

Ministry of Energy, Mines & Petroleum Resources  
Mining & Minerals Division  
BC Geological Survey

Assessment Report  
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: PROSPECTING & RECONNAISSANCE GEOLOGY ASSESSMENT REPORT TOTAL COST: \$3,880.00

AUTHOR(S): DAN CARDINAL SIGNATURE(S): Dan Cardinal

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

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 4213460 / 2008, MAY, 02

PROPERTY NAME: DRAGON

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

COMMODITIES SOUGHT: AU

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: \_\_\_\_\_

MINING DIVISION: NEW WESTMINSTER NTS/BCGS: 092I/04

LATITUDE: 50 ° 03 ' 22 " LONGITUDE: 121 ° 38 ' 09 " (at centre of work)

OWNER(S):  
1) DAN CARDINAL 2) \_\_\_\_\_

MAILING ADDRESS:  
1883 AGASSIZ AVE.  
AGASSIZ, BC V0M 1A2

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

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

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):  
The property is underlain by a belt serpentinite-ultramafic in fault-contact with Paleozoic metasediments (phyllitic schists) and meta-volcanics (Greenstone Schist). The structural break is referred to as the Kwoiek Creek Fault. Gold-bearing quartz veins are hosted within the fault.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 4985, 13634 & 23691

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping	1:15,000 3.5x1.5km	DRAGON	\$3,880.00
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil			
Silt			
Rock			
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY / PHYSICAL</b>			
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>			\$ 3,880.00

Event Number 4213460

BC Geological Survey  
Assessment Report  
30332

PROSPECTING AND RECONNAISSANCE GEOLOGY  
ASSESSMENT REPORT

On The

**DRAGON MINERAL CLAIM**

Mineral Tenure Number: 558159

Located On  
(Claim Centre)

Latitude:  $50^{\circ} 3' 22''\text{N}$ ; Longitude:  $121^{\circ} 38' 9''\text{W}$   
(UTM Zone 10; 5545500N; 598500E)

NTS: 092I/04

Report Prepared By:

**D.G. Cardinal, P.Geo.**  
1883 Agassiz Ave.  
Agassiz, BC  
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October 22, 2008



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## A. INTRODUCTION

The Dragon mineral claim lies approximately 25 km due northwest of the community of Boston Bar located along the Fraser River canyon and the TransCanada highway. It is accessible by a series of interconnecting secondary and logging access roads for a total of 33 road kilometres. The claim encompasses an area of 477.11 hectares with an average elevation of 1585 metres, covered predominately by hemlock, small lakes and swamps and prominent rocky ridges.

Historically, the area immediately to northwest of the claim was initially examined by Horwood (GSC, 1939) and documented a couple of gold workings. The claim itself was prospected in the early 1970s (Chamberlain, 1973) for nickel along parts of the ultramafic body underlying the property. In the early 1980s Hudson Bay Exploration & Development (Taylor, 1985) conducted regional geology and geochemical surveys for gold. More recently, 1990s (Cardinal, 1994) Highland Talc Minerals Ltd. carried out a series of exploration programs evaluating a number talc bodies associated with the serpentinite. Monger (GSC, 1989) updated a regional geology map which incorporated Duffel and McTaggart's mapping of the area (GSC, 1952). The Dragon claim was acquired by the author due to the favourable geology for potentially hosting gold mineralization. Initial phase consisting of reconnaissance geology and prospecting was conducted on the property during the summer of 2007.

Regional geology is comprised of a northwest trending ultramafic serpentine belt fault bounded by Mesozoic sediments to the northeast and Paleozoic metasediments to the southeast. The claim is underlain by 3 main northwest trending rock types: dark green, massive serpentinite in fault contact with steeply dipping argillites interbedded with shales and andesitic and phyllitic schists. These rocks have subsequently been cut and partly offset by northeast trending faults.

Reconnaissance bedrock mapping was carried out along trend of the rock types using hand held GPS for control with prospecting concentrated along fault contacts and related structures for possible quartz veining. Any small streams encountered were also panned for gold. This field work was submitted for assessment under event number: 4213460

## B. CLAIMS INFORMATION

The claim covers a 477.11 hectare area. The UTM co-ordinate centre of the property lies at: Zone 10, 5545500 N and 598500 E (at approximately NTS co-ordinates: Lat. 50°3' 22" N and Long. 121°38' 9" W) on NTS mapsheet: 092I/04.

