

**BC Geological Survey  
Assessment Report  
40990**



Ministry of Energy and Mines  
BC Geological Survey

Assessment Report  
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Prospecting Report

TOTAL COST: \$1968.75

AUTHOR(S): Tom Kennedy SIGNATURE(S): Tom Kennedy

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): \_\_\_\_\_ YEAR OF WORK: 2022

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): Event Number 5963804

PROPERTY NAME: Mac Attack

CLAIM NAME(S) (on which the work was done): 1089237

COMMODITIES SOUGHT: Lead, Zinc, Silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 082GSW024

MINING DIVISION: Fort Steele NTS/BCGS: 082G031

LATITUDE: 49 ° 22 ' 07 " LONGITUDE: 116 ° 00 ' 02 " (at centre of work)

OWNER(S):  
1) Tom Kennedy 2) \_\_\_\_\_

MAILING ADDRESS:  
2290 DeWolfe Ave.  
Kimberley, BC Canada V1A 1P5

OPERATOR(S) [who paid for the work]:  
1) Self 2) \_\_\_\_\_

MAILING ADDRESS:  
\_\_\_\_\_  
\_\_\_\_\_

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):  
Mid Proterozoic age Middle Aldridge formation, quartz veins

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 16606,18117,19277,19989,24916

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	_____	_____	_____
Photo interpretation	_____	_____	_____
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	_____	_____	_____
Electromagnetic	_____	_____	_____
Induced Polarization	_____	_____	_____
Radiometric	_____	_____	_____
Seismic	_____	_____	_____
Other	_____	_____	_____
Airborne		_____	_____
GEOCHEMICAL (number of samples analysed for...)			
Soil	_____	_____	_____
Silt	_____	_____	_____
Rock	_____	_____	_____
Other	_____	_____	_____
DRILLING (total metres; number of holes, size)			
Core	_____	_____	_____
Non-core	_____	_____	_____
RELATED TECHNICAL			
Sampling/assaying	_____	_____	_____
Petrographic	_____	_____	_____
Mineralographic	_____	_____	_____
Metallurgic	_____	_____	_____
PROSPECTING (scale, area) 1:10000		1089237	\$1968.75
PREPARATORY / PHYSICAL			
Line/grid (kilometres)	_____	_____	_____
Topographic/Photogrammetric (scale, area)	_____	_____	_____
Legal surveys (scale, area)	_____	_____	_____
Road, local access (kilometres)/trail	_____	_____	_____
Trench (metres)	_____	_____	_____
Underground dev. (metres)	_____	_____	_____
Other	_____	_____	_____
		<b>TOTAL COST:</b>	<b>\$1968.75</b>

**Report on Prospecting  
For  
The Mac Attack Property  
Spring of 2022**

**Fort Steele Mining Division**

**NTS  
82G031  
UTM Co-Ordinates:  
575600E, 5468000N Zone 11**

**Report Author:  
Tom Kennedy  
South Slocan, BC**

**Owner:  
Tom Kennedy  
2290 Dewolfe Ave.  
Kimberley, BC V1A 1P5**

**Operator:  
Self**

**January 2023**

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## 1:00 SUMMARY

During 2022 two days were spent prospecting on the Mac Attack claim group in the headwaters of Little Lamb creek. Several marker localities were discovered as well as a gabbro dyke and crystalline quartz veining.

## 2.00 INTRODUCTION

This report describes the results of a limited prospecting program carried out on the Mac Attack claim.

### 2.10 Location and Access

The Mac Attack claim is located roughly 22km southwest of Cranbrook and 8km to the west of the north end of Moyie Lake in the headwaters region of Little Lamb and McNeil Creeks.

Access is provided by logging haul roads from the north and east on the Lumberton then Semlin Creek haul roads network and from the south via the Lamb creek and then Little Lamb creek forest service roads. Roads from the south are in good shape with the exception of cross ditching which makes truck access a little more difficult to navigate. To the north several haul roads have been recently reactivated close to the claim group but the majority of historic access beyond this point is now heavily overgrown and only accessible by foot.

### 2.20 Property

The Mac Attack claim group consists of two mineral titles 1089096, 1089237 owned by Tom Kennedy of South Slokan, BC. The claims cover an area of 1178.24 Ha.

