

# **BLIZZARD CLAIMS**

**Geological Assessment Report** 

Greenwood Mining Division NTS 82E10W

> 49°37'36"N 118°55'05"W

> > for

POWER RESOURCE CORP. #501 - 905 WEST PENDER ST. VANCOUVER, B.C. V6C 1L6

> Owner Dave Heyman 111754

by RENÉE BRICKNER

November, 1999 (Revised Marel 2000) GICAL SURVEY BRANCH ASSESSMENT REPORT

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#### SUMMARY

The Blizzard Deposit contains an epigenetic strata bound sediment hosted uranium deposit. The property owned %100 by Power Resources Corp. is located within south central British Columbia, 54 km southeast of Kelowna. The Blizzard Property covers an area of 4 square kilometers that fully encompasses the deposit.

Mineralization is contained in fluvial sediments of Eocene to Miocene age. These sediments are underlain by monzonite intrusion and are capped by late Tertiary basalt. The topographic relief in the area varies between 4300ft to 4500ft.

Previous economic evaluation of the property has estimated ore reserves to be 2,200,000 tonnes of grading 0.1815 per cent uranium at a cutoff grade of 0.021 per uranium over a 1-metre interval. Other reports have indicated a potential reserve of 4736 tonnes of  $U_3O_8$  in the deposit. The most recent of studies was conducted in 1979.

In August, 1999 a 3 day field trip was conducted in order to update property information and to assess whether further work is warranted.

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## INTRODUCTION

The Blizzard Property, formerly the combined Patricia, Beverly, Moraig and Blizzard Claims, consists of 16 claim units measuring four squared kilometers. Staked by David Heyman in 1997, Power Resources has an 100% right and interest in the property. The property is located in the Greenwood Mining Division, British Columbia approximately 54km southeast of Kelowna.

This report and the following work was written and completed at the request of the directors of Power Resources Corp. It reviews previous work and reports on work carried out in August 1997. Recommendations are made for further exploration consisting of geophysical surveys, geochemical grid sampling, and a drill program in order to confirm previous work and interpretation of the property.

## LOCATION AND ACCESS

The Blizzard Property consists of 16 claim units measuring four squared kilometers and is located 54 km southeast of Kelowna, British Columbia to the north of Lassie Lake. The property is accessible by road from Kelowna via Highway 33 for ~65km, then by Trapping Creek and Lassie Lake logging roads for an additional ~33km. The logging roads completely encompasses the property and cut through the property along the western and southern edges. Additional roads remain from previous work that cross cut the property but are overgrown and inaccessible by vehicle.

The property ranges in elevation from  $\sim 1300$  m to  $\sim 1400$  m. The property has low topography, which is the result of a basalt cap situated in the centre of the property. The cap slopes are low incline except for bluffs along the northwestern side of the cap. Percent of exposed rock on the property is low and variable. On the basalt cap, outcrop can be up to 50% where as the lower elevations will have 0% outcrop. On average, the property contained 1-2% exposure.