Pertinent data includes:

<u>Claim Name</u>	<u>Tenure Number</u>	<u>Current Expiry Date</u>	<u>Area</u>
Dragon	558159	2009/May/06	477.113 Ha

## C. LOCATION AND ACCESS

Dragon claim is located some 25 kilometres due northwest of Boston Bar. It lies along a height of land with plateau-like topography between the Fraser River to the east and the Nahatlatch River drainage system to the west, at an elevation of approximately 1585 metres above sea level.

The claim can be reached from Boston Bar by crossing the Fraser River on permanent bridge which services North Bend and homes along west side of the river. Travelling north, a public access all weather road to Nahatlatch River is taken for 15 km. From this point a seasonal logging road heading northerly and paralleling the river is taken, gradually climbing to an elevation of about 1500 metres leading to headwaters of Four Barrel creek. At about 15 kilometres, an exploration road branching to the west is taken which enters the claim at about the 3 km point. Total distance from Boston Bar is some 33 km. A 4-wheel drive vehicle is required and it should be noted that approximately the last 10 km of the logging has been deactivated and is now only accessible by ATV. A small, 2-person camp was established on the property located along the north shore of a small lake from where mapping and prospecting traverses were conducted.



#### **D. BRIEF BACKGROUND**

Historically, the claim occurs along an area that has experienced sporadic exploration over the past several decades. As early as the 1920s, prospectors reported finding mineralized quartz veins hosted gold values. In 1936, H.C. Horwood (GSC Paper 36-7) first documented the gold showings referred to as the Serpentine and Summit. In 197-74, Nahatlatch Resources Ltd. was attracted to the area because of the occurrence of ultramafic rocks in the area and conducted a series of reconnaissance surveys for nickel mineralization (J.A. Chamberlain, 1973).

In 1983, Hudson Bay Exploration & Development Ltd. (HUDBAY) optioned a large block of ground, which also covered the area now covered by the Dragon claim, and carried out reconnaissance soil geochemical and geophysical E.M. surveys for gold. This work outlined a number of arsenic geochemical soil anomalies associated with weak gold-in soil values (K.J. Taylor, 1985). In 1986-87, the area was re-staked by Westerra Resources Ltd. and conducted limited geochemical and mapping surveys, centered around the old gold showings noted above. Old trenches and open-cuts were sampled with some of gold values running as high as 3.5-4.7 g/t with 1.2-2.3% arsenic (D.G. Cardinal, 1992).

Between 1991-94, Highland Talc Minerals Ltd., was one of the last companies to conduct any work in this area. The company discovered a talc-magnesite deposit located immediately southeast of the present Dragon claim and conducted a systematic evaluation program consisting of diamond drilling, bulk sampling and pilot scale testing (D. C Cardinal, 1994).

In August 2007, limited reconnaissance mapping and prospecting was conducted along the central portion of the Dragon claim. This work was filed for assessment credits under Event Number: 4213460.

#### **E. REGIONAL GEOLOGY**

The regional geological setting is comprised of a major northwest-southeast trending structural break referred to as the Kwoiek Creek Fault (J.W.H. Monger & W.J. McMillan, GSC, 1989). It represents a number of sub-parallel fault structures associated with a semi-continuous belt of ultramafic rocks bounded by metamorphosed sedimentary and volcanic units (Figure 3.).

The serpentized ultramafic hosted Kwoiek Creek structure can be traced for some 30 kilometres along strike and is bounded by 2 distinct lithological units. To the northeast are a series of intercalated Paleozoic sediments and volcanics, believed to be latterly equivalent to the Permian age Bridge River complex (Monger & McMillan). These rocks are predominately comprised of greenstone volcanic and phyllitic rocks metamorphosed

to lower greenschist facies. On the southwestern side is the Jurassic to late Cretaceous age Relay Mountain Group which mainly consists of lesser phyllite and interbeds of argillite, shale-limey shale and lesser sandstone.