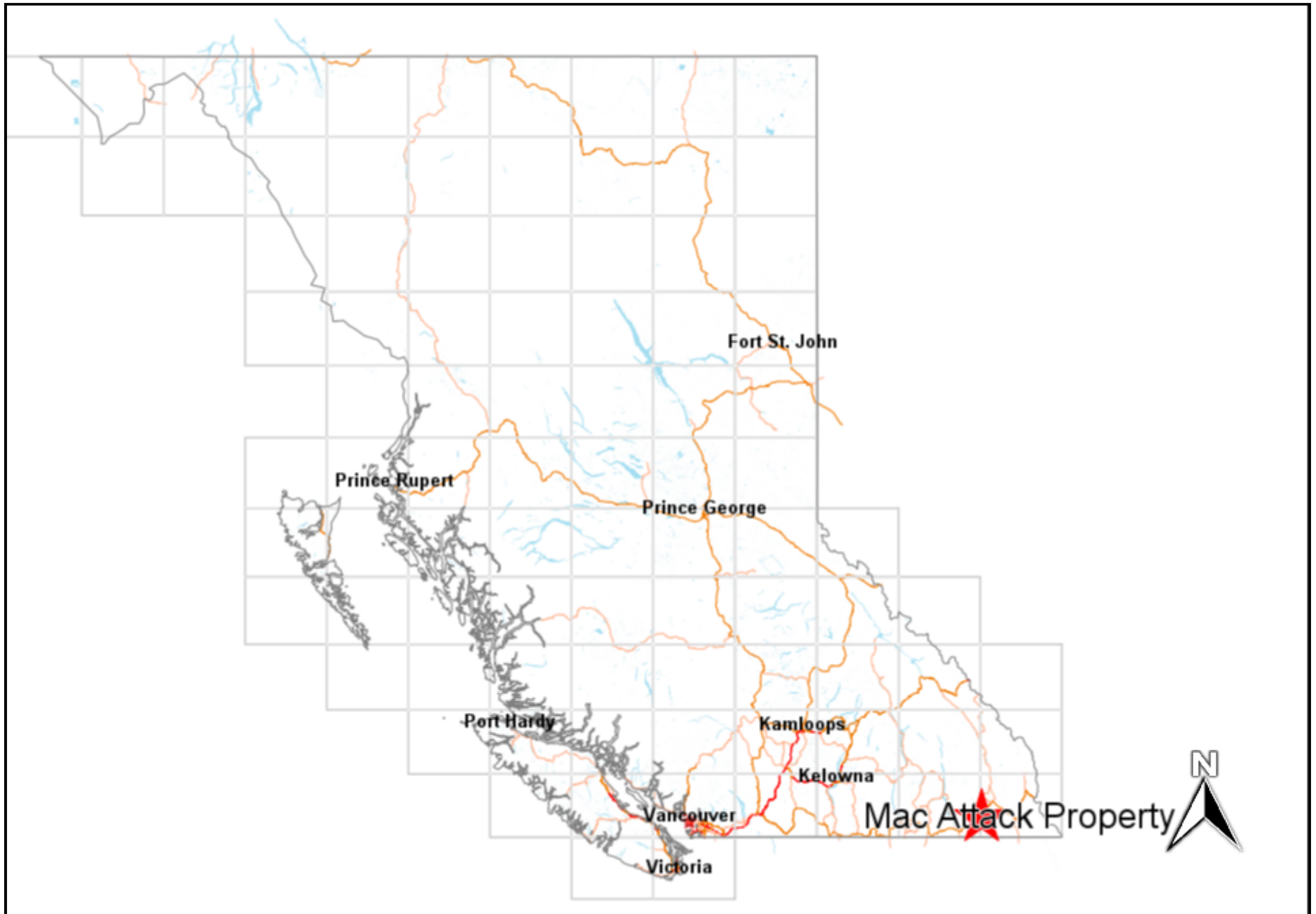
### 2.30 Physiography

The Mac Attack claim group covers mostly moderate topography at the height of land between the drainages of Little Lamb creek and McNeil creek. Elevation ranges from 1480m to 2080m. Outcrops on the claim are relatively sparse and mostly restricted to the back walls of drainages and logging roads cuts.

