

GEOLOGICAL REPORT

McDuck, McDON, McCOPE, and McMUL CLAIM GROUP

CLINTON MINING DIVISION

N.T.S. LOCATION 92N/10W

LATITUDE 51 Deg. 31 MIN LONGITUDE 124 Deg. 47 MIN.

OWNERS OF CLAIMS:

T. WAUGH
P. MacDONALD
J. McMULLIN
M. KADUK
J. BERRYERE

OPERATOR:

T. WAUGH

CONSULTANT:

G. McCONNELL

AUTHOR:

G. McCONNELL

Date: SEPTEMBER 10, 1982.

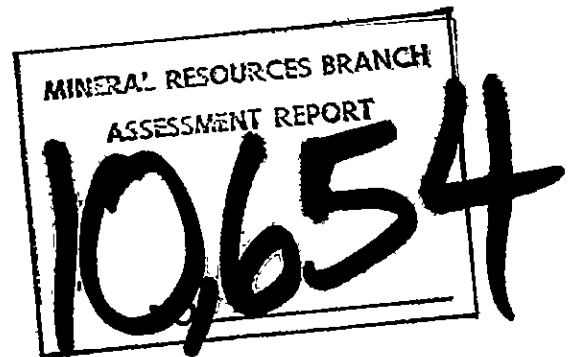


TABLE OF CONTENTS

	<u>PAGE NO.</u>
1. INTRODUCTION	1
(i) Location and Access	
(ii) Property, History and Economic Assessment	
(iii) Summary of Work Done	
2. TECHNICAL DATA & INTERPRETATION	3
3. ITEMIZED COST STATEMENT	6
4. AUTHOR'S QUALIFICATIONS	7
5. REFERENCES	8
6. MAPS AND PLANS	8
Map No. 1 Index Map	9
Map No. 2 Geology & Assay Plan McDuck Adit	10
7. CHEMEX LABS LTD. ASSAY SHEET	11

1. INTRODUCTION

(i) Location and Access

The McDuck, McDon, McCope and McMul Claim Group is located in the Clinton Mining Division (Mineral Claim Map 92N/10W) at longitude 124 degrees, 47 minutes and latitude 51 degrees, 35 minutes, approximately 40 kilometres southwest of the town of Tatla Lake and 20 kilometres southwest of White Saddle Air Services Ltd. helicopter base at Bluff Lake.

Access to the property is by helicopter from Bluff Lake with an approximate air time of 12 minutes for a fully loaded Bell Jet Ranger.

The property covers rugged topography with elevations rising from 1800 metres on the eastern boundary to over 2400 metres on the western side, covering the southern flank of Blackhorn Mountain with a peak of 3200 metres. See Index Map.

(ii) Property, History, Owners & Economic Assessment

The current claim group consists of the following:

McDuck Gold	(395)	- 6 units
McDon	(867)	- 6 units
McCope	(866)	- 6 units
McMul 1	(868)	claim
McMul 2	(869)	claim

The registered owners are as follows:

P. McDonald
 J. McMullin
 M. Kaduk
 T. Waugh
 J. Berryere

The operator for the current work is T. Waugh.

The property was first staked in 1936 on the basis of several finds of gold-bearing quartz veins and a company Homathko Gold Mines Limited, was formed in 1937 to develop the showings. Work carried out during the period 1936-1939 included surface trenching on a number of showings, open-cut mining and milling (Gibson prospector's mill) of a few tons of high-grade ore, establishment of an aerial tramway, the driving of an adit and drift on the main showing and approximately 600 metres of diamond drilling. The majority of the work

was done while the property was under option to N.A. Timmins Limited. This early work is described in B.C. Minister of Mines Annual Reports for 1937, 1938 and 1939 (Refs. 1, 2 and 3).

With the advent of World War 11, all work ceased on the property.

As a result of renewed interest in gold properties, the area was restaked in 1979 and brief prospecting programmes have been undertaken by the present owners.

The current mapping and sampling programme has confirmed the existence of high-grade gold-quartz veining on the property which may be of a continuous nature over considerable strike lengths. A thorough re-assessment including re-vitalization of an underground programme is warranted.

(iii) Summary of Work Done

The current programme has consisted of a review of past work and geological mapping and sampling of the adit and drift on a scale of 1 : 250. The adit is approximately 30 metres long and drifting covers a strike length of approximately 57 metres.

Field work was done during the period August 20th to 25th, 1982.

2. TECHNICAL DATA AND INTERPRETATION

Mapping and sampling of the adit and drift is shown on Map No. 2 on a scale of 1 : 250.

