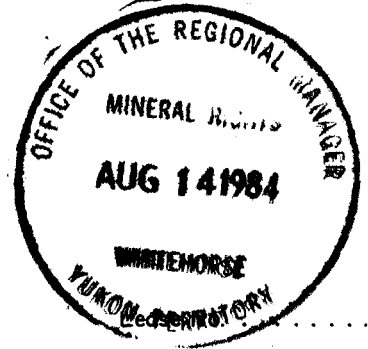


FROM: Mining Recorder at WHITEHORSE

TO: Regional Manager, Mineral Rights at Whitehorse, Y.T.



FOR ACTION ARE:

NEW APPL'N for PLACER LEASE to PROSPECT : Name:

RENEWAL APPL'N PLACER LEASE to PROSPECT: Name:

AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name:

SECURITY DEPOSIT

FINANCIAL ABILITY

ASSIGNMENT of PLACER LEASE No. \_\_\_\_\_

From: \_\_\_\_\_ To: \_\_\_\_\_

GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.

Owner: \_\_\_\_\_

DIAMOND DRILL LOGS:

Claims: HATCH

Claim sheet no: 115-H-12

QUARTZ ASSESSMENT REPORT:

Claims: \_\_\_\_\_

Claim sheet no: \_\_\_\_\_

Type of report: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Cls. work performed on \_\_\_\_\_

\$ Req. for ren. application \_\_\_\_\_

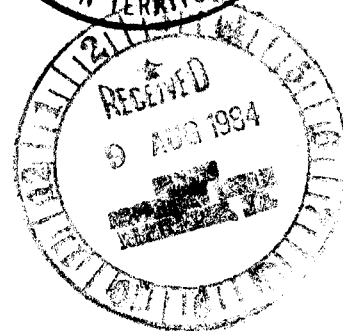
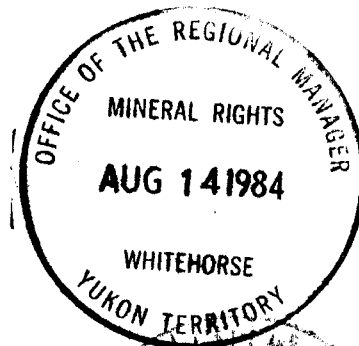
*for your info. only*

Signature [Signature] 84-8013

REPLY ACTION.

Date Ret. \_\_\_\_\_

091550



ASSESSMENT REPORT

DIAMOND DRILLING PROGRAM

MAY - JUNE, 1984

HATCH, THATCH, PATCH AND CATCH CLAIMS

WHITEHORSE MINING DISTRICT

YUKON TERRITORY

N. T. S. 115 H/12

LATITUDE  $61^{\circ} 33' N$

LONGITUDE  $137^{\circ} 38' W$

by

D. A. DOWNING - B. Sc. (ENG.) - JULY 1984

091550

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- APPENDIX B - DIAMOND DRILL ASSAYS
- APPENDIX C - REVIEW OF EXPENDITURES
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INTRODUCTION AND SUMMARY:

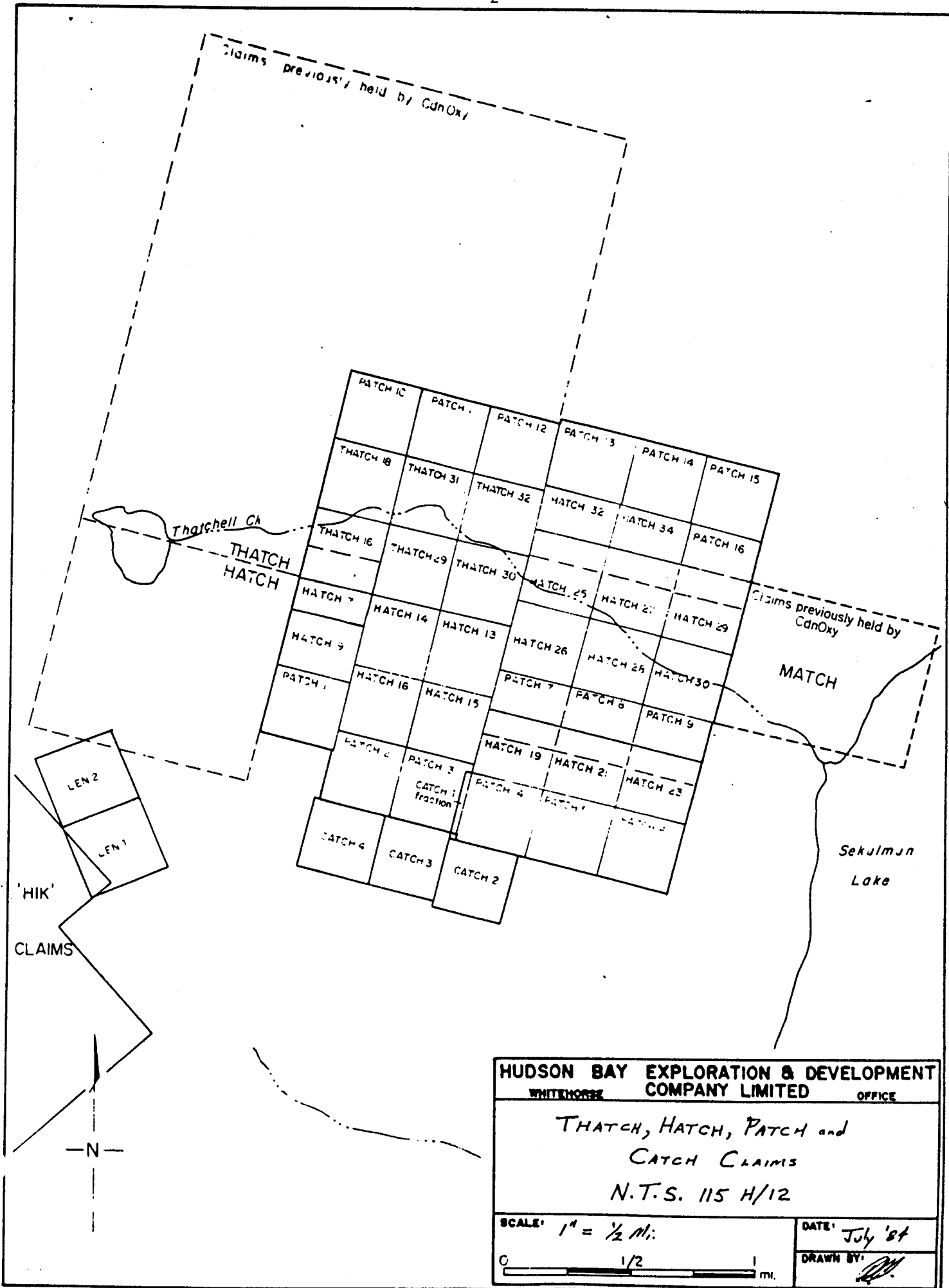
The HATCH property claims were originally staked by Canadian Occidental Petroleum Ltd. in October 1971 with additional claims staked 1972, 1981 and 1983. In 1971-73 soil geochemistry and magnetometer surveys were carried out. The property remained idle until 1981 when thorough geological, soil geochemistry, magnetic and VLF-EM surveys were completed. In March 1982 a joint venture agreement was reached between Canadian Occidental Petroleum Ltd. and Eldorado Nuclear Ltd. A trenching program was conducted in March and April 1982 with further examination of the trenches in August of the same year. In 1983 the joint venture was discontinued and only hand trenching was undertaken that summer. June 1984, Hudson Bay Exploration and Development Company Limited signed an agreement to participate in the property and carried out 1985 feet of NQ diamond drilling in 6 holes during May and June. The drilling was contracted to Arctic Diamond Drilling Limited of Whitehorse, Yukon.

LOCATION AND ACCESS:

The HATCH property is situated at  $61^{\circ}33'N$ ,  $137^{\circ}38'W$ , on map sheet 115 H/12 in the Whitehorse Mining District, Yukon. The claims are located 160 kilometers northwest of Whitehorse (see Figure 1), and 8 kilometers southwest of Aishihik Village on the west side of Sekulman Lake. The Aishihik Road running 130 km. north from the Alaska Highway to Sekulman Lake is not maintained but is passable by pickup truck in the summer. The abandoned Aishihik airstrip 15 km. to the northeast of the claims is useable to wheeled fixed-wing aircraft and Sekulman Lake is suitable for float equipped aircraft. Helicopter transport is available from Haines Junction 60 km. to the south south west.

PERSONNEL:

The drilling program was contracted to Arctic Diamond Drilling Limited with head office in Whitehorse, Yukon. Four qualified drillers were employed. D. A. Downing of Hudson Bay Exploration and Development Company was the drill geologist. Mr. G. E. Bidwell, Manager of the Northwest District, Whitehorse supervised the program. The summary of qualifications of Mr. Downing and Mr. Bidwell are included in this report.



**HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED**  
 WHITEHORSE OFFICE

*THATCH, HATCH, PATCH and CATCH CLAIMS*  
 N.T.S. 115 H/12

SCALE: 1" = 1/2 Mi.  
 0 1/2 1 mi.

DATE: July '84  
 DRAWN BY: *[Signature]*

CLAIM OWNERSHIP:

All of the contiguous claims forming the HATCH property are being transferred to the name of Hudson Bay Exploration and Development Comapany Limited.

The claims are:

<u>Claims Name</u>	<u>No. Units</u>	<u>Tags</u>
THATCH 16	1	Y63663
THATCH 18	1	Y63665
THATCH 29-32	4	Y63676 - Y63679
HATCH 7	1	Y67650
HATCH 9	1	Y67652
HATCH 13-16	4	Y67656 - Y67659
HATCH 19	1	Y67662
HATCH 21	1	Y67664
HATCH 23	1	Y67666
HATCH 25-30	6	Y67668 - Y67673
HATCH 32	1	Y67675
HATCH 34	1	Y67677
PATCH 1-16	16	YA74173 - YA74188
CATCH 1-4	<u>4</u>	YA78302 - YA78305
	43	

DIAMOND DRILLING PROGRAM:

The diamond drilling program commenced 30 May and was completed 17 June 1984. The equipment was mobilized to the Aishihik airstrip by fixed-wing aircraft and to the property by helicopter. The equipment is still on the property.

During the drilling period 6 holes were completed for a total of 1985 feet. The locations of the holes are shown on the drill plan included with this report. The core is on the property stored at the camp on Thatchell Creek.

GEOLOGY:

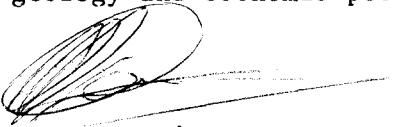
*- 2500 m deep hole as of Nov. '84.*

The claims are situated within a tectonic subdivision known as the Yukon Crystalline Terrane which regionally consists of rocks resulting from moderate regional metamorphism. Metamorphic paleozoic biotite quartz schist, marble and quartzite is intruded by a composite leucocratic granite body of probably Cretaceous vintage. Adjacent to the intrusive, calcareous sedimentary horizons have been subject to contact metamorphism converting them to sulphide/calc-silicate skarn and hornfels bands. At least two sets of quartz veins emanate

from the granite body. An extensive quartz vein stockwork is cut by a second much rarer set of quartz veins that carry both base metal and precious metal values.

CONCLUSIONS:

The drilling program indicates that the veins of economic interest are relatively flat lying and continuous but carry sub-economic levels of precious and base metals. Further diamond drilling is necessary to fully evaluate the geology and economic potential of the claims.