The bulk of the claim group has been logged with the majority of this activity around 15 years old. Where remaining original forest cover consists of generally spruce and balsam at higher elevations with pine and larch on the flanks of hillsides and older fire burns.

North facing slopes and creek draws are commonly thicker grown with an alder and buck brush understory. Thicker alder growth is also found in older logging blocks and along roads and skid trails.

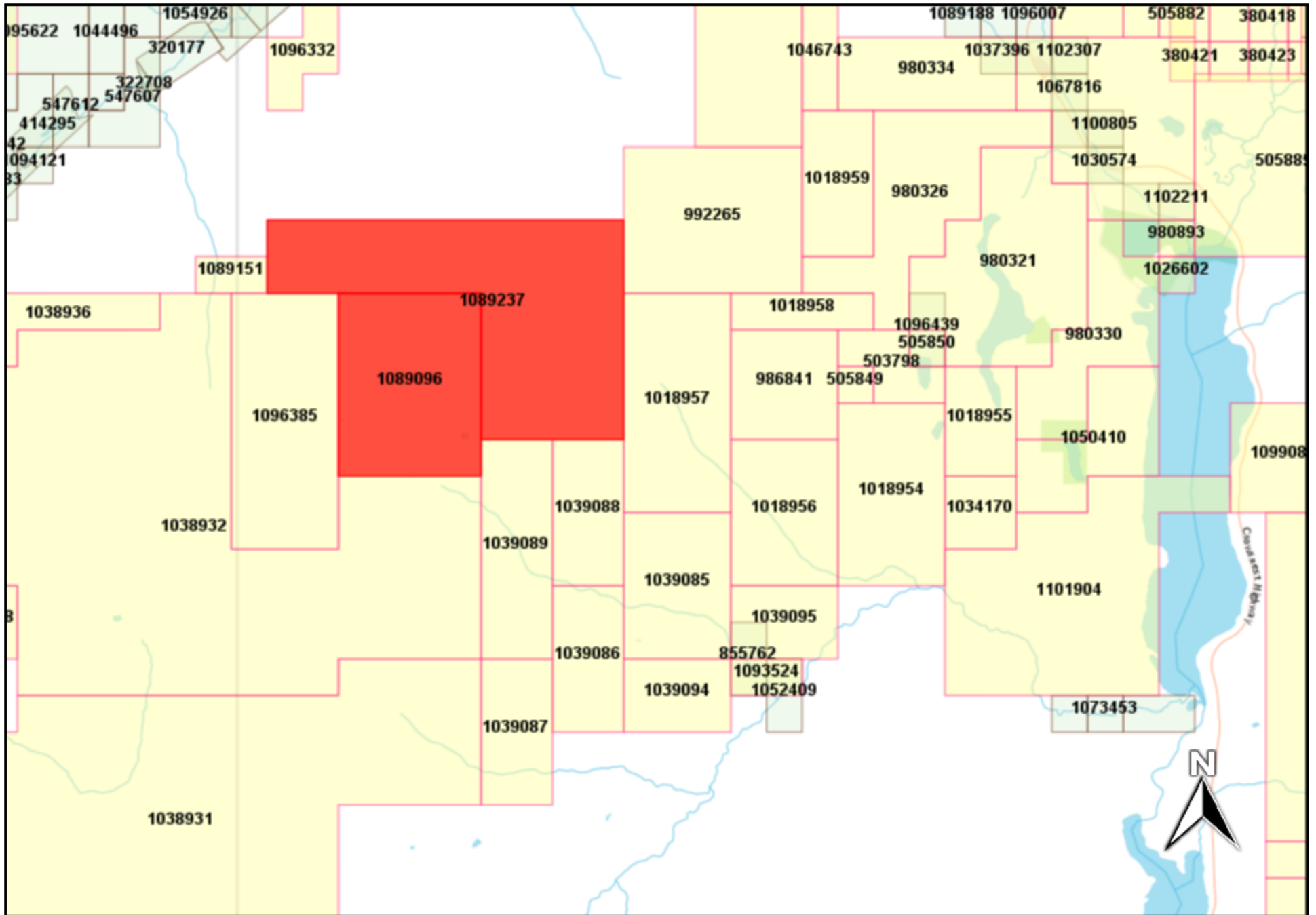
# Figure 1: Property Location Map



300 km  
200 mi

Mar/07/2023  
Scale 1:14000000

# Figure 2: Claim Location Map



## 2.40 History of Previous Exploration

The Mac Attack claim covers an area previously explored by several junior mining companies from the mid 1970's thru the early 2000's. This activity was focused primarily on the McNeil minfile occurrence. The occurrence consists of massive lead, zinc and silver mineralization in northwest trending quartz veins mostly in the vicinity of a gabbro sill in middle Aldridge sedimentary rocks. Most of the drilling and surface work was focused on these veins. Stratabound and disseminated lead and zinc mineralization was also encountered in drilling. Several drill holes have intersected lead, and zinc enriched, pyrrhotiferous laminated mudstone at the lower to middle Aldridge contact. This is the same stratigraphic interval that hosts the giant Sullivan SEDEX lead zinc deposit at Kimberley BC.

The Fors minfile occurrence is just to the east of the claim area and has received extensive exploration activities targeting stratiform massive sulfide mineralization close to the same stratigraphic section as veining at McNeil creek. A thick zone of fragmental rocks with lead/zinc enriched mudstone occurs at the lower to middle Aldridge below and to the north east of this mineralization. Evaluation of this geological setting has seen the bulk of historic and more current work in this area.

Minfile summary reports for both can be found in Appendix 1 and provide a more detailed description of work as well as references.

## 2.50 Purpose of work

The purpose of the 2022 prospecting was to collect some geological data from outcrops either along logging roads or ridgelines to help better constrain the geological setting of the claim area.