The adit is driven in massive fine grained green andesite and andesite breccia with weak fracturing and jointing. Dips appear to be about 45 degrees northwest.

At 30 metres from the portal a narrow quartz vein, approximately 0.6 metres wide is encountered. The vein strikes N50E and is steeply dipping to the northwest and drifting on it was undertaken to the northeast and southwest for about 30 metres in each direction.

The hanging wall of the vein is composed of schistose andesite, with minor crystalline pyrite mineralization. A 2 metre wide quartz porphyry dyke cuts the andesite at the east end of the drifting and is probably the same dyke encountered in the adit. The dyke dips vertically.

Cross faulting at right-angles to the quartz vein occurs in several places and near the east end of the drifting, the vein is offset to the southeast about 5 metres. The quartz is generally grey white and contains carbonate along fractures, and chlorite wisps. Sulphide mineralization comprises up to 10 percent of the vein material, but generally averages about 2 percent. The sulphides in order of abundance are arsenopyrite, pyrite, sphalerite, chalcopyrite and galena. The arsenopyrite is generally in the form of clusters of fine acicular crystals. Pyrite is generally crystalline and disseminated. The other sulphides occur as blebs and small masses. Visible gold occurs as fine grains on fractures.

Five chip samples were taken in the drift as shown on Map No. 2. From southwest to northeast a description is as follows:

1. Grey quartz-carbonate fractures
2% fine crystalline arsenopyrite
minor pyrite and chalcopyrite
Fine disseminated gold
(Sample 179 P)
2. Grey-white quartz.
5% fine needles of arsenopyrite.
Minor pyrite galena and sphalerite
Fine flour gold on fractures
(Sample 180 P)

3. White-grey quartz.
Minor fine arsenopyrite needles
(Sample 181 P)
4. White quartz.
2% fine arsenopyrite
Minor disseminated fine crystalline pyrite
Some coarse visible gold on fractures
(Sample 182 P)
5. Grey quartz-Chlorite inclusions
5% fine crystalline arsenopyrite
Minor pyrite, galena, sphalerite and chalcopyrite.
(Sample 183 P)

Gold assays and widths are shown on Map No. 2. An assay sheet is attached showing both gold and silver values (Chemex Labs Ltd.).

An uncut average for the five samples is 2.092 oz./ton gold and 1.64 oz./ton silver across 0.56 metres.

A grab sample of adit muck at the portal consisting of grey quartz with 5% fine crystalline arsenopyrite, minor pyrite, chalcopyrite, galena and sphalerite assayed 0.680 oz./ton gold and 1.00 oz./ton silver. (Sample 186 P).

A selected grab sample of similar mineralization, but containing considerable visible free gold on fractures, assayed 19.066 oz./ton gold and 4.32 oz./ton silver (Sample 187 P).

Approximately 25 metres vertically above the vein in the adit, at the top of a bluff, quartz veining in a chloritic shear zone, probably representing the surface expression of the adit vein, is exposed in trenching. A chip sample across 1.0 metres consisting of grey quartz with schist inclusions and minor fine crystalline arsenopyrite and pyrite assayed 0.550 oz./ton gold and 0.59 oz./ton silver. (Sample 185 P). A grab sample of similar material containing some fine visible gold on fractures assayed 2.168 oz./ton gold and 1.38 oz./ton silver (Sample 188 P).

At the base of a tramway built to raise equipment to and lower muck from the adit, a grab sample of white-grey quartz with 3% fine arsenopyrite, minor pyrite and a few specks of visible gold taken from a muck pile assayed 1.880 oz./ton gold and 0.82 oz./ton silver (Sample 184 P).

This sampling confirms the results of work done by Homathko Gold mines Limited in 1936-1939 and results

of examinations reported in B. C. Minister of Mines Annual Reports (Refs. 1, 2 and 3) in which chip sampling of the vein in the adit averaged 1.6 oz./ton gold and 1 oz./ton silver.

Short reconnaissance traverses to the north and south of the adit area and in the talus slopes below, indicated that the underlying sequence is mostly massive andesite with some schistose sections and minor argillaceous rocks. Light coloured porphyritic material indicates a number of dykes cutting the sequence.

At a location approximately 300 metres northeast of the adit a grab sample of grey quartz with arsenopyrite, galena and pyrite in talus assayed 0.576 oz./ton gold and 7.78 oz./ton silver (Sample 189 P). This may be related to the showing described as the galena-showing in the B. C. Minister of Mines Annual Report, 1937 (Ref. 1).

