85-1076-14672

PROGRESS REPORT

1985 FIELD SEASON

SULPHURETS PROPERTY

BRUCEJACK LAKE AREA

SKEENA MINING DIVISION

BRITISH COLUMBIA, CANADA

NTS MAP SHEET 104B/8, 9

LATITUDE: 56°30' N

LONGITUDE: 130°13' W

FOR THE

NEWCANA J. V.

NEWHAWK GOLD MINES LTD.

LACANA MINING CORP.

860 - 625 Howe Street,

Vancouver, B. C.

N. L. Tribe, P. Eng.

Kelowna, B. C.

November 1, 1985

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CONTENTS

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INTRODUCTION

The purpose of this report is to record the work done on the Sulphurets Property in the 1985 field season. The property is located 65 km northwest of Stewart, B.C. at 56°30' north latitude, 130°15' west longitude on NTS sheet 104B/8. Access to the property at the present time is by helicopter from Stewart (Figure 1), (Figure 2).

The Sulphurets Property currently consists of 246 units which is owned by Granduc Mines Ltd. This report is concerned with 197 units grouped into two groups. The Snowfield Group consists of the following claims:

ED 1, 2

Ice 1, 2, 3, 4, 5

Iron Cap 1, 2, 3, 4, 5, 6, 7

Sulphurets 1FR., 2FR., 3FR.

Tedray 1, 2, 3, 6, 7, 8, 20

Xray 1, 2, 3, 4, 5, 6, 7, 8, 9

The Brucejack Group consists of the following claims:

Red River

Red River 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

Tedray 10, 12, 21, 22

The property was first discovered in the 1880's when Sulphurets Creek was known as a source of alluvial gold. Copper mineralization was discovered in 1935 but the claims were not staked until 1960. Copper was the focus of attention through the sixties and the gold on the peninsula at Brucejack Lake was discovered in 1980. The next three years work concentrated on the gold mineralization. The property was optioned by Newhawk Gold Mines Ltd. and Lacana Mining Corp. under a joint venture agreement in July 1985. The work to date has indicated at least two zones of vein systems near Brucejack Lake which

may be economic. Two other lower grade bulk tonnage zones also exist - one on Sulphurets-Mitchell Ridge called the Snowfield Zone; the other near the toe of the Sulphurets Glacier called the Sulphurets Breccia Zone. There are at least fourteen other zones of mineralization known to exist on the property, varying from copper-molybdenum to gold veins. The 1985 field season consisted of a drilling program on the West Brucejack Zone and the Snowfield Zone. The program consisted of a total of 3,984 meters of BQ diamond drilling in 29 holes.