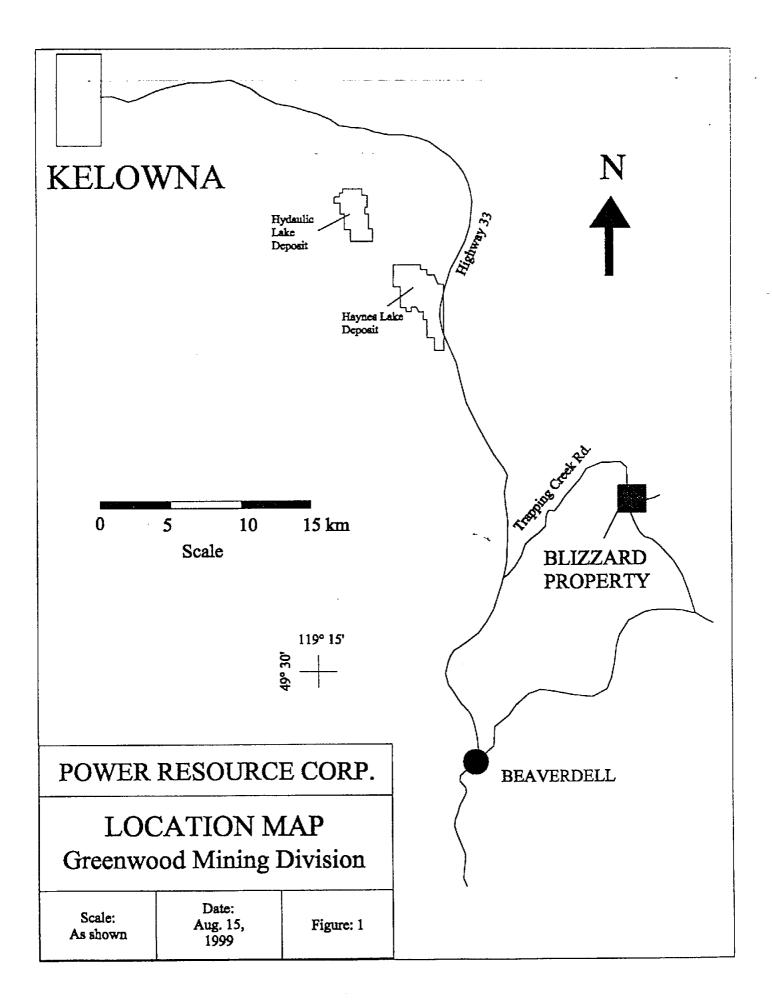
## **CLAIM DATA**

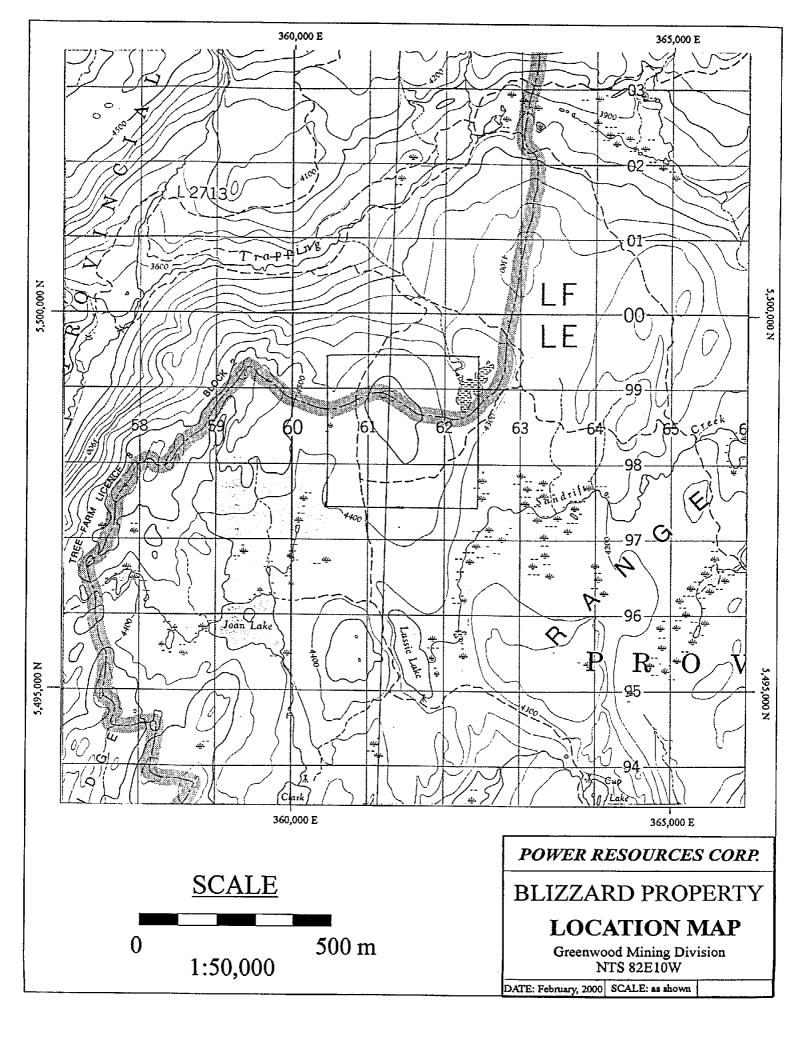
Claim Name	Tenure No.	No. of Units	Expiry Date
Blizzard	358775	16	Aug. 28, 1999