The present geological assessment and sampling information has confirmed previous descriptions of the geology and gold-bearing quartz veining on the property. In particular, the assessment of the adit area indicates that narrow continuous quartz veining is present and that the quartz contains high-grade gold values.

The property warrants extensive work which should include a re-assessment of all surface showings located in past exploration, with a view to outlining diamond drill targets and the revitalization of an underground programme in the adit area to establish the strike extent and vertical continuity of the gold-quartz veining.

This programme would necessitate the building of a road from Bluff Lake to Wolverine Lake, a distance of approximately 20 km.

3. ITEMIZED COST STATEMENT(a) Personnel

G. McConnell, geologist: Aug. 19-26 & Sept. 5-6	9 days @ \$200.	\$1800.
D. Howlin, field assistant: Aug. 19-26	7 days @ \$ 50.	350.
J. Dick, field assistant: Aug. 19-26	7 days @ \$ 50.	<u>350.</u>
	Total	\$ 2500.

(b) Food & Accomodation

Camp food & supplies Aug. 19-26	7 days	\$ 219.
Camp equipment rentals Aug. 19-26	7 days @ \$20.	<u>140.</u>
	Total	\$ 359.

(c) Transportation

Truck transport: Vancouver to White Saddle Helicopter Base - Bluff Lake & return Aug. 19-20 & 25-26	1000 mi @ 25¢	\$250.
White Saddle Air Services Helicopter from Bluff Lake to property & return Aug. 21 and 25		<u>\$686.</u>
	Total	\$ 936.

(d) Report Costs


Typing, drafting, etc.		<u>80.</u>
	TOTAL COSTS	\$ 3875.

4. AUTHOR'S QUALIFICATIONS

I, George W. McConnell, of the City of Vancouver, British Columbia, the author of this report, hereby submit that I have the following qualifications:

1. Graduate Geological Engineer, B.A. Sc.
- University of Toronto, 1957
2. Master of Applied Science, M.A. Sc. Economic Geology
- University of Toronto, 1959.
3. Have practiced my profession continuously since 1957 and have had broad experience in mining exploration in Canada and overseas. More specifically, I have over 10 years experience as a consultant in the Northwest Territories, have acted as a consultant for the Canadian International Development Agency in Malaysia, for United States Steel Corp. in Australia and Papua New Guinea, as Assistant Chief Government Geologist, Dept. of Minerals and Energy, Papua New Guinea, and for Anaconda Australia Inc. in Australia.
4. I personally examined and worked on the subject property in August, 1982.
5. I have compiled this report and drawn conclusions from my own personal observations and work and from published reports.
6. My sole remuneration for this report is the professional fee charged during the course of the work and I have no interest in the property, nor do I expect to receive any interest.

Dated at Vancouver, British Columbia, this 20th day
of September, 1982.