D. A. Downing  
Project Geologist  
31 July 1984

APPENDIX A

DIAMOND DRILL LOGS

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: PATCH 7 (YA74179)

Location: 115 H/12

Mining Division Whitehorse

Dip Tests: 48.5 @ 265'  
48.0 @ 378'

Hole Nº. 84-01

Angle: -50°

Direction: 078°

Depth: 378'

Grid Nº.

Co-Ordinates: 8+25E  
42+35S  
3934'

Date Started: 30 May 1984

Finished: 1 June 1984

Logged By: D. A. Downing

Drilled By: Arctic Diamond Drilling

DEPTH		DESCRIPTION OF CORE	Page 1 of 5
From	To		
0.0	11.0	Overburden	
11.0	12.2	Andesite Dike Fine grained, subhedral dark green mineral (pyroxene?) with interstitial calcite matrix 11.3 - 12.2 - #98127	
12.2	19.9	Biotite Quartz Schist Gneissic biotite banded quartzite. Pyritic with a network of small actinolite filled fractures with rare bleached halo's. The actinolite also occurs as 1/32"-1/16" patches. Core recovery 40% 12.2 - 16.0 - # 98128 16.0 - 19.9 - # 98129	
19.9	26.7	Skarn Coarse garnets in pyroxne, actionolite, epidote matrix. Pyrite and actinolite (?) fill fine fracture network along with calcite. Garnets are fractured and altered with chloritic alteration of the matrix. 19.9 - 20.4 - #98001 20.4 - 20.8 - #98002 - 5/8" quartz carbonate vein cutting 1/2 QV <sub>1</sub> -QV <sub>1</sub> cut by pyrite filled fractures. QV <sub>2</sub> @55° to c/a, tr galena crystals in pyrite. 20.8 - 23.3 - #98003 - with fine molybdenum along fracture surfaces 23.3 - 26.7 - #98004	
26.7	31.5	Calc-silicate Hornfels Pyritic hornfels cut by stockwork of QV <sub>1</sub> 26.7 - 29.4 - #98130 29.4 - 32.1 - #98131	
31.5	33.0	Skarn Skarn with QV <sub>1</sub> stockwork and fracture network filled with pyrite and magnetite. 32.1 - 33.0 - #98005	
33.0	35.0	Calc-silicate hornfels Strongly fractured with actinolite in fractures and alteration halos. Pyrite is also along the fractures and along the schistosity. 33.0 - 35.0 - #98132	

DEPTH		DESCRIPTION OF CORE	Page 2 of 5
From	To		
35.0	44.2	<p>Silicified Biotite Quartz Schist Gneissic quartzite with very fine mica grains. Cut by stockwork of 1/8" QV<sub>1</sub> and fine fracture set filled with magnetite surrounded with 1/16" alteration halos. 35.0 - 38.0 - #98133 38.0 - 41.0 - #98134 39.0 - 44.2 - #98135</p>	
44.2	46.5	<p>Calc-silicate Hornfels Hornfels with pyrite in fractures and pyrrhotite disseminated in hornfels. 44.2 - 46.9 - #98136 46.9 - 47.4 - #98007</p>	
46.5	50.6	<p>Biotite Quartz Schist With pyrrhotite, pyrite and magnetite along fractures. The last 2' is strongly fractured with only 30% core recovery. 47.4 - 50.6 - #98137</p>	
50.6	50.8	<p>QV<sub>2</sub> Brecciated quartz-carbonate vein. Rusty with very fine grained sulphides along sheared surfaces. Trace carbonate along fine fracture in quartz vein stockwork. 50.6 - 50.8 - #98138</p>	
50.8	54.0	<p>Calc-silicate Hornfels Slightly brecciated, strongly altered hornfels with secondary pyrite along QV<sub>1</sub> stockwork.</p>	
54.0	130.2	<p>Biotite Quartz Schist Uniform schist cut by QV<sub>1</sub> stockwork. Strong alteration where fractured and slight alteration around QV<sub>2</sub>'s. 50.8 - 53.3 - #98139 53.3 - 55.9 - #98140 55.9 - 58.0 - #98006 - Hangingwall 58.0 - 58.1 - #98008 - QV<sub>2</sub> with pyrite along footwall contact 58.1 - 59.0 - #98009 - Footwall 59.0 - 61.8 - #98141 61.8 - 64.6 - #98142 64.6 - 65.0 - #98010 - Hangingwall 65.0 - 65.7 - #98011 - QV<sub>2</sub> 65.7 - 67.3 - #98012 - Footwall with molybdenum in Fractures 67.3 - 69.5 - #98143 69.5 - 70.0 - #98013 - Hangingwall 70.0 - 70.6 - #98014 - QV<sub>2</sub> with 1/8"-1/4" core of pyrite, molybdenum and sphalerite 70.6 - 71.9 - #98015 - footwall 71.9 - 73.5 - #98144 73.5 - 76.3 - #98145 ) Fracture parallel to c/a is filled with quartz, 76.3 - 79.0 - #98146 ) carbonate, chlorite &amp; sulphides is surrounded 79.0 - 82.0 - #98147 ) by bleached halo. Variously brecciated, silicified and cut by QV<sub>1</sub> stockwork. 82.0 - 84.0 - #98148 84.0 - 86.0 - #98149 86.0 - 86.5 - #98016 - Hangingwall 86.5 - 86.7 - #98017 - QV<sub>2</sub> with trace molybdenum 86.7 - 87.4 - #98018 - Footwall 87.4 - 88.4 - #98150 88.4 - 89.9 - #98019 - Hangingwall 89.9 - 90.6 - #98020 - QV<sub>2</sub> with trace molybdenum</p>	

DEPTH		DESCRIPTION OF CORE	Page 3 of 5
From	To		
		90.6 - 92.4 - #98021 - Footwall	
		92.4 - 92.5 - #98083 - QV <sub>2</sub> with grey mica and euhedral feldspar crystals	
		92.5 - 96.5 - #98151	
		96.5 - 101.5 - #98152	
		101.5 - 102.2 - #98084 - Pyritic, calcareous shear zone with anhedral feldspar patches locally developed in the host	
		102.2 - 103.7 - #98153	
		103.7 - 104.6 - #98022 - Hangingwall with fine grained pyrrhotite disseminated in the host, pyrite in the fractures and with pyrite and pyrrhotite intergrown in small quartz veins.	
		104.6 - 105.0 - #98023 - QV <sub>2</sub> with leaf pyrite on fracture surfaces	
		105.0 - 105.9 - #98024 - Footwall as described in hangingwall	
		112.3 - 113.0 - skarn band developed adjacent to pyrite fracture fillings.	
		114.2 - 115.4 - #98025 - Hangingwall with disseminated molybdenum	
		115.4 - 116.9 - #98026 - QV <sub>2</sub> with grey mica and a clear green quartz like mineral surrounded by a calcareous halo	
		116.9 - 117.5 - #98027 - Footwall	
		118.3 - 118.7 - #98028 - Hangingwall with a 1/8" quartz vein containing pyrite and pyrrhotite.	
		118.7 - 119.0 - #98029 - Pyritic QV <sub>2</sub> with minor molybdenum	
		119.0 - 119.5 - #98030 - Footwall with a stockwork of pyrite filled fractures and pyrrhotite disseminated in the host	
		119.5 - 130.2 - The host rock is altered around a quartz vein stockwork.	
130.2	140.0	Skarn Garnet, pyroxene, pyrrhotite skarn of varying composition	
		131.2 - 131.5 - #98085 - QV <sub>2</sub> with pyrite and pyrrhotite	
		133.0 - 133.9 - #98031 - QV <sub>2</sub> with pyrite, pyrrhotite & molybdenum	
		136.2 - 136.6 - Brecciated quartz in a calcareous shear zone	
140.0	145.3	Tan altered Biotite Quartz Schist Pyrite, calcareous quartz breccia in schist altered to a tan colour	
		140.8 - 141.8 - #98086	
		141.8 - 142.1 - #98087 - Pyrite 1/8" QV <sub>2</sub> with very fine disseminated molybdenum	
		142.1 - 144.8 - #98088	
		144.8 - 145.1 - #98089 - Pyritic QV <sub>2</sub> with trace disseminated molybdenum	
145.3	154.9	Skarn - Slightly calcareous quartzite with a matrix of magnetite filled fractures and a second very fine stockwork of pyrrhotite filled fractures. The unit appears black with white mottling and very rarely has a schistose texture. There are rare but large 1" patches of green calc-silicate.	
154.9	175.9	Skarn Garnet, pyroxene skarn	
		163.3 - 161.8 - #98032 - pyrite quartz vein	
175.9	180.3	Skarn Magnetic skarn as described 145.3 - 154.9	
		176.1 - 176.2 - #98090 - Very pyritic quartz vein with molybdenum and galena in fractures. There is one 1/16" sphalerite crystal	
		176.9 - 177.2 - #98033 - Slightly brecciated, very pyritic quartz vein	

DEPTH		DESCRIPTION OF CORE	Page 4 of 5
From	To		
180.3	183.5	Leucocratic Granite	
183.5	189.5	Biotite Quartz Schist Schist cut by quartz vein stockwork and a stockwork of fine fractures with 1/8" alteration halos. Minor magnetite along the margins of some of the quartz veins. Marginal to magnetite skarn. 186.2 - 186.5 - #98034 - Hangingwall 186.5 - 187.7 - #98035 - Slightly brecciated, very pyritic quartz vein with abundant molybdenum 187.7 - 188.5 - #98036 - Footwall containing 1/2" quartz vein	
189.5	193.4	Leucocratic Granite	
193.4	194.4	Skarn	
194.4	201.3	Leucocratic Granite	
201.3	205.7	Skarn - Garnet diopside skarn with several 1/8" pyritic quartz veins. 204.1 - 204.5 - #98091 - Quartz/carbonate vein	
205.7	214.0	Calc-silicate hornfels Unit is marginal to biotite quartz schist towards lower contact 212.4 - 212.5 - Quartz vein with pyrite on cross-cutting fractures 212.5 - 214.0 - Extensive quartz vein stockwork	
214.0	224.1	Biotite Quartz Schist - Banded with calc-silicate hornfels	
224.1	224.8	Skarn - cut by stockwork of 1/16" quartz veins	
224.8	227.6	Skarn - very magnetic skarn similar to that at 145.3 - 154.9. It is marginal both to altered biotite quartz schist and to calc-silicate hornfels.	
227.6	228.4	Skarn	
228.4	229.7	Biotite Quartz Schist	
229.7	231.1	Skarn	
231.1	239.6	Calc-silicate hornfels 233.5 - 234.7 - Quartz, pyrite and pyrrhotite in fracture parallel to the c/a 236.0 - 236.7 - Skarn	
239.6	276.5	Biotite Quartz Schist Schist is variously marginal to calc-silicate hornfels and to magnetite skarn. 240.5 - 240.9 - #98037 - QV <sub>2</sub> 249.5 - 250.6 - #98092 - Slightly pyritic and calcareous quartz vein with a pyritic bleached halo 253.0 - 253.2 - - Bleached and sheared schist 257.8 - 259.1 - #98038 - Sheared QV <sub>2</sub> with molybdenum on fracture surface 261.2 - 261.8 - #98094 - 1/2" quartz vein with molybdenum on fractures 273.6 - 275.7 - #98095 - Sheared quartz vein with molybdenum on the shear surfaces	
276.5	278.4	Leucocratic Granite	
278.4	285.4	Biotite Quartz Schist Schist is marginal to calc-silicate hornfels with a quartz vein stockwork.	
285.4	291.6	Calc-silicate hornfels	
291.6	296.0	Skarn	

DEPTH		DESCRIPTION OF CORE	Page 5 of 5
From	To		
296.0	378.0	Leucocratic Granite 296.0 - 298.5 -           - with intergrowth of long grey/green crystals characteristic of greisen 301.0 - 301.5 - #98096 - Massive pyrite in quartz vein at the intrusive contact 301.5 - 303.3 -           - Bull quartz vein with minor molybdenum End of Hole.	
378.0			

## HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: PATCH 7 (YA74179)

Location: 115 H/12

Dip Tests: 70.0°@253'  
74.0°@339'

Mining Division Whitehorse

Hole Nº. 84-02

Angle: -72°

Direction: 078°

Depth: 339'

Grid Nº.