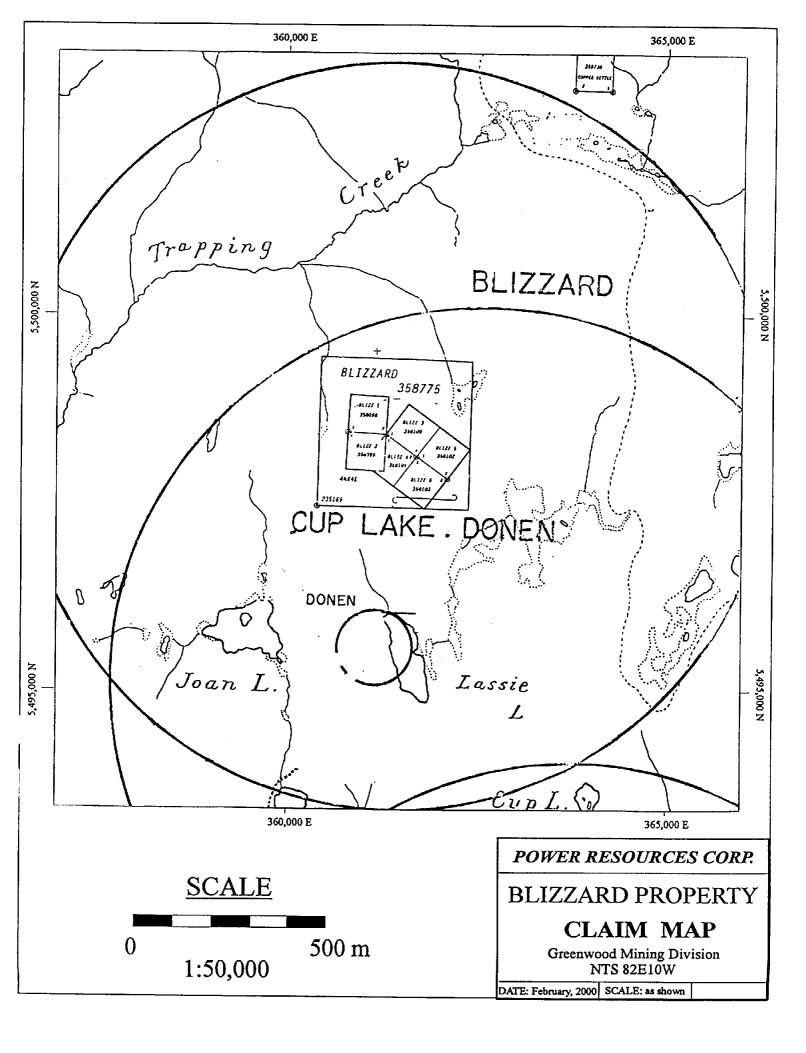
Location Map (Figure 1)

## **PREVIOUS WORK**

Lacana Mining Corporation staked the property in 1976. It was then optioned to a joint venture group comprised of Norcen Energy Resources Limited, Campbell Chibougaman Mines Ltd. E & B Explorations Ltd. and Ontario Hydro. Before the 1980 Uranium moratorium in 1980, a total of 478 holes were completed on the properties. Drilling included percussion and diamond drilling of a combined total of 21,184 meters. Following drilling, ore







reserves were estimated to be 2,200,000 tonnes grading 0.0815 percent uranium at a cutoff grade of 0.021 per cent uranium over a one meter interval.

# **REGIONAL GEOLOGY**

The area is underlain by biotite gneisses of Proterozoic age called the Moanshee Group. Overlying these is a thick interbedded volcanic and sedimentary sequence of Paleozoic Anachist Group greenstones and greywackes. Cretaceous Valhalla and Nelson plutonic rocks intrude the Anarchist Group. Early Tertiary rocks include poorly sorted and well lithified conglomerate and sandstone with carbonaceous siltstone beds, of the Kettle River Group. These sedimentary rocks are capped by intermediate flow rocks consisting of porphyritic dacite and dacite tuff. The Kettle River group is overlain by the Phoenix Group biotite andesite, which is intruded by Coryell Syenite.