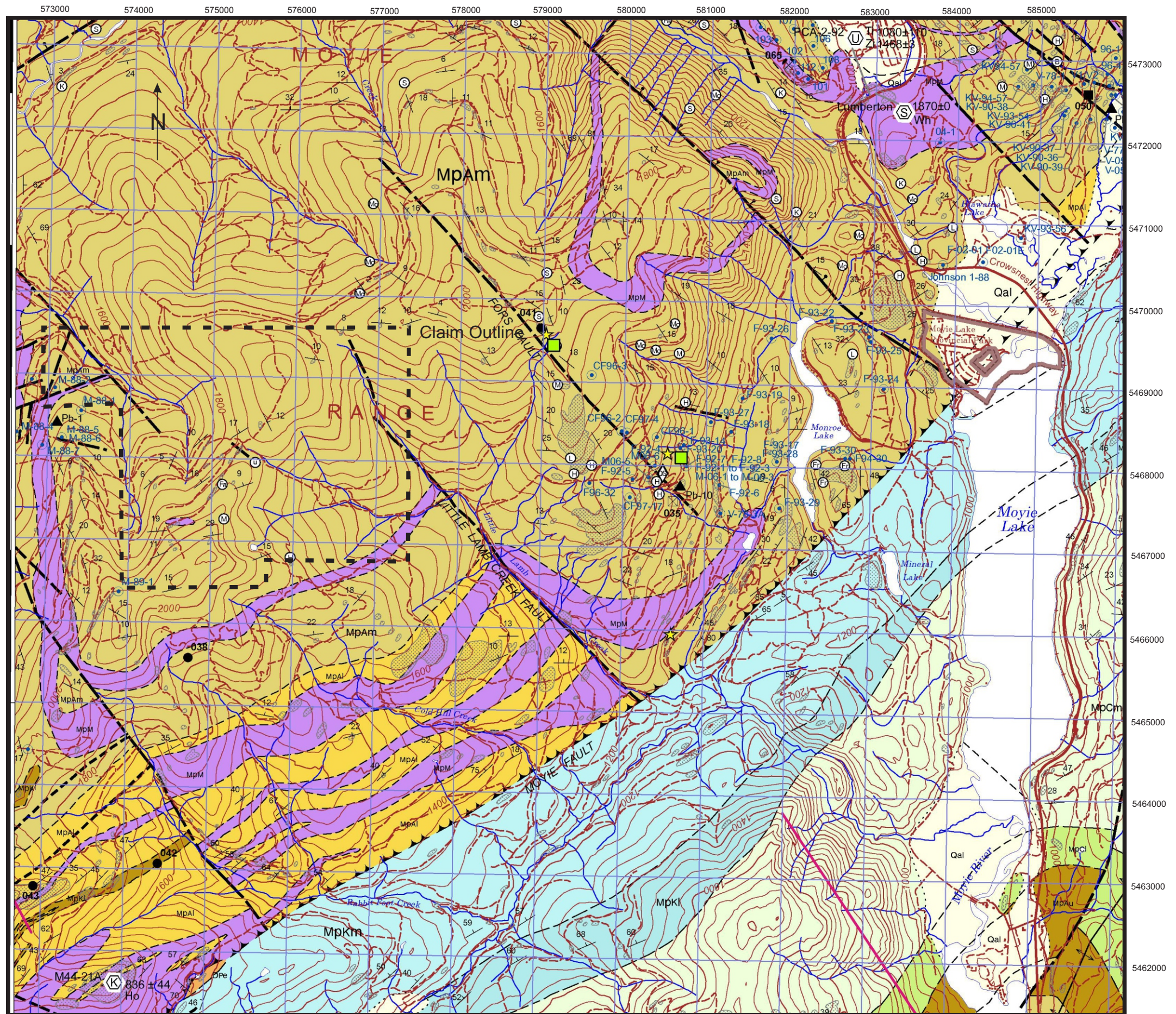
## 3.00 GEOLOGY

The Mac Attack claim group covers stratigraphy belonging to the middle Proterozoic Aldridge formation and consists of medium to thicker bedded siltstone and wacke turbidites intruded by gabbro sills. On the property stratigraphy is folded into a gently plunging north-easterly trending syncline. This feature is bound to the west by the north-south trending McNeil fault and to the south east by the northeast trending Moyie fault system. Dips on the eastern limb of the syncline are shallow, mostly less than 15 degrees.

Based upon regional stratigraphic marker intervals, middle Aldridge rocks on the property are in the lower part of the stratigraphic column. Rocks belonging to the lower Aldridge formation outcrop just off the claim area to the southwest. Lower Aldridge stratigraphy has also been intersected at depth in several drill holes on the claim area. An interval of thinly bedded laminated mudstone unit with pyrrhotite and anomalous



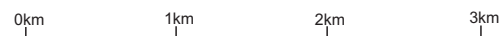
# Figure 3: Geology



**LEGEND**

- MpM- Mid Proterozoic Moyie Intrusion
- MpKm- Mid Proterozoic Upper Kitchener Fm.
- MpKl- Mid Proterozoic Lower Kitchener Fm.
- MpCm- Mid Proterozoic Middle Creston Fm.
- MpCl- Mid Proterozoic Lower Creston Fm.
- MpAu- Mid Proterozoic Upper Aldridge Fm.
- MpAm- Mid Proterozoic Middle Aldridge Fm.
- MpAl- Mid Proterozoic Lower Aldridge Fm.

Scale 1:50,000



Geology from: OPEN FILE 6303  
 GEOLOGY MOYIE LK.  
 Comp. by D.A. Brown, R.F. MacLeod, C.L. Wagner and W. Chow; 2008-2010