As can be observed by the intensely sheared serpentinite and structural fabric of the bedrock, the belt has undergone a complex series of stress and tension related multi-lateral movements. The Kwoiek Creek Fault system displays a number of these structural features which include a series of steeply dipping shear zones, sub-parallel, imbricated over-thrusts and strike-slip movements. The northwesterly trending and steeply dipping schistosity, foliation and bedding features form the regional fabric of the bedrock.

The Cretaceous age Scuzzy Pluton and local, possibly younger, (Tertiary ?) stocks that form part of the Coast Range intrusives and, which intrude portions of the belt., probably played a role in the regional metamorphism and localized skarn overprint. These intrusions would also have produced local and regional tensional and dilation structures allowing for introduction of mineralized-bearing solutions. The anomalous gold-arsenic quartz structures found on the former Summit and Serpentine old showings are probably related to these types of structures.

## **F. BEDROCK GEOLOGY OF PROPERTY**

The underlying bedrock geology of the claims is comprised of 3 main rock types. A belt of serpentinitized ultramafic rock runs roughly down the centre of the property forming a northerwesterly trending prominent rocky ridge. The serpentinite is generally massive, dark green and contains coarse grains of magnetite with minor finer grains of chromite and occasional very fine specks of either chalcopyrite or pentlandite. The belt of serpentine strikes northwesterly and ranges in width from about 300 metres near the south boundary to about 1000 metres along the north boundary of the property.

The serpentine is in fault-contact with steeply dipping phyllites and shales to the east. In places a talcose shear was observed in structural contact with the phyllite. Both phyllite and shales are highly foliated trending northwest 330-350 degrees and dip 70-80 degrees to the southwest. Both rocks are occasionally cross-cut by quartz veinlets. The serpentine is bounded to the southwest by a greenstone schist. No obvious contact was noted between the 2 rock types due to overburden. The schist appears to be andesitic in composition. It is structurally concordant with the other rocks in the area.

One prominent structural feature mapped along the southern part of the claim is a northeast trending fault which also forms part of a small lake (Figure 4.). The fault has a dextral movement and offsets all 3 rocks by at least several 10s of metres. During the prospecting some quartz veining and listwanitic alteration was noted along the structure.

Tabulated below is list of rock outcrops that were encountered and mapped with a GPS.



Table 1. Bedrock Outcrop

Outcrop No.	UTM co-ordinates		Brief Description
	Northing	Easting	
1	5545330	598341	Dark green, massive serpentine, surface oxidized, magnetic.
2	5545349	598390	Same as outcrop 1 with surface oxidation.
3	5545249	598097	Dk. Green, massive serpentine with fine talcose fractures.
4	5545175	598128	Greyish-green andesitic schist; foliation 345 degrees, dipping 78 degrees west.
5	5545342	597869	Massive serpentinite with disseminated grains of magnetite; minor, very grains of pentlandite.
6	5545206	597884	Andesitic greenstone.
7	5545448	597679	Massive serpentinite with talcose fractures.
8	5545571	597534	Same as outcrop 7, carries very fine chalcopryite and or pentlandite.
9	5544882	598382	Outcrop is highly broken rubble and blocks of massive serpentine; faulted and offset.
10	5545216	598462	Phyllite with dark grey bedded argillite and shale; faulted and offset; strikes 065degrees with dip 69 degrees southeast.
11	5545353	598570	Phyllite and shale; strike 346, dip 80 west.
12	5545522	598506	Same as outcrop 11.
13	5545988	598303	Interbedded shale/argillite, st. 350, dip 75W.
14	5545590	598066	Massive serpentinite.
15	5546085	597661	As outcrop 14 with numerous talcose veins.

## **G. FIELD PROCEDURES**

A small 2-person camp was established along the north shore of small lake which was accessible with an ATV. From here traverses were carried out by geologist and an experienced prospector, and reconnaissance mapping and prospecting conducted at a scale of 1:15,000. Most of the main rock outcrops were mapped utilizing a hand held Garmin GPS and plotted onto an airphoto. All outcrops encountered were briefly examined, GPS co-ordinates obtained, plotted and latter tabulated on excel spreadsheet.

Limited prospecting was carried out targeting fault-contacts for possible structurally control quartz veins and mineralization. Some panning was conducted of the silts on local streams encountered. On one of the small streams quartz veins carrying narrow seams of arsenopyrite mineralization was noted, occurring along the fault-contact of the serpentine and phyllite schist. Iron carbonate – listwanite alteration was also noted along a northeast cross-cutting fault.