The target for uranium exploration is late Tertiary loosely consolidated sediments. This unit is very poorly exposed. The sediments appear to have been derived from the Cretaceous plutonic rocks and have been deposited in fault zones and depressions in the underlying basement complex. The olivine basalt flow has preserved the sediment during Pleistocene Glaciation. Pleistocene sand and gravel deposits obscure the above units in areas of low relief and outcrop exposure is generally >10%.

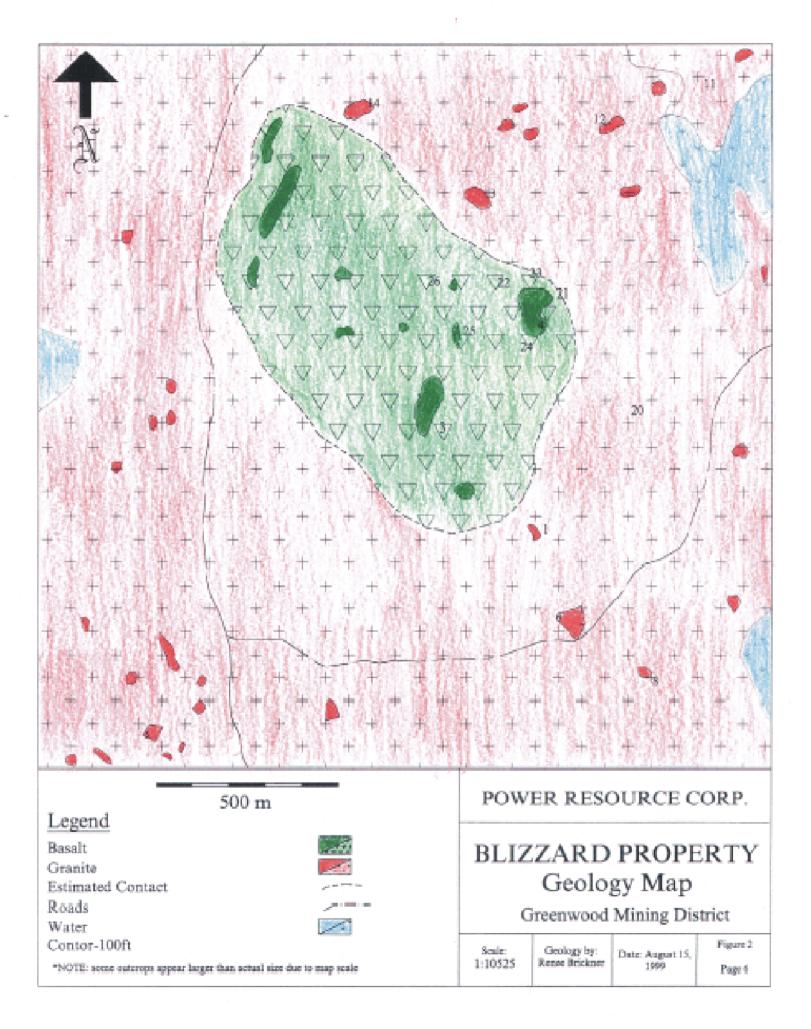
# LOCAL GEOLOGY

The property is located in an area containing a complete basalt cap of elevated topography surrounded by low relief granitic basement rocks. Previous work on the property shows the basalt cap to overlie a sediment unit located between the basalt cap and underlying basement granitic rock (Figure 2).

The various rock samples were collected on the property from locations meant to represent the various geological units associated with the area. No specific criterion was followed in the collection of the samples due to the fact that mineralization occurs at depth and suface indicators are not visible. Instead, limited outcrop resulted in samples taken when outcrop was available except where abundant outcrop occurred asin the southwest corner and along the top of the basalt cap. Vial samples were collected in areas which would be most affected by radioactive seeping through fracture, ie. in locations with water, swampy soils and sandy areas.