Co-Ordinates: 87 + 25E  
42 + 35S  
3934'

Date Started: 1 June 1984

Finished: 3 June 1984

Logged By: D. A. Downing

Drilled By: Arctic Diamond Drilling

DEPTH		DESCRIPTION OF CORE
From	To	
0.0	8.5	Overburden
8.5	17.8	Skarn 9.2 - 9.7 - #98039 - Hangingwall 9.7 - 10.3 - #98040 - Saccharoidal quartz vein with pyrite and pyrrhotite margins 10.3 - 14.0 - #98041 - Footwall
17.8	20.6	Biotite Quartz Schist Stockwork of distorted, "sweated-out" quartz veins with calc-silicate hornfels margins 17.8 - 19.9 - Several 1/16" QV <sub>2</sub> perpendicular to c/a cutting both a stockwork of QV <sub>1</sub> and a stockwork of pyrite filled fractures. Biotite in the schist is bleached adjacent to the QV <sub>2</sub> 's.
20.6	22.3	Skarn - Quartz vein stockwork and molybdenum in fractures
22.3	26.6	Biotite Quartz Schist Slightly to strongly calcareous with magnetic filled fractures 22.3 - 23.5 - Calc-silicate hornfels 25.00 - 25.5 - skarn
26.6	35.2	Skarn - Magnetic and calcareous
35.2	43.8	Biotite Quartz Schist Calcareous and magnetic schist with extensive calc-silicate hornfels development 38.0 - 40.6 - Quartz vein stockwork 40.6 - 41.0 - #98042 - Hangingwall 41.0 - 41.4 - #98043 - Pyrite and galena in a slightly rusty quartz vein 41.4 - 41.9 - #98044 - Footwall with 1/2" argillic alteration margin at vein contact
43.8	50.2	Tan Altered Biotite Quartz Schist Noncalcareous schist with tan coloured alteration. Schist is non-magnetic with minor calcite as fracture fillings. 47.2 - 47.9 - #98045 - Hangingwall 47.9 - 48.5 - #98046 - Milky, white quartz vein with yellow, rusty calcite along fractures. Minor pyrite and very fine grained galena intergrown with trace chalcopyrite 48.5 - 49.1 - #98047 - Footwall

DEPTH		DESCRIPTION OF CORE	Page 2 of 4
From	To		
50.2	54.5	Biotite Quartz Schist with quartz stockwork 53.3 - 53.4 - 1/8" brecciated zone with 2" bleached halo	
54.5	62.4	Tan Altered Biotite Quartz Schist 56.2 - 57.0 - Hangingwall 57.0 - 58.0 - QV <sub>2</sub> with pyrite, very dark blueish, very fine grained galena and rusty brown calcite fracture fillings with trace coatings of azurite and malachite.	
62.4	85.0	Calc-silicate Hornfels Calcareous hornfels with minor rusty shears and rare magnetite 83.2 - 83.9 - #98051 - Hangingwall 83.9 - 84.3 - #98052 - QV <sub>2</sub> with minor rusty calcite on fractures and trace pyrite 84.3 - 85.0 - #98053 - Footwall	
85.0	92.1	Tan Altered Biotite Quartz Schist 87.5 - 88.5 - Shear zone 89.5-90.5 - #98054 - Hangingwall 90.5 - 90.8 - #98055 - QV <sub>2</sub> 90.8 - 91.6 - #98056 - Footwall	
92.1	125.3	Calc-silicate Hornfels Variably magnetic and calcareous 98.0 - 100.5 - Skarn 102.5 - 102.6 - Pyrite, Pyrrhotite, Mica Vein 103.8 - 104.0 - #98097 - Quartz vein with pyritic, micaceous margins 107.0 - 108.0 - Skarn 115.9 - 116.6 - #98057 - Hangingwall 116.6 - 117.6 - #98058 - Quartz vein with minor pyrite and trace galena 117.6 - 118.5 - #98059 - Footwall 118.7 - 121.3 - Skarn	
125.3	129.3	Leucocratic Granite Stockwork of very fine clear and milky quartz veins is criss crossed by a stockwork of <1/64" fractures filled with a dark green mineral. The host is speckled with <1/64" disseminations of the same mineral. There is trace pyrite and pyrrhotite along the fractures. 125.3 - 126.5 - #98060 - Pyritic quartz vein 128.2 - 129.3 - #98061 - Quartz veins in very micaceous granite with minor pyrite and rare disseminations of molybdenum	
129.3	148.5	Biotite Quartz Schist 129.3 - 129.5 - #98062 - Massive pyrite in a quartz vein 129.5 - 129.8 - #98063 - Hangingwall 129.8 - 130.0 - #98064 - Pyritic quartz vein 130.0 - 130.3 - #98065 - Footwall 132.0 - 133.3 - Skarn 138.5 - 138.9 - #98066 - Hangingwall 138.9 - 139.9 - #98067 - Quartz vein with massive and leaf pyrite 139.9 - 140.4 - #98068 - Footwall with extremely pyrrhotite rich calc-silicate hornfels. 145.2 - 145.3 - #98098 - Pyrrhotitic QV <sub>1</sub> 145.8 - 146.0 - #98099 - Pyrrhotitic QV <sub>1</sub>	
148.5	150.3	Leucocratic Granite	
150.3	159.8	Calc-silicate hornfels - Hornfels is marginal to schist with minor skarn banding.	

DEPTH		DESCRIPTION OF CORE	Page 3 of 4
From	To		
159.8	165.4	Tan Altered Biotite Quartz Schist 161.5 - 161.6 - Trace malachite and azurite along rusty slicken sided fractures 163.2 - 164.6 - #98069 - Brecciated quartz vein with pyrite, pyrrhotite and either galena or molybdenum 164.6 - 165.6 - #98070 - Brecciated pyrite and quartz vein with trace flourite	
165.4	166.5	Calc-silicate hornfels	
166.5	169.4	Leucocratic Granite 166.9 - 167.9 - #98071 - Micaceous, slightly pyritic quartz vein with trace molybdenum	
169.4	196.4	Biotite Quartz Schist Schist with minor skarn and calc-silicate hornfels bands 172.0 - 172.1 - 1/2" quartz vein with disseminated molybdenum 172.1 - 172.7 - 1/2" quartz vein with disseminated molybdenum 192.0 - 192.7 - #98072 - Quartz vein with pyrite, galena and trace molybdenum 193.0 - 194.5 - 1" quartz vein perpendicular to the c/a with a core of pyrite and molybdenum	
196.4	199.3	Grey Altered Biotite Quartz Schist - very calcareous schist altered to a grey colour with a slightly pyritic carbonate vein stockwork containing trace molybdenum and flourite	
199.3	201.9	Skarn	
201.9	203.7	Grey Altered Biotite Quartz Schist	
203.7	209.0	Skarn	
221.0	228.2	Biotite Quartz Schist Upper and lower contacts are cal-silicate hornfels 224.1 - 225.0 - #98073 - Saccharoidal quartz vein with trace pyrite and molybdenum	
228.2	239.0	Skarn 228.0 - 228.9 - #98074 - Hangingwall skarn 228.9 - 229.3 - #98075 - Massive pyrite vein 229.3 - 230.3 - #98076 - Footwall skarn 235.8 - 236.0 - #98077 - Quartz vein of quartz vein stockwork that has trace molybdenum on fractures.	
239.0	241.6	Leucocratic Granite	
241.6	243.0	Skarn	
243.0	246.0	Biotite Quartz Schist 244.1 - 244.3 - #98078 - Quartz vein stockwork with large euhedral pyrite crystals	
246.0	253.5	Leucocratic Granite Metasomatized (albitization) for 10 feet below the sediment contact 246.0 - 254.5 - strongly quartz veined and pegmatitic 246.5 - 248.3 - #98079 - Hangingwall with large (3/4") euhedral crystals of green/grey feldspar (albite?) in a matrix of sugary quartz, pyroxene & biotite 248.3 - 251.7 - #98080 - Quartz vein with large (1") feldspar crystals and rare but large books of molybdenum 251.7 - 252.5 - #98081 - Pyritic Feldspar band 252.5 - 253.6 - #98082 - Quartz/feldspar vein	

DEPTH

DESCRIPTION OF CORE

From	To
320.0	323.6
323.6	339.0
339.0	

Skarn  
Leucocratic Granite  
End of Hole

## HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: PATCHE 7 (YA 74179)

Location: 115H/12

Dip Test: 53.0° @ 298'

Mining Division Whitehorse

Hole Nº. 84-03

Angle: -50°

Direction: 111°

87 + 25E

Depth: 298'

Grid Nº.

Co-Ordinates: 42 + 35S

3934'

Date Started: 4 June 1984

Finished: 6 June 1984

Logged By: D. A. Downing

Drilled By: Arctic Diamond Drilling

DEPTH		DESCRIPTION OF CORE	Page 1 of 2
From	To		
0.0	7.0	Overburden	
7.0	9.0	Andesite Dike	
9.0	17.5	Skarn Very magnetic skarn with minor biotite quartz schist bands. The schistosity is at 45° to the c/a and core recovery is only 50% in very broken ground.	
17.5	25.2	Biotite Quartz Schist Cut by both a quartz vein stockwork and a fracture stockwork with magnite and calcite along the fractures. Minor skarn and hornfels banding 17.6 - 17.7 - 1/8" quartz/carbonate vein with a 2" grey coloured alteration halo	
25.2	34.0	Skarn	
34.0	50.5	Biotite Quartz Schist Variably magnetic and calcareous schist with minor skarn and hornfels banding 39.5 - 40.0 - sheared 1/2" quartz/carbonate vein with poor core recovery 41.0 - 41.1 - sheared 1/2" quartz/carbonate vein with poor core recovery 43.0 - 43.1 - sheared 1/2" quartz/carbonate vein with poor core recovery 44.2 0 44.8 - #98101 - QV <sub>2</sub> with a trace of rust staining where fractured and a 2" grey alteration margin on the footwall	
50.5	55.1	Grey Altered Biotite Quartz Schist Schist altered due to a major QV <sub>2</sub> 51.6 - 52.0 - #98102 - Hangingwall with minor quartz veining and pyritization in a slightly brecciated zone 52.0 - 52.6 - #98103 - Slightly brecciated, pyritized QV <sub>2</sub> with trace galena 52.6 - 53.1 - #98104 - Rust Stained footwall	
55.1	62.5	Calc-silicate hornfels	
62.5	69.8	Silicified Biotite Quartz Schist	
69.8	73.0	Grey Altered Biotite Quartz Schist Schist altered around a major shear 71.0 - 72.5 - Rusty kaolinite breccia in a major shear	