## **H. SUMMARY**

The Dragon claim covers a 477.11 hectare area, at an average elevation of 1585 metres. The area is accessible from Boston Bar by logging roads, some sections of the roads have been partly deactivated. To reach the claim and mapping area an ATV was used for the last 10 kilometres since the road was not passable with 4-wheel drive vehicle from this point because of deactivation.

The claim straddles a favourable geological structure which is known to host gold-arsenopyrite mineralization in structurally controlled quartz veins. Mapping and prospecting was carried out along the central portion of the claim. Three main rock types were encountered associated with significant fault structures. A belt of serpentinite in fault-contact with phyllite/shale and andesitic greenstone trends northwest across the claim.

Fault zones were prospected for possible quartz vein-hosted mineralization. Quartz veins carrying arsenopyrite mineralization and listwanite alteration were noted during prospecting along some of the faults.

Follow-up detail mapping, prospecting and sampling is planned.

### I. COST BREAKDOWN – STATEMENT OF EXPLORATION

Reconnaissance mapping and prospecting surveys were conducted on the Dragon claim for 5 days between August 15<sup>th</sup> to 19<sup>th</sup>, 2007. Expenses incurred are as follows:

Field Crew:	
Geologist, 5 days @ \$400 per day	\$ 2,000.00
Prospector, 5 days @ \$250 per day	1,250.00
Camp Expenses:	
Food, supplies, etc. 5 days @ \$60 per day	300.00
Transportation:	
ATV, 5 days @ \$50.00 per day	250.00
Misc., gas	80.00
Total Expenses Incurred:	<b><u>\$ 3,880.00</u></b>

Respectfully submitted;

  
D. G. Cardinal, P. Geo.





## J. REFERENCES

Cardinal, D.G., November 1994, Assessment Report on the Talc Project – Pilot Scale Tests and Diamond Drill Programme, Talc Group. Assessment Report No. 23691.

Chamberlain, J.A., 1973, Geological Report, H Claims, Nahatlatch Area, BC, Department of Mines and Petroleum Assessment Report No. 4985.

Duffel, S. and McTaggart, K.C., 1952, Ashcroft Map Area, British Columbia, Geological Survey of Canada, Memoir 262.

Horwood, H.C., 1936, Preliminary Report on the Nahatlatch Region, GSC Paper 36-7.

Monger, J.W.H., 1989, Geology of Hope and Ashcroft Map Area, British Columbia, GSC, Maps 41-1989 and 42-1989.

Taylor, K.J. (Hudson Bay Exploration & Development Co. Ltd.), March 1985, Diamond Drill Report for the Natch 1-4 Claims, Boston Bar Area, BC, Geological Branch Assessment Report No. 13634.

## K. PROFESSIONAL CERTIFICATE

I, Daniel G. Cardinal, of the District of Kent, British Columbia, do hereby certify that:

- I am a Professional Geoscientist and reside at 1883 Agassiz Ave., Agassiz, BC V0M 1A2.
- I am a graduate of the University of Alberta (1978) and received a 2-yr. Diploma certificate from the Northern Alberta Institute of Technology (NAIT) 1972.
- I am member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo.), membership 18455; and a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (P.Geol.), membership No. M29405.
- I have practiced my profession continuously for the past 30 years.
- I am the registered owner of the Dragon claim.
- and that, I conducted the field surveys described in this report.

Signed in Agassiz, BC, this 22<sup>nd</sup> day of October, 2008.

  
Daniel G. Cardinal, P.GEO.



