85-86-13436 02/86

PROSPECTING WORK REPORT

ON THE

MOUSE MOUNTAIN

(MM2, MM3, COT 1)

MINERAL CLAIMS

CARIBOO MINING DIVISION

NTS LOCATION 93G/1

AT. LATITUDE 53°02'N, LONGITUDE 122°21'E

OWNED AND OPERATED BY

FIRST NUCLEAR CORPORATION LTD.

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BY: JAMES P. STEWART B.Sc. (Hons) JULY 15TH, 1984

# GEOLOGICAL BRANCH ASSESSMENT REPORT

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# LIST OF DIAGRAMS

Property Location	•••••••••••••••••••••••••••••••••••••••	•
Claim Map and Gri	Diagram	•

## FOLDER POCKET

Diagram 4 - Work on MM3 Diagram 5 - Work on MM2 Diagram 6 - Work on COT 1





### 1. INTRODUCTION

### 1.1 LOCATION AND ACCESS

The Mouse Mountain claims are located on NTS Map Sheet 93 G/l and are situated 12 kilometers from the town of Quesnel, B.C. along the Barkerville Highway. The property is easily accessible off the highway via farming and logging roads and trails which can be utilized by four wheel drive vehicles during the summer months. The old Barkerville road also crosses the property.

#### 1.2 TOPOGRAPHY AND VEGETATION

The property is situated within the extensive interior physiographic plateau known as the Fraser Basin. The topography of the claim area is a glaciated and stream eroded plateau which displays a gentle relief, situated between the Cottonwood and Quesnel Rivers. The steepest slopes are encountered along deeply incised stream valleys. Maximum relief is about 900 ft (274 m), from the highest to lowest points on the property. The average elevation on the Mouse Mountain claims is about 3000 ft (914 m).

Vegetation consists of a mixture of coniferous and deciduous trees as well as cleared agricultural land. The coniferous stands are dominated by spruce, fir and cedar trees while birch and poplar trees dominate the lower lying wetter areas.

#### 1.3 HISTORY OF THE PROPERTY

The history of the property is sketchy and incomplete as few records were kept and little assessment work has been recorded. Interest in the area probably started in the early 1950's when copper minerals were noted in outcrop along the edge of the old Barkerville Highway, marking the location of a significant surface showing. There is evidence of some hand pits and prospector shafts near this showing. The exact age of this work is unknown.

The property has been staked by numerous companies and individuals over the last thirty years (personal communications with Mr. Corbit who has homesteaded in the area since 1958).

In 1955 - 1956 a carload of hand-sorted ore averaging 5.5% Cu was produced from the property and shipped to the Tacoma smelter.

In 1967, Euclid Mining Corporation from Vancouver planned to heap leach the man showing and some preparatory work was undertaken, including the testing of a pilot leach process, before the operation closed down later that year due to lack of funding. No records are available regarding this work. In 1970, Bethlehem Copper drilled 14 percussion drill holes and the data from this program have been obtained and are summarized on the Drilling Data Map attached to this report (Dwg. 3).

In 1975, Dupont of Canada drilled 5 percussion holes on the northwestern end of the property and the results of this program are also shown on the Drilling Data Map.

Diamond drilling was also carried out on the property, however, information regarding the location of holes and results in not available.

Geochemical surveys have been conducted on the property and some of the data has been filed for assessment reports.

Geophysical surveys have been conducted on the property. An I.P. survey was run by Canadian Superior, however only two lines were completed and the geophysicist considered the data erroneous and uninterpretable.

The Mouse Mountain property was acquired by First Nuclear Corporation Ltd. in July of 1981 and now includes MM 1-5, Cot 1-2, and the Jess 2 claims which form a contiguous group.

Previous work by First Nuclear, the current owner and operator of the property, consisted of a reconnaissance geochemical survey carried out during 1981. During 1984, First Nuclear also carried out physical work involving the construction of a 52.5 km of reconnaissance grid over the MM 4, MM 5, Cot 2, and Jess 2 mineral claims and physical work involving the construction of 18 km of reconnaissance grid and a light rock sampling geochemical survey over the MM 1 claim. Summary of the above work carried out by First Nuclear is contained within previously submitted assessment reports.

#### 2. PHYSICAL WORK (see diagram 4, 5 & 6)

2.1 GENERAL

The physical work undertaken over the claims consisted of the establishment of a reconnaissance grid over the MM2, MM3 and COT 1 claims in preparation for anticipated future geochemical and geophysical surveys. Previous work by First Nuclear and others on the property has demonstrated the effectiveness of reconnaissance geochemical sampling and magnetic surveys despite the considerable glacial till overburden thickness (10-30 meters?). The specification of the grid establishment over the MM2, MM3 and COT 1 claims is detailed below.