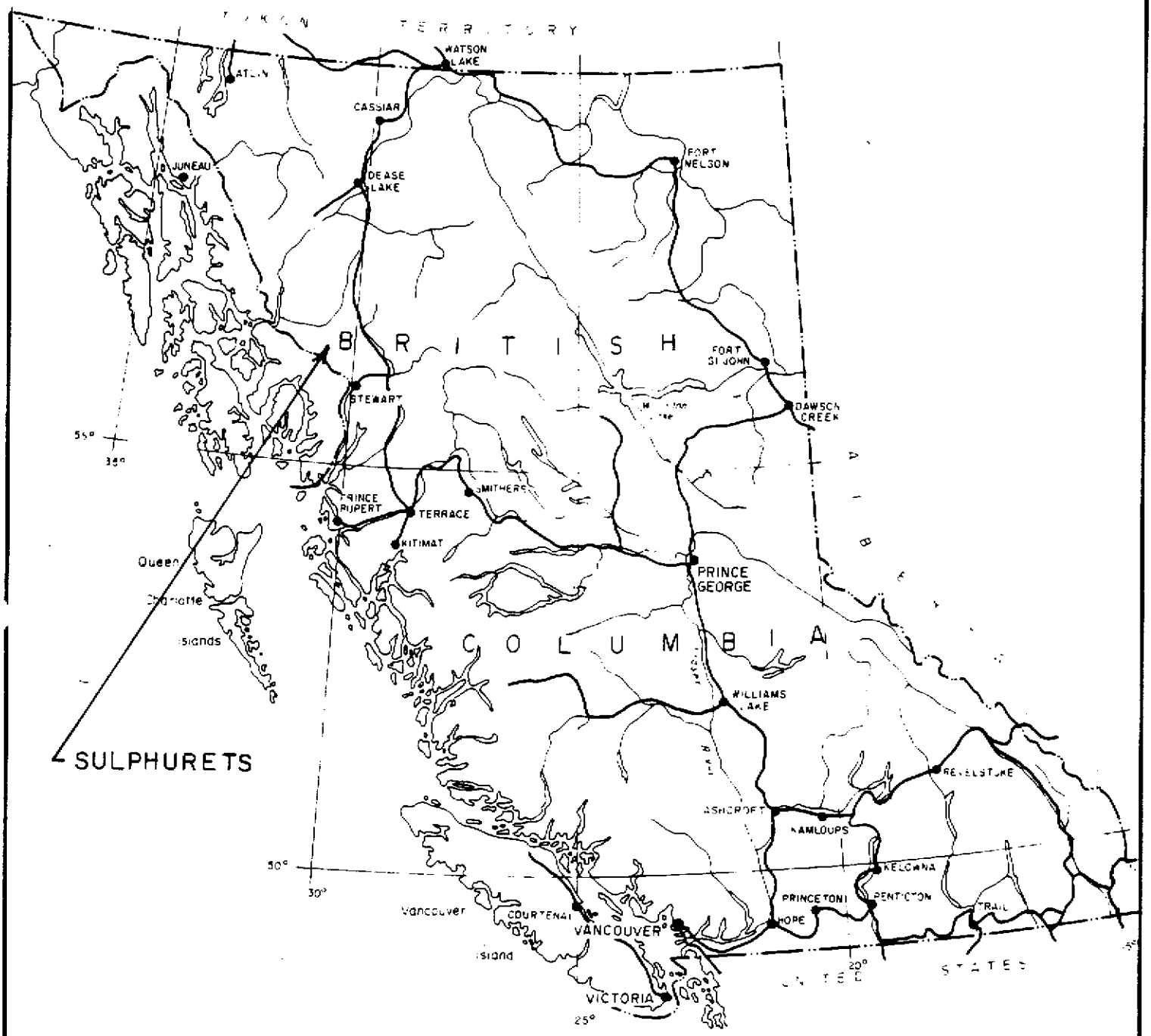
The Snowfield Group drilling consisted of 736 meters (2,414 feet) on Xray 9 and the Brucejack Group drilling consisted of 3,248 meters (10,652 feet) of drilling on the Red River claim.

RESULTS

Regional Geology

The geology of the Stewart area is typified by moderately folded, intermediate volcanics and sediments intruded by a succession of plutons. Those areas around many of the deposits are washed by a distinctive red iron alteration forming a broad band in which the numerous showings occur.

The lowermost formation within the Sulphurets claims is the Unuk River Formation of dark green volcanoclastic rocks. The Unuk River Formation is composed of