lead/zinc mineralization has been intersected at this contact and this is similar to the environment that hosts the Sullivan SEDEX lead/zinc orebody at Kimberley BC to north.

A gabbro body outcrops on the western limb of the syncline and appears to play a role in localizing lead/zinc mineralized quartz veins. This gabbro is interpreted as being a sill with a number of gabbro feeder dykes intersected in various drill holes.

Due to a lack of outcrops across the eastern section of the claim area the geological interpretation relies on projection of units across considerable distances and any additional geologic data may change the current understanding.

#### 4.00 PROSPECTING

Two days were spent in late spring prospecting on the Mac Attack claim group. Snow conditions at the time limited prospecting to the southeast portion of the property area in the Little Lamb Creek drainage.

No new occurrences of mineralization were encountered in the area investigated. One zone of manganese and iron stained fracturing with a light brownish bleaching was noted in a logging road landing. This type of material is common near structures hosting either base metal or gold quartz veining.

Elsewhere weak chlorite and albite alteration was noted with some limonite. Alteration was found mostly in sub-crop however a few thinner fractures of similar looking material was seen in outcrops. This may be related to structure and warrants follow up including possible soil sampling.

Near the area of albite and chlorite alteration a 5-10 m wide feldspar porphyritic gabbro/diorite dyke was found. The strike of the western contact with sediments was 20 degrees with a dip of 85 degrees to the east.