# MAPPING AND ANALYSIS

An initial weeklong field trip was recommended to fully map the Blizzard Property. Upon inspection of the property and the amount of exposed rock a revised 3 day program was later implemented. The final 3 day program consisted of surface geological mapping, vial sampling and grab sampling. Initial mapping was done using a compass and hip chain, and orientation on the property began at the legal claim post. A geiger counter was used in order to pin point areas where radioactivity was anomalous in hopes of determining a crack or fracture in the basalt cap that may have been a uranium seep from the underlying formation.



It was anticipated that the locations of seeps, if determined, would be target areas for vial samples so that radioactivity could be measured using a scintillation counter. Grab samples and vial samples were to be collected for later analysis. The grab samples were taken from outcrop on both the basalt cap and the basement granites though no samples were taken of the uranium hosted sediment due to lack of exposure at surface. Vial sample collection was done to conduct tests n order to determine radioactivity levels at surface relative to background levels of radioactivity. Of the collected samples, only the soil samples and water samples were later tested for radioactivity. Rock samples were collected for mineralogical analysis to aid in field mapping and to reconstruct the property geology.

Once on the property, the geiger counter was unsuitable for the purpose of determining radioactivity seeps due to the fact that the geiger counter's sensitivity was unsuitable for the desired purpose.

#### Samples

During the three day mapping program, 10 grab samples and 11 vial samples were collected for analysis. Grab samples were collected from exposed bedrock and vial samples included soils, rock chips and water samples (See Appendix II for detailed sample descriptions). Grab samples were to be taken back to the office to determine their mineralogical composition while vial samples were taken to be tested by a scintillation counter to determine whether the material was radioactive with relative to background radioactivity.

Nine soil and sediment vial samples and 2 water samples were collected for the purpose of determining the radioactivity at the surface. The purpose of this analysis was to determine the amount of mobile uranium at surface that has seeped through fractures and cracks in the basalt cap. These seeps were to be determined by using a geiger counter and sediment or nearby water sources were collected to later test for radioactivity using a more sensitive analytical tool. Analysis was conducted to determine whether sediment and water sources on the property are radioactive relative to background radiation. Because we were unable to pinpoint desired seep locations, precise radioactive readings were not conducted. Instead we were able to determine whether sources or surface sediment and soils were radioactive relative to the background radioactivity though the level of accuracy of the analysis is too high for exact evaluations.

# CONCLUSION

The Greenwood Mining Division, in particular the area in and around the Blizzard Property is known for its Uranium deposits. Production in the 1970 at the Hydrolic and Haynes Deposits indicated that the area has a potential for further Uranium Production if environmental regulations warranted.

Previous work on the property has defined the Blizzard Property as a Uranium Deposit, though the work is over twenty years old. In today's marked, new environmental regulations and commodity prices may have an effect on the status of the property.

Hence, further work is recommended to confirm old results. An areomagnetic survey is recommended in addition to a radiometric survey to determine areas of elevated radioactivity. Further geochemical and geological grid work is recommended combining surface geochemical and precise radioactive measurements. Following the previously recommended work program, if results warrant it, a reconnaissance drill program may be implemented.

#### STATEMENT OF COSTS

#### BLIZZARD PROPERTY FIELDWORK BUDGET

August 8-11, 1999

Geologist (R. Brickner)			
3 days @ \$250.00 per day		\$	750.00
Field Assistant			
2 days @ \$100.00 per day		\$	200.00
Vehicle Rental			
4 days @ \$60.00 per day		\$	240.00
travel costs (fuel)		\$	138.64
damages		\$	500.00
Field Equipment		\$	255.86
Meals and Accommodation		\$	375.04
Report		<u>\$</u>	560.00
	Total cost	\$	3019.54

#### REFERENCES

McWilliams, G.H., Barclay, J. E., 1978. Assessment Report Rotary Drilling Program Patricia and Moraig Jan 1, Jan 2, Jan 3 Claims, Greenwood Mining Division, Assessment Report # 6640 Part 1

McWilliams, G.H., Barclay, J. E., 1978. Diamond Drilling Project, Blizzard and Beverly Claims, Greenwood Mining Division, British Columbia. Assessment Report # 6640 Part 2

http://www.em.gov.be.ca/cgi-shl/dbml.exe?template=/mf/search/search&mode=find Minfile Database. Blizzard, Beverly, Moraig, Patricia.