MILES 0 100 200 300 MILES

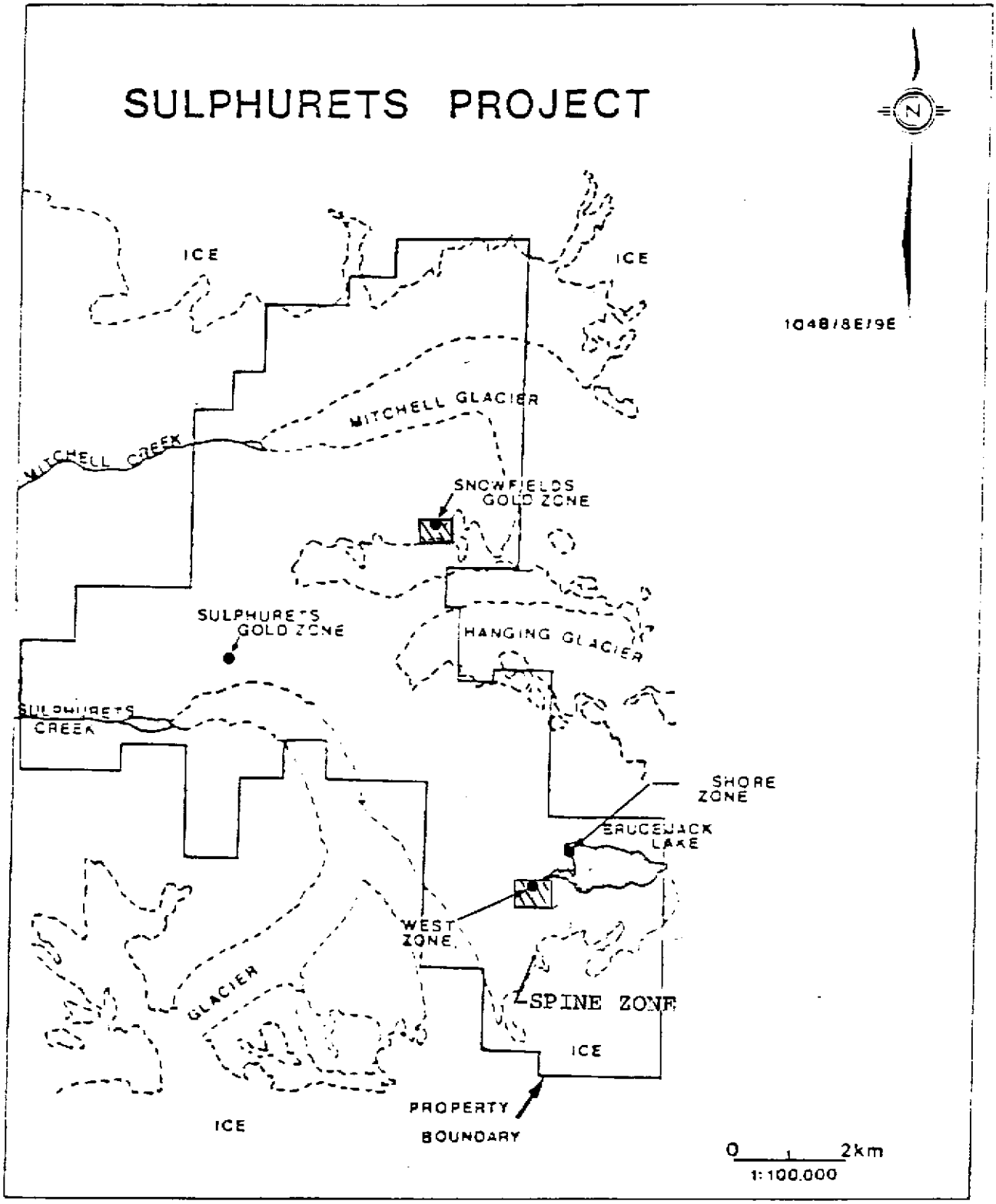
Km 0 100 200 400 Km

NEWCANA JOINT VENTURE

SULPHURETS PROJECT

LOCATION MAP

Drawn. J.W.	By.	FIG No.	1.
Scale. As shown	Date.		



