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FILE NO:

GEOPHYSICAL EXPLORATION REPORT ON THE JACKPOT 10 MINERAL CLAIM JACK OF CLUBS CREEK CARIBOO MINING DIVISION, B.C.

> N.T.S. 93H/4W LATITUDE: 53006' LONGITUDE: 121037'

WRITTEN FOR:

ALEX BILLWILLER #405-7251 LANGTON ROAD RICHMOND, B.C. V7C 4R6

SURVEYED BY:

STRYDER EXPLORATIONS LTD. #611-470 GRANVILLE STREET VANCOUVER, B.C. V6C 1V5

WRITTEN BY:

NICHOLAS W. GIBSON

DATED: March 29, 1988

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SUMMARY

The Jackpot 10 mineral claim is located 4 km southwest of Wells, B.C. It is accessible from Highway 26. The Jack of Clubs Creek flows through the property and has a history of producing significant amounts of placer gold. No previous mineral exploration is known of on this property.

Two gold belts trending northwest-southeast extend through the Wells-Barkerville district. The Jackpot 10 claim lies between these belts and is underlain by the same package of rocks, the Snowshoe Formation, as is the Barkerville Gold Belt lying to the east and the secondary gold belt lying to the west. The Barkerville Gold Belt is host to the Mosquito Creek Mine, the Cariboo Gold Quartz Mine and the Island Mountain Mine.

A VLF-EM Geophysical Survey was completed on the property in January, 1988. The survey was limited in scope and therefore little information was made available by it.

A grassroots exploration program is recommended. This would include prospecting, mapping and a soil geochémical survey.

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APPENDICES

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Appendix I	Bibliography
Appendix II	Geophysical Results, Raw Data
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1. INTRODUCTION

This report discussed work carried out on the 4 post mineral claim, Jackpot 10, located near Wells, B.C., in January, 1988. The work consisted of 2,050 meters of VLF-EM survey. The purpose of the survey was to identify fault structure on the property and any mineralized zones. The property is of interest as a potential gold prospect.

The project was under the management of Lloyd C. Brewer of Stryder Explorations Ltd., of Vancouver, B.C.

1.1 LOCATION, ACCESS AND PHYSIOGRAPHY

The property is located on the Jack of Clubs Creek approximately 4 km, 195° southwest of Wells, B.C., as shown in Figure 1.

Access is easily attained by road. The property is approximately 70 km east of Quesnel on Highway 26, then south 3 km on a logging road which follows Jack of Clubs Creek.

The area is located within the northern part of the Quesnel Highlands. The Quesnel Highlands is a part of the Interior Plateau. The terrain is moderate to steep with the Jack of Clubs Creek valley trending north-west, south- east diagonally across the claim.

The highest elevations are in the north-east and south-west corners of the claim reaching 1,606 meters and 1,454 meters respectively. Two creeks drain into the Jack of Clubs Creek on the property, which drains to the northwest.



1.2 OWNERSHIP AND CLAIM STATUS

The property consists of one claim totaling 12 units as shown on figure 2 and as described below.

CLAIM NAME	UNITS	RECORD NO.	EXPIRY DATE
ЛАСКРАТ	12 [;]	8197	JANUARY 9, 1988

The expiry date does not include the geophysical work discussed in this report as being accepted for assessment credit.

The Jackpot 10 claim is owned by Alex Billwiller of Richmond, B.C.

1.3 REFERENCES

A bibliography of reports and publications relevant to the Jackpot 10 mineral claim is presented in Appendix I.



1.4 HISTORY

1.4.1 REGIONAL HISTORY

The Cariboo District is one of the oldest camps in British Columbia and is rich in history and mining folklore. Placer gold was first discovered on Antler Creek in 1860. This area is still a major producer of placer gold in British Columbia.

The first major hardrock mine, the Cariboo Gold Quartz Mine, began production in 1933 and operated until 1959. The Island Mountain Mine operated from 1939 to 1967. The Mosquito Creek Mine is the latest hardrock venture. It is currently pursuing an aggressive underground exploratory program.