DEPTH		DESCRIPTION OF CORE	Page 2 of 2
From	To		
73.0	88.7	Calc-silicate Hornfels Calcareous, non magnetic hornfels 86.0 - 87.0 - Silicified Biotite Quartz Schist	
88.7	104.7	Grey Altered Biotite Quartz Schist Bands of alteration of variable intensity with minor silicified bands 88.8 - 90.7 - #98105 - Brecciated, pyritic quartz/carbonate veins 100.0 - 101.6 - #98106 - A series of distorted pyritic QV <sub>1</sub> with trace molybdenum 102.2 - 104.7 - #98107 - Slightly pyritic QV <sub>2</sub> with a trace molybdenum	
104.7	122.3	Biotite Quartz Schist Variably magnetic and calcareous schist with minor skarn and hornfels bands. The schistosity is at 40° to c/a 106.1 - 106.4 - #98108 - QV <sub>2</sub> with large euhedral pyrite crystals, minor pyrrhotite & a trace of chalcopyrite 109.0 - 109.3 - #98109 - QV <sub>2</sub> similar to the one described above 110.4 - 110.6 - #98110 - Milky massive white quartz 116.9 - 117.1 - #98111 - Quartz vein with 40% pyrrhotite, 10% pyrite, minor chalcopyrite and a trace of molybdenum on fracture surfaces	
122.3	123.9	Leucocratic Granite	
123.9	140.9	Biotite Quartz Schist - schist with minor skarn bands and marginal to calc-silicate hornfels 126.0 - 126.5 - #98112 - QV <sub>1</sub> truncated by a shear 126.8 - 127.5 - #98113 - Quartz vein with minor pyrite and a trace of molybdenum	
140.9	141.4	Leucocratic Granite	
141.4	155.4	Biotite Quartz Schist - Banded with skarn and hornfels	
155.4	170.5	Leucocratic Granite - The lower contact with sediment is gradational	
170.5	176.5	Quartz vein - milky massive white quartz containing minor pyrrhotite & pyrite with a trace of chalcopyrite. The upper contact with the granite has a minor section of grey altered biotite quartz schist 170.5 - 176.5 - #98114	
176.5	199.0	Skarn	
199.0	200.7	Leucocratic Granite	
200.7	204.7	Biotite Quartz Schist - Schist marginal to hornfels due to a QV <sub>1</sub> stockwork and bleaching around fractures. The schistosity is at 45° to the c/a.	
204.7	298.0	Skarn - Skarn with minor granite diking and the unit is marginal to calc-silicate hornfels 211.0 - 211.8 - #98115 - QV <sub>2</sub> with large euhedral pyrite crystals and with trace molybdenum 227.2 - 227.7 - #98116 - Quartz vein 244.2 - 244.5 - #98117 - Quartz vein 247.0 - 248.0 - #98118 - QV <sub>2</sub> with large euhedral pyrite crystals, pyrrhotite, mica and a trace of chalcopyrite 263.0 - 264.0 - grey bleaching around a fracture set	
298.0		END OF HOLE	

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: HATCH 13 (Y67656)

Location: 115 H/12

Mining Division Whitehorse

Hole No. 84-04

Angle: -50°

Direction: 077°

Depth: 257.5'

Grid No.

Co-Ordinates:

84+60E

39+50S

3939'

Date Started: 8 June 1984

Finished: 9 June 1984

Logged By: D. A. Downing

Drilled By: Arctic Diamond Drilling

DEPTH		DESCRIPTION OF CORE	Page 1 of 2
From	To		
0.0	5.0	Overburden	
5.0	32.5	Biotite Quartz Schist Noncalcareous, non magnetic schist with an extensive QV <sub>1</sub> stockwork There are no sulphides, the schistosity is variably distorted and there are locally massive biotite margins around quartz veins 13.2 - 13.9 - #98119 - QV <sub>2</sub> with trace pyrite, molybdenum and/or galena 15.7 - 16.6 - #98120 - QV <sub>1</sub> with a trace of molybdenum 19.5 - 21.4 - #98121 - QV <sub>1</sub> with a trace of molybdenum 25.0 - 25.8 - #98123 - QV <sub>2</sub> with chalcopyrite, pyrite and galena	
32.5	34.5	Tan Altered Biotite Quartz Schist 32.5 - 32.9 - #98122 - QV <sub>2</sub> 32.9 - 33.4 - Broken core <sup>2</sup> possibly due to shearing	
34.5	57.7	Biotite Quartz Schist Extensive QV <sub>1</sub> stockwork and with minor chloritic alteration bands There is a trace of molybdenum associated with larger quartz veins of the stockwork. 53.0 - 53.1 - 1/8" quartz carbonate vein with a rusty, chloritic alteration halo. 53.8 - 54.0 - Leucocratic granite	
57.7	63.1	Tan Altered Biotite Quartz Schist There is chloritic alteration developed adjacent to quartz veins of an extensive QV <sub>1</sub> stockwork. 57.7 - 61.4 - #98124 - QV <sub>1</sub> Stockwork 61.4 - 61.7 - Leucocratic <sup>1</sup> granite 63.0 - 63.1 - #98126 - QV <sub>2</sub> with minor galena and a trace of pyrite	
63.1	86.0	Biotite Quartz Schist Extensive QV <sub>1</sub> stockwork 72.8 - 73.2 - A major QV <sub>1</sub> 81.6 - 82.0 - #98126 - QV <sub>2</sub> with minor galena and a trace of pyrite	
86.0	95.4	Tan Altered Biotite Quartz Schist Slightly pyritic schist with an extensive QV <sub>1</sub> stockwork The drill core is very broken	
95.4	110.8	Biotite Quartz Schist 95.4 - 100.0 - Major QV <sub>1</sub> parallel to the c/a	

DEPTH		DESCRIPTION OF CORE	Page 2 of 2
From	To		
		100.0 - 104.0 - Chloritic alteration zone giving the schist a green colour	
		107.3 - 108.3 - Chloritic alteration zone	
110.8	111.8	Grey Altered Biotite Quartz Schist	
111.8	122.3	Biotite Quartz Schist Extensive QV <sub>1</sub> stockwork 111.8 - 113.0 - strongly distorted, massive biotite with some chloritic rusty alteration	
122.3	124.7	Tan Altered Biotite Quartz Schist Alteration is localized around a major shear	
124.7	125.9	Leucocratic Granite Granite altered to a tan colour due to the adjacent shear zone	
125.9	184.0	Biotite Quartz Schist Schist with slightly calcareous light green bleached bands and cut by an extensive QV <sub>1</sub> stockwork 151.0 - 151.1 - Possibly sheared, very broken, very calcareous, greenish schist 155.0 - 155.8 - Major QV <sub>1</sub> 155.8 - 156.9 - Schist as described 151.0 - 151.1	
184.0	257.5	Leucocratic Granite There is partial alteration of the feldspars to clay. Zones of strong alteration and probably shearing are located at 190, 195, 205.	
257.5		END OF HOLE	

## HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: HATCH 13 (Y67656)

Location: 115 H/12

Mining Division Whitehorse

Dip Test @ 245' = 45°  
(corrected)

Hole Nº. 84 - 05

Angle: -50°

Direction: 057°

Depth: 319'

Grid Nº.

Co-Ordinates: 72+20E

35+55S

Date Started: June 10, 1984

Finished: June 13, 1984

Logged By: G. Bidwell

Drilled By: Arctic Diamond Drilling

DEPTH		DESCRIPTION OF CORE	Page 1 of 3
From	To		
0.0	62.0	Overburden	
62.0	68.0	Biotite sericite schist core angle = 25° - quartz stockwork semi-parallel schistosity	
68.0	70.0	Calc - silicate hornfels - stockwork present - dark green (diopside) biotite - rusty oxidation particularly on fracture (former pyrite)	
70.0	72.0	Biotite Sericite schist - stockwork present up to 3/4" quartz veins - core angle = 30°	
72.0	80.0	Skarn - large garnet masses ( up to 2" diameter) - chlorite + pyrite in fractures, also magnetite (total magnetite 10%) - garnet (epidote) magnetite skarn - no stockwork	
80.0	91.0	Quartz biotite hornfels - generally massive, calcareous - minor QV <sub>1</sub> stockwork - minor foliation @ 88' core angle = 30° - pyrite in fractures - some concentration of magnetite	
91.0	94.5	Skarn - brecciated - garnet diopside ? - pyrite in veinlets - minor QV <sub>1</sub> vein	
94.5	99.0	Gossanous skarn ? - almost completely oxidized - quartz vein @ 95.6' 1/2" wide QV <sub>1</sub> - shearing @ 96' - 98' remanent epidote skarn, pyrite in fractures - 94.5-96.5 - # 98158	
99.0	106.0	Skarn - with minor biotite hornfels, magnetite-rich - vein and disseminated pyrite - large clots of garnets	

DEPTH		DESCRIPTION OF CORE	Page 2 of 3
From	To		
106.0	109.5	Gossanous skarn - same as above - some magnetite (in clots) - portions brecciated	
109.5	113.0	Biotite hornfels - QV <sub>1</sub> stockwork present - tan alteration with minor rusty shears	
113.0	113.8	Quartz vein (QV <sub>1</sub> ) - minor fracturing, no sulphides 113.0 - 113.8 - #98159	
113.8	117.0	Gossan - poor core recovery - very magnetic in sections - minor disseminated pyrite - probably shear area 113.8 - 117.0 - #98160	
117.0	117.3	Quartz vein (QV <sub>1</sub> ) - fractured no sulphides 117.0 - 117.3 - #98161	
117.3	127.0	Magnetite skarn (with some skarn section) 118.0 - 119.0 - garnet skarn - abundant magnetite, pyrite veinlets - QV <sub>1</sub> stockwork present - 124.0 - 125.0 garnet skar	
127.0	145.5	Altered biotite schist ? tan coloured - QV <sub>1</sub> stockwork - 128.0 - 128.4 - #98162 - vein with quartz and pyrite - 131.5 - 135.0 - #98163 - QV <sub>1</sub> stockwork (trace moly?) - 143.0 - 145.5 - #98164 - intense tan alteration - 144.9 - 145.0 - quartz vein	
145.5	167.5	Biotite quartz schist - generally massive - QV <sub>1</sub> stockwork - 150' core 5° - @ 157' minor tan alteration around fractures, slightly brecciated - @ 158' 1" wide quartz vein centered by dark metallic sulphide (moly?), chloritic alteration? 162 - 163 - 1½" wide QV <sub>1</sub> vein	
167.5	173.5	Magnetite Skarn (diopside?) - some QV <sub>1</sub> veining (narrow) with pyrite centers 170 - 171 - garnet with chlorite borders	
173.5	174.5	Shear zone - biotite chlorite schist sub-parallel core axis	
174.5	177.5	Calc - silicate hornfels (brecciated) - minor magnetite - diopside, biotite rich section - QV <sub>1</sub> stockwork	
177.5	187.3	Altered Calc-silicate hornfels? 177.5 - 179.1 - bleached with QV <sub>1</sub> stockworm, pyrite in fractures 179.1 - 180.3 - tan alteration, manganese dendrites, calcareous 180.3 - 182.7 - calc silicate hornfels, quartz veinlets with pyrite 182.7 - 186.5 - tan alteration, calcareous 186.5 - 187.3 - shear gouge and tan altered hornfels	

DEPTH		DESCRIPTION OF CORE	Page 3 of 3
From	To		
187.3	191.5	Biotite quartz schist - minor QV <sub>1</sub> and pyrite in fractures	
191.5	199.6	Garnet Skarn - 65% garnet - minor epidote, magnetite - quartz, pyrite, magnetite in fractures - portions heavily oxidized, highly fractured	
199.6	199.9	Quartz veins - probably QV <sub>1</sub> - tight fractures - 199.6-199.9 - pyrite (fine), vuggy - 199.6 - 199.9 - #98165 - QV <sub>2</sub> ?	
199.9	257.0	Garnet Epidote magnetite skarn - highly fractured - oxidized, pyritic 207.1 - 208.0 - #98166 - quartz pyrite vein QV <sub>2</sub> - trace moly?, galena? - vugs 218.2 - 219.2 - #98167 - QV <sub>2</sub> vein, vuggy - spots moly galena? - vugs parallel to core axis - pyrite along fractures and clogs at cross fractures @227.0 - ½" wide quartz vein parallel core axis QV <sub>1</sub> ? - 227.5 - pulled rods - crap from top of hole picked up on next run - 232.0 - 1" wide shear? infilled with quartz, pyrite, calcite - quite vuggy	
257.0	271.5	Biotite Quartz schist - QV <sub>1</sub> stockwork - minor pyrite - very fresh looking compared to heavily oxidized skarn unit - 269.5 - 270.5 - Bull quartz vein QV <sub>1</sub> #98168 - 265' core angle = 45° - 268' ½" wide QV <sub>1</sub> - 271.0 - 271.5 1 2" wide QV <sub>1</sub>	
271.5	298.0	Magnetite Skarn (fresh) - diopside, minor garnet, biotitic sections - QV <sub>1</sub> stockwork - pyrite veinlets - 285.4 ¼" pyrite veinlet - 286.7 ½" wide pyrite, pyrrhotite vein - 288.6 - 1" wide QV <sub>1</sub> vein	
298.0	319.0	Garnet Skarn (oxidized) - rusty gossanous - epidote, pyrite - 319' in a very broken section (probably shear)	
	319.0	END OF HOLE	

## HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: HATCH 13 (Y67656)

Location: HATCH PROJECT, THATCHELL CK.  
115 H/12

Mining Division Whitehorse

Dip Tests: 56° @ 250'

Hole Nº. 84 - 06

Angle: -50°

Direction: 066°

Depth: 393.0'

Grid Nº.

