minerals include dolomite and calcite, with barite and fluorite as common accessory minerals. Alteration features in these deposits typically include silicification and minor sulfidation (Leach et al., 2010).

Several geological controls influence the localization of MVT deposits in this region. Structural controls, such as faults, fractures, and bedding planes, act as conduits for fluid flow and sites for mineral deposition. Stratigraphic controls are also significant, as specific carbonate units with high porosity and permeability are more favorable hosts for mineralization. Additionally, geochemical

controls, such as the presence of sulfate-bearing evaporites or organic-rich layers, can enhance the precipitation of sulfide minerals through chemical reduction processes (Kesler, 1996).

## 9.0 EXPLORATION

### 9.1 2024 Exploration Work

From April to June 2024, the Company carried out exploration work on the Property. The work included compiling and digitizing historical data, modelling historical drill holes, modelling historical gravity surveys, and digitizing historical soil surveys. A field exploration program was carried out, with the objectives to confirm the location of the Main showing area, to collect representative hand samples for assay, to confirm the location of historical drill collars, and to recover representative historical drill core samples. The purpose of these activities was to further understand and replicate highly anomalous historical values of Zn-Pb-Ga-Ge in order to develop an exploration model for the Property that could be based upon validated historical exploration activities.

#### 9.2.1 Modelling Historical Drill Holes

Figure 4 presents the georeferenced locations of the 1976 and 1996 drill holes and Figure 5 presents the result from digitizing and modelling the drill logs. The modelling of historical drill data provided spatial information pertaining to mineralization trends and patterns for future exploration targeting, and (while not sufficient on its own) was a step towards bringing the historical geological resource estimate into compliance. The process of modelling the historical drill hole data involved digitization of drill logs, standardization of geologic descriptions, and combination of results into a common database. Select drill collar locations were field checked, and a spatial-shift was applied to the georeferenced locations (see Section 9.2.4 for additional information).

Data validation corrections were performed to address various issues identified in historical drill hole logs. For hole C-76-10, the assay interval at depth (27.75 meters) extended past the end of hole (“EOH”) depth of 26.45 meters; therefore, the EOH value in the log was used, and contradictory values were disregarded. In hole C-76-11, overlapping intervals from 13.76 meters-to-14.94 meters and 13.76 meters-to-23.32 meters were corrected by taking the weighted average of assays over several samples and removing the redundant intervals. Hole C-76-13 had an assay interval at depth (33.77 meters) extending past the EOH depth of 31.42 meters; therefore, the EOH value was used and contradictory values disregarded. Additionally, overlapping intervals from 6.23 meters-to-6.61 meters and from 6.23 meters-to-7.02 meters were resolved by averaging the assays and removing overlaps. For holes F-96-01, F-96-10, and F-96-11, numerous overlapping intervals were edited for continuity of lithological intervals on the basis of broad and detailed unit descriptions. Hole F-96-09's EOH depth was adjusted from 69.80 meters to 72.85 meters, and for hole F-96-13, all EOH depths were adjusted to 103.34 meters to resolve discrepancies. These corrections ensured consistency and accuracy in the historical data, facilitating the ability to perform reliable future resource estimation and geological modeling.

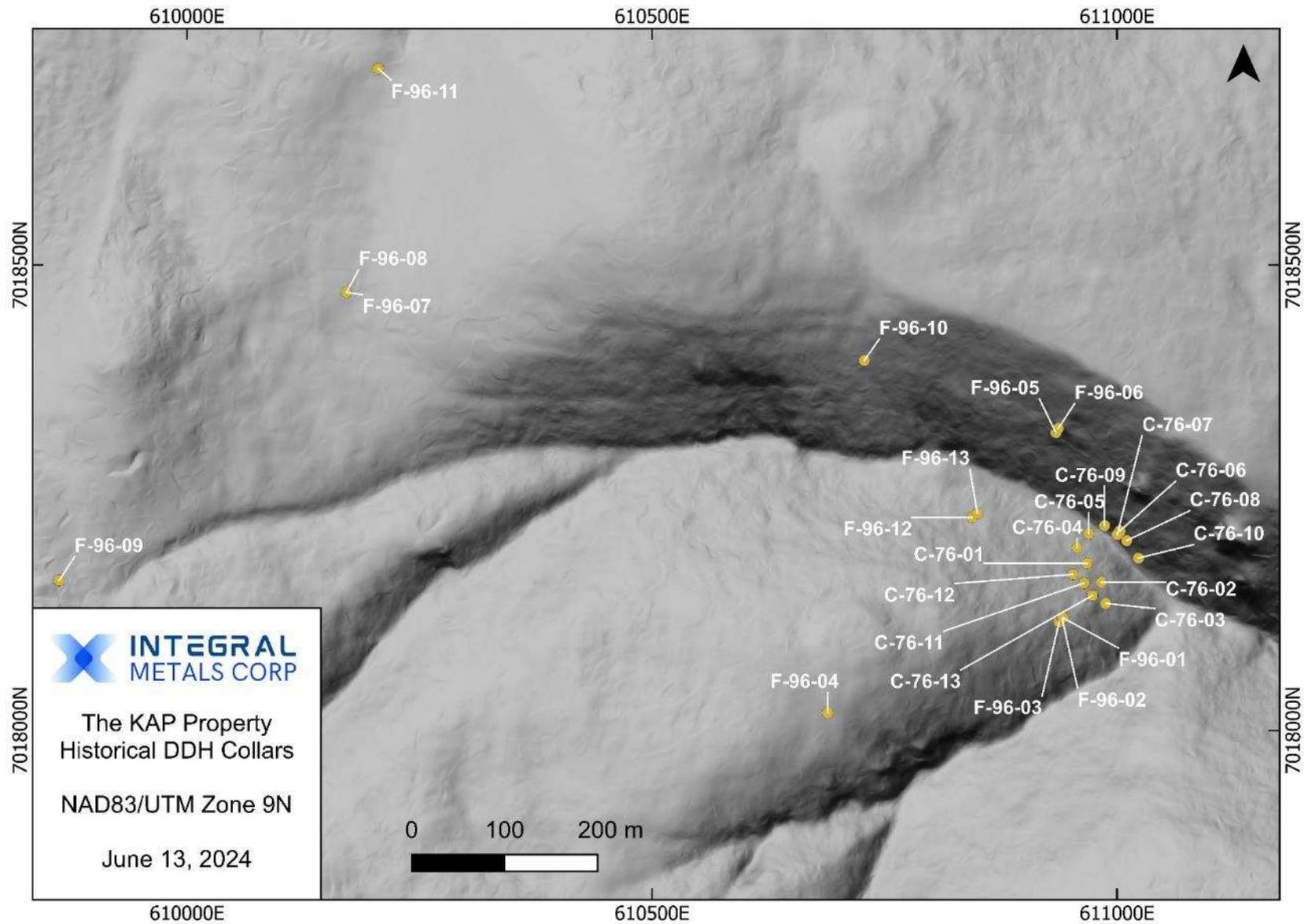


Figure 4: Georeferenced locations of the 1976 and 1996 drill holes.

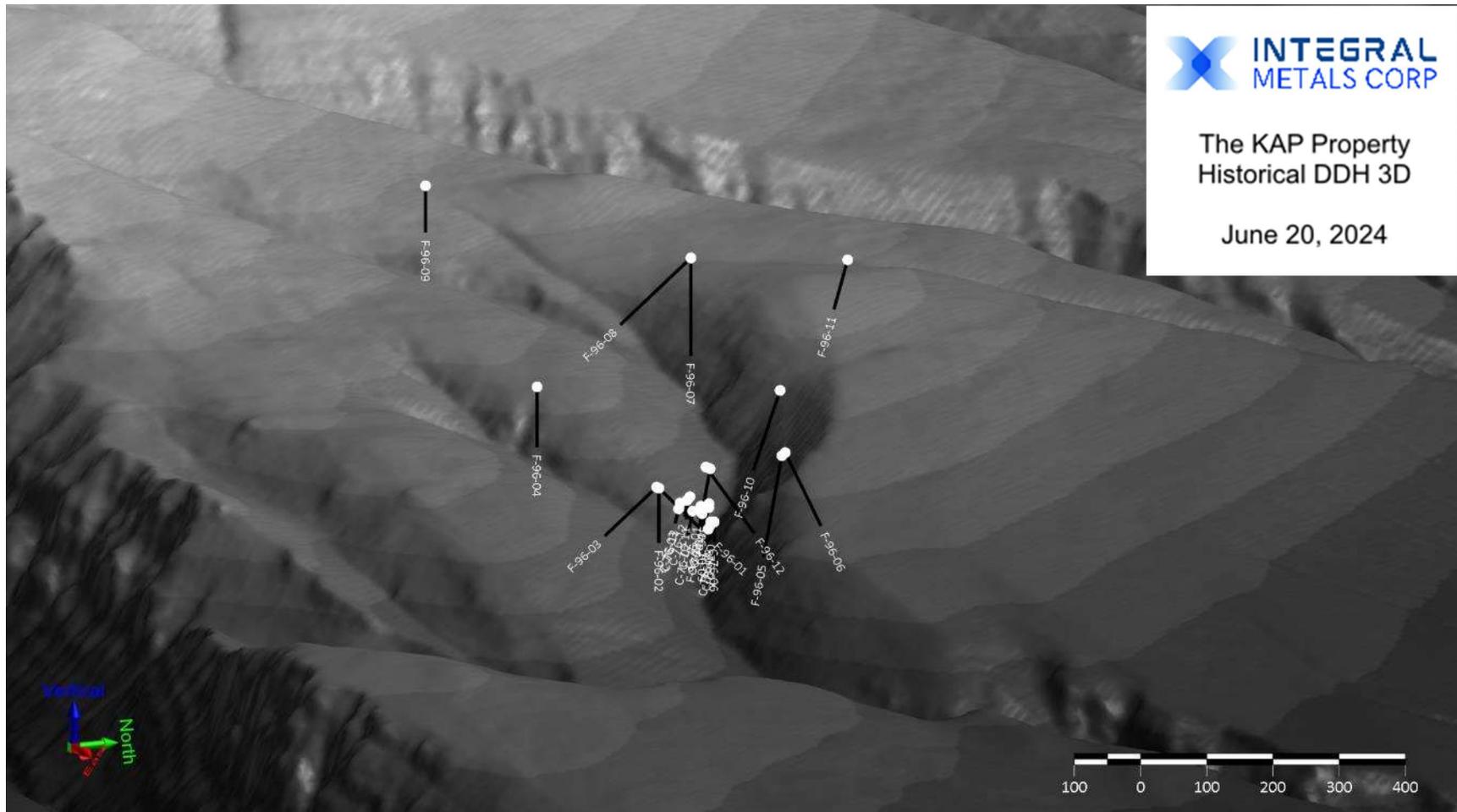


Figure 5: Drill holes in 3D space resulting from the digitizing and modelling of the drill logs.