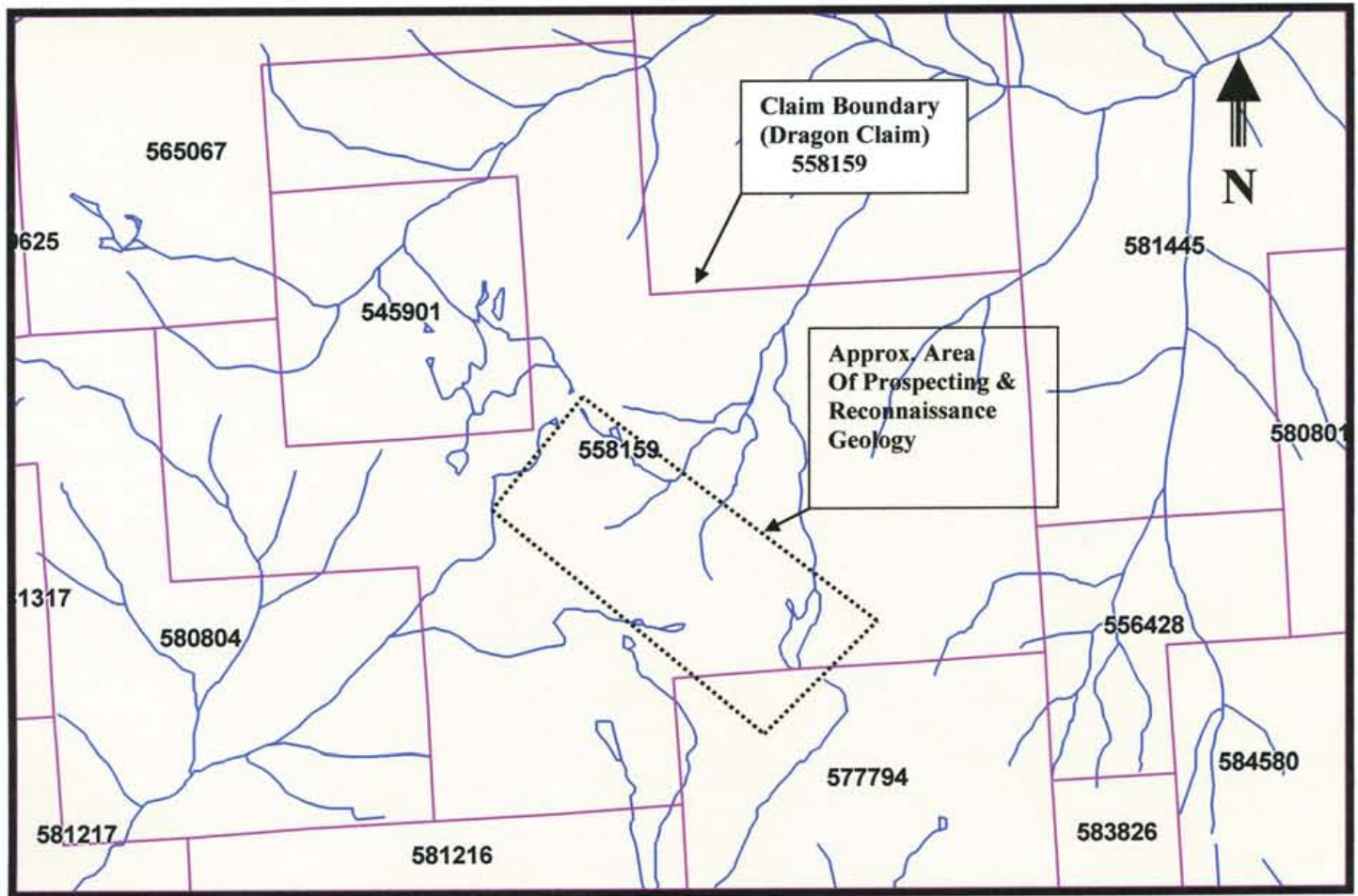
## LOCATION MAP

**DRAGON CLAIM – Tenure No. 558159**

**Lat. 50° 3' 22"; Long. 121° 38' 9"  
(Centre of Claim)**

**NTS Mapsheet: 0921/04**

**UTM Zone 10  
5545500N; 597500E**



**MINERAL CLAIMS MAP**

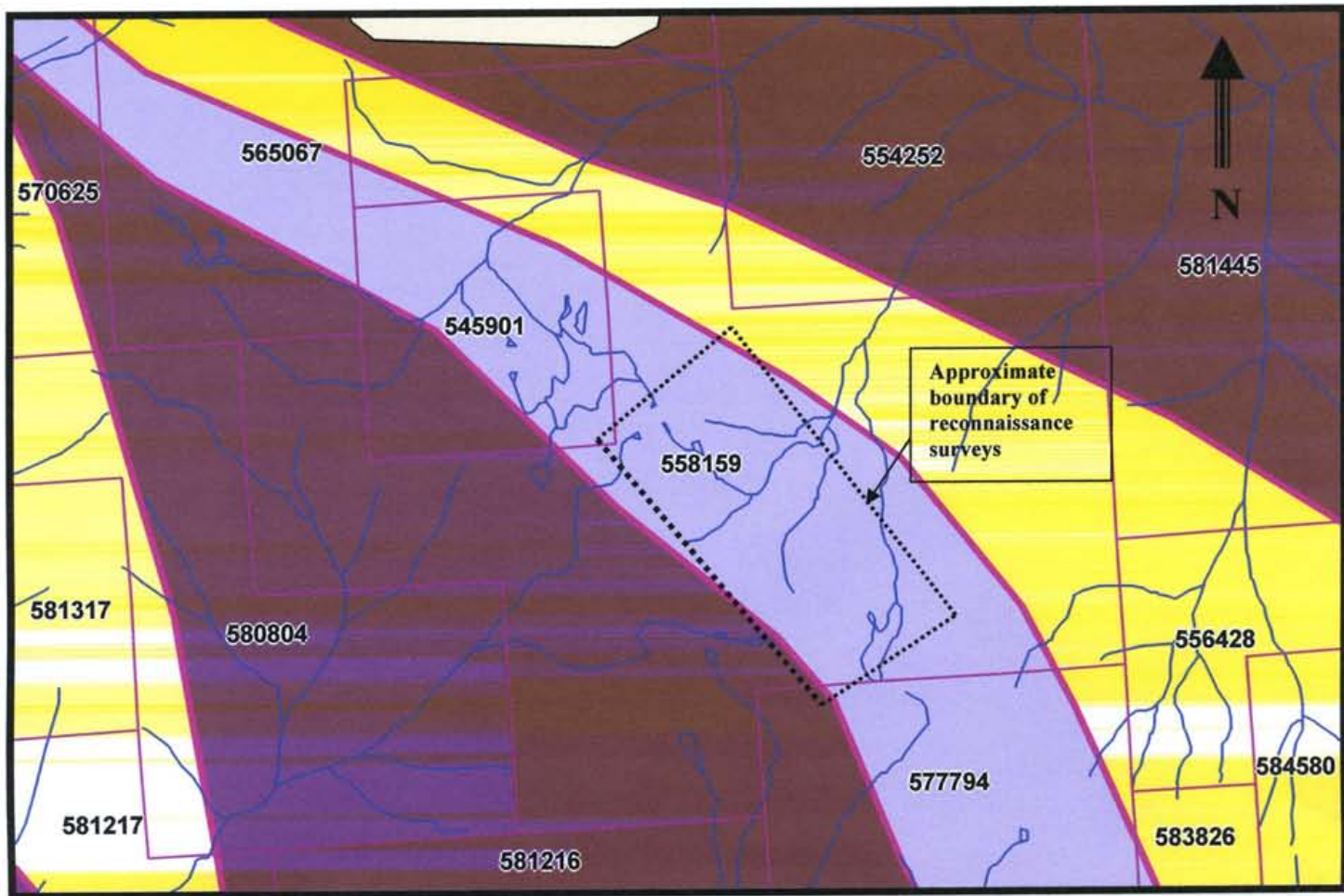
**Tenure No. 558159**

**Mineral Titles Reference Map: M92I002**

**(Showing Area of Prospecting and Reconnaissance Geology)**

**Scale: 1:30,000 (Approx.) Figure 2.