#### QUALIFICATIONS

- I, Renee D. Brickner, of 601-3675 W 7<sup>th</sup> Ave. Vancouver, British Columbia hereby certify:
- I am a graduate of the University of Saskatchewan (1999) and hold a B.Sc.H. with a major in Geology.
- I have experience in mineral exploration in the Yukon Territory, British Columbia and Peru as well as having done educational research in Northeastern British Columbia.
- I have prepared this report for Power Resource Corp. of #501-905 W. Pender St. Vancouver, British Columbia and have been working in my field on a full time basis since graduation.
- I have not received or expect to receive any interest in the properties Power Resource Corp. and do not beneficially own, directly or indirectly, any securities of either company.
- This report is based on examination of reports and information previously compiled and information and work originally conducted during a three day work program.
- I consent to the use of this report, or summary thereof, in a statement of material facts or for use in documents filed with any regulatory authority.

Dated at Vancouver, British Columbia, this 1<sup>st</sup> day of October, 1999.

Renée Brickner, B.Sc. Geo.

# **APPENDIX I - Radioactive Analysis**

Number 13 in the following chart is the standard that gives the reading for regular background radiation levels. Any of the previous tests (Numbered 1-11) that record higher than 20 cpm (counts per minute) are considered radioactive relative to normal conditions. The water samples contain 3 mL of sampled water and the dry samples contain an estimated 3 grams of material. All samples are mixed with a scintillation liquid that responds to the radioactivity of the material and consequently emits a beta ray that the scintillation counter then reads. For this purpose, sediment samples that may not be fully soluble in the scintillator liquid would then have a less accurate reading, significantly lower than expected. The analysis done on the samples are measured in counts per minute.

VIAL #	SAMPLE #	СРМ	% ERROR	DESCRIPTION	
Vial 1	Road side	26.00	59.59	2.59 Sample was taken near property on the roadside. It is a water Sample containing rusty red sediment.	
Vial 2	5	10.00	89.44 Sample # 6 - sample was collected from the trench located nea The south road. This sample corresponds to the hand sample		
Vial 3	11	54.00	38.49 Sample # 11 - sample was collected in the northeast corner of The property in a low lying area near the swamp.		
Vial 4	21	30.00	51.64	Sample #21 - sediment sample collected near the northeastern Edge of the basalt cap.	
Vial 5	20	30.00	51.64	Sample #20 - soil sample collected in an area underlain by Granitic basement rock.	
Vial 6	22	20.00	63.25	Sample # 22 - sediment sample collected within the northeast Corner of the basalt cap.	
Vial 7	23	36.00	47.14	Sample # 23 - sediment sample collected within the northeast Corner of the basalt cap.	
Vial 8	24	22.00	60.3	Sample # 24 - sediment sample collected within the east-central Section of the basalt cap.	
Vial 9	26	26.00	55.47	Sample # 26 - sediment sample collected within the central area Of the basalt cap.	
Vial 11	25	26.00	55.47	Sample # 25 - soil sample collected in the east central section Of the basalt cap.	
Vial 13	Standard	20.00	63.25	Standard - background radioactivity	

Sample # 7 was collected but unable to be tested for radioactivity. The sample was too coarse for the type of analysis conducted and therefore was discarded from testing.

The results of the analysis for radioactivity concluded that most of the collected samples were radioactive before the source of error is factored in. With the source of error factored in, except sample #6, taken from sediment overlying granitic rock, all samples could be considered radioactive.

\* Note - In no way is the following analysis representative of the potential of the Blizzard Property. The purpose of the analytical work was to assign a general indication as to the presence of radioactive material on the property. Samples were not prepared nor tested for qualitative or quantitative information therefore no cost was assigned to this procedure.

## APPENDIX II - Grab and Vial Sample Descriptions

### **Grab Samples**

Of the 7 grab samples taken, 3 samples were taken from outcrop on the basalt cap rock and 7 were taken from the granitic basement rock.