NEWCANA JOINT VENTURE

SULPHURETS PROJECT

CLAIM MAP

Drawn	By.	FIG. No.
Scale. 1:100,000	Date.	2

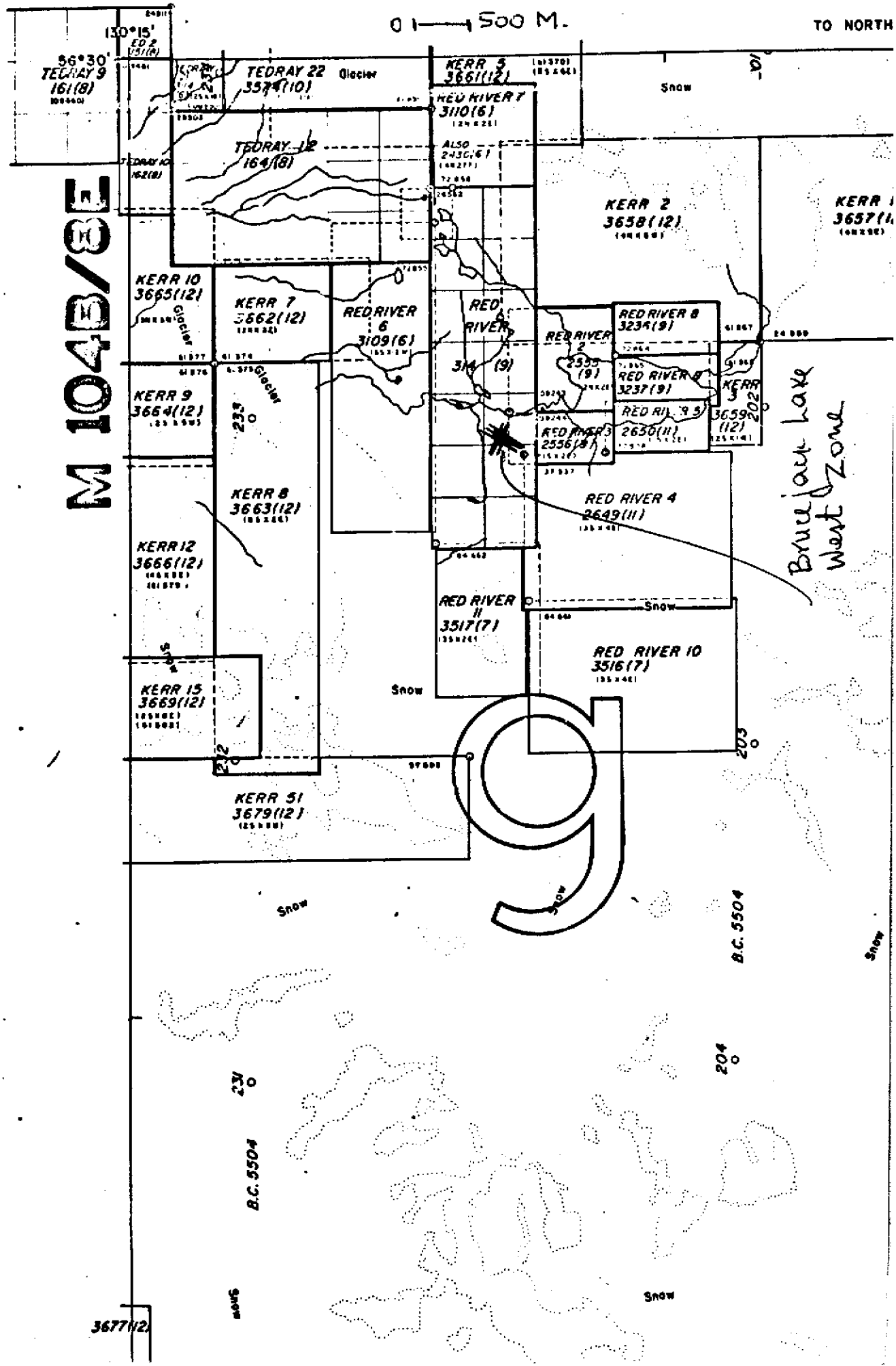
SNOWFIELDS GROUP

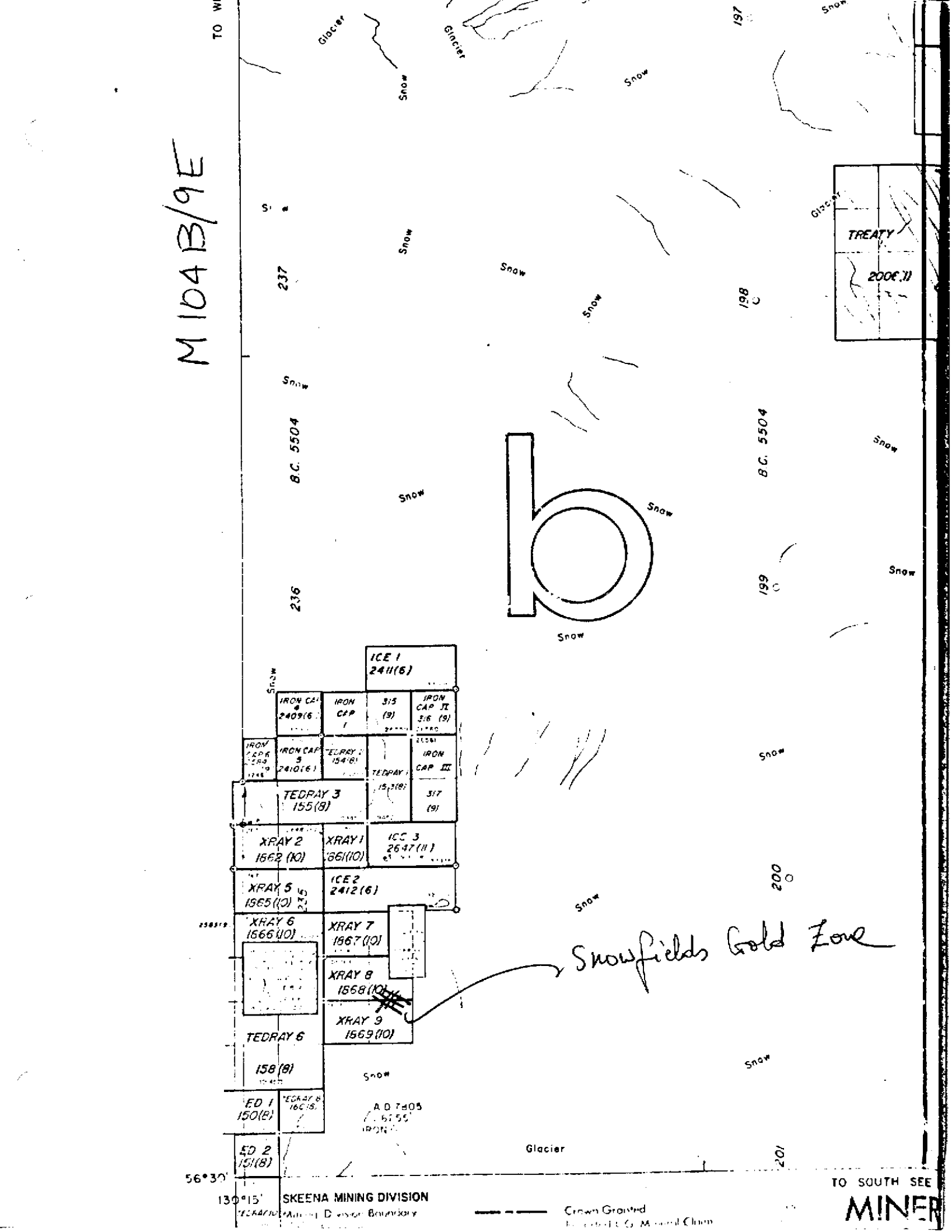
NAME OF CLAIM	NO. OF UNITS	RECORD NO.	MONTH OF RECORD	NO. OF YEARS	DOLLARS
Ed 1	2	150	August	2	$ 800
Ed 2	1	151	August	2	400
Ice 1	2	2411	June	2	800
Ice 2	3	2412	June	2	1,200
Ice 3	2	2647	Nov.	2	800
Ice 4	12	3111	June	2	4,800
Ice 5	12	3112	June	2	4,800
Iron Cap 1	2	315	Sept.	2	800
Iron Cap ~~2~~ II	1	316	Sept.	2	400
Iron Cap ~~3~~ III	2	317	Sept.	2	800
Iron Cap 4	1	2409	June	2	400
Iron Cap 5	1	2410	June	2	400
Iron Cap 6	2	2584	Sept.	2	800
Iron Cap 7	2	2585	Sept.	2	800
Sulphurets 1 Fr.	1	2582	Sept.	2	400
Sulphurets 2 Fr.	1	2583	Sept.	2	400
Sulphurets 3 Fr.	1	2648	Nov.	2	400
Tedray 1	2	153	August	2	800
Tedray 2	1	154	August	2	400
Tedray 3	3	155	August	2	1,200
Tedray 6	15	158	August	2	6,000
Tedray 7	2	159	August	2	800
Tedray 8	1	160	August	2	400
Tedray 20	4	3113	June	2	1,600
Xray 1	1	1861	October	2	400
Xray 2	2	1862	October	2	800
Xray 3	2	1863	October	2	800
Xray 4	6	1864	October	2	2,400
Xray 5	2	1865	October	2	800
Xray 6	2	1866	October	2	800
Xray 7	2	1867	October	2	800
Xray 8	2	1868	October	2	800
Xray 9	2	1869	October	2	800
	97				$38,800

