

180-#48-#7848

1979 Assessment Report
Diamond Drilling

TITLE DUNCAN RIVER PROPERTY
CLAIMS Fox 1-8, Scot 1-8, Moly 1, Duncan 1-4
COMMODITY Mo,W

LOCATION 125 km north of Kaslo, B.C. at the
junction of Duncan River and Stevens
Creek
Latitude 50°^{46'}45'N Longitude 117°10'W ✓
Slocan Mining Division 82K 14E ✓

BY B.W. Kyba

FOR AMAX OF CANADA LIMITED

WORK PERIOD September 27 - November 3, 1979

AMAX VANCOUVER OFFICE

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. **7848**

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SUMMARY

This assessment report presents results of drill hole DR-79-1 on the Duncan River property, drilled by AMAX between September 27 and November 3, 1979.

The property is located approximately 125 km north of Kaslo, B.C. at the junction of Duncan River and Stevens Creek. The property consists of Fox 1-8, Scot 1-8, Moly 1 (4 units), and Duncan 1-4 (50 units) claims staked in 1978. The property was optioned from Sherlynn Mines Limited by AMAX in the spring of 1979.

Diamond drill hole DR-79-1, driven to a depth of 435 m (1427') encountered biotite schist, quartzite, hornfels and skarn and dykes of leucocratic quartz monzonite. Weak molybdenite mineralization was intersected along with trace amounts of scheelite and sphalerite.

A field cost of \$54,364.60 was applied as assessment to Group #1 (Duncan 1, 2, 4 and Fox 1-4 claims) for a period of six years.

INTRODUCTION

Location and Access

The Duncan River property is located approximately 125 km north of Kaslo, B.C. (Figure 1). The property covers the valley of Duncan River and Stevens Creek.

Access to the property is gained by taking Highway 31 north from Kaslo to Cooper Creek (40 km) and then following the Duncan River logging road to the property (85 km).

The drill camp was established on the Duncan River opposite the mouth of Stevens Creek.

Claims

The property consists of 21 claims: Fox 1-8, Scot 1-8, Moly 1 and Duncan 1-4 (Figure 2). The claims are held by AMAX under option from Sherlynn Mines through an option agreement dated May 9, 1979.

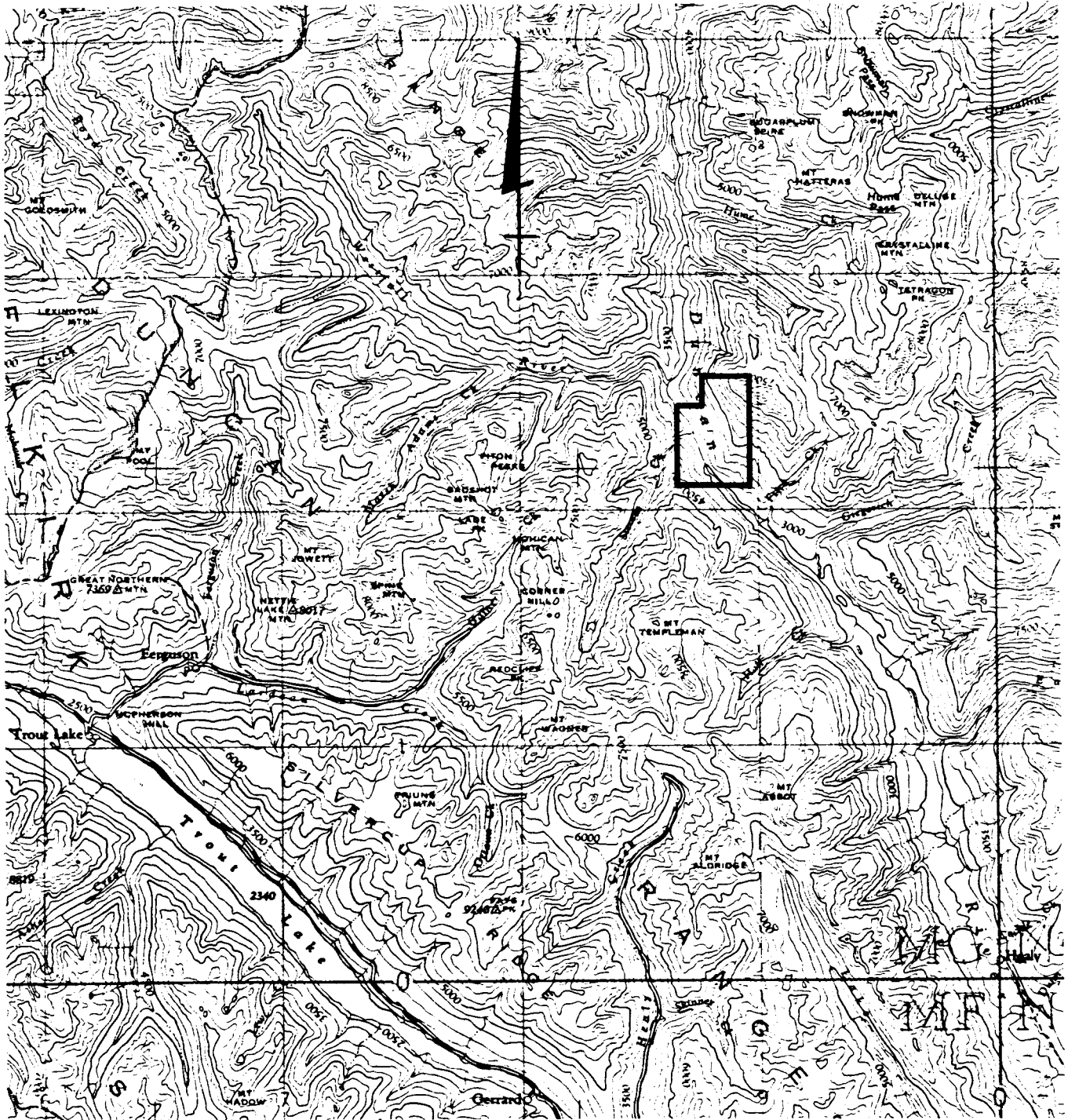
Pertinent claims data are as follows:

			<u>Recording Date</u>	<u>Expiry Date</u> *
Duncan	1	(14 units)	May 10/78	May 10/82
	2	(14 units)	May 10/78	May 10/82
	3	(14 units)	Nov. 21/78	Nov. 21/81
	4	(8 units)	Nov. 21/78	Nov. 21/82
Fox	1-4	(2 post claims)	Apr. 12/78	Apr. 12/82
	5-6	(2 post claims)	Apr. 12/78	Apr. 12/83
	7-8	(2 post claims)	Apr. 12/78	Apr. 12/82
Scot	1-8	(2 post claims)	Apr. 12/78	May 12/82
Moly	1	(4 units)	May 29/78	May 29/82

Cost of a topographic map prepared for the property in May, 1979 was submitted towards assessment on the Moly claims in May, 1979.

A geology, geochemistry and geophysics assessment report was submitted to cover all the claims in November, 1979.

* Prior to application of assessment work described in this report



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DUNCAN RIVER PROPERTY
 SLOCAN MINING DIVISION - BRITISH COLUMBIA

LOCATION MAP

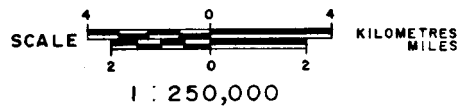
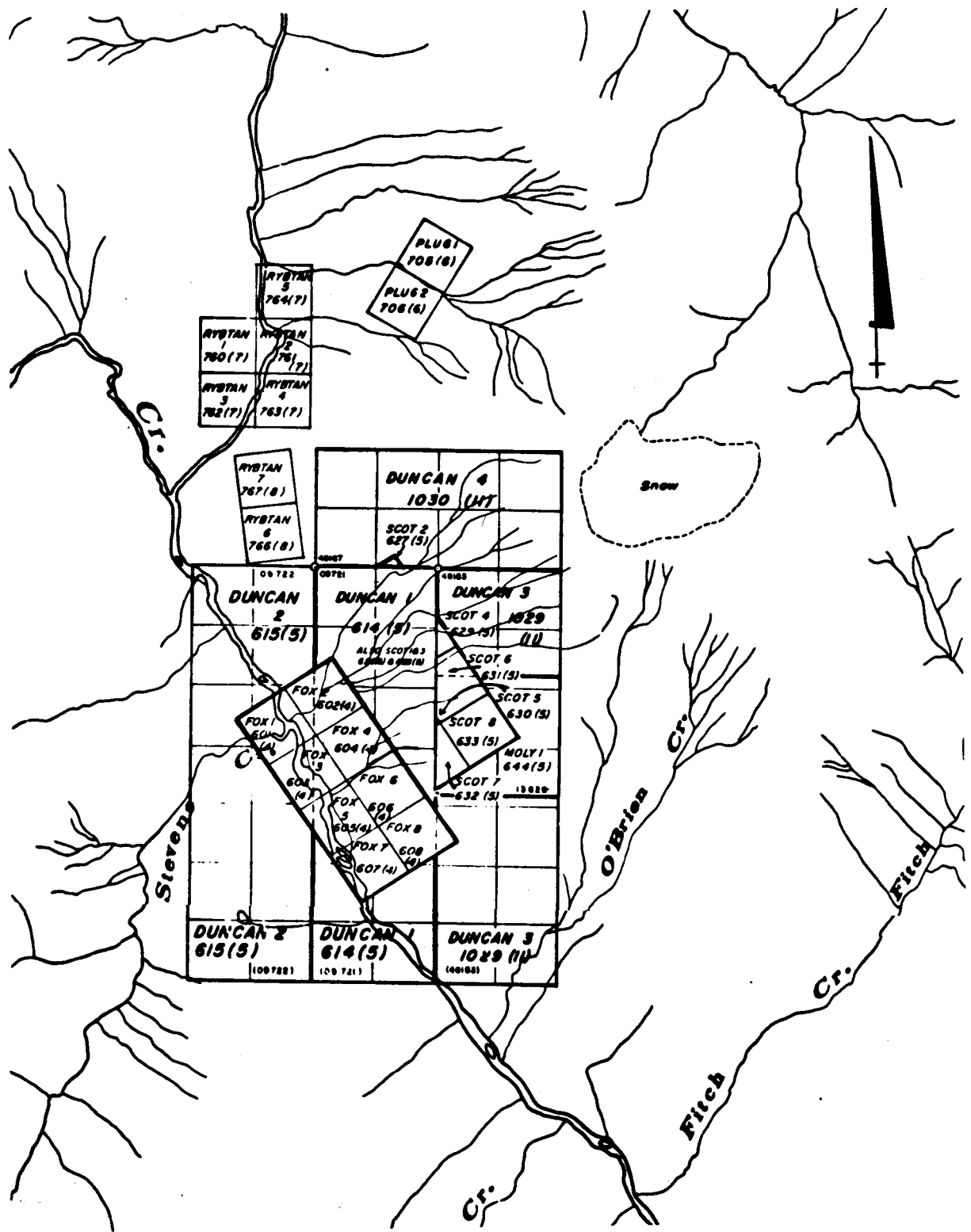


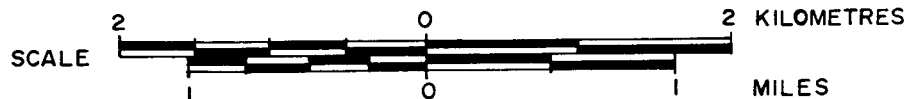
FIG. 1
 N. T. S. Ref. 82 K 11 and 14



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DUNCAN RIVER PROPERTY
SLOCAN MINING DIVISION - BRITISH COLUMBIA

LOCATION MAP



1: 50,000

FIG. 2
N.T.S. Ref. B2K11 and 14

Physiography

The property covers the valley and adjacent slopes of Duncan River. Elevations range from 766 m on the river to 1800 m on surrounding ridges. Topography is rugged, typical of northern Purcell Mountains.

Virgin stands of cedar, fir and hemlock on the property are currently being logged by Kootenay Forest Products.

Outcrop on the property is abundant except in Duncan River valley where a 250 m wide zone of glaciofluvial sand and gravel is present.

1979 DRILLING

General Statement

One NQ (1-7/8" diameter) diamond drill hole was driven to a depth of 434.9 m (1427') during the period September 27 to November 3, 1979. The drill hole was collared on the banks of Duncan River opposite the mouth of Stevens Creek at an elevation of 766 m (Figure 3). It was set at an inclination of -45° on a bearing of 195° azimuth. Contractor for the job was Connors Drilling of Vancouver, B.C. using a Longyear Super 38 drill.