A number of crystalline quartz veins were also encountered in outcrops. Veins trend within the range of 110 to 130 degrees with 80 to 90 degree dips. Some coarse chlorite clots and rare pyrite was seen within veins and along margins. Veins range from the cm scale to close to a foot in width.

Several marker locations were also noted on road cuts and in outcrop near the top of a ridgeline. Most of these locations consisted of laminated mudstone with minor pyrrhotite and no matchable varved light and dark banded sections. The one location close to the ridgeline did have sections that looked to be suitable to match to regional marker standards and several pieces were collected to attempt this in the future.

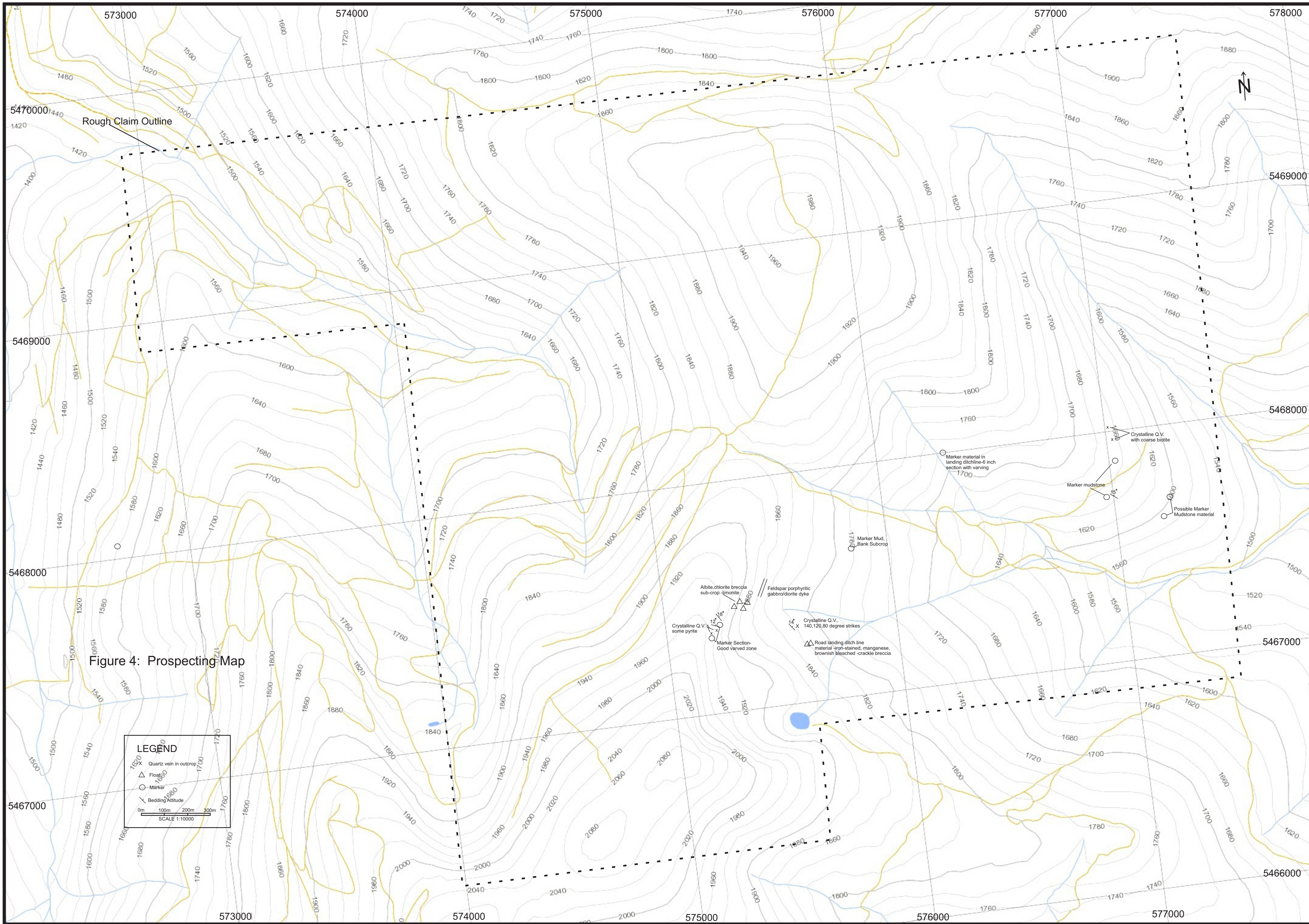


Figure 4: Prospecting Map

## 5.00 CONCLUSIONS AND RECOMMENDATIONS

The 2022 prospecting program was limited in scope and additional prospecting is warranted especially in the area along the ridgeline between Little Lamb and McNeil creeks.