Co-Ordinates: 86 + 10E 110' @ 291° from  
42 + 23S DDH #1

Date Started: June 15, 1984

Finished: June 17, 1984

Logged By: G. Bidwell

Drilled By: Arctic Diamond Drilling

DEPTH		DESCRIPTION OF CORE	Page 1 of 3
From	To		
0.0	12.0	Overburden	
12.0	37.0	Calc-silicate Hornfels - combination of Calc-silicate hornfels, biotite, quartzite and magnetite skarn with QV <sub>1</sub> stockwork, good solid fresh core, 100% recovery 12.0 - 13.5 - Biotite quartz schist 13.5 - 17.0 - Garnet epidote skarn 17.0 - 23.0 - Calc-silicate hornfels, minor magnetite 19.5 ½" quartz vein 23.0 - 25.0 - Biotite quartz schist - minor magnetite - pyrite veinlets - QV <sub>1</sub> stockwork 25.0 - 30.0 - Calc-silicate hornfels biotite diopside, pyrite veinlets QV <sub>1</sub> stockwork 30.0 - 31.0 - Garnet epidote skarn 31.0 - 31.25- Quartz veins, probably QV <sub>1</sub> (#98169) main sulphide pyrrhotite - minor pyrite, molybdenite - minor rusty fractures 31.25- 37.0 - Calc-silicate hornfels biotite, quartz, magnetite, diopside trace moly, veinlet pyrite QV <sub>1</sub> stockwork (moly) magnetite in fractures and outside of veins, quartz on inside of veins, pyrite core	
37.0	72.0	Andesite Dike (diabase) - calcareous, disseminated pyrite, massive - very fine grained at margin, coarser after 2 feet but still fine grained - no veining, a few micro fractures	
72.0	73.5	Calc-silicate hornfels (diopside) - biotite schist sections - pyrite magnetite veinlets	
73.5	79.0	Garnet diopside Skarn (magnetite) - pyrite magnetite veinlets - QV <sub>1</sub> stockwork	

DEPTH		DESCRIPTION OF CORE	Page 2 of 3
From	To		
		74.6 - 76.1 - QV <sub>1</sub> vein disseminated and vein pyrite (#98170)	
		76.1 - 76.6 - #98171 - Garnet magnetite skarn	
		76.6 - 76.9 - #98172 - QV <sub>2</sub> vein? pyrite, dark mineral, fine grained in fractures?	
		76.9 - 79.0 - Garnet epidote magnetite skarn minor QV <sub>1</sub> stockwork	
79.0	86.0	Calc-silicate hornfels - appreciable biotite (15%) - Quartz pyrite magnetite veinlets	
		79.5 - 80.4 - #98173 - vein (metamorphic)	
		81.0 - 81.8 - Garnet skarn	
		85.3 - 85.8 - #98174 - QV <sub>1</sub> veins (pyrite)	
86.0	88.5	Garnet magnetite skarn - minor QV <sub>1</sub> stockwork	
88.5	127.6	Calc-silicate hornfels - sections quartz or biotite rich - disseminated and vein pyrite - minor magnetite	
		91.7 - 91.8 - #98175 - QV <sub>1</sub> vein	
		109.6 - 109.9 - 1" wide quartz pyrite sericite vein (QV <sub>1</sub> ?) #98176	
		116.4 - 116.6 - #98177 - QV <sub>1</sub> vein (pyrite)	
		119.0 - 119.1 - - 1" wide QV <sub>1</sub> vein # 98178	
		119.1 - 120.7 - #98179 - HW Calc-silicate (includes 0.2' siliceous pyrite bleached zone adjoining vein)	
		120.7 - 121.4 - #98180 QV <sub>2</sub> vein (pyrite, sphalerate, moly, tr galena)	
		121.4 - 123.0 - #98181 FW <sub>2</sub> Biotitic hornfels (minor garnet)	
		127.2 - 127.6 - #98182 - QV <sub>1</sub> vein	
127.6	144.0	Biotite quartz schist - gradational change from above, 5% disseminated pyrite - QV <sub>1</sub> stockwork - section of cal-silicate, very minor garnet	
		128.9 - 129.7 - QV <sub>1</sub> vein (barren) massive bull quartz (#98183)	
		129.7 - 131.2 - bleached section of schist - abundant disseminated pyrite and pyrite QV <sub>1</sub> vein	
		138.4 - 140.2 - Calc-silicate hornfels, disseminated pyrite, QV <sub>1</sub> minor	
144.0	150.0	Calc-silicate Hornfels - gradational from above - biotite-rich section @144.3 - 1/2" wide QV <sub>1</sub> vein, magnetite on boundary 148.3 - 148.5 - brecciated QV <sub>1</sub> vein (pyrite) (#98184)	
150.0	159.5	Biotite Quartz Schist - contains some cal-silicate hornfels 153.2 - 153.6 - #98185 - brecciated quartz vein, pyrite, minor sphalerite, trace moly? - QV <sub>1</sub> stockwork abundant	
159.5	166.3	Calc-silicate Hornfels, sections biotitic (Hornfels/schist boundary parallel core axis) 159.3 - 161.0 - Garnet epidote skarn 163.0 - 163.5 - #98186 - 2" wide QV <sub>1</sub> vein with bleached zone (pyrite trace moly) 163.5 - 164.0 - #98187 - Intermediate calc-silicate 164.0 - 164.4 - #98188 - 2" wide QV <sub>2</sub> ? vein, mainly pyrrhotite, minor pyrite	

DEPTH		DESCRIPTION OF CORE	Page 3 of 3
From	To		
166.3	181.0	Biotite quartz Schist - QV <sub>1</sub> stockwork with sericite alteration 174.2 - 174.7 - QV <sub>1</sub> bull quartz vein, sericite, tr moly (#98189) 176.5 - shear filled with quartz, minor sulphides parallel core axis	
181.0	210.5	Calc-silicate hornfels QV <sub>1</sub> stockwork becoming more intense pyrrhotite, pyrite, tr moly minor garnet skarn 189.0 - 189.6 - #98190 - brecciated quartz vein - all pyrite in fractures - rusty alteration on one side of vein 194.0 - 197.0 - Biotite rich section - 196.0 - 1" wide quartz sericite vein 207.5 - 208.0 - #98191 - 2" wide quartz vein (sericite, pyrrhotite, pyrite, tr chalcopyrite) 209.0 - 209.2 - Quartz sericite (pyrite) vein	
210.5	235.0	Garnet magnetite skarn (epidote) - pyrite and magnetite in fractures - QV <sub>1</sub> stockwork present - disseminated pyrite and pyrrhotite 213.5 - 215.9 - #98192 - QV <sub>2</sub> vein vuggy, sericitic in fractures - pyrite, pyrrhotite, moly, minor chalcopyrite @ 216.0 - 1" wide bull quartz vein QV <sub>1</sub> no sulphides, sericite boundaries	
235.0	241.0	Griesen - contact with skarn sharp (shear) no gouge, probably little move- ment core angle = 25° - griesen in quartz blocks (breccia) in sericite rich matrix, disseminated pyrite - contact with alaskite gradational over 2 feet	
241.0	393.0	Alaskite - typical quartz feldspar muscovite unit 242.1 - 1" wide bull quartz vein - fractures in Alaskite somewhat open, minor rust 251.0 - 253.0 - fractures along core axis - minor spots of pyrrhotite and moly and trace sphalerite 261.3 - 261.4 - 1½" wide quartz vein 281.5 - splotch of pyrite, moly and sphalerite 328.8 - ½" wide quartz vein with sericite 329.9 - 330.9 - #98193 - spots of pyrite, sphalerite, galena? 332.3 - 1" wide bull quartz vein 338.6 - 338.8 - shear? filled with sulphides sphalerite, galena? pyrite (#98194) 339.0 - 1" wide bull quartz vein 351.7 - 353.0 - minor shears core angle = 60° 353.0 - 353.8 - concentration of pyrite, sphalerite and moly 356.5 - 1" wide pyrite Quartz vein with moly and sphalerite 362.3 - 363.0 - minor shears core angle = 60° 368.0 - 369.0 - shear contact core angle = 60°; clots of pyrite & moly 371.0 - 372.0 - clots of pyrite and sphalerite 391.2 - ½" wide bull quartz vein	
	393.0	END OF HOLE	

APPENDIX B

DIAMOND DRILL ASSAYS

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED  
Northwest District

Jul 29/84

Project: HATCH

Page 1 of 1

Drill Hole No.: HAT-1  
Co-ordinates: 87+25E  
42+35S  
Collar Elev.: 3934 ft.  
Azimuth: 078 true  
Angle: -50  
Hole Depth: 378 ft.