Two gold belts lie within this region. The easternmost belt, the 'Barkerville Gold Belt' runs from north of Mt. Tom, through Island Mountain, Antler Mountain and Southeast towards Keithly Creek. A secondary belt passes through Mt. Nelson and Durns Mountain. (Campbell 1984)

Up to 1945 the Jack of Clubs Creek produced 6,916 ounces of gold. (Holland 1950). This is noteworthy as Sutherland Brown (1957), has observed that in this region, placer gold and it's source lode gold are spatially closely related.

1.4.2 PROPERTY HISTORY

There has been no other work done on the property by the present property holder and no record of work done previously could be found. The Jack of Clubs Creek has been mined for placer gold since the late 1800's. 2. GEOLOGY

2.1 REGIONAL GEOLDGY

A recent interpretation of the regional geology has been put forth by Struik (1981). Struik identifies three tectinostatigraphic successions in the region. They are shown in figure 3. The oldest sequence, Hadryian to Cambrian in age, are a continental shelf wedge of sediments derived from the North American craton. These sediments are divided into the Western Cariboo Group and the Eastern Cariboo Group. The second succession is a package of Ordivician to Permian sedimentary and volcanic rocks. These represent a basinal environment and unconformably overlie the older sediments. The third succession is the Anthec Formation of Permo-Pennsylvanian age. It is composed of oceanic chert and basalt and was thrust eastward over the first two successions in the early Mesozoic. All three successions were folded, faulted and metamorphosed to the greenschist facies during the mid-mesozoic.

The major folds trend north-westerly and are overturned towards the southeast. The strata dips 40 to 55 degrees northeast (Aldrick, 1952).

Faulting in the region is Mesozoic and occurred before and after the metamorphisma(Struik, 1982). The youngest phase of faulting is a northerly trending right lateral strike slip series of faults. Next in age is a transverse northeast trending normal set of faults. Earlier incage are a normal and high angle east dipping reverse faults. The oldest are east dipping thrust faults.

Quartz veins are prevalent in the region, and are known to carry gold locally. Four vein types are recognized (Campbell, 1984). The Smallest are northeast striking transverse veins mined at Cariboo Gold Quartz Mine. Larger than these are the east-northeast striking diagonal veins. These were mined at the Island Mountain Mine. Northerly striking veins occur in fault zones and are difficult to mine. Finally, are the largest veins. These strike northwest and are subparallel to the foliation. They are usually barren. Gold mineralization occurs in two forms. The first is auriferous pyrite in quartz veins. This was a major source of ore at the Cariboo Quartz Mine. the second type is known as 'replacement ore' which describes stratabound massive pyrite ore lenses found at the contacts and within limestone beds (Aldrick, 1983). Island Mountain Mine was dominantly mining 'replacement ore'.

2.2 PROPERTY GEOLOGY

There has been no geologic mapping dome specific to this property. Struik (1982), indicates form his regional mapping that this area is underlain by the Downey Creek Succession consisting of micaceous quartzite, slate, lime-stone and metatuff. The Downey Creek Succession belongs to the Snowshoe Formation



3. GEOPHYSICS

3.1 INSTRUMENTATION AND THEROY

A Model 27 VLF-EM reciever manufactured by Sabre Electronic Instruments Ltd., of Burnaby, B.C., was used for this survey. The transmitting station used was N.A.A. Cutler, Maine, which transmits at a frequency of 17.7 KHz. The station is south of the property. The filtered data is shown on figure 5 and in appendix III. The raw data is presented in appendix II.

The transmitter emits very low frequency radio waves, designed for communications with submarines. These VLF waves induce electircal currents in conductors beneath the surface of the earth. These currents then induce deviations in the normal VLF field strength and direction. Measurements of these deviations are made by the VLF-EM reciever.

Types of conductors that can create measureable deviations include faults, graphitic zones, fractures, zones of sulphide enrichment and creeks. Conductors which strike approximately in the direction of the transmitter produce the best results.

3.2 SURVEY PROCEDURES

2,550 meters of grid was established consisting of 3 north-south lines and 1 east-west base line. The grid was developed using a compass and hipchain and was flagged. Stations were at 50 meter intervals as shown on figure 4. A total of 2,050 meters of grid was utilized for the VLF-EM survey.

3.3 DATA HANDLING

All readings were recorded in a fieldbook as they were taken. The raw data was fraser filtered as described by D.C. Fraser, 1969 (Geophysics V.34, No. 6, p. 958–967). The raw data is presented in appendix II. The filtered data is shown in profile in figure 5 and appendix III.