The matching of collected markers from this program should be undertaken to better define the stratigraphic position and interpret structure in the area that was prospected.

Two areas with sporadic alteration; one albitization and chlorite with limonite, and the other bleaching with manganese and limonite were found. Rock and soil geochemistry is warranted through these areas to help define size and economic significance to either area.

6.00 Statement of Expenditures

STATEMENT OF EXPENDITURES							
Prospecting Program							
2022						Spring	
Tom Kennedy: May 31, Jun 1, 2022							
2 Man days @ 472.5050						\$	945.00
2 Truck days @ 157.50							315.00
Tom Kennedy Report							708.75
<b>Total Costs</b>							<b>\$1,968.75</b>

## 7.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Tom Kennedy certifies that:

- 1) I am an independent consulting prospector residing at 1082 Cote Rd, South Slocan, B.C.
- 2) I have been actively involved in mining and mineral exploration for the past 30 years.
- 3) I have been employed by individuals as well as Junior and Major mining companies.
- 4) I have created and optioned numerous grass-roots mineral exploration properties.

Tom Kennedy

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Prospector

## 8.00 REFERENCES

Open File 6303: Geology Moyie Lk.  
Geological Compilation by D.A. Brown, R.F. MacLeod,  
C.L. Wagner, and W. Chow; 2008-2010

## **APPENDIX 1**

### **Minfile Summary Reports**

### Location/Identification

<b>MINFILE Number:</b>	082GSW024		
<b>Name(s):</b>	<u>MCNEIL</u> MCNEIL CREEK		
<b>Status:</b>	Prospect	<b>Mining Division:</b>	Fort Steele
<b>Regions:</b>	British Columbia	<b>Electoral District:</b>	East Kootenay
<b>BCGS Map:</b>	082F040	<b>Resource District:</b>	Rocky Mountain Forest District
<b>NTS Map:</b>	082F08E, 082G05W	<b>UTM Zone:</b>	11 (NAD 83)
<b>Latitude:</b>	49 22 07 N	<b>Northing:</b>	5468914
<b>Longitude:</b>	116 00 02 W	<b>Easting:</b>	572560
<b>Elevation:</b>	1463 metres		
<b>Location Accuracy:</b>	Within 500M		
<b>Comments:</b>	Centre of drilling for bedded sulphides, 350 metres east of McNeil Creek and 2.75 kilometres south of its confluence with Moyie River, 24 kilometres south-southwest of Cranbrook (Assessment Report 19989). This may be the same occurrence as the McNeil (082FSE109) on the next map area.		

### Mineral Occurrence

<b>Commodities:</b>	Lead, Zinc, Silver, Copper, Gold		
<b>Minerals</b>	<b>Significant:</b>	Galena, Sphalerite, Chalcopyrite, Pyrite	
	<b>Associated:</b>	Quartz	
	<b>Alteration:</b>	Cerussite, Pyromorphite, Smithsonite	
	<b>Alteration Type:</b>	Oxidation	
	<b>Mineralization Age:</b>	Unknown	
<b>Deposit</b>	<b>Character:</b>	Vein, Stockwork, Stratabound	
	<b>Classification:</b>	Epigenetic, Hydrothermal, Sedimentary	
	<b>Type:</b>	E14: Sedimentary exhalative Zn-Pb-Ag, I05: Polymetallic veins Ag-Pb-Zn+/-Au	

### Host Rock

<b>Dominant Host Rock:</b>	Metasedimentary		
<b>Stratigraphic Age</b>	<b>Group</b>	<b>Formation</b>	<b>Igneous/Metamorphic/Other</b>
Helikian	Purcell	Aldridge	-----
Proterozoic	-----	-----	Moyie Intrusions
<b>Isotopic Age</b>		<b>Dating Method</b>	<b>Material Dated</b>
-----		-----	-----
-----		-----	-
<b>Lithology:</b>	Quartzite, Siltstone, Argillite, Gabbro Sill		