### 9.2.2 Modelling Historical Gravity Surveys

Figure 6 presents the location of the 1995 and 1996 gravity surveys. The gravity data was acquired in 1995 (498 points) and 1996 (671 points) by Maple Services across the high elevation plateau that hosts the Main showing. The data appeared to be acquired in a systematic and rigorous manner. The relative locations and elevations measured in the course of the survey are assumed to be correct. The bulk of the data was collected at 50-meter station and 100-meter line spacing, with some tighter spacing over areas of interest. Raw data was not available; however, there was a description of the processing in the original report (McCartney and Olfert, 1995) along with tables containing local elevation and processed gravity results. The tables of the original data were processed with a text recognition algorithm and outputted to an Oasis Montaj database. Manual quality control of the OCR output was done in Oasis Montaj by examining profiles and grids of all important parameters of the input data.

Several publicly available elevation datasets were compared to the surveyed elevation grid, and it was determined that the ArcticDEM dataset provided the highest resolution and best correlation to the original elevation survey. A regional grid using the 32-meter resolution ArcticDEM was created as well as a local correction grid using 2-meter resolution. The regional grid extended approximately 150 kilometers past the survey outline and the local grid extended 2.5 kilometers past the survey outline.

Figure 7 presents the Complete Bouguer Anomaly (“CBA”) – the result of digitizing, re-processing, and modelling the 1995 and 1996 gravity geophysical data. The CBA was created by performing georeferencing, elevation processing, and terrain corrections. The result was used as input for modelling the density in 3D using the Oasis Montaj VOXI platform. Cell size was 25 meters horizontally and 10 meters vertically. The model was otherwise unconstrained.

Figure 8 presents gravity targets interpreted from the data, and Table 9 presents details on the interpreted gravity targets. All historical zinc showings in the survey area were reported to occur at the same stratigraphic level, and they were only exposed in the drainages which steeply incise the plateau. Therefore, the target horizon can be expected to be within a few hundred meters of the surface across most of the Property. This represents an ideal target for a gravity survey. The Main showing is associated with a NE-SW trend of high gravity that is part of a broad gravity high that spans much of the plateau. This trend of anomalous gravity is in line with topography features and could be associated with faulting. The “Grav East 1” and “Grav\_South 1” are near the interpreted near contact between Arnica and Landry formation and could be sub-cropping below cover. The “Grav\_west\_2” is the only anomaly below the Headless formation and its low amplitude could be caused by deeper burial. The Main showing outcrop and drilling is east of the Main anomaly in the drainage; however, this is the area that has the worst coverage and least reliable gravity observations. The “Grav\_Main\_3” is a strong anomaly measured across several lines that is untested. It is interpreted to be the best drilling target based on the interpreted gravity survey.

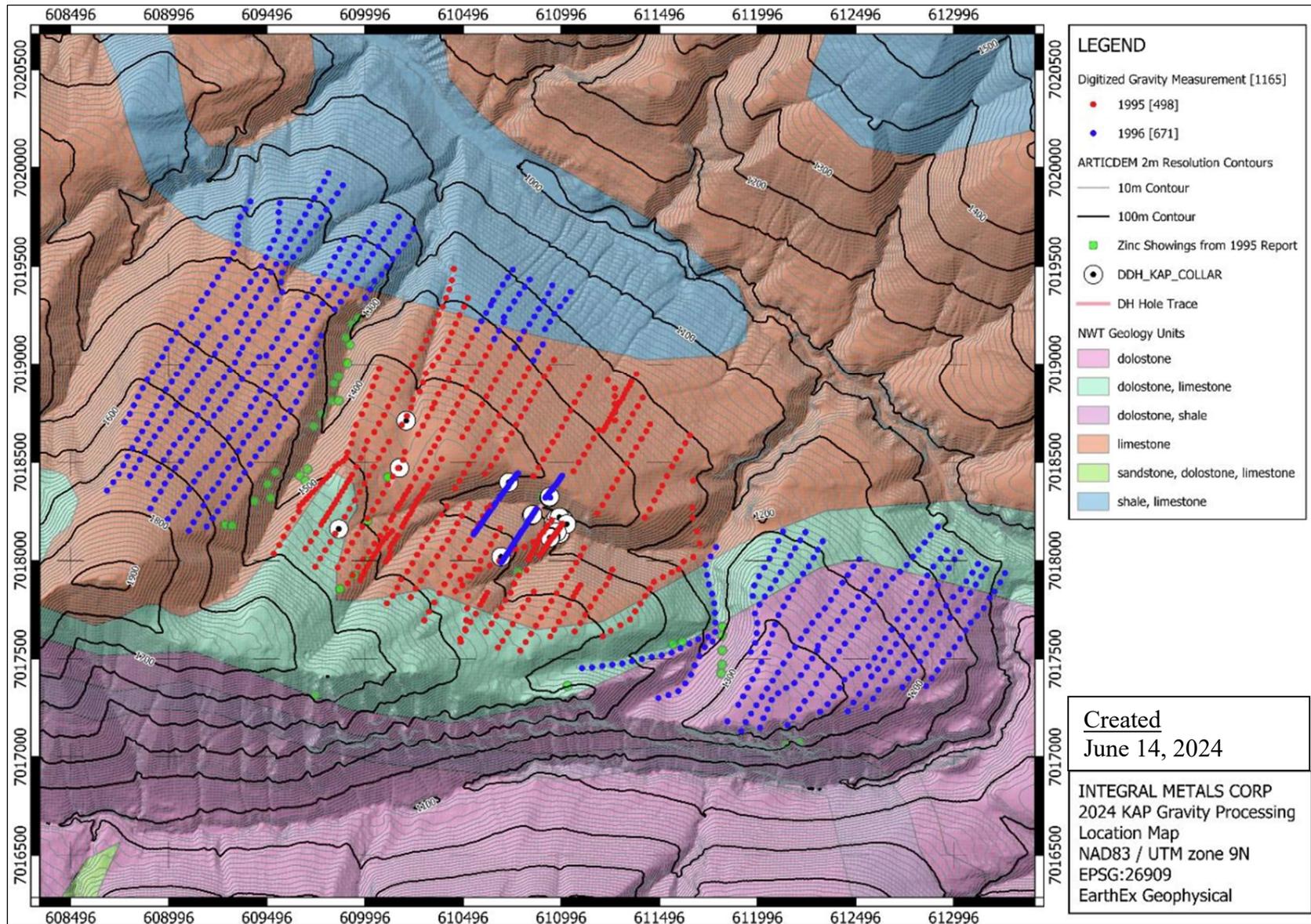


Figure 6: Location of the 1995 and 1996 gravity surveys.