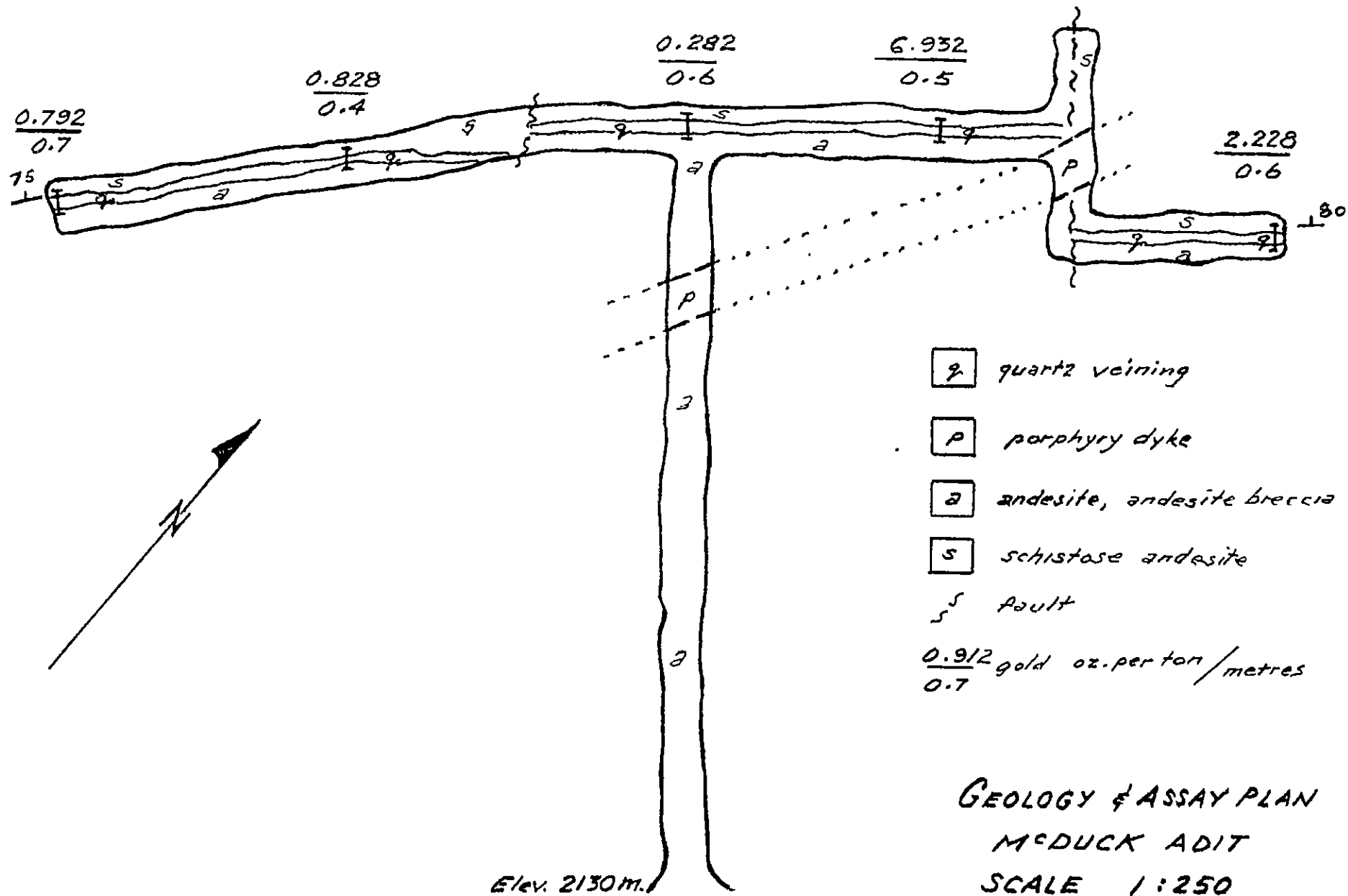

George W. McConnell
B.A. Sc., M.A. Sc.

5. REFERENCES

1. B. C. Minister of Mines, Annual Report, 1937.
2. B. C. Minister of Mines, Annual Report, 1938.
3. B. C. Minister of Mines, Annual Report, 1939.

6. MAPS AND PLANS

Map. No. 1	Index Map	1:50,000
Map. No. 2	Geology and Assay Plan McDuck Adit	1:250



GEOLOGY & ASSAY PLAN
 M^CDUCK ADIT
 SCALE 1:250



MAP No. 2

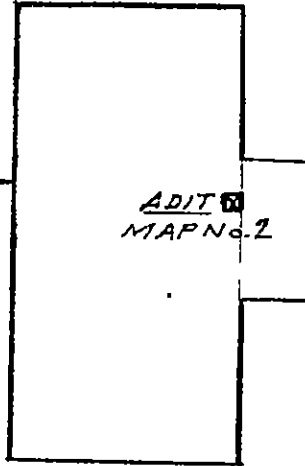
G.W.M. Sept./82

BLACKHORN M⁺

RAZOR CK

20 KM
BLUFF
LAKE

MCDUCK, MCDON
MCCOPE & MCMUL
CLAIM GROUP



WOLVERINE
LAKE



124°45'

51°30'

INDEX MAP

92 N / 10W
MAP No 1

>>> AB213391-001 <<<<
 >>> AB213391-001 <<<<

CLIENT : BLAIR SERVICE
 (AHN)

**

of Pages : 1
 # of samples : 11
 # of Parameters : 3

PROJECT :
 PHONE/TELEX INFO : PHONE: 588-8997
 OR : 588-5826

F.O. NUMBER : NONE

Page 11

#	SAMPLE DESCRIPTION	PREF CODE	BEAD #	WEIGHT GM	Au FA	
					oz/T	oz/t
1	179 P	207			0.67	0.792
2	180 P	207			0.60	0.828
3	181 P	207			0.92	0.282
4	182 P	207			5.45	6.932
5	183 P	207			1.02	2.228
6	184 P	207			0.82	1.880
7	185 P	207			0.59	0.550
8	186 P	207			1.00	0.680
9	187 P	207			4.32	19.066
10	188 P	207			1.38	2.168
11	189 P	207			7.78	0.576

TO BF CHECKED

TO BI CHECKED