### Geological Setting

<b>Tectonic Belt:</b>	Omineca	<b>Physiographic Area:</b>	Purcell Mountains
<b>Terrane:</b>	Ancestral North America		
<b>Metamorphic Type:</b>	Regional		



## Inventory

**Ore Zone:** SHOWING  
**Category:** Assay/analysis

**Year:** 1989  
**Report On:** N  
**NI 43-101:** N

**Sample Type:** Drill Core

Commodity	Grade
Silver	137.8000 grams per tonne
Lead	13.9900 per cent
Zinc	2.1100 per cent

**Comments:** Quartz vein material.

**Reference:** Assessment Report 19989.

## Capsule Geology

The McNeil property is entirely underlain by rocks of the Helikian Aldridge Formation (Purcell Supergroup) and predominantly comprise siltstones and quartzites. The sediments are relatively flat-lying and are thinly to very thickly bedded. A gently north-northeast plunging syncline is centred in the south part of the property. Lower Aldridge Formation rocks have been mapped on the east limb of the syncline, immediately north of the northeast trending Moyie fault. The west limb of the syncline is cut by the north trending McNeil Creek fault, a major steeply west dipping(?) normal fault with vertical displacement in the order of 1000 metres. Several thick, regional gabbro intrusions of the Proterozoic Moyie Intrusions also occur on the property. The uppermost of these, the "Hiawatha" sill, has been intersected in several diamond-drill holes.

Mineralization is of two types: 1) stratabound base metal sulphides developed at the Lower-Middle Aldridge Formation contact; and 2) a series of mineralized quartz veins in Middle Aldridge Formation rocks.

The stratabound mineralization generally occurs as banded sphalerite and as fracture-fillings and disseminations. A best drill intersection assayed 1.74 per cent zinc over 40 centimetres (Assessment Report 19989).

A series of sulphide-mineralized quartz veins occur in hydrothermally altered lower Middle Aldridge Formation quartzites and siltstones, just above the hanging wall of a regionally extensive, thick gabbro sill, on the west limb of the McNeil syncline. The veins occur near the gabbro hanging wall contact in an orthogonal set of fractures, of which two are steeply dipping and one is relatively flat. Wallrock adjacent to the vein zones are commonly altered. Vein widths range from a few centimetres to 1.5 metres. The veins carry galena, sphalerite, chalcopyrite and pyrite with gold and silver values. Cerussite and pyromorphite are extensively developed from weathering of galena, and chalcopyrite is typically oxidized to malachite; sphalerite has been weathered to smithsonite. The veins are oriented at approximately 120 degrees and are steeply dipping.

The best intersection of vein material assayed 13.99 per cent lead, 2.11 per cent zinc and 137.8 grams per tonne silver over 0.65 metre (Assessment Report 19989). There is a spatial and genetic relationship between the quartz veins and the "Hiawatha" sill, with the veins occurring near the juncture of feeder dike(s) and the gabbro sill.

Sedex Mining Corp. drilled the property in 1998. See McNeil (082FSE109).

## Bibliography

EMPR ASS RPT 16606, 18117, \*19277, \*19989, 24916  
EMPR EXPL 1998-68  
EMPR GEOS MAP 1998-3  
EMPR OF 1988-14; 2000-22  
EMPR PF (Prospectors Report 1996-17 by Frank O'Grady)  
GSC MAP 11-1960  
GSC MEM 76; 336  
GSC P 58-10  
GCNL #182(Sept.22), #184(Sept.24), #191(Oct.5), 1998  
WWW <http://www.infomine.com/>  
Placer Dome File  
EMPR PFD 650026, 900183, 901601, 903562, 903564, 903884, 904278, 904400, 904401, 904827, 885332, 885333, 822613, 822702, 822711, 822720, 822721, 822722, 822728, 822741, 822742, 822743, 825825, 861845, 861863

**Date Coded:** 1991/04/22

**Coded By:** George Owsiacki (GO)

**Field Check:** N

**Date Revised:** 2014/12/02

**Revised By:** Laura deGroot (LDG)

**Field Check:** N