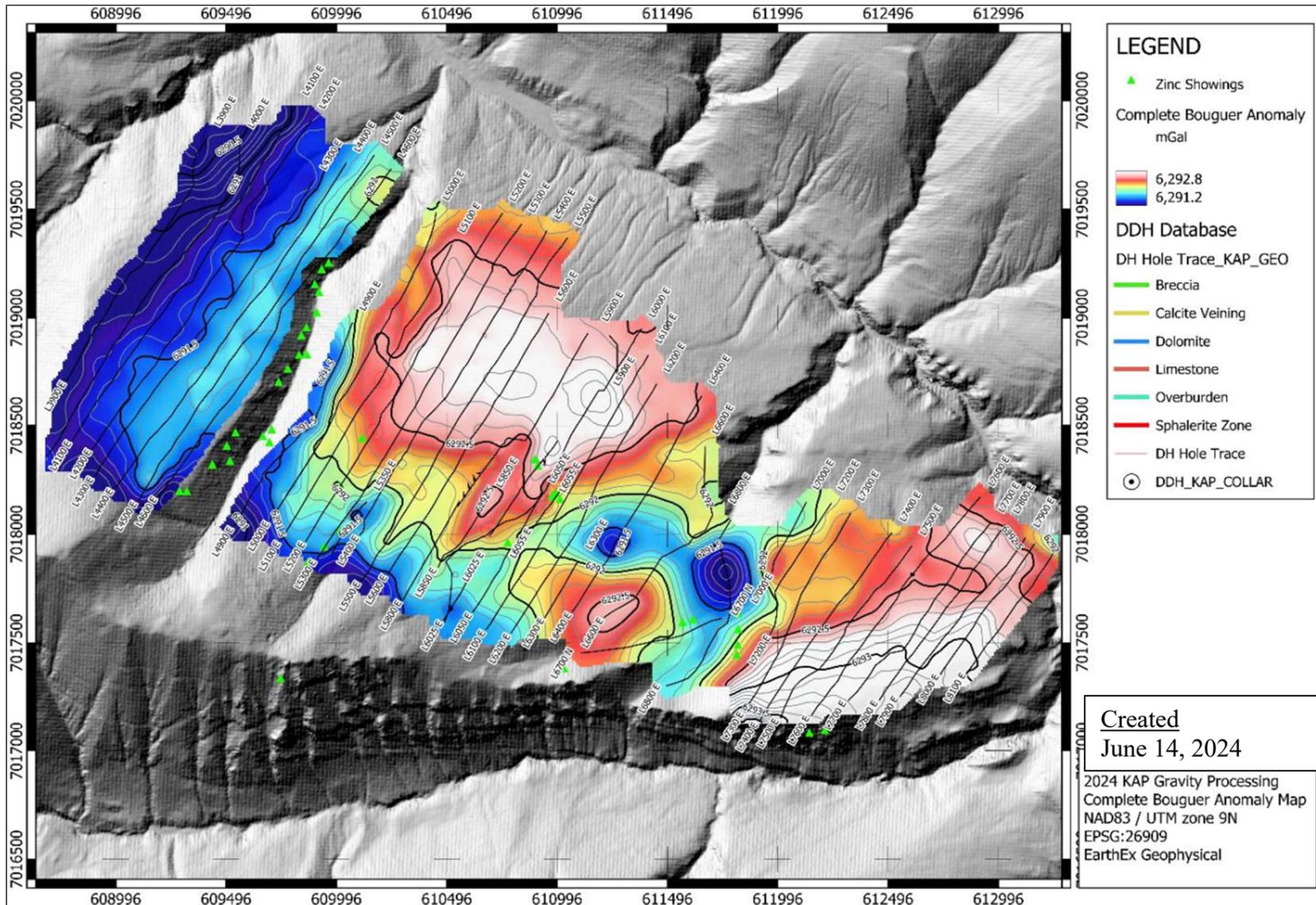


Figure 7: Result of digitizing, re-processing, and modelling the 1995 and 1996 gravity geophysical data.

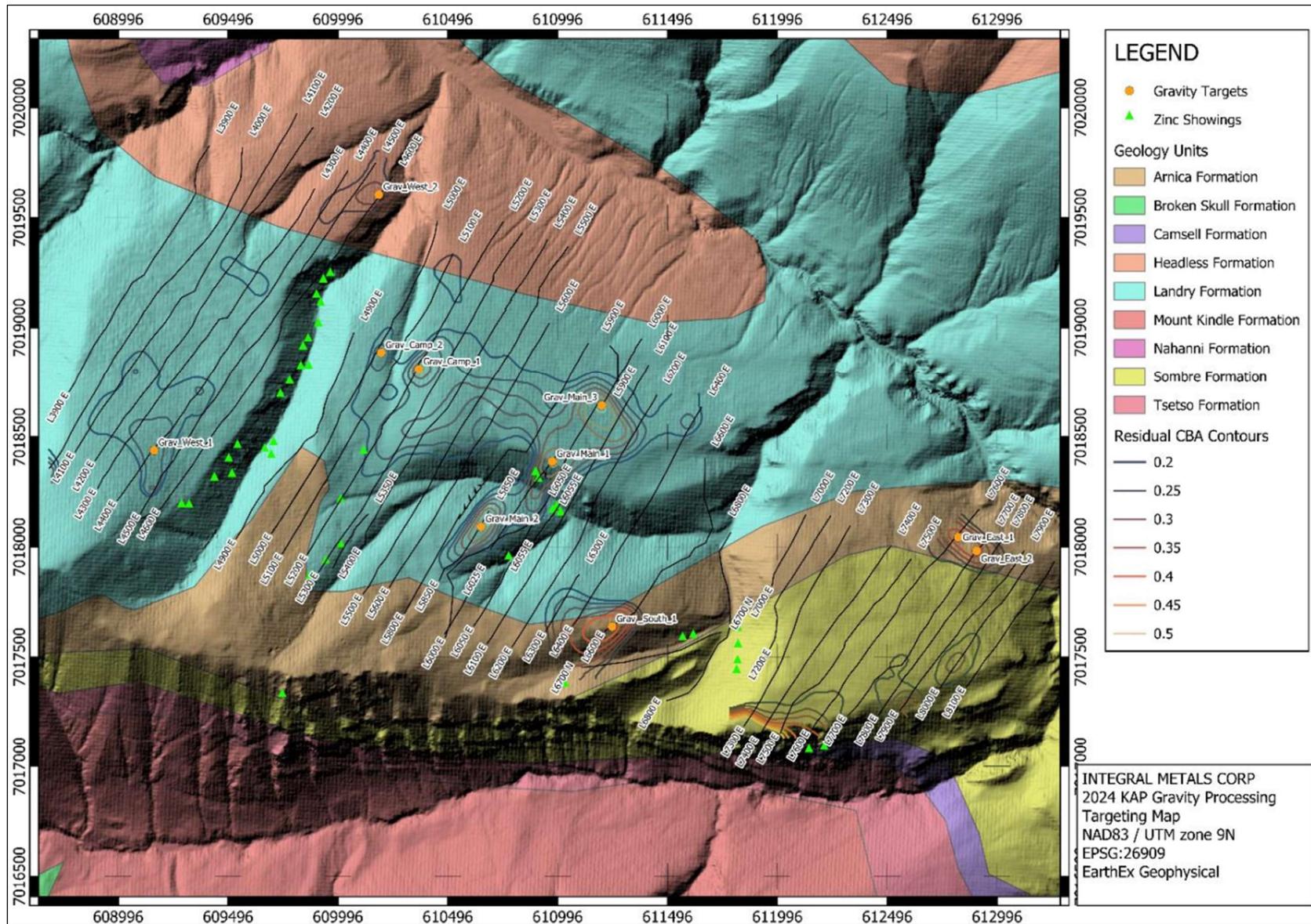


Figure 8: Residual gravity contours and targets overlain on a hillshade coloured by geological units.

Table 9: Details on the interpreted gravity targets.

<b>Name</b>	<b>UTM X</b>	<b>UTM Y</b>	<b>Description</b>
Grav_South_1	611244	7017638	Poorly constrained by data, at the south ends of L6400, L6600 and L6700. Some zinc showings nearby. Close to drainage so unreliable terrain correction.
Grav_Camp_1	610364	7018811	The best anomaly in the area surrounding the old camp (0.35mGal). North of existing drilling and the historic residual anomaly that it targeted. Questionable elevations here decrease confidence in the target.
Grav_Camp_2	610192	7018887	Across the drainage from Grav_Camp_1, a weaker 0.25 mgal minor anomaly measured on L5000. Mineralization in steep creek to the west.
Grav_East_1	612819	7018044	Distinct gravity high at the north end of L7600-7800. Although the elevation data is generally suspect in this area, this stands out as a discrete high worth following up on. Could be subcropping because of high amplitude.
Grav_East_2	612902	7017982	Same as Grav_east 1, but on L7700.
Grav_Main_1	610971	7018388	The gravity anomaly nearest to the main showings. Measured on the north end of L6001. Challenging terrain decreases confidence in the CBA here.
Grav_Main_2	610647	7018092	Southernmost anomaly along the main trend. Only observed on L5850, high amplitude (0.4 mgal) but not closed off. Suspect terrain correction enhancing anomaly.
Grav_Main_3	611196	7018645	Part of the Main Trend, a 0.5mGal anomaly below cover. Observed on L6000 and L6100. Best anomaly for follow-up drilling.
Grav_West_1	609159	7018440	Peak (0.25 mgal) of a wide anomaly interpreted on the west side of steep creek. Questionable elevations here, but there is widespread mineralization in the creek east of here. Best observed on L4400.
Grav_West_2	610182	7019605	Observed on the north end of L4500 and L4600. A discrete anomaly that peaks at 0.25 mgal. Close to the drainage so questionable quality of data. Geologic map indicates deeper burial.

### 9.2.3 Mapping Historical Soil Surveys

Figure 9 presents the location and results of soil geochemistry (lead) from the digitized 1976, 1996, and 1998 surveys, and Figure 10 presents the location and results of soil geochemistry (zinc) from the 1976, 1996, and 1998 surveys. The modelling of historical soil geochemistry data integrated historical data into a modern database, and provided a comprehensive understanding of the spatial distribution between lead and zinc concentrations from across multiple soil surveys. Trend analysis highlighted geochemical anomalies and potential mineralization zones, which could be used to refine exploration targets and optimize future drilling programs. Furthermore, the presence of geochemical anomalies over known areas of mineralization validated the technique as an effective exploration tool – the expansion of the grid is the next recommended step for development (see Section 26.1 for additional details). The process of modelling the historical soil geochemistry data involved georeferenced maps and the digitization of sample stations.

Using a previously georeferenced hand drawn map of lead ppm in soil samples from 1976 the Zinc map from 1976 was georeferenced by matching multiple sample locations between the two maps. Individual points were created at each sample site with the corresponding Lead and Zinc. It was assumed that there was one sample site and each sample had multi-element analysis for lead and zinc for both the 1976 and 1996/1998 programs. Two maps were produced for the 1996 and 1998 soil sampling programs with both lead and zinc (measured in ppm) in soil sample sites. These maps were georeferenced by matching contour lines in correspondence to sample sites. The georeferencing for these maps was more arduous but ended up matching relatively well with the corresponding contour lines and with the sample locations from 1976. Again, individual points were created at each sample site with corresponding lead and zinc ppm. One small discrepancy observed was an off-set of about 30 meters between survey lines 5950, 6050, 6150, and 6250 on the maps from 1996/1998. This was corrected by shifting the points on these lines by 15 meters to split the difference without knowing what caused this inconsistency between both georeferenced maps.

A small number of data points from the 1996/1998 maps were unable to be digitized due to the values being illegible on one or both maps. The maps identified anomalous zones and also show the correlation of anomalies from both the 1976 program and 1996/1998 programs, which provides confidence that all the data was georeferenced properly and is reliable.