#### Basalt Cap

Sample 3-Weakly magnetic basalt with homogenous aphanitic texture containing small phenocrysts. Weathered surface is brown while the fresh surface is dark with a faint greenish tint noticeable amongst some grains.

Sample 4- as in sample 3

Sample 7-Moderately magnetic diabase dike. Fine grained with phenocrysts. The sample weathers a tan orange color and the fresh surface is dark, almost black in color with slightly lighter plagioclase phenocrysts. The outcrop has been categorized as a diabase dike though no orientation could be measured due to the limited size of outcrop, 1m x.0.5 m.

#### **Granite Basement**

- Sample 1- Moderately magnetic, metamorphic schist showing foliation of segregated plagioclase, hornblend and quartz. Rock. Weathered surface is a brownish red color and foliation is apparent even on weathered surfaces.
- Sample 5-Strongly magnetic, coarse-grained granodiorite rock. Weathered surface is buff colored where plagioclase is altered. Obvious oxidation of the sample is evident. The rock contains up top 15% combined magnetite and sulphides, thus giving the sample a relatively strong magnetic property.
- Sample 6-The sample is a coarse-grained granite collected from the debris. Weathered surface shows white, green and red weathering due to plagioclase being altered. Fresh surface is white, plagioclase feldspar and quartz, with minor mafic and sulphides
- Sample 8-The sample is a medium- to fine-grained diorite. Weathered surface is tan colored with areas of slightly rust color. Weathering of the sample indicates plagioclase altering to sericite or albite and iron content is noticeable due rust weathering. The sample has no magnetic properties. though sulphide mineralization is finely disseminated throughout the hand sample.
- Sample 12-Weakly magnetic granite with pegmatitic segregation in the granite outcrop. The hand sample varies between a fine grain aphanitic equigranular mass to pegmatitic hetrogranular segregated bands within the sample. Weathered surface is slightly buff colored and is more intense in the areas of finer cyrstallography.

Sample 13-as in sample 12

#### Vial Samples

- Vial 1 Sample was taken near property on the roadside. It is a water sample containing rusty red sediment.
- Vial 2 Sample # 6 sample was collected from the trench located near the south road. This sample corresponds to the hand sample # 6.
- Vial 3 Sample # 11 sample was collected in the northeast corner of the property in a low lying area near the swamp.
- Vial 4 Sample #21 sediment sample collected near the northeastern edge of the basalt cap.
- Vial 5 Sample #20 soil sample collected in an area underlain by granitic basement rock.
- Vial 6 Sample # 22 sediment sample collected within the northeast corner of the basalt cap.
- Vial 7 Sample # 23 sediment sample collected within the northeast corner of the basalt cap.
- Vial 8 Sample # 24 sediment sample collected within the east-central section of the basalt cap.
- Vial 9 Sample # 26 sediment sample collected within the central area of the basalt cap.

Vial 11 - Sample #25 - soil sample collected in the east central section of the basalt cap.

# APPENDIX III - Photographs



Figure 1: Situated on the basalt cap to the east. Area shows 20% outcrop, one of the few places where abundant exposure is found.

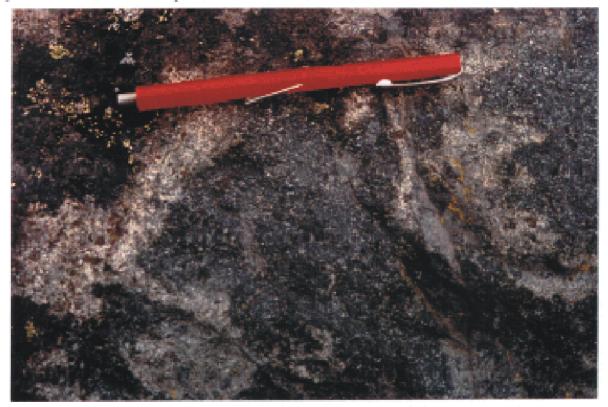


Figure 2: Same location as figure 1.Corresponding sample # 3. Close up showing fresh and weathered basalt.