ORIENTATION	••••090 <sup>0</sup> TRUE	
TRAVERSE LINE SPACING	••••250 METERS	
STATION SPACING	•••• 50 METERS	
MARKING	BLUE FLAGIN	G TAPE/STAKES
BASE LINE	WEST CLAIM	BOUNDARY
CONTROL	TAPE & COMP	ASS
LINE KILOMETERS ESTABLISHED	MM2 13.5	KILOMETERS
	MM3 12.5	KILOMETERS
	COT 1 17.5	KILOMETERS

#### WORK DONE BY FIRST NUCLEAR

### 3. PROSPECTING SURVEY

During the course of grid establishment a prospecting survey was carried out by the author of this report. The prospecting survey involved locating and recording outcrop occurrences and panning shallow soil samples, along the grid lines.

#### 3.1 GEOLOGICAL OBSERVATIONS

With the exception of two bedrock outcrop localities encountered, the remainder of the three mineral claims are veneered by an undetermined thickness of gravely sandy till, typical of the area. The geology recorded at the outcrop localities is as follows:

#### Locality A (Diagram 6)

Massive grey-green chlovitic porphyritic biotite-andesite (Takla Volcanics). The rock is exposed as a road side outcrop where the Quesnel-Barkerville highway crosses the southern extremity of the Mouse Mountain ridge.

#### Locality B (Diagram 4)

Dark brown, carbonecous pyritc phyllite. This rock is exposed on the track which leads from the Barkerville highway north to the Cottonwood River.

### 3.2 GOLD PANNING RESULTS

Samples were collected every 100 meters from soil or till material immediately below the organic layer. The samples were carried until a source of water was encountered suitable for panning. The results of panning are presented upon the accompanying diagrams 4, 5, and 6. The panning was undertaken on the basis of the possibility that a down ice dispersion train of visible gold could be related to a bedrock source.

#### 3.3 CONCLUSIONS

(1) The occurence of carbonecous and pyritic phyllite at locality "A" is significant in that this occurrence suggest that the Mouse Mountain volcanic centre terrain exposed on the adjacent mineral claims (MM1, MM4, JESS 2) is probably flanked to the east by sedimentary rocks. The sedimentary rocks are potentially a favourable host to hydrothermal epigenetic or sygenetic precious metal deposits.

(2) With the possible exception of the cluster of visible gold occurring from the northwest of the COT 2 claim. The remainder of the samples collected from visible gold occurences would appear to be related to dispersed (placer) gold particles carried into the area with the till rather than from a local bedrock source. The crude panning method does not eliminate the possibility of (su b-visible, colloidal geochemical or rock fragment) gold anomalies occurring in the area.

#### 3.4 RECOMMENDATIONS

It is recommended, based upon the forgoing, particularily the favourable juxta position of the Mouse Mountain volcanic centre and the east flanking sedimentary terrain that the following program be undertaken during 1985:

(1) Soil sampling with hand auger every 50 meters on 250 meter spaced traverses, samples to be analysed for gold, silver and associated elements and;

(2) A sensitive ground magnetometer survey to be conducted at the same time.

# 4. ITEMIZED COST STATEMENT

# 4.1 FIELD WORK (prospecting)

1.	Operator:	First Nuclear Corporation
2.	Field Crew:	J.P. Stewart, I.D. Stewart
3.	Time Period(s):	June (05-09), July (18-22), Oct. (14-20), 1984
4.	Salary and Wages:	\$3,993.06
5.	Accomodation:	\$ 403.39
6.	Vehicle:	\$ 571.43
7.	Food:	\$ 268.61
8.	Misc.:	\$ 51.62

# 4.2 <u>REPORT PREPARATION</u> (included in 4.1(4) above)

## 4.3 COST ASSESSMENT ALLOCATION

Total cost of physical work: \$5,288.11

CLAIMS	NO. OF UNITS	KM OF GRID	GROSS ALLOCATION	NET ASSESMENT
COT 1	20	17.5	2035.50	\$2,000
MM 1	15	13.5	1531.13	\$1,500
MM 3	15	12.5	1502.12	\$1,500

#### 5. AUTHOR'S QUALIFICATIONS

Statement of Qualifications of James P. Stewart, Author.

4.1 <u>EDUCATION</u> B.Sc. Honours (Geology), conveyed 1970 by University of Canterbury Christchurch, New Zealand

### 4.2 PROFESSIONAL EXPERIENCE

- 1970 1974 Noranda Australia Ltd. (Australia) Geologist, mineral exploration, property evaluation, mine evaluation.
- 1975 1976 Noranda Exploration Company (Australia) Geologist, mineral exploration, property evaluation, project supervision and consultation.
- 1976 1979 Pan Ocean Oil/Marathon Oil (Africa) Geologist, manager of overseas uranium development projects.
- 1979 1985 First Nuclear Corporation Ltd. (Canada) President, mineral and oil gas exploration and development company.





Gold Panning Results

5

Dwg. No. 5

N.T.S. 93G/1

100 M

Date: Feb/85

Scale:1:10,000 Drawn By: jps

Checked By:

Values are in Visible Flakes/Sample



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