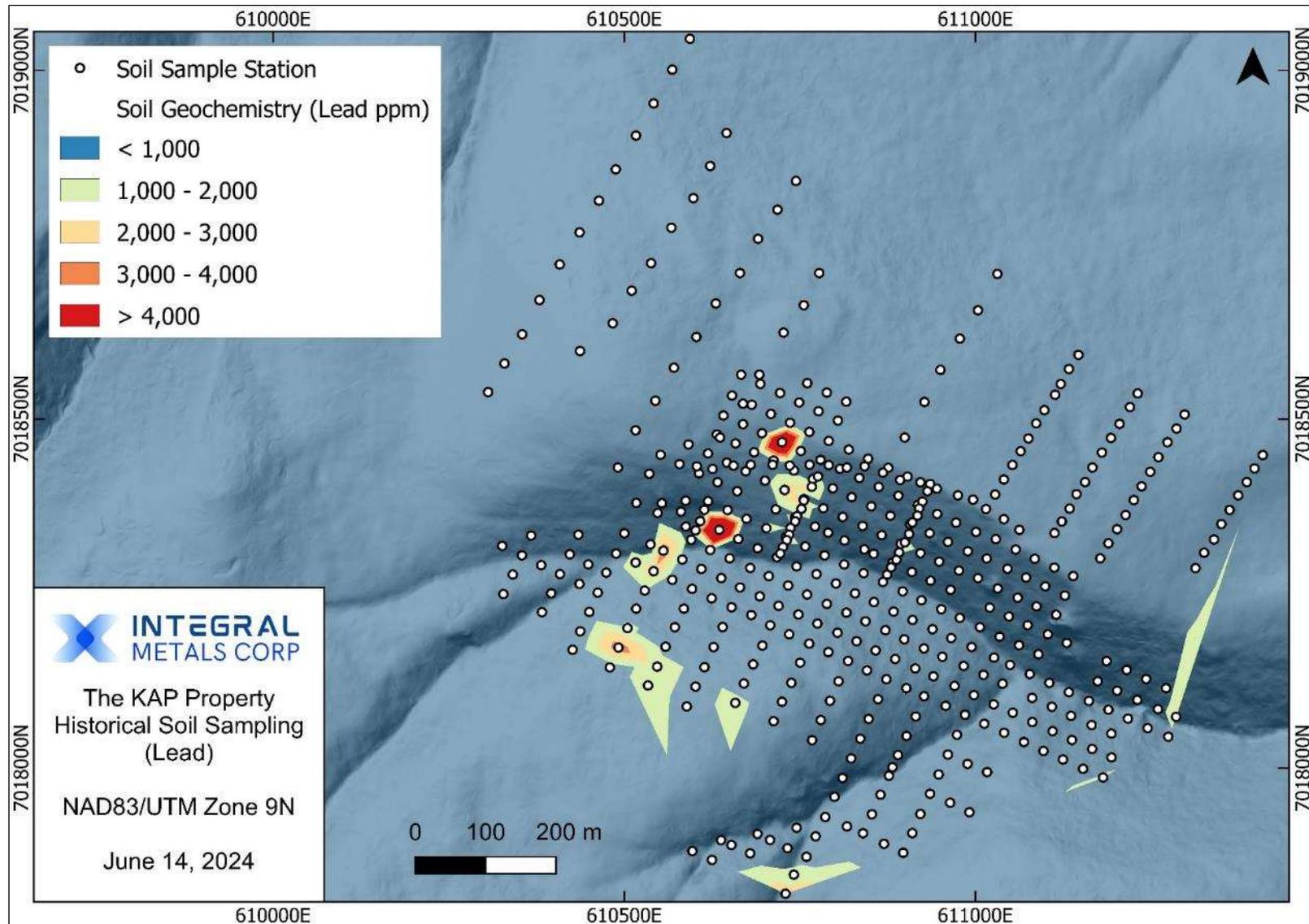


Figure 9: Location and results of soil geochemistry (lead) from the digitized surveys.

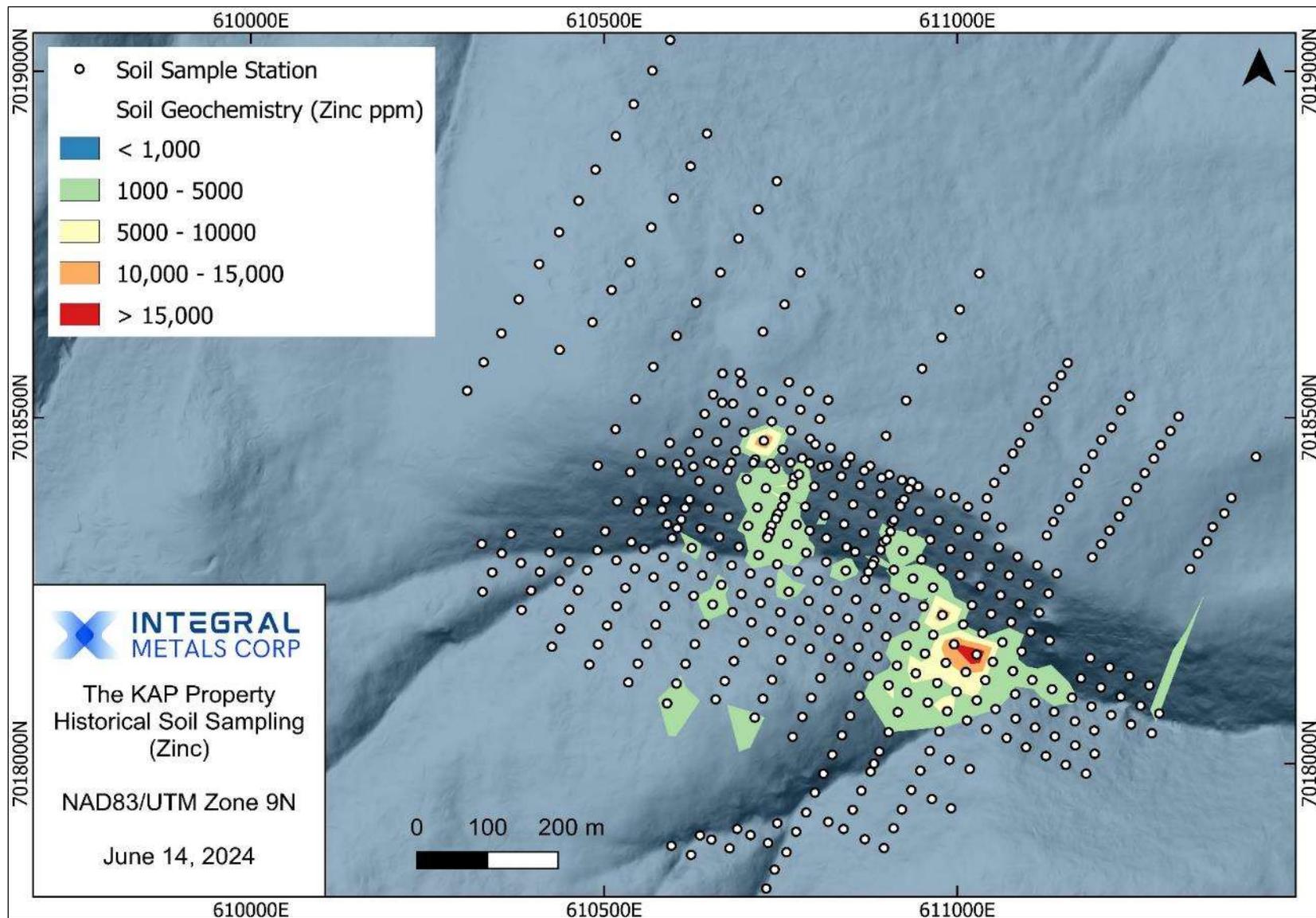


Figure 10: Location and results of soil geochemistry (zinc) from the surveys.

#### 9.2.4 Hand Sampling, Drill Collar Verification, and Core Recovery

A field program undertaken by a crew of four took place from May 16<sup>th</sup> to 19<sup>th</sup>, 2024. The program was helicopter-supported and mobilized from the community of Norman Wells, Northwest Territories.

Highlights of the program included:

- Identification, sampling, and measurement of characteristics of the Main showing;
- Identification and recording of the coordinates of numerous historical drill collars from both eras of historical drilling (i.e., the 1976 and the 1996 drill programs);
- Identification of a core cache that appeared to have contained core from all holes of the 1976 program and most core from the 1996 program; and,
- Recovery and retrieval of all 1976 and significant 1996 core from the field to Yellowknife.

Figure 11 presents a photo of a geological assistant standing next to outcrop exposure at the Main showing. The area contained visually distinct replacement-style mineralization that primarily consisted of sphalerite. The sphalerite was typically orange-red, but was also observed as being green and yellow as well. Mineralization occurred as 1 cm-to-4 cm wide colloform bands related to carbonate veins that were mostly sub-parallel to the strata, though notably occurred at all angles in an erratic nature. Sphalerite mineralization was also observed as a pervasive replacement texture into the host rock; this mineralization was occasionally present as decimeter scale pods of particularly dense sphalerite mineralization. On a centimeter-to-decimeter scale, sphalerite could locally account for up to 80%-to-90% of the mineralogy. Irregular calcite pods with very coarse crystals (up to decimeter-scale), numerous breccia zones, and a possible coincident kink in the strata were present in the Main Showing area.

Figure 12 presents the location of the geochemical samples, Table 10 presents the results of geochemical sampling, and Table 11 presents additional field notes on each sample. There were 17 rock hand samples collected for geochemical analysis. The rock samples were primarily collected at the Main Showing trend. Sample M160601 was taken in the geology overlying the Breccia Creek showing and contained narrow calcitic veinlets. It was expected that this sample would not assay significantly but would serve as a useful sample to help quantify background values. Sample M160661 was found at the core cache location and appears to have been collected elsewhere on the Property and left at the cache site in the past. This sample contained probable malachite and azurite along with sphalerite and was sampled due to it being the only notable rock identified for copper potential. Of the 17 samples collected, 16 were collected on mineralized rock. All 16 of these assayed over 10,000 ppm Zn and 12 select samples assayed over 30% Zn, exceeding the overlimit analysis capacity of the laboratory. One sample assayed over 10,000 ppm Pb. Gallium reached up to 1,280 ppm Ga and averaged 495 ppm Ga across 14 select mineralized samples. Germanium reached up to 486 ppm Ge and averaged 245 ppm Ge across 14 select mineralized samples. Further analysis may be completed to understand the exact values of zinc in these samples, but the results were comprehensive enough to validate the high-grade mineralization previously observed at the Main showing.