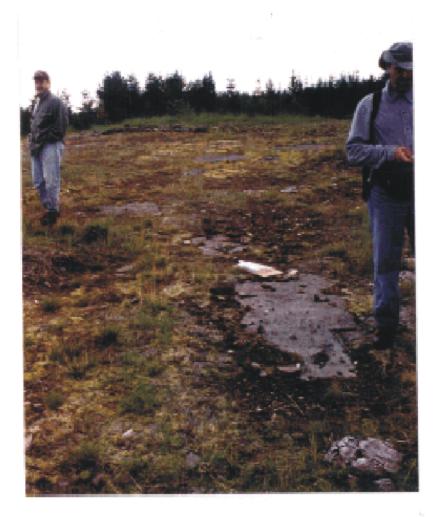


Figure 3: Outcrop showing basalt cap with 20% exposure. Looking to the northwest



Figure 4: Photo taken towards Lassie Lake to the south. Over looking the Cup Lake and Donen claims.

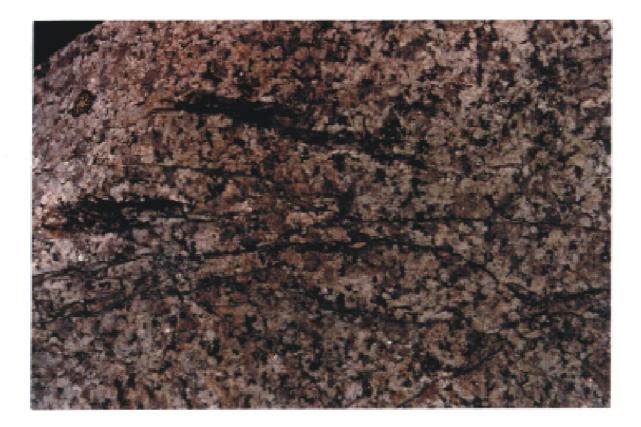


Figure 5: Corresponding sample # 5 describes coarse-grained granite Outcrop located in the southeastern corner of the claim near the legal claim post.

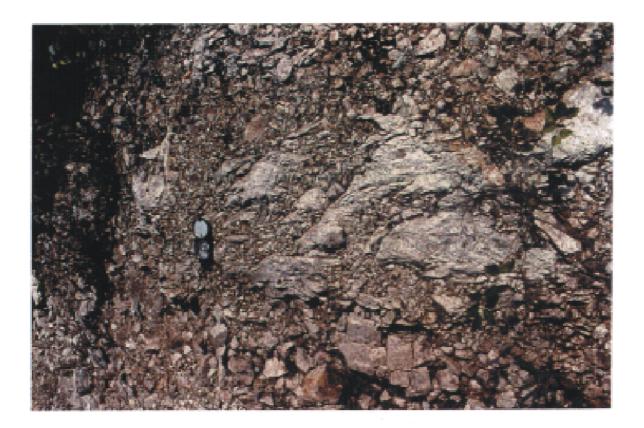


Figure 6: Corresponding sample # 6. Located within an old trench.



Figure 7: Corresponding sample #7 describes outcrop as a diabase dike. Located within an old trench within close proximity to sample #6.



Figure 8: Corresponding sample #13. Close up of granite with pegmatitic segregation.

## Appendix IV

## **Analytical Instrumentation**

Instrumentation used to measure radioactivity

Radiation measurement of sediment and water vial samples was conducted using a Beckman LS (Liquid Scintillation) 6500 Scintillation Counter.

The process by which the scintillation counter is able to measure the degree of radiation is as follows:

- > The sediment or water sample is measured and placed in a vial.
- > Scintillation fluid is added to the sample.
- As the sample undergoes radioactive decay, molecules in the scintillation fluid absorb the energy produced. The scintillation fluid in turn transmits a photon causing the fluid to become fluorescent. The scintillation counter is able to measure the light emitted thus determining the rate of decay or radiation in counts per minute.

Compared to the Geiger counter, which measures the beta, alpha or x-ray particles given off directly from the radioactive material during the decay of Uranium, the scintillation counter's indirect measurement enables a more precise reading. Geiger instrumentation, especially portable instrumentation, is much less sensitive then the scintillation counter thus the low amount of radioactivity at the surface on the Blizzard Property was far too low for a Geiger counter to be effective.