Core recovery averaged 98% over the entire hole. All core was logged and split in 4 metre intervals. Splits were geochemically analyzed for Mo, Zn, W and F by Rossbacher Laboratory, Burnaby, B.C. The core was stacked on the property.

Results

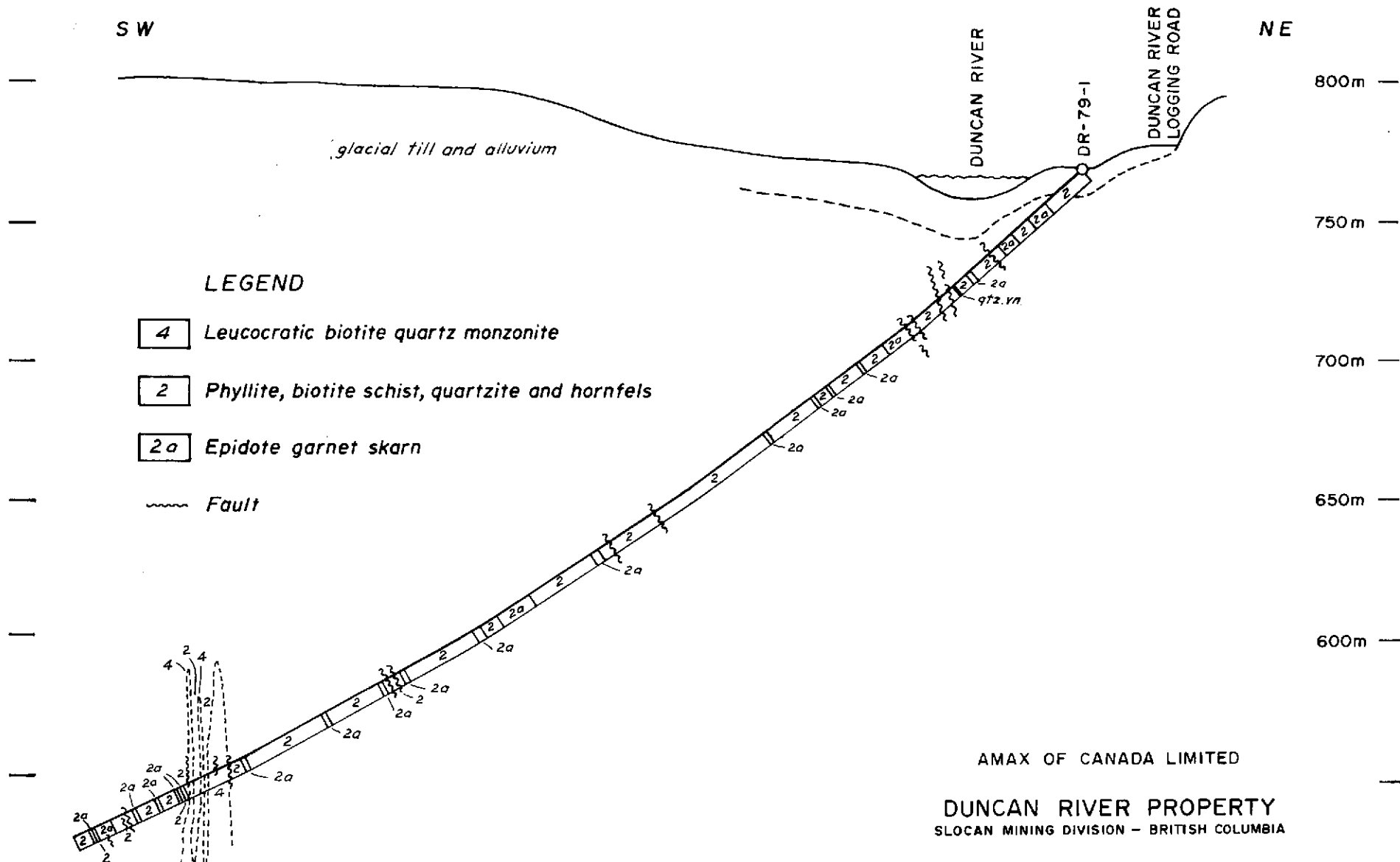
Predominant lithology is a brown biotite schist inter-banded with narrow pale green quartzite units.