*Figure 11: Photo of a Main showing exposure with a person for scale.*

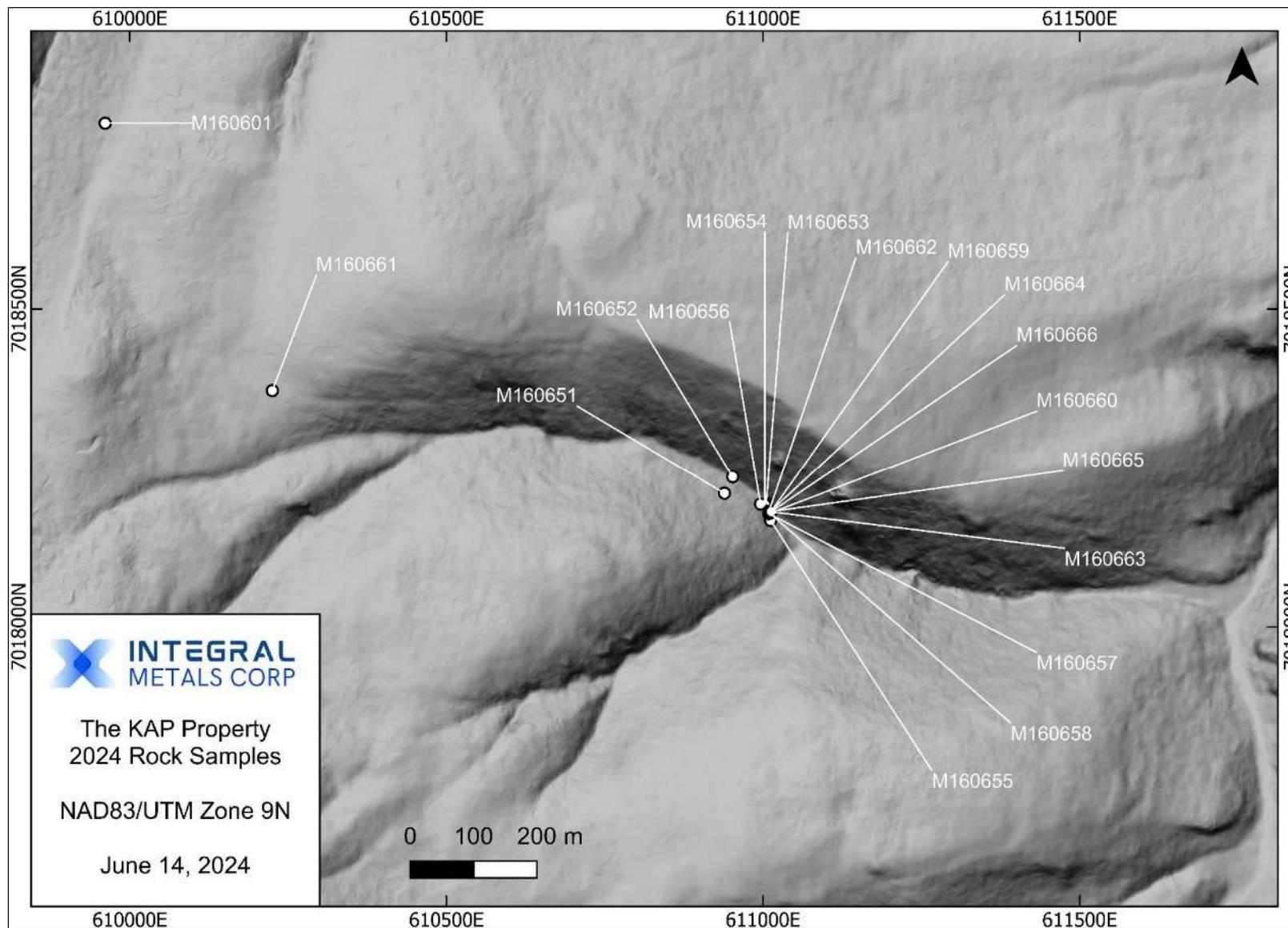


Figure 12: Location rock hand samples collected during the 2024 program.

Table 10: Summary of the geochemical analysis on collected rock hand samples during the 2024 survey.

Sample	UTM X	UTM Y	UTM Z	Zn	Zn	Pb	Ga	Ge
				Zn- OG62	ME- MS61	ME- MS61	ME- MS61	ME-MS61
				%	ppm	ppm	ppm	ppm
M160601	609961	7018791	609961	-	9	4	0.36	0.21
M160651	610939	7018210	610939	>30.0	>10000	102	291	260
M160652	610952	7018236	610952	4.24	>10000	43.7	122	0.24
M160653	611005	7018194	611005	>30.0	>10000	8320	920	486
M160654	611003	7018192	611003	>30.0	>10000	237	600	366
M160655	611012	7018167	611012	>30.0	>10000	75.5	435	296
M160656	610996	7018193	610996	>30.0	>10000	105.5	205	280
M160657	611009	7018178	611009	>30.0	>10000	2070	175	232
M160658	611010	7018179	611010	>30.0	>10000	45.7	500	208
M160659	611011	7018179	611011	21.7	>10000	15.3	61	30
M160660	611012	7018179	611012	>30.0	>10000	401	1280	381
M160661	610225	7018372	610225	-	4120	>10000	8	0.17
M160662	611009	7018181	611009	>30.0	>10000	191.5	162	83
M160663	611010	7018181	611010	25.4	>10000	267	540	76
M160664	611011	7018181	611011	>30.0	>10000	112.5	380	176
M160665	611012	7018181	611012	>30.0	>10000	1635	790	439
M160666	611013	7018181	611013	>30.0	>10000	215	530	116

Figure 13 presents field photos of the historical drill core, and Table 12 presents the corrected positions of historical drill collars. Two crew members were tasked with identifying historical drill collars. Georeferenced historical maps proved accurate enough to find historical collar locations in the field. The search was sometimes made easier by artefacts such as drilling platforms being left behind. Seven out of thirteen holes from the 1976 drilling campaign were located in the field, and five out of thirteen holes from the 1996 program were located. Handheld GPS units typically record XY coordinates within a  $\pm 3$ -meter accuracy. The standard deviation of XY coordinates for both drilling campaigns is considered to be within the standard GPS accuracy range. As such, the delta values for measured XY coordinates were used in applying a correction to collar locations that were not measured. There is reasonable confidence that this correction is accurate and can be used with confidence for plotting DDH collar locations in a 3D environment.

Table 11: Details on collected rock hand samples during the 2024 survey.

ID	Type	Notes
M160601	Grab	Limestone w/ network of hairline calcite veins - not mineralized.
M160651	Grab	Up to 80% sphalerite in calcite vein
M160652	Grab	Grab sample along strike of mineralization outcrop. Calcite veining in brecciated carbonate unit. Seeing trace sphalerite in outcrop above sample in large 1x2m calcite vein. Sample is ~20-25% sphalerite.
M160653	Grab	Almost pure sphalerite. Chose best looking mineralization to obtain representative sample of very high grades.
M160654	Grab	30-40% sphalerite from in situ mineralization calcite vein.
M160655	Float	70-80% sphalerite from nearby eroded outcrop. Numerous heavily mineralized rock in vicinity over 5x5m.
M160656	Grab	In situ mineralization w/ 70-80% sphalerite. Numerous chunks cleaved off outcrop in vicinity with good sphalerite mineralization.
M160657	Grab	60-70% sphalerite. Trace galena. Mins pervading into host rock with cm/mm-scale calcite veins. Porous texture of host.
M160658	Grab	80% sphalerite in calcite vein and within black host rock. Black mineral in calcite vein (tourmaline/pxn/amphibole?)
M160659	Grab	20-30% sphalerite mainly concentrated in host rock. Black host rock with minor irregular mm/cm-scale calcite veins.
M160660	Grab	80% sphalerite. Appears to be same black host rock with calcite veining.
M160661	Float	5% sphalerite, 3-5% green blue minerals (malachite, azurite?). Grey/brown crystalline host rock limestone with calcite veining. Found by other out of place mineralized samples at core cache. Too small to keep rep.
M160662	Grab	60-70% sphalerite. Minimal calcite veining. Mineralization in host rock.
M160663	Grab	20-30% sphalerite in veining. Brown limestone with calcite veining. No rep kept.
M160664	Grab	20% sphalerite. Brown/black crystalline unit. Does not react with HCl.
M160665	Grab	80% sphalerite in calcite vein.
M160666	Grab	20-30% sphalerite. Black host rock with irregular mm/cm-scale calcite veining. Mins in host rock/veining.



Figure 13: 2024 Fieldwork photos of the historical drill core, including: A) the stacks of core, where the 1976 core was stored in plastic trays, and the 1996 core was stored in wooden trays; B) box tag on a 1976 core box; and, C) box label on a 1996 core box.



*Photo 1: Historical drill hole collar location (August 7, 2024, Property visit photo)*

Table 12: Corrected positions of historical drill collars.