Claim No.: Patch 7  
Core Size: NQ  
Date Started: May 30/84  
Completed: Jun 01/84  
Logged by: D. Downing  
Section:  
% Recovery:

HOLE SURVEYS (corrected)  
depth direction dip  
265' -48.5  
378' -48.0

( ) - approximate  
N.A. - not assayed  
gold values >10000 ppb shown as 10000  
silver values >100.0 ppm shown as 100.0

FROM	TO	SAMPLE No.	WIDTH (feet)	GOLD (ppb)	SILVER (ppm)	GOLD (oz/ton)	SILVER (oz/ton)	LEAD (ppm)	MDLY (ppm)	ZINC (ppm)	ANTIMONY (ppm)	ARSENIC (ppm)
0.00	11.30	D.B.	11.30									
11.30	12.20	98127	0.90	2								
12.20	16.00	98128	3.80	2								
16.00	19.90	98129	3.90	2								
19.90	20.40	98001	0.50	2	0.10			1	27	93	0.10	4
20.40	20.80	98002	0.40	45	0.70			23	110	120	0.10	29
20.80	23.30	98003	2.50	2	0.20			1	140	137	0.10	3
23.30	26.70	98004	3.40	2	0.20			1	220	183	0.10	2
26.70	29.40	98130	2.70	2								
29.40	32.10	98131	2.70	10								
32.10	33.00	98005	0.90	2	0.50			1	230	133	0.20	4
33.00	35.00	98132	2.00	2								
35.00	38.00	98133	3.00	2								
38.00	41.00	98134	3.00	2								
41.00	44.20	98135	3.20	10								
44.20	46.90	98136	2.70	5								
46.90	47.40	98007	0.50	2	0.10			1	130	250	0.10	4
47.40	50.60	98137	3.20	2								
50.60	50.80	98138	0.20	50								
50.80	53.30	98139	2.50	2								
53.30	55.90	98140	2.60	2								
55.90	58.00	98006	2.10	2	0.20			1	190	190	0.20	4
58.00	58.10	98008	0.10	40	1.00			75	7	25	9.20	35
58.10	59.00	98009	0.90	5	0.50			1	170	150	0.20	4
59.00	61.80	98141	2.80	2								
61.80	64.60	98142	2.80	2								
64.60	65.00	98010	0.40	5	0.20			1	25	145	0.20	9
65.00	65.70	98011	0.70	190	1.10			103	57	480	0.20	140
65.70	67.30	98012	1.60	10	0.60			7	125	130	0.20	12
67.30	69.50	98143	2.20	20								
69.50	70.00	98013	0.50	45	0.60			8	180	140	0.30	23
70.00	70.60	98014	0.60	1225	2.20	0.04		1500	7	84	1.00	14
70.60	71.90	98015	1.30	45	0.40			14	54	122	0.70	38
71.90	73.50	98144	1.60	2								
73.50	76.30	98145	2.80	2								
76.30	79.00	98146	2.70	2								
79.00	82.00	98147	3.00	2								
82.00	84.00	98148	2.00	10								
84.00	86.00	98149	2.00	2								
86.00	86.50	98016	0.50	45	1.90			17	90	155	0.40	11
86.50	86.70	98017	0.20	20	0.30			8	6	17	0.10	29
86.70	87.40	98018	0.70	20	0.60			3	52	150	0.10	10
87.40	88.40	98150	1.00	40								
88.40	89.90	98019	1.50	2	0.40			15	360	170	1.00	11
89.90	90.60	98020	0.70	5	0.20			1	41	9	0.10	27
90.60	92.40	98021	1.80	30	0.80			3	125	110	0.20	250
92.40	92.50	98083	0.10	0	0.60			1	105			
92.50	96.50	98151	4.00	2								
96.50	101.50	98152	5.00	2								
101.50	102.20	98084	0.70	135	6.00			28	85			
102.20	103.70	98153	1.50	60								
103.70	104.60	98022	0.90	15	0.90			1	100	112	0.20	14
104.60	105.00	98023	0.40	20	0.30			1	3	4	0.10	27
105.00	105.90	98024	0.90	50	0.60			1	57	103	0.10	9
105.90	114.20	N.A.	8.30									
114.20	115.40	98025	1.20	15	0.50			2	120	134	0.10	6
115.40	116.90	98026	1.50	20	3.60			48	150	75	0.20	95
116.90	117.50	98027	0.60	525	79.00		1.84	800	140	280	115.00	36
117.50	118.30	N.A.	0.80									
118.30	118.70	98028	0.40	60	2.90			30	30	125	0.10	14
118.70	118.80	98029	0.10	70	1.00			57	77	75	1.00	500

118.70	119.00	98029	0.30	70	4.00			87	73	75	1.00	580
119.00	119.50	98030	0.50	35	1.80			12	140	83	0.20	45
119.50	131.20	N.A.	11.70									
131.20	131.50	98085	0.30	1010	14.00	0.04	0.34	125	16			
131.50	133.00	N.A.	1.50									
133.00	133.90	98031	0.90	65	19.00		0.46	130	15	58	0.10	9
133.90	136.00	N.A.	2.10									
136.00	136.50	98154	0.50	35								
136.50	140.80	N.A.	4.30									
140.80	141.80	98086	1.00	562	16.30			150	56			
141.80	142.10	98087	0.30	22	2.50			6	105			
142.10	144.80	98088	2.70	13	1.40			3	200			
144.80	145.10	98089	0.30	75	31.00			965	190			
145.10	155.00	N.A.	9.90									
155.00	155.80	98155	0.80	15								
155.80	161.30	N.A.	5.50									
161.30	161.80	98032	0.50	135	1.10			9	28	12	0.10	51
161.80	176.10	N.A.	14.30									
176.10	176.20	98090	0.10	6570	22.00	0.20	0.58	113	10			
176.20	176.90	N.A.	0.70									
176.90	177.20	98033	0.30	220	37.00		1.12	655	31	88	0.20	160
177.20	186.20	N.A.	9.00									
186.20	186.50	98034	0.30	20	0.80			6	16	73	0.10	5
186.50	187.70	98035	1.20	240	40.00		0.86	1580	110	445	0.70	320
187.70	188.50	98036	0.80	35	3.60			75	57	105	0.20	35
188.50	204.10	N.A.	15.60									
204.10	204.50	98091	0.40	39	8.70			148	6			
204.50	240.50	N.A.	36.00									
240.50	240.90	98037	0.40	125	3.00			82	13	14	3.20	145
240.90	249.50	N.A.	8.60									
249.50	250.60	98092	1.10	68	1.70			18	24			
250.60	254.00	N.A.	3.40									
254.00	254.50	98038	0.50	50	0.70			9	160	35	0.90	16
254.50	257.80	N.A.	3.30									
257.80	259.10	98093	1.30	67	1.40			15	15			
259.10	261.20	N.A.	2.10									
261.20	261.80	98094	0.60	27	2.80			67	730			
261.80	273.60	N.A.	11.80									
273.60	275.70	98095	2.10	29	4.10			200	120			
275.70	301.00	N.A.	25.30									
301.00	301.50	98096	0.50	4400	100.00	0.14	9.18	2800	5			
301.50	303.40	98156	1.90	2								
303.40	305.50	98157	2.10	25					250			
305.50	378.00	N.A.	72.50									

mercury values in hole ranged from 10 to 40 ppb

#### ASSAY SUMMARY

FROM	TO	WIDTH (feet)	GOLD oz/ton	SILVER oz/ton
176.10	176.20	0.10	0.20	0.58
301.00	301.50	0.50	0.14	9.18

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED  
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Drill Hole No.: HAT-2  
Co-ordinates: 87+25E  
42+35S  
Collar Elev.: 3934 ft.  
Azimuth: 078 true  
Angle: -72  
Hole Depth: 339.0 ft.

Claim No.: Patch 7  
Core Size: NQ  
Date Started: Jun 01/84  
Completed: Jun 03/84  
Logged by: D. Downing  
Section:  
% Recovery:

HOLE SURVEYS (corrected)  
depth direction dip  
253' -70.0  
339' -74.0

( ) - approximate  
N.A. - not assayed  
gold values >10000 ppb shown as 10000  
silver values >100.0 ppm shown as 100.0

FROM	TO	SAMPLE No.	WIDTH (feet)	GOLD (ppb)	SILVER (ppm)	GOLD (oz/ton)	SILVER (oz/ton)	LEAD (ppm)	MOLY (ppm)	ZINC (ppm)	ANTIMONY (ppm)	ARSENIC (ppm)
0.00	8.50	D.B.	8.50									
8.50	9.20	N.A.	0.70									
9.20	9.70	98039	0.50	2	1.00			1	78			
9.70	10.30	98040	0.60	2	0.80			1	55			
10.30	14.00	98041	3.70	5	1.00			1	100			
14.00	40.60	N.A.	26.60									
40.60	41.00	98042	0.40	5	1.40			7	62			
41.00	41.40	98043	0.40	10	0.20			3	8			
41.40	41.90	98044	0.50	15	1.50			3	80			
41.90	47.20	N.A.	5.30									
47.20	47.90	98045	0.70	5	0.90			3	105			
47.90	48.50	98046	0.60	215	8.00			2500	24			
48.50	49.10	98047	0.60	55	3.30			218	120			
49.10	56.20	N.A.	7.10									
56.20	57.00	98048	0.80	40	1.00			22	46			
57.00	58.00	98049	1.00	4050	14.00	0.19	0.38	3800	11			
58.00	58.70	98050	0.70	40	0.90			62	120			
58.70	83.20	N.A.	24.50									
83.20	83.90	98051	0.70	30	2.00			33	270			
83.90	84.30	98052	0.40	85	0.70			13	7			
84.30	85.00	98053	0.70	2	1.00			7	420			
85.00	89.50	N.A.	4.50									
89.50	90.50	98054	1.00	2	0.50			2	66			
90.50	90.80	98055	0.30	10	0.80			4	13			
90.80	91.60	98056	0.80	5	1.00			3	115			
91.60	103.80	N.A.	12.20									
103.80	104.00	98097	0.20	228	8.40			49	7			
104.00	115.90	N.A.	11.90									
115.90	116.60	98057	0.70	70	1.30			2	60			
116.60	117.60	98058	1.00	40	5.30			80	45			
117.60	118.50	98059	0.90	35	1.90			4	30			
118.50	125.30	N.A.	6.80									
125.30	126.50	98060	1.20	10	1.30			5	120			
126.50	128.20	N.A.	1.70									
128.20	129.30	98061	1.10	10	0.80			9	80			
129.30	129.50	98062	0.20	375	13.50		0.42	217	24			
129.50	129.80	98063	0.30	55	4.20			26	55			
129.80	130.00	98064	0.20	120	6.70			56	12			
130.00	130.30	98065	0.30	5	1.50			10	12			
130.30	138.50	N.A.	8.20									
138.50	138.90	98066	0.40	50	1.80			12	37			
138.90	139.90	98067	1.00	380	10.50		0.28	120	28			
139.90	140.40	98068	0.50	265	2.00			2	44			
140.40	145.20	N.A.	4.80									
145.20	145.30	98098	0.10	55	6.00			40	100			
145.30	145.80	N.A.	0.50									
145.80	146.00	98099	0.20	1320	2.20	0.01	0.03	9	19			
146.00	163.20	N.A.	17.20									
163.20	164.60	98069	1.40	175	19.00		0.70	710	130			
164.60	165.60	98070	1.00	145	6.10			93	50			
165.60	166.90	N.A.	1.30									
166.90	167.90	98071	1.00	90	2.30			50	95			
167.90	192.00	N.A.	24.10									
192.00	192.70	98072	0.70	50	11.00		0.24	450	78			
192.70	224.10	N.A.	31.40									
224.10	225.00	98073	0.90	60	0.60			12	20			
225.00	228.00	N.A.	3.00									
228.00	228.90	98074	0.90	82	2.20			14	260			
228.90	229.30	98075	0.40	310	93.00		2.84	2350	1			
229.30	230.30	98076	1.00	20	7.10			70	51			

229.30	230.30	98076	1.00	20	7.10	70	51
230.30	235.80	N.A.	5.50				
235.80	236.00	98077	0.20	55	1.70	29	62
236.00	244.10	N.A.	8.10				
244.10	244.30	98078	0.20	235	9.00	105	200
244.30	246.50	N.A.	2.20				
246.50	248.30	98079	1.80	7	0.50	12	1
248.30	251.70	98080	3.40	10	0.60	20	410
251.70	252.50	98081	0.80	45	5.40	230	100
252.50	253.60	98082	1.10	0	0.80	41	2
253.60	339.00	N.A.	85.40				

ASSAY SUMMARY

FROM	TO	WIDTH (feet)	GOLD oz/ton	SILVER oz/ton
57.00	58.00	1.00	0.19	0.38
228.90	229.30	0.40	(0.01)	2.84

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Project: HATCH

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Drill Hole No.: HAT-3  
Co-ordinates: 87+25E  
42+35S  
Collar Elev.: 3934 ft.  
Azimuth: 111 true  
Angle: -50  
Hole Depth: 298.0 ft.