Hornfels occurs as pale green-brown patches and bands throughout the length of the hole and constitutes approximately 20% of the core.

Epidote-garnet skarn occurs as distinct bands up to 15 m wide throughout the length of the hole and constitutes approximately 15% of the core.

In the interval 375 to 390 m three dykes of leucocratic quartz monzonite totalling 6 m in width were intersected.

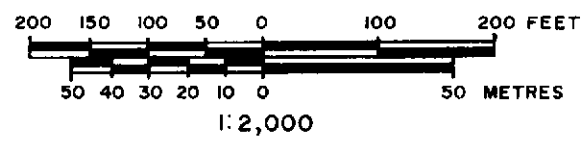
Quartz vein density averages 3 veins per metre except in the interval 260 to 320 m where the average vein density increases to 7 per metre. Quartz veins range in width from 2 mm to 1 m with an average width of 3 cm.



LEGEND

- 4 Leucocratic biotite quartz monzonite
- 2 Phyllite, biotite schist, quartzite and hornfels
- 2a Epidote garnet skarn
- ~~~~~ Fault

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 DUNCAN RIVER PROPERTY
 SLOCAN MINING DIVISION - BRITISH COLUMBIA
 DRILL SECTION DR-79-1
 LOOKING NORTH WEST



N.T.S. Ref. 82K 11 and 14

Fig. 4

Molybdenite occurs as scattered rosettes and stringers in approximately 10% of the quartz veins and in trace amounts disseminated in skarn and quartz monzonite dykes. The best mineralization correlates with the increase in quartz vein density between 260 to 320 m. This 60 m section averages 0.07% MoS₂.

Pyrite and pyrrhotite both average less than 2% throughout the length of the core.

Scattered grains of scheelite occur along dry fractures in the hornfels and in quartz-pyrite veins but overall occurs only in trace amounts.

Sphalerite occurs in trace amounts in quartz-pyrite veins.

No significant intersections of molybdenum or tungsten mineralization were encountered and no increase in grades was seen with increasing depth. Sample numbers and results are entered in the drill log (Appendix II).


B.W. Kyba

DUNCAN RIVER

APPENDIX I

-

STATEMENT OF COSTS

<u>Summary of Work</u>	Diamond Drilling	
<u>Period of Work</u>	September 27 - November 3, 1979	
<u>Personnel</u>		
B.W. Kyba, Geologist, 601-535 Thurlow Street, Vancouver, B.C. October 10 - November 3, 1979	25 days @ \$110.11	\$2,752.75
A.C. Smallwood, 7580 Burris Street, Burnaby, B.C. October 10 - November 3, 1979	25 days @ \$ 39.46	986.50
<u>Drilling</u>		
Connors Drilling, 205-1201 West Pender Street, Vancouver Inv. #9782,9831,9891,9916 for 435 m NQ core		48,398.85
<u>Geochemical Analyses</u>		
Rosbacher Laboratory, Burnaby, B.C.		
110 samples for two elements	@ 1.75	192.50
110 samples for W analysis	@ 2.00	220.00
36 samples for F analysis	@ 2.75	99.00