Hole	Georeferenced Collar		Corrected Collar		Correction	Collar Variation	
	UTM X	UTM Y	UTM X	UTM Y		$\Delta$ UTM X	$\Delta$ UTM Y
C-76-01	610968	7018180	610975	7018175	GPS	6.9	-4.4
C-76-02	610983	7018159	610991	7018155	GPS	8.4	-4.0
C-76-03	610988	7018136	610993	7018132	GPS	5.2	-4.6
C-76-04	610957	7018197	610965	7018192	GPS	8.2	-4.6
C-76-05	610969	7018211	610976	7018187	Calculated	-	-
C-76-06	611003	7018214	611010	7018183	Calculated	-	-
C-76-07	611000	7018210	611007	7018179	Calculated	-	-
C-76-08	611010	7018204	611017	7018174	Calculated	-	-
C-76-09	610986	7018220	610993	7018170	Calculated	-	-
C-76-10	611023	7018185	611030	7018165	Calculated	-	-
C-76-11	610964	7018158	610970	7018155	GPS	5.8	-3.7
C-76-12	610952	7018168	610959	7018163	GPS	6.4	-4.1
C-76-13	610973	7018145	610979	7018139	GPS	5.8	-5.6
Average (m)						6.7	-4.4
Standard Deviation						1.14	0.57
F-96-01	610942	7018121	610952	7018116	GPS	10.6	-5.1
F-96-02	610941	7018120	610952	7018116	GPS	11.2	-4.4
F-96-03	610938	7018117	610949	7018113	GPS	10.9	-3.3
F-96-04	610689	7018019	610699	7018017	GPS	-	-
F-96-05	610934	7018320	610944	7018318	Calculated	-	-
F-96-06	610937	7018324	610946	7018323	Calculated	-	-
F-96-07	610171	7018471	610181	7018469	Calculated	-	-
F-96-08	610171	7018471	610181	7018469	Calculated	-	-
F-96-09	609862	7018161	609872	7018159	Calculated	-	-
F-96-10	610728	7018398	610738	7018396	Calculated	-	-
F-96-11	610205	7018711	610215	7018709	Calculated	-	-
F-96-12	610844	7018229	610853	7018231	GPS	8.7	2.0
F-96-13	610850	7018233	610858	7018236	GPS	7.9	2.5
Average (m)						9.8	-1.7
Standard Deviation						1.33	3.25

## 10.0 DRILLING

No drilling has been done on the Property by the Company.

## 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

The trenching, drilling, and geological sampling report and work completed by Cominco in 1975/1976 was performed by the geologist E.G. Olfert, under the supervision of D.W. Heddle, a registered professional engineer, and the report was approved for release by W.T. Irvine, a registered professional engineer. A detailed picket-grid was established in the main showings area, where the work was performed. There are no details documented regarding sample preparation, analyses, or security with respect to this work.

In 1979, the geological sampling report and work was performed by the geologist R. Cook. Assay certificates from Bondar-Clegg & Company Ltd. are provided in the assessment report. Certain samples are indicated to have undergone hot aqua regia extraction and have been analyzed by atomic absorption. There are no details documented regarding sample preparation or security with respect to this work. Bondar-Clegg & Company Ltd. was a Canadian geochemical and assay laboratory which was acquired by ALS Chemex in 2001.

The geological sampling report and work completed by Equinox in 1987 was performed by D.G. Leighton, a registered professional geologist. Assay certificates from Acme Analytical Laboratories Ltd. are provided in the assessment report. There are no details documented regarding sample preparation, analyses, or security with respect to this work.

The geophysical survey and report completed by Firesteel in 1995 was supervised and written by the geophysicist A.J. White, while the geological sampling and report was written and approved by I.D. McCartney, a registered profession engineer, and E.G. Olfert, a registered professional geologist. Details are provided on the geophysical data collection, as well as the raw data (including line number, station number, elevation, Bouguer, northing, and easting). The survey equipment consisted of a LaCoste & Romberg Gravity meter (#199), a Wild T1 Theodolite, and a Distomat Wild DI 1000 EDM. A Gravity Base Station was set up on a flat rock beside the camp and marked with fluorescent paint, with its coordinates tied to a specific reference point to ensure positive grid coordinates without external gravity or elevation references. The survey grid was established with a baseline azimuth of 120 degrees and cross lines at 30 degrees, maintaining Northing and Easting alignment. Gravity data was collected in loops starting and ending at the base station, with daily drift errors kept below 0.08 milligals and repeat readings within 0.04 milligals. The data collection involved converting gravimeter dial readings to milligals, correcting for solar and lunar tides, and adjusting for meter height above surveyed ground level. Corrections were also made for the difference in gravity between field and base stations, with free air corrections applied based on station latitude and elevation. Data reduction involved linear prorating between base ties and adding absolute base station gravity values, ensuring data integrity. Bouguer gravity was calculated to correct for material attraction between the station, sea level, and local terrain, using a density of 2.65 g/cm<sup>3</sup>. The data set, deemed of high quality, was used to base

exploration decisions. Assay certificates from the Cominco Ltd. exploration research are provided in the assessment report. The samples are indicated to have undergone aqua regia digestion, and have been analyzed by inductively coupled plasma (“ICP”) atomic absorption. There are no details documented regarding sample preparation or security with respect to this work.

The geophysical survey and report completed by Firesteel in 1996 was supervised and written by the geophysicist A.J. White, while the drilling and report was written and approved by I.D. McCartney, a registered profession engineer, and E.G. Olfert, a registered professional geologist. Details are provided on the geophysical data collection, as well as the raw data (including line number, station number, observed gravity, elevation, Bouguer, northing, and easting). The geophysical equipment and procedure are the same as described above with respect to the 1995 report. The samples are indicated to have undergone aqua regia decomposition, and have been analyzed by Atomic Absorption Spectroscopy (AAS), except zinc which also underwent solvent extraction. There are no details documented regarding sample preparation or security with respect to this work.

The geological sampling and report completed by Firesteel in 1998 was performed and written by D.G. DuPre, a registered professional engineer. The survey involved the establishment of lines using a compass and topofil chain, with stations marked by flagging at 20-meter intervals along the lines. Soil samples were collected at 20-meter intervals along lines that were spaced 100 meters apart. Each sample was identified according to its grid coordinates. All samples were taken from the "B" soil horizon using a shovel and placed into kraft sample bags. Samples were collected and sent to the Bondar-Clegg & Company Ltd. laboratory in Vancouver for analysis using ICP methods. There are no details documented regarding sample security with respect to this work.

The geological sampling and report completed by Stoneshield Capital Corp. was performed and written by G. Vivian and D. White, both registered professional geologists. The samples were described, bagged and tagged in the field and taken to the ACME prep lab in Yellowknife, an independent laboratory. All samples were prepped using the R200-250 code, crushed to 80% passing 10 mesh, split 250 g and pulverized to 85% passing 200 mesh. Samples were then analyzed using the Inductively Coupled Plasma Mass Spectrometry (“ICP-MS”) analysis using 36 elements and a 15 g sample. There are no further details documented regarding sample security with respect to this.

As described in Section 9.2.4, the Company carried out exploration work on the Property from May 16<sup>th</sup> to 19<sup>th</sup>, 2024. Work included gaining access to the Property, and traversing to select historically discovered mineral showings. All of the 1976 drill core and select mineralized intercepts from the 1996 drill core was recovered for future re-analysis, while rock hand samples were obtained for geochemical analysis from the main mineral showing. There were numerous rock hand samples collected from previously mapped and trenched parts of the Main showing that were also sent for analysis. All rock hand samples were under the care and control of contractor personnel. The historical drill core was found on the Property near the Main showing, stored in

properly organized stacks, with core that was previously split in half with sample tags still attached and visible.

Figure 14 presents an example of a rock hand sample being collected, tagged, and stored. The rock hand samples were collected in the field by placing between 0.3 kilograms and 5.0 kilograms of material in a heavy-duty plastic sample bag with the sample number written with permanent marker. Each sample bag was then sealed with a plastic cable tie, and transported back to the base station at the end of each day. Rock samples were recorded as to their source location coordinates, sample type, exposure type, lithology, colour, texture, and grain size were described. The source location coordinates were determined by hand-held GPS set to report locations in UTM coordinates using the North American Datum established in 1983 (NAD 83) Zone 9N. The drill core was kept in the original core boxes and trays while undergoing extraction from the site. The 1976 core was in plastic trays, while the 1996 core was in wooden boxes. The hand samples and core were shipped back to Yellowknife. The collected samples were sent to the ALS Laboratory facility in Yellowknife (3 Coronation Drive #8, Yellowknife, NT) for preparation, and then were shipped to the facility in Vancouver (2103 Dollarton Hwy, Vancouver, BC) for analysis. A Chain of Custody form exists for all samples transferred to the care of ALS Minerals. ALS is an accredited and ISO Certified laboratory in Canada that is independent of the Company.

The first analytical method employed with respect to the samples taken from the Property was the *Four Acid Digestion With ICP-MS Finish* (ME-MS61; 0.25-gram sample) technique. This procedure involved a four-acid digestion of 0.25 grams of sample paired with ICP-MS and Atomic Emission Spectroscopy (“ICP-AES”) analyses for trace level, exploration samples, and provided a finer-level of detection limits. The method involved the decomposition of samples using a combination of hydrochloric, nitric, perchloric, and hydrofluoric acids, which ensured the dissolution of nearly all mineral species, including silicates. A digestion specialised to prevent the loss of volatile germanium species was requested, as it can be lost during the standard procedure. Following digestion, the solution was analyzed using ICP-MS and ICP-AES, which provided precise and accurate multi-element determinations at trace levels. When samples exhibited a mineralized detection overlimit, they underwent re-testing using a second analytical method called the *Four Acid Overlimit Method* ((+)-OG62; 0.4-gram sample) technique. This procedure involved a four-acid digestion on 0.4 grams of sample with ICP-AES analyses, which provided higher-level detection limits.

Additionally, the historical work undertaken on the Property was carried out by industry professionals and was included in assessment reports verified by the Northwest Territories Geological Survey. The ALS and ACME laboratories used for the past and recent exploration work also have their own QA/QC procedures for sample preparation, analysis and security. As a result, the author is of the opinion that the sample preparation, security and analytical procedures undertaken with respect to this work were likely carried out in accordance with best practices at the time the work was completed and, therefore, can be considered adequate for the purposes of this report.