Claim No.: Patch 7  
Core Size: NQ  
Date Started: Jun 04/84  
Completed: Jun 06/84  
Logged by: D. Downing  
Section:  
% Recovery:

HOLE SURVEYS (corrected)  
depth direction dip  
298' -53.0

( ) - approximate  
N.A.- not assayed  
gold values >10000 ppb shown as 10000  
silver values >100.0 ppm shown as 100.0

FROM	TO	SAMPLE No.	WIDTH (feet)	GOLD (ppb)	SILVER (ppm)	GOLD (oz/ton)	SILVER (oz/ton)	LEAD (ppm)	MOLY (ppm)	ZINC (ppm)	ANTIMONY (ppm)	ARSENIC (ppm)
0.00	7.00	O.B.	7.00									
7.00	44.20	N.A.	37.20									
44.20	44.80	98101	0.60	40	0.60			41	11			
44.80	51.60	N.A.	6.80									
51.60	52.00	98102	0.40	210	3.80			23	220			
52.00	52.60	98103	0.60	10000	25.00			4400	11			
52.60	53.10	98104	0.50	155	1.80			47	120			
53.10	88.80	N.A.	35.70									
88.80	90.70	98105	1.90	130	1.20			34	36			
90.70	100.00	N.A.	9.30									
100.00	101.60	98106	1.60	475	3.60			58	430			
101.60	102.20	N.A.	0.60									
102.20	104.70	98107	2.50	95	3.20			19	43			
104.70	106.10	N.A.	1.40									
106.10	106.40	98108	0.30	560	4.50			63	5			
106.40	109.00	N.A.	2.60									
109.00	109.30	98109	0.30	45	1.30			14	150			
109.30	110.40	N.A.	1.10									
110.40	110.60	98110	0.20	55	2.80			23	10			
110.60	116.90	N.A.	6.30									
116.90	117.10	98111	0.20	1170	4.60			13	90			
117.10	126.00	N.A.	8.90									
126.00	126.50	98112	0.50	10	0.80			1	87			
126.50	126.80	N.A.	0.30									
126.80	127.50	98113	0.70	2	0.80			7	125			
127.50	170.50	N.A.	43.00									
170.50	176.50	98114	6.00	25	2.30			93	81			
176.50	211.00	N.A.	34.50									
211.00	211.80	98115	0.80	90	2.20			41	180			
211.80	227.20	N.A.	15.40									
227.20	227.70	98116	0.50	25	1.20			10	6			
227.70	244.20	N.A.	16.50									
244.20	244.50	98117	0.30	5	1.10			24	65			
244.50	247.00	N.A.	2.50									
247.00	248.00	98118	1.00	8	8.60			155	17			
248.00	298.00	N.A.	50.00									

ASSAY SUMMARY

FROM	TO	WIDTH (feet)	GOLD oz/ton	SILVER oz/ton
52.00	52.60	0.60		

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED  
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Drill Hole No.: HAT-4  
Co-ordinates: 83+60E  
39+50S  
Collar Elev.: 3939 ft.  
Azimuth: 077 true  
Angle: -50  
Hole Depth: 257.5 ft.

Claim No.: Hatch 13  
Core Size: NQ  
Date Started: Jun 08/84  
Completed: Jun 09/84  
Logged by: D. Downing  
Section:  
% Recovery:

HOLE SURVEYS (corrected)  
depth direction dip

( ) - approximate  
N.A. - not assayed  
gold values >10000 ppb shown as 10000  
silver values >100.0 ppm shown as 100.0

FROM	TO	SAMPLE No.	WIDTH (feet)	GOLD (ppb)	SILVER (ppm)	GOLD (oz/ton)	SILVER (oz/ton)	LEAD (ppm)	MOLY (ppm)	ZINC (ppm)	ANTIMONY (ppm)	ARSENIC (ppm)
0.00	5.00	D.B.	5.00									
5.00	13.20	N.A.	8.20									
13.20	13.90	98119	0.70	40	0.30			23	46			
13.90	15.70	N.A.	1.80									
15.70	16.60	98120	0.90	60	0.10			2	175			
16.60	19.50	N.A.	2.90									
19.50	21.40	98121	1.90	5	0.10			23	220			
21.40	25.00	N.A.	3.60									
25.00	25.80	98123	0.80	5	0.10			5	54			
25.80	32.50	N.A.	6.70									
32.50	32.90	98122	0.40	10	3.90			305	380			
32.90	57.70	N.A.	24.80									
57.70	61.40	98124	3.70	5	2.20			83	45			
61.40	63.00	N.A.	1.60									
63.00	63.10	98125	0.10	5	1.30			58	100			
63.10	81.60	N.A.	18.50									
81.60	82.00	98126	0.40	20	5.70			810	77			
82.00	257.50	N.A.	175.50									

ASSAY SUMMARY

FROM	TO	WIDTH (feet)	GOLD (oz/ton)	SILVER (oz/ton)
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no significant values

Project: HATCH

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Drill Hole No.: HAT-5  
Co-ordinates: 72+20E  
35+55S  
Collar Elev.: 3926'  
Azimuth: 057 true  
Angle: -50  
Hole Depth: 319.0 ft.

Claim No.: Hatch 13  
Core Size: NQ to 2, BQ  
Date Started: Jun 10/84  
Completed: Jun 13/84  
Logged by: G. Bidwell  
Section:  
% Recovery:

HOLE SURVEYS (corrected)  
depth direction dip  
245' -45.0

( ) - approximate  
N.A. - not assayed  
gold values >10000 ppb shown as 10000  
silver values >100.0 ppm shown as 100.0

FROM	TO	SAMPLE No.	WIDTH (feet)	GOLD (ppb)	SILVER (ppm)	GOLD (oz/ton)	SILVER (oz/ton)	LEAD (ppm)	MOLY (ppm)	ZINC (ppm)	ANTIMONY (ppm)	ARSENIC (ppm)
0.00	62.00	D.B.	62.00									
62.00	94.50	N.A.	32.50									
94.50	96.50	98158	2.00	70				120				
96.50	113.00	N.A.	16.50									
113.00	113.80	98159	0.80	2								
113.80	117.00	98160	3.20	50								
117.00	117.30	98161	0.30	180								
117.30	128.00	N.A.	10.70									
128.00	128.40	98162	0.40	405								
128.40	131.50	N.A.	3.10									
131.50	135.00	98163	3.50	350				16	230			
135.00	143.00	N.A.	8.00									
143.00	145.50	98164	2.50	2								
145.50	199.60	N.A.	54.10									
199.60	199.90	98165	0.30	10								
199.90	207.10	N.A.	7.20									
207.10	208.00	98166	0.90	980				1630	240			
208.00	218.20	N.A.	10.20									
218.20	219.20	98167	1.00	65				282	100			
219.20	269.50	N.A.	50.30									
269.50	270.50	98168	1.00	25								
270.50	319.00	N.A.	48.50									

FROM	TO	WIDTH (feet)	GOLD (oz/ton)	SILVER (oz/ton)
no significant values				

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Drill Hole No.: HAT-6  
Co-ordinates: 86+10E  
42+23S  
Collar Elev.: 4000'  
Azimuth: 066 true  
Angle: -50  
Hole Depth: 393.0 ft.

Claim No.: Hatch 13  
Core Size: NQ  
Date Started: Jun 15/84  
Completed: Jun 17/84  
Logged by: G. Bidwell  
Section:  
% Recovery:

HOLE SURVEYS (corrected)  
depth direction dip  
250' -56.0

( ) - approximate  
N.A. - not assayed  
gold values >10000 ppb shown as 10000  
silver values >100.0 ppm shown as 100.0

FROM	TO	SAMPLE No.	WIDTH (feet)	GOLD (ppb)	SILVER (ppm)	GOLD (oz/ton)	SILVER (oz/ton)	LEAD (ppm)	MOLY (ppm)	ZINC (ppm)	ANTIMONY (ppm)	COPPER (ppm)
0.00	12.00	O.B.	12.00									
12.00	31.00	N.A.	19.00									
31.00	31.25	98169	0.25	30				23	90			
31.25	74.60	N.A.	43.35									
74.60	76.10	98170	1.50	30								
76.10	76.60	98171	0.50	50								
76.60	76.90	98172	0.30	290				410	34			
76.90	79.50	N.A.	2.60									
79.50	80.40	98173	0.90	40								
80.40	85.30	N.A.	4.90									
85.30	85.80	98174	0.50	65								
85.80	91.70	N.A.	5.90									
91.70	91.80	98175	0.10	20								
91.80	109.60	N.A.	17.80									
109.60	109.90	98176	0.30	450								
109.90	116.40	N.A.	6.50									
116.40	116.60	98177	0.20	295								
116.60	119.00	N.A.	2.40									
119.00	119.10	98178	0.10	115								
119.10	120.70	98179	1.60	40								
120.70	121.40	98180	0.70	10000	19.50	0.40	0.16	5830	2	10000		133
121.40	123.00	98181	1.60	35								
123.00	127.20	N.A.	4.20									
127.20	127.60	98182	0.40	30								
127.60	128.90	N.A.	1.30									
128.90	129.70	98183	0.80	20								
129.70	148.30	N.A.	18.60									
148.30	148.50	98184	0.20	35								
148.50	153.20	N.A.	4.70									
153.20	153.60	98185	0.40	440								
153.60	163.00	N.A.	9.40									
163.00	163.50	98186	0.50	995								
163.50	164.00	98187	0.50	30								
164.00	164.40	98188	0.40	100				88	10			
164.40	174.20	N.A.	9.80									
174.20	174.70	98189	0.50	225								
174.70	189.00	N.A.	14.30									
189.00	189.60	98190	0.60	50								
189.60	207.50	N.A.	17.90									
207.50	208.00	98191	0.50	360								
208.00	213.50	N.A.	5.50									
213.50	215.10	98192	1.60	85	46.00		0.92	450	18	42		670
215.10	329.90	N.A.	114.80									
329.90	330.90	98193	1.00	85				195	6	1050		
330.90	338.60	N.A.	7.70									
338.60	338.80	98194	0.20	4670		0.12		2700	103	10000		
338.80	393.00	N.A.	54.20									

ASSAY SUMMARY

FROM	TO	WIDTH (feet)	GOLD oz/ton	SILVER oz/ton
120.70	121.40	0.70	0.40	0.16
213.50	215.10	1.60	-	0.92
338.60	338.80	0.20	0.12	-

## APPENDIX C

### REVIEW OF EXPENDITURES

The following invoices cover diamond drill holes #1 to #6 totalling 1985 feet. The total expenditures were sufficient to support the years of assessment applied to the groupings as shown on the claim maps.



# ARCTIC DIAMOND DRILLING LTD.

184 Industrial Road, Whitehorse, Yukon Y1A 2V1 (403) 667-6434

INVOICE # 2305

June 8, 1984

Hudson Bay Exploration & Development  
100 - 10 Burns Road  
Whitehorse Y.T.  
Y1A 4Y9

Drilling charges for the period May 28 - 31, 1984

Mobilization

Labour charge moving in and setting up on Hole #1  
✓ 104 Man hours @ 29.50 per man hour 3068.00

Hole #84-1 -50'xNQ

Overburden  
✓ 10 - 10' = 10' @ 17.50 per ft. 175.00

Core Drilling  
✓ 10' - 265' = 255' @ 17.50 per ft. 4462.50

Reaming Casing  
✓ 10' - 22' = 12' @ 13.00 per ft. 156.00

✓ Reaming Cave  
✓ 2 Man hours @ 29.50 per hr. 59.00

✓ 1 Machine hr. @ 12.00 per hr. 12.00

Water Supply  
✓ 16 Man hours @ 29.00 per hr. 472.00 5336.50

Equipment To Be Charged

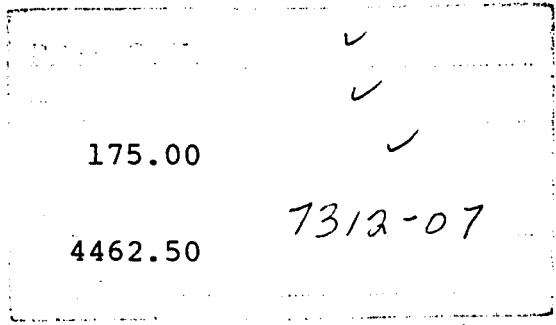
✓ 2 - 100# Tanks Propane @ 40.20 81.40

✓ 2 Bags calcium chloride @ 42.40 84.80

166.20

Plus 10% 16.62 182.82

Total 8587.32



7312-07



# ARCTIC DIAMOND DRILLING LTD.

184 Industrial Road, Whitehorse, Yukon Y1A 2V1 (403) 667-6434

INVOICE # 2306

June 19, 1984

Hudson Bay Exploration & Development Corp.,  
100 - 10 Burns Road,  
Whitehorse Y.T.,  
Y1A 4Y9

Drilling charges for the period June 1 - 18, 1984.