110 rock preparation	@ 1.00	110.00
<u>Drill Site Preparation and Site Clean-up</u>		
Harold Command, Nakusp, B.C. 50 hours D6 and 3 days truck rental		1,605.00
	TOTAL	\$54,364.60
		=====

To be applied to Group #1 Duncan 1-2 and Fox 1-4 for six years
\$38,400.00. The \$15,964.60 to be added to AMAX of Canada Limited
PAC account.

APPENDIX II - DRILL LOG DR-79-1

AMAX MINERALS EXPLORATION

DUNCAN RIVER PROPERTY

DDH DR 79-1
SHEET 4 OF 14

DEPTH METRES	GRAPHIC LOG				% REC.	ASSAY INTERCEPTS	ASSAY DATA				VEINS				% MINERALS					NOTES	
	LITH.	BEDDING	FAULTS	MINERALS			SAMPLE NO. AND INTERVAL	Mo (ppm)	Sn (ppm)	W (ppm)	P (ppm)	Qtz	Py	Mo ₂	Co ₂						
78					5		60692	700	100	5	-										96.8-97.7 3 quartz-pyrite-molybdenite veins
80					5																100.5-105.9 hornfels
82					5		60694	10	200	18	-										102.4 scheelite in quartz vein
84					5																105.9-106.8 epidote garnet skarn
86					5		60698	8	120	20	660										sphalerite and scheelite on fractures
88					5																106.8-108 biotite schist
90					5		60698	2	208	40	-										108-110.2 hornfels
92					5																108.5-109 - 2 crosscutting quartz-pyrite-sphalerite veins
94					5		60700	10	84	20	-										110.2-113.2 biotite schist
96					5																113.2-114.1 hornfels
98					5		60701	6	108	0	850										114.1-118.7 biotite schist
100					5																118.7-120 hornfels
102					5																120-120.8 epidote garnet skarn
104					5		60702	6	68	20	-										trace scheelite
106					5																120.8-122.2 pyritic schist
108					5		60703	2	46	70	-										122.2-127.1 hornfels
110					5																127.1-127.9 epidote garnet skarn
112					5																127.9-144.4 hornfels

AMAX MINERALS EXPLORATION

DUNCAN RIVER PROPERTY

DDH DR 79-1
SHEET 11 OF 14

DEPTH METRES	GRAPHIC LOG				% REC	ASSAY INTERCEPTS	ASSAY DATA				VEINS						% MINERALS				NOTES		
	LITH.	MEDIONS	FAULTS	UNITS			SAMPLE NO AND INTERVAL	Mo (ppm)	Sn (ppm)	W (ppm)	F (ppm)	Qtz	Qtz Py	Qtz MoS ₂	Py	MoS ₂	Cerb			K-Feld		Biotite	Musc
322					95	60752	4																321.5 - 328.1 biotite schist
324					8	"																	323 two crosscutting quartz-sphalerite-sibirite veins
326					6	60753	4																324.6-326.7 hornfels
328					6	"																	327.7-328 quartz pyrite molybdenite vein
330					8	60754	12																328.1 - 330.4 hornfels
332					8	"																	330.4 - 335 biotite schist
334					8	60755	44																widely spaced quartz calcite molybdenite, sphalerite, pyrite veins