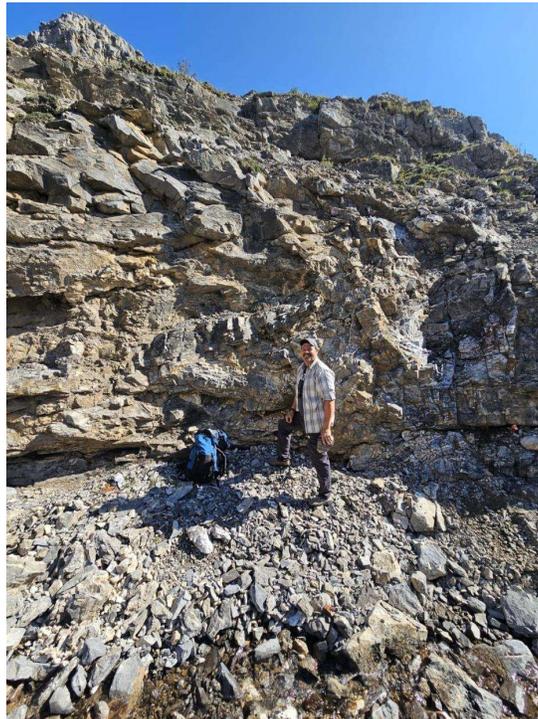
*Figure 14: Photo example of a rock hand sample collected during the 2024 exploration program.*

## 12.0 DATA VERIFICATION

The author visited the Property on August 07, 2024, to verify historical and recent exploration work, to examine mineralized outcrops, to collect necessary geological data, to take infrastructure and other technical observations and to assess the potential of the Property for discovery of lead, zinc, gallium, germanium and other mineralization.

The data collected during the 2024 exploration program is considered reliable because it was verified by the author and it was collected by a professional geologist with Voyager Exploration. The data quoted from other sources is also considered reliable because information was collected, supervised, or reviewed by a professional geologist or engineer, verified during the 2024 exploration program where possible, and validated in the process of literature search on the Property. Furthermore, the historical exploration work was carried out under the supervision of professional geoscientists and taken from assessment reports verified by the Northwest Territories Geological Survey. A limited search of tenure data on the Mineral Tenure website on August 3, 2024, confirmed the Property ownership data supplied by the Company.

In summary, the author believes that the data utilized and relied upon for this report is adequate for the purposes for which it is used herein.



*Photo 2: August 07, 2024, Property visit photo*



*Photo 3: A float with sphalerite mineralization within calcite veining (August 7, 2024, Property visit photo).*

## **13.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

No mineral processing or metallurgical testing was done on the Property by the Company.

## **14.0 MINERAL RESOURCE ESTIMATES**

No mineral resource estimates were done on the Property by the Company.

*Items 15 to 22 are not applicable at this time.*

## **23.0 ADJACENT PROPERTIES**

There are no relevant properties adjacent to the Property.

## **24.0 OTHER RELEVANT DATA AND INFORMATION**

No other information at this time.

## **25.0 INTERPRETATION AND CONCLUSIONS**

### **25.1 Interpretation**

The Property is situated in the Mackenzie Mountains of the Northwest Territories, spans 7,500 hectares, and contains five significant mineral showings: KAP (Main), Steep Creek, Breccia Creek, Blanche, and Adyjo. These showings are classified as MVT carbonate-hosted zinc-lead deposits, with additional anomalous gallium, germanium, and silver mineralization. The Property's geographical coordinates center at UTM NAD 83, Zone 9N, 607167mE and 7018574mN, covering the NTS map sheets 95M06 and 95M07.

The Property is accessible via helicopter from Norman Wells or Wrigley. The all-weather Mackenzie Highway provides year-round access to Wrigley and is under review for extension to Norman Wells. Additional access is possible through float-equipped aircraft landing at nearby lakes. Should future exploration prove successful, studies about potential all-season road access may be warranted and the Redstone River may provide a pathway along its host valley worth of consideration. This logistical framework, combined with local infrastructure, facilitates reasonably efficient exploration activities.

The Property's geological framework is complex, featuring the Arnica and Landry Formations, which include extensive limestone and dolomite deposits. These formations, particularly the Recrystallized Zone in the Landry Formation, host significant mineralization. This zone, marked by granular dolomitization and euhedral quartz needle silicification, exhibits stratabound sphalerite and galena deposits within brecciated and veined structures. The Property's structural complexities further enhance its mineralization potential. The Recrystallized Zone's occurrence along a stratigraphic trend suggests high potential for undiscovered mineralization along said trend.

Historical environmental concerns are minimal, with no historical production affecting the area and historical drill programs being of a reasonably small scale with apparent care for cleanliness during and at the conclusion of historical drilling, less minor artefacts such as timbers left behind. Ongoing and future exploration activities will require thorough environmental assessments and continuous consultation with local First Nations communities, including the Tulita Dene, Norman Wells Métis, and Fort Norman Métis. These consultations are crucial for obtaining and maintaining

the necessary permits and for ensuring that exploration activities are conducted responsibly and sustainably.

The mineral claims comprising the Property permit low-impact exploration activities such as prospecting, sampling, geological surveying, and non-invasive geophysical surveying. A Type A Land Use Permit (SC24C-004) was granted for the Property with effective date of July 30, 2024, to July 29, 2029 which allows more extensive exploration activities, including diamond or reverse circulation drilling, use of heavy and light equipment, and establishment of temporary structures.

The lack of existing infrastructure poses a substantial risk to the economic viability of the Property. While the region's infrastructure, though limited, supports exploration activities, the necessity to develop and upgrade infrastructure, such as constructing reliable winter roads to access to the Property and power infrastructure to supply any mining project developed at the Property, entails, among other things, considerable regulatory approvals and financial investment, which could lead to significant delays in developing the Property. These infrastructural developments are essential for ensuring all-weather access to the Property, transporting materials to and from the Property, and supporting large-scale exploration and development operations at the Property. Unforeseen challenges in securing funding, regulatory approvals, and timely construction of necessary infrastructure could escalate costs and push back project timelines, adversely affecting the project's economics. These uncertainties could ultimately influence the feasibility and profitability of the Property and will require comprehensive planning and risk management strategies as the Property is progressed through the exploration stage and into the development stage.

### **25.1.1 Historical Work**

The Property has undergone several phases of exploration, beginning in 1975 with Cominco Ltd. discovering the Main, Breccia Creek, Steep Creek, and Adyjo mineral showings. This historical work provided a good basis for the 2024 exploration work as well as helped in understanding the Property merits for continuous exploration efforts to develop a potential mineral resource for lead, zinc, gallium, and/or germanium mineralization.

Cominco conducted geological mapping, rock channel sampling, soil sampling, trenching, and drilling. Their detailed soil geochemistry and trenching around the Main showing revealed significant lead-zinc mineralization, with zones like the "A-Showing" averaging 18.5% Zn, and the "B-Showing" averaging 32.3% Zn.

In 1977, prospectors, including Raymond Cook, discovered the Blanche and Olaxis showings, performing geological mapping and rock hand sampling. The Blanche showing reported high-grade samples, including one with 61.03% Pb and three others with over 30% Zn.

Equinox Resources Ltd. in 1987 focused on rock hand sample geochemistry, assessing previously identified lead-zinc occurrences for gallium-germanium content. Their sampling from the Adyjo,

Main, Steep Creek, and Blanche showings indicated significant gallium and germanium content within sphalerite, suggesting potential for high-grade reserves.

Firesteel Resources Inc. conducted extensive exploration from 1995 to 1998, including gravity geophysical surveys, drilling, and soil geochemistry. The 1995 survey identified six significant gravity anomalies around the Main showing, interpreted as potential shallow, blind Zn (+Pb) sulfide deposits. Drilling in 1996 confirmed consistent mineralization in the Main showing area, with substantial potential for high-grade zinc within a collapse breccia unit.

In 1998, Firesteel extended the soil geochemistry survey, defining moderate anomalies over the collapse breccia unit, confirming the effectiveness of soil geochemistry as an exploration tool. These efforts have collectively advanced the understanding of the Property's mineral potential, highlighted significant zones of high-grade lead-zinc mineralization, and identified key geological structures that warrant further exploration.

### **25.1.2 2024 Exploration Work**

The successful compilation, digitization, and validation of historical drill hole, gravity survey, and soil survey data have reinforced the reliability of previous exploration efforts at the Property. This validation allows for the creation of a more accurate geological model and enhances confidence in the historical datasets for use in ongoing and future exploration. The confirmed presence of high-grade zinc, gallium, and germanium mineralization, primarily within sphalerite ore, indicates potential for resource development. The recovery of the 1976 historical drill core, in addition to select intercepts of the 1996 historical drill core, initiated an opportunity for the rough historical resource estimate to be brought into compliance with further testing and analysis.

The exploration program has refined the geological model of the Property. The identification of sphalerite mineralization occurring in various forms, such as colloform bands, replacement textures, and pods within carbonate veins, provides insights into the mineralizing processes. This knowledge helps in understanding the distribution and potential controls of mineralization, which is expected to benefit future drilling and resource estimation. Accurate georeferencing and the correction of historical drill collar locations have enabled the integration of drill holes into a 3D space. This three-dimensional modeling is essential for visualizing the spatial relationships between mineralized zones, aiding in the design of targeted drilling programs and resource estimation.

The mapping of geochemical anomalies, particularly for lead and zinc, from historical soil surveys has identified zones of interest that correlate with known mineralized areas. These anomalies provide additional targets for future exploration and can guide drilling to expand the known mineralized zones. The successful identification and sampling of the Main showing, along with the recovery of historical core, underscore the exploration program's effectiveness.

The high-grade assays from the geochemical samples, with zinc values exceeding 30% and significant concentrations of gallium and germanium, highlight the Property's potential to host economic mineral deposits. This potential supports the continued investment in exploration to delineate a mineral resource at the Property.

## 25.2 Conclusions

In the author's opinion, the Property is a property of merit with good potential to host meaningful lead, zinc, gallium, germanium and other mineralization due to the documented mineral showings, historical and recent exploration work results and favorable geological setting. In addition, the interplay of structural, stratigraphic, and geochemical controls enhances the potential for discovering additional mineralization.