Hole #84-01-50°xNQ

Core Drilling

✓ 265' - 378' = 113' @ 17.50 per ft. 1977.50

Testing

✓ 3 Man Hours @ 29.50 per hr. 88.50

✓ 1.5 Machine Hrs. @ \$12.00 per hr. 18.00

Water Supply

✓ 2 Man hours @ 29.50 per hr. 59.00 2143.00

Hole #84-02 ← 72°xNQ

Moving

✓ 4 Man Hours @ 29.50 per hr. 118.00

Overburden

✓ 0-11=11' @ 17.50 per ft. 192.50

Reaming Casing

✓ 11-15=4' @ 13.00 per ft. 52.00

Core Drilling

✓ 11 - 339 = 328' @ 17.50 per ft. 5740.00

Testing

✓ 2 Man hours @ 29.50 per hr. 59.00

✓ 1 Machine hr @ 12.00 per hr. 12.00 6173.50

c/fwd..... 8316.50

b/fwd..... 8316.50

Hole #84-03 -50°xNQ

Moving

✓ 52 Man hours @ 29.50 per hr. 1534.00

Overburden

✓ 0-10=10' @ 17.50 per ft. 175.00

Reaming Casing

✓ 10-23=13' @ 13.00 per ft. 169.00

Core Drilling

✓ 10'-295'=285' @ 17.50 per ft. 4987.50

Testing

✓ 2 Man hours @ 29.50 per hr. 59.00

✓ 1 Machine hr @ 12.00 per hr. 12.00

Water Supply

✓ 1 Man hour @ 29.50 per hr. 29.50

Standby

✓ 6 Man hours @ 25.00 per hr. 150.00 7116.00

Hole # 84-04 -50°xNQ

Standby Time

✓ 8 Man hours @ 25.00 per hr. 200.00

Moving

✓ 68 Man hours @ 29.50 per hr. 2006.00

Overburden

✓ 0 - 5 =5' @ 17.50 per ft. 87.50

Reaming Casing

✓ 5'-10'=5' @ 13.00 per ft. 65.00

Core Drilling

✓ 5'-258'=253' @ 17.50 per ft. 4427.50

Testing

✓ 2 Man hours @ 29.50 per hr. 59.00

✓ 1 Machine hr. @ 12.00 per hr. 12.00 6857.00

c/fwd..... 22289.50

Hole #84-05 -50'xNW + BQ

Standby Time

✓ 16 Man hours @ 25.00 per hr. 400.00

Moving

✓ 60 Man hours @ 29.50 per hour. 1770.00

Overburden

✓ 0 -70'=70' @17.50 per ft. 1225.00

Reaming Casing

✓ 70 - 80= 10' @ 13.00 per ft. 130.00

Core Drilling

✓ 70'-319'=249' @17.50 per ft. 4357.50

Testing

✓ 2 Man hours @ 29.50 per hr 59.00

✓ 1 Machine hr @ 12.00 per hr. 12.00

7953.50

Hole #84-06 -50'xNQ

Standby

✓ 32 Man hours @ 25.00 per hour 800.00

Moving

✓ 52 Man hours @ 29.50 per hour 1534.00

Overburden

✓ 0-8=8' @ 17.50 per ft. 140.00

Reaming Casing

✓ 8-14=6' @ 13.00 per ft. 78.00

Core Drilling

✓ 8-393=385' @ 17.50 per ft. 6737.50

Water Supply

✓ 3 Man hours @ 29.50 per hr. 88.50

9378.00

Demobilizing

Tearing Down & Storing Equipment

38 Man hours @ 29.50 per hr. 1121.00

Travelling Time

✓ 5 Man hours @ \$25.00 per hr. 125.00

1246.00

b/fwd.....-..... 40867.00

Supplies Chargeable

10 Bags Quik-Qel @ 15.50	155.00	
1 Box Quik-Trol @ 100.32	<u>100.32</u>	255.32
		<hr/>
	Total Amount Due	41122.32

Prices O. K. ....
Ext. O. K. ....
Quantity Checked .....
Charge # No. <u>7312-07</u> .....
Approved .....

*July 5/84*

APPENDIX D

QUALIFICATIONS OF SUPERVISION

DAVID A DOWNING

ADDRESS: 83 Tamarack Dr.,  
Whitehorse, Y. T.

EDUCATION: B. Sc. (Eng.) in geological engineering - Queen's University  
at Kingston, graduated in 1978.

EMPLOYMENT: 1979 - 1980 - Hudson Bay Exploration and Development Company  
Limited. Field geologist - base metal exploration, Yukon.

1980 - 1981 - CDCOG Limited. Geological engineer - oil field  
exploration and development, Alberta.

1981 - 1982 - Hudson Bay Exploration and Development Company  
Limited. Project geologist - tungsten exploration, Yukon.

1983 - Monopros Limited. Project geologist - diamond  
exploration, Ontario.

1984 - Geokon Resources, Consulting geologist - precious metal  
exploration, Yukon and N. W. T.

GERALD E. BIDWELL

ADDRESS: 62 Klondike Road,  
Whitehorse, Y. T.

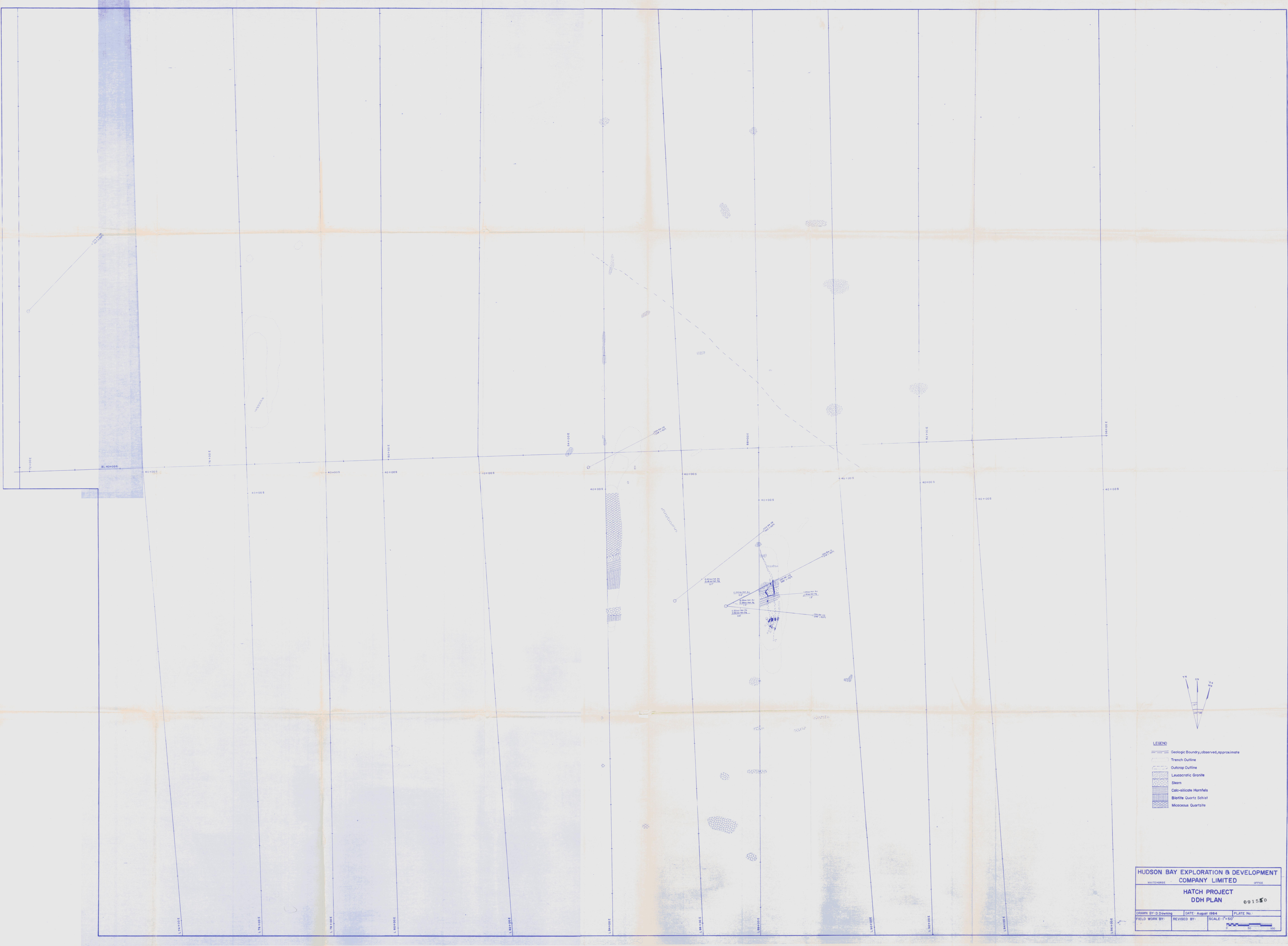
EDUCATION: B. A. in geology - Universith of Saskatchewan, graduated  
in 1967.

EMPLOYMENT: 1967 - 1984 - Hudson Bay Exploration and Development Company  
Limited.

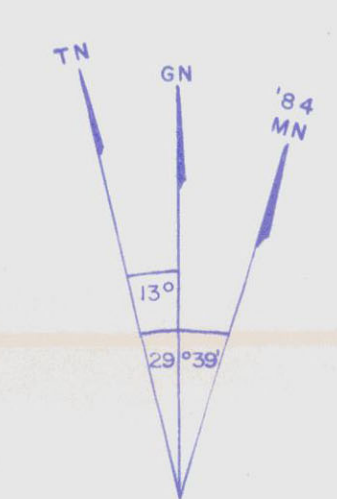
1967 - 1970 - mine geological work and surface exploration,  
geological mapping Snow Lake area, Manitoba.

1970 - 1976 - Supervisor of exploration programs in British  
Columbia and Yukon Territory

1976 - 1984 - Manager, Northwest District, Hudson Bay Exploration  
and Development Company Limited



- LEGEND**
- Geologic Boundary, observed, approximate
  - Trench Outline
  - Outcrop Outline
  - Leucocratic Granite
  - Skarn
  - Calc-silicate Hornfels
  - Biotite Quartz Schist
  - Miocene Quartzite



HUDSON BAY EXPLORATION & DEVELOPMENT  
 COMPANY LIMITED  
 HATCH PROJECT  
 DDH PLAN 00150

DRAWN BY: S. Dowling    DATE: August 1984    PLATE No:  
 FIELD WORK BY:    REVISED BY:    SCALE: 1"=50'  
 0 50 100