336					8	"																	335 - 336.7 epidote garnet skarn
338					8	60756	60																336.7 quartz-black amphibole-pyrite vein
340					8	"																	336.7 - 339.4 hornfels
342					8	60757	110																337.4-338.4 quartz vein
344					8	"																	339.4 - 339.5 hornfels
346					8	60758	58																339.5 - 342.1 biotite schist
348					8	"																	341 quartz-molybdenite vein
350					8	60759	250																342.1 - 348 biotite schist
					8	"																	348-350 quartz pyrite, pyrrothite, molybdenite vein in biotite schist
					8	"																	350 - 369.5 biotite schist

AMAX MINERALS EXPLORATION

DUNCAN RIVER PROPERTY

DDH DR 79-1
SHEET 13 OF 14

DEPTH METRES	GRAPHIC LOG				% REC.	ASSAY INTERCEPTS	ASSAY DATA				VEINS						% MINERALS				NOTES
	LITH.	BEDDING	FAULTS	MINERALS			SAMPLE NO. AND INTERVAL	Mo (ppm)	Sn (ppm)	W (ppm)	P (ppm)	Qtz	Qtz Py	Qtz MoS ₂	Py	MoS ₂	Corb	K-Feld	Biotite	Musc.	
385.5					(S)		60768	60		25											385.5 - 387 hornbls and skarn
387					(S)		"														387 - 388.8 biotite schist
388.8					(S)		60769	80													388.8 - 389.3 seriticized quartz monzonite
389.3					(S)		"														389.3 - 393.2 biotite schist
393.2					(S)		60770	60		135											393.2 - 393.8 epidote garnet skarn trace disseminated molybdenite
393.8					(S)		"														393.8 - 394.9 biotite schist
394.9					(S)		"														394.9 - 395.7 epidote garnet skarn
395.7					(S)		60772	42													395.7 - 400.1 biotite schist
400.1					(S)		"														400.1 - 402.4 hornbls (minor biotite schist)
403.4					(S)		60773	78		30											403.4 - 403.6 quartz molybdenite vein 403.6 - 404.4 epidote garnet skarn
404.4					(S)		"														404.4 - 408.4 biotite schist
408.4					(S)		60774	110		45											408.4 - 411.2 quartzite and hornbls 408.7 - 409.3 quartz pyrite molybdenite vein
411.2					(S)		"														411.2 - 413.4 garnet epidote skarn
413.4					(S)		60775	116		200											413.4 - 414.4 biotite schist
414.4					(S)		"														414.4 - 417.6 hornbls and skarn

AMAX MINERALS EXPLORATION

DUNCAN RIVER PROPERTY

DDH DR 79-1
SHEET 19 OF 19

DEPTH METRES	GRAPHIC LOG			% REC	ASSAY INTERCEPTS	ASSAY DATA				VEINS					% MINERALS				NOTES
	LITH.	FAULTS	REGIONS			SAMPLE NO AND INTERVAL	Mo (ppm)	Cu (ppm)	W (ppm)	F (ppm)	Oz Py	Oz MoS ₂	Py	MoS ₂	Carb	K-Feld	Biotite	Musc	
0-10				10		60776	750		210										417.6 - 418.2 biotite schist
10-20				10		60777	580		25										418.2 - 421.8 hornfels and schist 418.7 K feldspar vein