## 26.0 RECOMMENDATIONS

In the author's opinion, the character of the Property merits further geological mapping, sampling, and geophysical surveys to refine the understanding of the Property's mineralization and guide future drilling programs.

A two-phased exploration approach, where the second phase is contingent upon the results of the first phase is recommended. The first phase includes detailed geological mapping and low-impact surveys, followed by a second phase of targeted drilling.

### 26.1 Phase 1 – Soil Geochemical Survey

Table 13 presents a budget for the proposed Phase 1 exploration activity. The total estimated budget for the Phase 1 program is \$285,922 and it will take about two months' time to complete this work. A soil geochemical survey is an appropriate next step, as historical data from the 1976 and 1996 drill hole results have indicated the presence of mineralization hosted by the Recrystallized Zone in the Manetoe Facies; however, the spatial extent and continuity of these mineralized zones remain inadequately defined. Previous soil geochemical surveys orientated over the Main showing have demonstrated success in identifying mineralization, revealing significant geochemical anomalies that correlate with known mineralized zones. An expanded soil geochemical survey will build on the previous success, providing a cost-effective and non-destructive method to delineate surface geochemical anomalies that could correlate with subsurface mineralization. This survey will help identify new target areas, refine existing targets, and enhance the understanding of the geochemical landscape of the project area. By systematically collecting and analyzing soil samples, a detailed geochemical map can be generated that will guide Phase 2 exploration activities, thereby optimizing resource allocation and increasing the likelihood of discovery.

### 26.2 Phase 2 – Diamond Drilling Program

Table 14 presents a budget for the proposed Phase 2 exploration activity. If results from the first phase identify mineralization that justifies further exploration, then a strategically planned drilling program would be warranted. The total estimated budget for the Phase 2 program is approximately \$2,694,235 and it will take about four months' time to complete this work. This budget includes \$30,000 for First Nation engagement (including a traditional knowledge study); \$764,643 to mobilize, construct, and maintain a remote camp for a four-month period; \$1,879,592 to perform

2,000 meters of drilling (including wages, equipment, transport, food, rentals, permit fees, and fuel); and \$20,000 to analyze the resulting data. The scope of work for this program is as follows:

- Setup and take-down a temporary remote work camp on-site to house and support workers.
- Approximately 300 meters will be used to twin two historical drill holes on the Main showing. It is anticipated that in combination with re-logging the historical drill core, that past results may be brought into modern compliance and contribute towards the development of a mineral resource estimate on the Property.
- Approximately 500 meters will be used to test the previously un-drilled gravity anomalies in the vicinity of the Main showing. It is anticipated that additional mineralization could be added to the Main showing mineralization and contribute towards the development of a mineral resource estimate on the Property.
- Approximately 1,200 meters will be used to test soil geochemical anomalies that may occur in the vicinity of the other showings (e.g., Breccia Creek, Steep Creek, Blanche), as well as in-between the showings, as demonstrated through the Phase 1 exploration work.

Table 13: Budget for the proposed Phase 1 exploration activity.

Category	Count	Units	Rate	Total
Food and Consumables	7 people	16 days	\$70/day	\$7,840
Senior Geologist	2 people	16 days	\$1,050/day	\$33,600
Junior Geologist	4 people	16 days	\$675/day	\$43,200
Wildlife Monitor	1 person	16 days	\$500/day	\$8,000
Gasoline and Propane	-	16 days	\$35/day	\$560
Travel to Norman Wells	7 people	2 trips	850/trip	\$11,900
Helicopter Charter	-	16 days	\$7,500/day	\$120,000
Geochemical Analysis	-	500 samples	\$50/sample	\$25,000
GPS Rental	4 units	16 days	\$15/day	\$960
inReach Rental	2 units	16 days	\$25/day	\$800
Mountain Tent Rental	10 units	16 days	\$110/day	\$17,600
Generator Rental	2 units	16 days	\$55/day	\$1,760
Field Kit Rental	6 units	16 days	\$110/day	\$10,560
Accommodations	3 rooms	2 days	\$357/day	\$2,142
Expediting	-	4 days	\$500/day	\$2,000

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**TOTAL \$285,922**

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Table 14: Budget for the proposed Phase 2 exploration activity.

Category	Count	Units	Rate	Total
Food and Consumables	40 days	1 camp	\$500	\$20,000
First Nation Engagement and Traditional Knowledge Study	-	1 program	\$30,000	\$30,000
Camp Setup, Operation, and Take-down	4 months	1 camp	\$191,160	\$764,643
Drill Mobilization Team	5-person x 3 days	180 hours	\$105	\$18,900
Driller	2-person x 40 days	80 days	\$1,350	\$108,000
Driller Assistant	2-person x 40 days	80 days	\$750	\$60,000
Geologist	1 person x 30 days	30 days	\$750	\$22,500
Core Cutter	2-person x 20 days	40 days	\$350	\$14,000
Camp Assistant	1 person x 50 days	50 days	\$600	\$30,000
Camp Manager	1 person x 50 days	50 days	\$800	\$40,000
Cook	1 person x 50 days	50 days	\$800	\$40,000
Drill Diesel	6 drums x 40 days	240 drums	\$600	\$144,000
Jet Fuel	25 drum/program	25 drums	\$600	\$15,000
Drill Gasoline	20 drums/program	20 drums	\$600	\$12,000
Camp Gasoline	4 drums/program	4 drums	\$600	\$2,400
Helicopter Support	4 hours/day	160 hours	\$2,600	\$416,000
Fuel Mobilization Charter Fixed-Wing Flight	6 drums/flight	27 flights	\$4,500	\$121,500
Drill Equipment Mobilization Fixed-Wing Flight	-	8 flights	\$4,500	\$36,000
Drill Equipment Mobilization Trucking	-	2 trips	\$25,000	\$50,000
Drill Crew Mobilization Commercial Flight	-	10 seats	\$1,500	\$15,000

Standards		100 units	\$100	\$10,000
XRF		60 days	\$250	\$15,000
ALS lab analysis		1,350 samples	\$100	\$135,000
Tooling Charge	-	2,000 units	\$45	\$90,000
Quad	-	2 units	\$3,000	\$6,000
Survival Shack Supplies	-	1 unit	\$1,500	\$1,500
Satellite Phone	-	1 unit	\$500	\$500
Internet Service	-	1 unit	\$1,000	\$1,000
Centrifuge	-	1 unit	\$16,500	\$16,500
Drill Generators	-	3 units	\$1,500	\$4,500
Drill Survey Equipment	-	60 days	\$285	\$17,100
Tractor	-	1 unit	\$12,500	\$12,500
Marking Blocks and Tape	-	1 unit	\$750	\$750
AMC Poly Plug	-	2 units	\$300	\$600
AMC Pure Vis	-	12 units	\$210	\$2,520
Van Ruth Hole Plug	-	10 units	\$305	\$3,050
Cement Per Bag	-	30 units	\$15	\$450
Mega Bag Totes	-	45 units	\$45	\$2,025
Core boxes	-	600 boxes	\$15	\$9,000
Core Saw	-	1 unit	\$10,000	\$10,000
Data Analysis, Interpretation, and Reporting	-	1 program	\$20,000	\$20,000
Land Use Permit	-	1 fee	\$40,000	\$40,000
Contingency (5%)	-	-	\$128,297	\$128,297
			<b>TOTAL</b>	<b>\$2,694,235</b>

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## **28.0 SIGNATURE PAGE**

The effective date of this Technical Report, titled “Technical Report on the KAP Property, Mackenzie Mountains, Northwest Territories, Canada”, is August 09, 2024.

/s/ “Kristian Whitehead”

Kristian Whitehead, P.Geol.

Dated: August 09, 2024

## 29.0 CERTIFICATE OF AUTHOR

I, Kristian Whitehead, P.Geo., as the author of this report entitled, “Technical Report on the KAP Property, Mackenzie Mountains, Northwest Territories, Canada”, with an effective date of August 09, 2024, do hereby certify that:

- 1) I am a professional geoscientist residing at 2763 Panorama Drive, North Vancouver, British Columbia, Canada, V7G 1V7;
- 2) I have authored the report entitled, “Technical Report on the KAP Property, Mackenzie Mountains, Northwest Territories, Canada”, with an effective date of August 09, 2024. The report is based on a review of the recent exploration carried out on the Property as well as a review of the available historical data;
- 3) I have a Bachelor of Science degree in Earth and Ocean Science from the University of Victoria, 2005. I fulfilled APEGBC requirements in Earth and Ocean Science at the University of British Columbia, 2006. I am a Licensed Professional Geoscientist with the Association of Professional Engineers and Geoscientist of British Columbia, License # 34243. I have experience in exploration and mining operations in Canada and I am a “qualified person” for the purposes of NI 43-101;
- 4) I have been continuously engaged in the mineral industry since 2004 working for junior exploration companies and as an independent geologist and have over 20 years of experience in mineral exploration for precious and base metals (lead, zinc, copper, cobalt) and rare earth metals, including lithium, gallium, germanium and niobium;
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI43-101”) and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purpose of NI43-101;
- 6) I conducted a personal site visit of the Property on August 07, 2024, to verify the recent historical exploration work on the Property, to view local geological conditions, rock outcrops, local structural trends and assess road access and local infrastructure;
- 7) I am responsible for all items of this technical report;
- 8) I am an independent of the Company (Integral Metals Corp.) using the definition in Section 1.5 of Nation Instrument 43-101.
- 9) I have had no prior involvement with the Property that is the subject of this technical report;
- 10) I have read NI 43-101 and this technical report has been prepared in compliance with the NI 43-101 and Form 43-101F1 guidelines;
- 11) As of the effective date of this technical report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading.

Signed and dated at North Vancouver, British Columbia, on the 9<sup>th</sup> day of August 2024.

/s/ "Kristian Whitehead"

Kristian Whitehead B.Sc., P.Geol