As the survey was very limited, in that only 4 lines were run, little information was made available. However, it appears to have picked up some structure, trending northeast-southwest, possibly a fault associated with Victoire Creek. This would likely be a cross-fault which would be associated with any fault structure that controls the Jack of Clubs Creek Valley.



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RECOMMENDATIONS

As little information was provided by the VLF-EM survey, I recommend that a grassroots type exploration program by implemented. This would include the following:

- 1.) Prospecting and detailed mapping as the exact lithology, and therefore the type of potential gold deposit has not been identified,
- 2.) A geochemical soil sampling survey covering the entire property. this would include laying in a grid using 100 m spacing between the lines and 50 meter station intervals. This, in conjunction with the mapping would help in identifying target areas. If any target areas are identified with the prospecting, mapping and geochemical survey a second stage exploration program could be recommended. This would include closer spaced geochemical soil sampling, trenching and further geophysical work.

Respectfully Submitted Middle hilmen

I, Lloyd C. Brewer, President of Stryder Explorations Ltd., do hereby declare that the following is a true and accurate statement of costs incurred in a program of exploration undertaken on the Jackpot 10 mineral claim between January 4, 1988 and January 7, 1988.

NICHOLAS GIBSON B.Sc. Geologist	Project Supervisor	5 days @ \$130.00/day	\$650.00
KENT KIRBY	Geophysical Technician	5 days @ \$100.00/day	\$500.00
DAVE TRAPPER	Field Assistant	2 days @ \$100.00/day	\$200.00
ROOM AND BOARD	15 man days	@ \$ 40.00/day	\$600.00
SKIDOO RENTAL	Yahmaha Bravo 340	5 days @ \$ 40.00/day	\$200.00
VEHICLE RENTAL	International Scout 4X4	5 dạys @ \$ 50.00/day	\$250.00
FUEL & MILAGE	1400 km	@\$ 0.15/km	\$210.00
MISC. COSTS & SUPPLIES			
REPORT AND DATA PRESENTATION			

TOTAL EXPENDITURES

\$ 3,325.00

Lloyd C. Brewer President

6. STATEMENT OF QUALIFICATIONS

I, Nicholas Gibson, of 5833 Lanark Street, Vancouver, B.C., do hereby certify that:

- 1.) I am a graduate of the University of Windsor (1986), with a B.Sc. in geology.
- 2.) I have practised my profession for 2 years.
- 3.) I am an independant consulting geologist.
- 4.) I have no interest, direct or indirect, in the property which is the subject of this report.
- 5.) This report is based on available literature, fieldwork done on the property and interpretation of geophysical data provided by Stryder Explorations Ltd.

Micholas Irilan

Nicholas Gibson Geologist

March 24, 1988

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APPENDIX I Bibliography

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APPENDIX II

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VLF-EM RAW DATA

VLF - EM RAW DATA

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LINE 95+00W

LINE 101+00W

	Station	Degrees	<u>Station</u>	Degrees
•	<u>.</u>			
	105+50S	+ 4	105+00S	+18
	105+00S	+ 8	104+50S	+20
	104+50S	- 4	104+00S	+12
6	104+00S	- 4	103+50S	+22
	103+50S	- 4	103+00S	+20
	103+00S	- 6	102+50S	+12
	102+50S	- 2	102+00S	+30
i	102+00S	- 1	101+50S	+2-
•	101+50S	+ 10	101+00S	+2-
	101+00S	+ 6	100+50S	+25
Ì	100+50S	+ 2	100+00S	+10
	100+00S	- 1		

LINE 103+00W

j.

LINE 100+00S

Station	Degrees	Station	Degrees
105+00S	+25	100 ≉00₩	+12
104+50S	+9	99 + 50W	+12
104+00S	+9	99+00W	+8
103+50S	+13	98+50W	4
103+00S	+18	98+00W	-6
102+50S	+20	97+50W	+12
102+00S	+17	97+00W	+12
101+50S	+13	96+50W	+10
101+00S	+19	96+00W	+2
100+50S	+31	95+50W	+4
100+00S	+16	95+00W	-1

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APPENDIX III GEOPHYSICAL RESULTS, FILTERED DATA