20-30				10		60778	80		225										419 - 419.4 quartz pyrite schaleite molybdenite vein
30-40				10		60779	20										5		
40-50				10		60780	60		165								1		421.8 - 422.6 garnet epidote skarn
50-60				10		60781	46		60								4		422.6 - 423.5 epidote garnet skarn
60-70				10		60782	100		5								5		423.5 - 426.8 garnet epidote skarn trace disseminated molybdenite
70-80				10		60783	8		0								5		426.8 - 427.3 hornfels
80-90				10		60784	30		60										427.3 - 428 garnet epidote skarn
90-100				10		60785	280		70										428 - 431.8 biotite schist
																			431.8 - 434.5 hornfels
																			434.5 - 434.9 quartz pyrite molybdenite vein

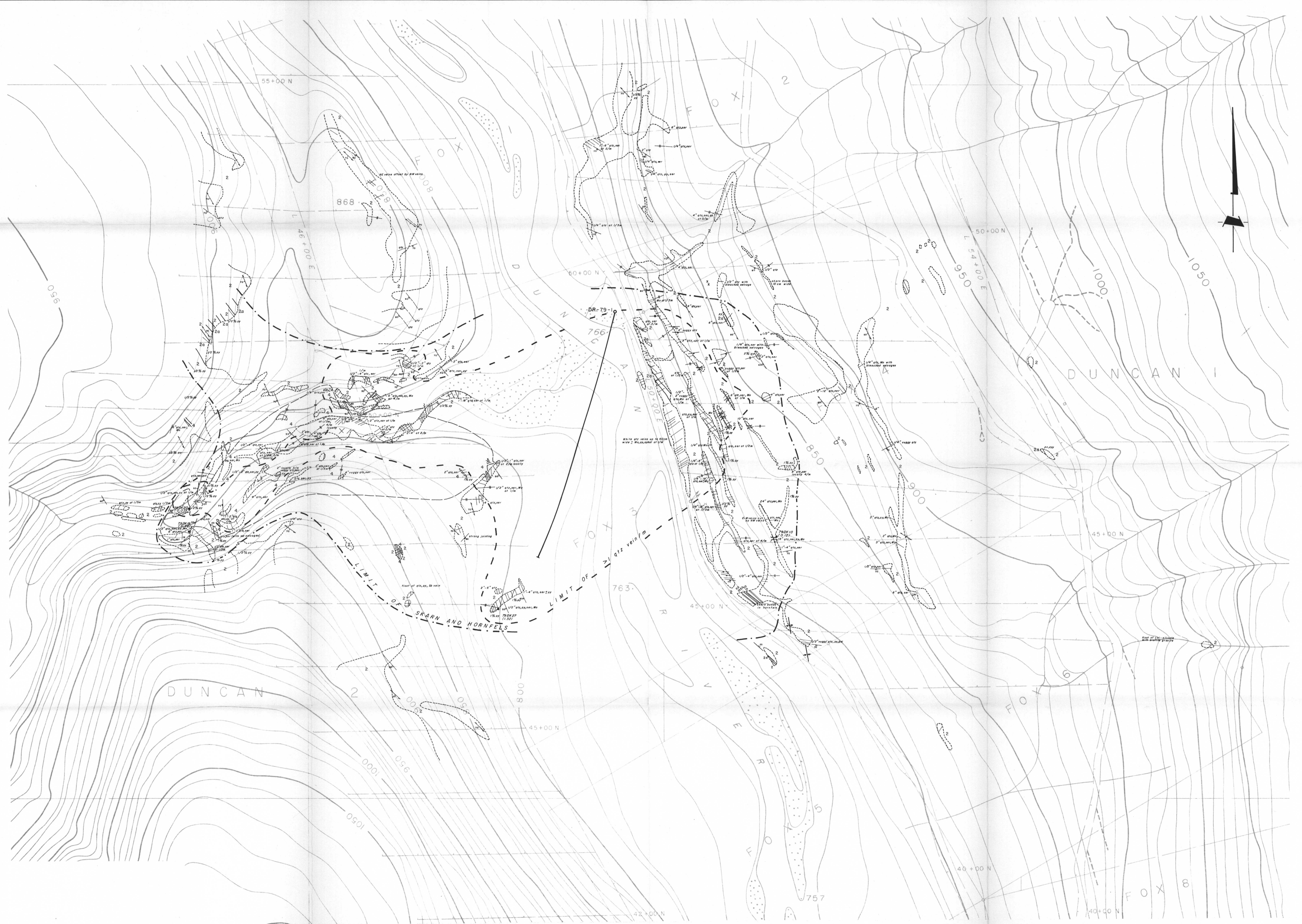
APPENDIX III

STATEMENT OF QUALIFICATIONS

NAME	B.W. Kyba
EDUCATION	Four year BSc in Geology University of Alberta
EXPERIENCE	Geologist, Brascan Resources - 1974 Geologist, Pechiney Development Ltd. - 1975-1976 Staff Geologist, AMAX Minerals Exploration, 1976 Present

STATEMENT OF QUALIFICATIONS

NAME	A.C. Smallwood
ADDRESS	7580 Burris Street Burnaby, B.C.
EDUCATION	3rd year standing at Simon Fraser University
EXPERIENCE	1977 Newmont Mining - Field Assistant 1978 AMAX Minerals - Field Assistant 1979 AMAX Minerals - Field Assistant



LEGEND

- MESOZOIC (?)**
- 4 Leucocratic biotite quartz monzonite.
 - 3 Foliated diorite.
- PROTEROZOIC TO PALEOZOIC**
- LOWER CAMBRIAN**
- MARSH ADAMS FORMATION**
- 2 Phyllite, biotite schist, quartzite and hornfels.
 - 2a Epidote garnet skarn.
- HADRYNIAN (?)**
- HORSETHIEF CREEK GROUP**
- 1 Limestone and calc-silicate.

- S Y M B O L S**
- Trench.
 - Outcrop boundary.
 - Geological contact (defined, approximate).
 - Fault, showing dip.
 - Bedding attitude.
 - Major fold axis (anticline, syncline).
 - Jointing attitude (inclined, vertical).
 - Schistosity attitude (inclined, vertical).
 - Quartz veins; quartz vein attitude (inclined, vertical).
 - Chip sample location, sample number (assay values in % MoS₂).
 - Collar location and horizontal projection of diamond drill hole.
 - Flagged grid line.
 - Diamond drill hole collar location (Noranda).
 - Claim boundary (M.G.S.).
 - Claim unit boundary.
 - Claim post, claim location line.
 - Claim boundary.
 - Road.
 - Stream.
 - Topographic contour (contour interval 10 metres).

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7848

AMAX CANADA LIMITED

DUNCAN RIVER PROPERTY
SLOCAN MINING DIVISION — BRITISH COLUMBIA
**DRILL HOLE LOCATION
GEOLOGICAL MAP**

SCALE 1:2,000 METRES FEET

To accompany 1979 Assessment Report by: B.W.Kyba