

# ATLAS EXPLORATIONS LIMITED

330 MARINE BUILDING  
355 BURRARD STREET  
VANCOUVER 1, B.C.

## PROPERTY EXAMINATION

### CONNAUGHT MINES: BOUCHER CREEK PROPERTY

115-N-15

#### SUMMARY

The property examined is situated over a contact zone between quartzites of the Yukon Group (Proterozoic) and a body of quartz diorite intrusive. Geochemical surveys yielded anomalous values in copper, lead and molybdenum. Subsequent trenching show the anomalous zones to overlie porphyritic quartz diorite with only trace amounts of copper-molybdenum mineralization and several pieces of galena float.

#### CONCLUSIONS

The geochemical values are probably caused by the small amounts of chalcopyrite, molybdenite and galena which occur along fractures in the quartz-diorite.

#### RECOMMENDATIONS

The property does not seem to be worthy of further interest by Atlas Explorations at present.

#### INTRODUCTION

The property was brought to us for consideration by Al Archer of Archer & Cathro Consultants. I visited the property in the company of Al Archer and two geologists from Quintana (David Lowell and Irvin Grey). Approximately 3 hours were spent examining the Bulldozer trenches. The weather was down in the area and a light rain was falling.

### LOCATION:

The property is located at approximately 63°55'N and 140°38' on the southern fork of Boucher Creek, a tributary of the Sixty-Mile River. There are numerous bulldozer trenches and tote-roads which are easily seen from the air. See location sketch on the accompanying property map.

### ACCESS

The property is accessible from the town of Dawson City, Y.T., by helicopter, a distance of approximately 40 miles east of the property.

### PROPERTY AND OWNERSHIP

The property is currently held by Connaught Explorations Ltd.

### TOPOGRAPHY

The area is mountainous but has not been subjected to the last continental glaciation. The mountains are for the most part rounded hills with isolated spires on rubbly monadnocks protruding through a shallow soil cover. The slopes are grassy or moss-covered and in places sustain thick growths of buckbrush.

### HISTORY OF THE OCCURRENCE

A skarn zone with appreciable amounts of magnetite was opened up near the turn of the century. With the exception of this small amount of work, nothing has been done in the area before Connaught acquired the property.

### GENERAL GEOLOGY

The property is underlain by quartzitic rocks of the Yukon Group, which are slightly mineralized with pyrite, quartz-diorite intrusive rocks. Where the intrusive rocks contact the Yukon Group small lensoid bodies of magnetite are found. The intrusive is a buff-coloured medium to coarse grained porphyritic biotite-hornblende quartz-diorite. It is uniformly fractured with a frequency of approximately one fracture per foot surface-length.

MINERALIZATION

The mineralization seen was the following:

- 1) Disseminated pyrite within the hornfelsed Yukon Group sediments
- 2) Magnetite in lenses in the contact zone
- 3) Fractures in the weathered granite at the northern end of trench No. 4 are lined with limonite stain
- 4) Small pebbles of (a) Galena-ankerite (see Assay No. Y-1144) and (b) Molybdenite-quartz were found in trench No. 4.
- 5) One small piece of fractured quartz-diorite with traces of of chalcopyrite was found in trench No. 5.

COMMENTS

Soil samples and rock-chips were collected from several of the trenches. The results are appended and the sites are labelled on the accompanying map.

Respectfully submitted,

M.E. (Tim) Coates, P.Eng.  
August 15, 1970

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# ATLAS EXPLORATIONS LIMITED

## ANALYTICAL WORK SHEET

### GEOCHEMICAL

Report Number 70-4-YK  
 From Yokon  
 Tested For Cu Pb Zn Mo  
 Date August 14, 1970

Weight of Sample 0.5gm rock ch  
 Extraction nitric acid  
 Volume Used 10ml  
 Analyst \_\_\_\_\_

SAMPLE NUMBER		Cu	PPM	Pb	PPM	Zn	PPM	Mo	PPM	PPM
OURS	YOURS									
<del>1</del>	<del>87040</del>									
2	87040	5	18		21	15	5	4		
3	87041		15		12	11		2		
4	87042		6		21	9		82		
5	87043		15		12	Tr		10		
6	87044		9		14	47		TR		
7	87045		21		8	13		40		
8	87046		39		5	15		TR		
9	Stand No. 1		18		10	69		TR		

(9)

DATE Aug. 18-70  
FILE NO. 6281-4

# ASSAY CERTIFICATE

YUKON OR  
CONNAUGHT.

WHITEHORSE ASSAY OFFICE  
P.O. BOX 346. WHITEHORSE. YUKON

RECEIVED FROM Atlas Explorations

SAMPLE NO.	GOLD OZ. PER TON	SILVER OZ PER TON	Lead	Copper PPM	Molly PPM			
Y-1144		95.88	72.1	3760	94			

ASSAYER Geo. Spallin

CONNAUGHT PROPERTY EXAMINATION

August 11, 1970

Ca - Pb - Zn - Mo

- 87037 Soil from above second organic horizon at the Connaught Property (Trench No. 4) 38 - 22 - 58 - 200
- 87038 Soil from below second organic horizon at Connaught Property. Same location as 87037 (Trench No. 4) 30 - 21 - 53 - 156
- 87039 Soil from wall of Trench No. 5. Connaught Property. Zone of Cu-Mo Anomaly overlap. 90 - 21 - 42 - 2
- 87040 Rock-chip from pyritized Yukon Group just below crest of ridge south of quartz-diorite contact.
- 87041 Rock-chip from fresh quartz-diorite porphyry. 2 ppm Mo
- \* 87042 Sample of Manganese stained quartz diorite with narrow miarolitic quartz veinlet from mid-point of Trench No. 4. (82 ppm Mo)
- \* 87043 Sample of Aplite dyke from Trench No. 4. (10 ppm Mo)
- 87044 Sample of lightly altered quartz diorite with narrow block veinlets. Trench No. 2.
- \* 87045 Rusty altered fine-grained quartz diorite from upper end of Trench No. 4. (40 ppm Mo)
- 87046 Hornfels: Yukon Group south of quartz diorite contact.