**





**REGIONAL GEOLOGY MAP**  
**Dragon Claim – Tenure No. 558159**

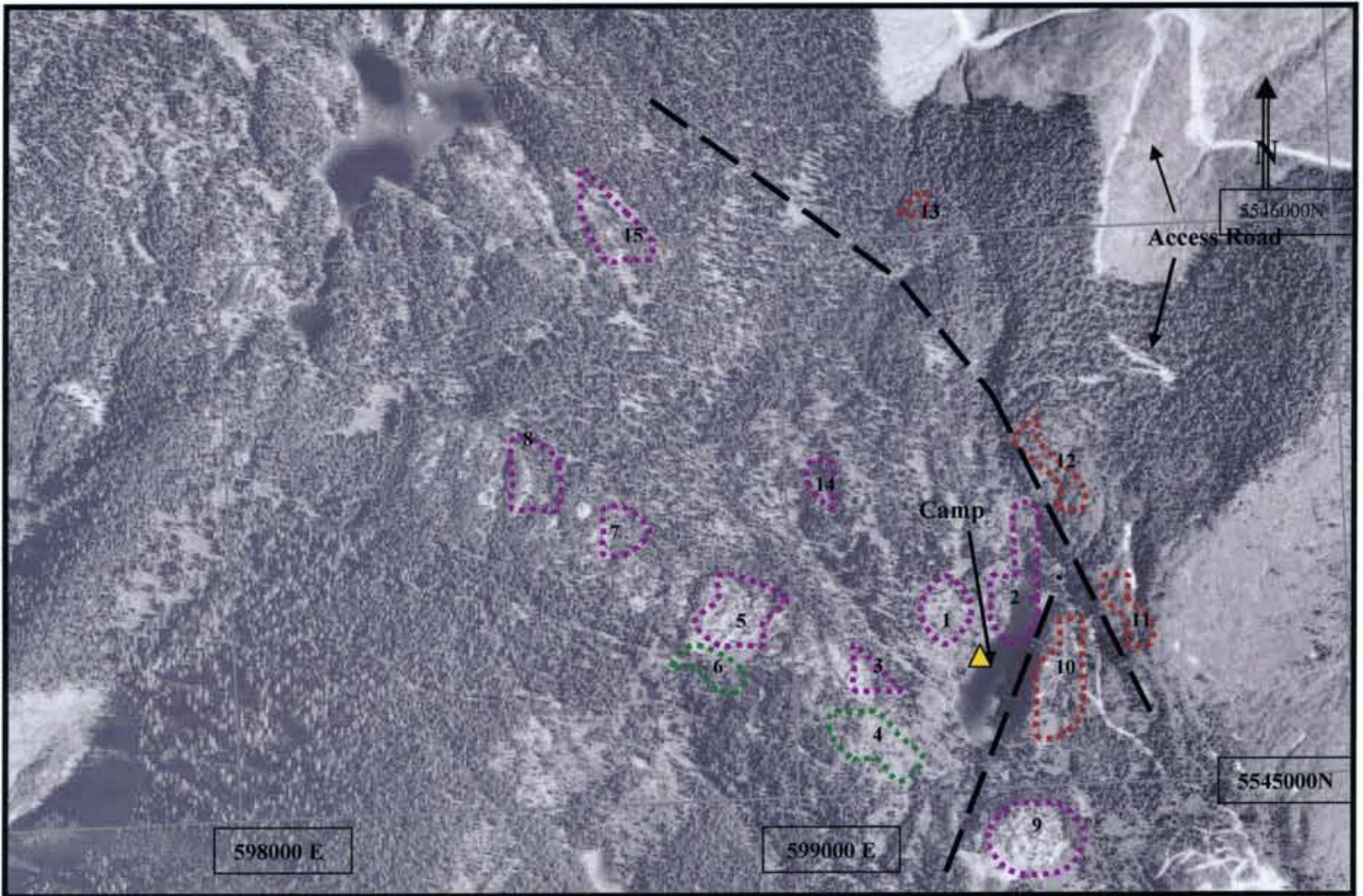
**Legend:**

- Mesozoic:  
Argillites, Phyllites & Shales
- Paleozoic:  
Schists, Phyllites & Argillites
- Paleozoic:  
Ultramafic – Serpentine, Talcose Schist

Scale 1:30,000




Fault-Contact

Figure 3.



**RECONASSIANCE MAPPING & PROSPECTING**  
**Showing Locations of Rock Outcrops Mapped & Prospected**

**Legend:**

-  Northwest trending,  
Steeply dipping, schists & phyllites
-  Northwest foliating  
Greenschist Andesitic Volcanics
-  Massive, Green, Serpentinite  
With lenses of talcose schist.

 Assumed faulting.

**DRAGON MINERAL CLAIM**  
 50 3' 22" N; 121 38' 9" W  
 (Claim Centre)

Scale: 1;15,000 (Approx.)

Figure 4.