BRUCEJACK GROUP

NAME OF CLAIM	NO.OF UNITS	RECORD NO.	MONTH OF RECORD	NO. OF YEARS	DOLLARS
Red River	14	314	September	2	$5,600
Red River 2	4	2555	September	2	1,600
Red River 3	2	2556	September	2	800
Red River 4	12	2649	November	2	4,800
Red River 5	2	2650	November	2	800
Red River 6	12	3109	June	2	4,800
Red River 7	4	3110	June	2	1,600
Red River 8	2	3236	September	2	800
Red River 9	2	3237	September	2	800
Red River 10	12	3516	July	2	4,800
Red River 11	6	3517	July	2	2,400
Tedray 10	3	162	August	2	1,200
Tedray 12	15	164	August	2	6,000
Tedray 21	2	3114	June	2	800
Tedray 22	8	3574	October	2	3,200
	100				$40,000

CLAIM MAP, NTS 104B 8





Snowfields Gold Zone

medium-grained matrix-supported lapilli tuffs of andesite composition. This andesite lapilli tuff forms the host for most of the vein deposits in the Stewart area and appears to be the favored host rock at Sulphurets. The Unuk River Formation is believed to be as much as 10,000 feet thick.

Above the Unuk River Formation is the Salmon River Formation of siltstones, greywackes and other fine to medium-grained epiclastic and pyroclastic rocks. Both these formations are similarily iron-stained with pervasive pyrite-sericite alteration over most of the property. In the Sulphurets area these two formations are cut by two elongate sub-parallel northerly-trending zones of intrusive rocks which are probably Middle Jurrassic in age. These intrusive rocks range from diorite to granite or syenite in composition and appear to be sub-alkaline. The intrusive rocks roughly enclose a northerly-trending 10 km. lineal zone of intense alteration. Sericite and pyrite are the most abundant alteration minerals with other assemblages locally dominated by K-feldspar, chlorite and propylitic minerals. Advanced argillic assemblages contain alunite, native sulphur occur in the Treaty Creek area on the northern part of the property. Porphyry copper-molybdenum mineralization occurs in the north and north-west portions of the property and is often associated with K-feldspar and sericite alteration. Some evidence suggests zoning on the property with copper-moly-

bdenum and copper-molybdenum-gold mineralization in the centre with gold found in a halo away from the centre, generally associated with pyrite alteration.

The gold mineralization in this halo is usually of the epithermal vein-type, is structurally controlled and is usually in the volcanic rocks near the sedimentary contact. It is often adjacent to intrusive rocks within a wide zone of intense sericite-dominated alteration. The veins consist of quartz carbonate with up to 20 per cent sulphides. They range from simple veins to complex vein zones and stockworks. Pyrite, sphalerite, galena, tetrahedrite, electrum, argentite, pyrargyrite, chalcopyrite, barite and molybdenite have been identified in these veins.

Structurally, the most predominant feature is the "Brucejack Lineament" which runs north-south through the entire property and appears to have a major influence on the mineralization. The mineralization appears along early fault zones which trend northwesterly and are cut by the Brucejack Lineament. This configuration appears to control the mineralization of the West Zone and is repeated again on the Shore Zone and the Spine Zone.

Geology of the Mineralized Areas

The West Zone

The epithermal-type mineralization of the West Zone is located in the volcanics near the volcanic sedimentary contact. This contact marks a northwest-trend-

ing zone of alteration about 100 meters wide parallelling the hornblende-feldspar-porphyry-syenite contact immediately to the west. The complex vein system within this zone may be up to 40 meters thick and contain in excess of 60 percent vein material. A pervasive sericite-silica alteration marks the zone which abutts against the syenite on the northwest and appears to continue to the southeast. The zone has a length of 400 meters plus and extends into the Galena Zone to the southeast. This zone has now been drilled on approximately 40-meter spaced sections throughout its length.

Shore Zone

The Shore Zone is located along the western shore of Brucejack Lake, approximately one-half km east of the West Zone and forms a broad 150 meter wide zone of alteration along a strong north-west trending fault zone. Stratigraphically, it appears to be in a similar setting to the West Zone near the volcanic sedimentary contact. This zone is open to the northwest and appears to be continuing to the southeast underneath Brucejack Lake. The Shore Zone is the strongest and carries the best grade of the structures tested to date.

Snowfield Zone

The Snowfield Zone is located on the Mitchell side of Mitchell-Sulphurets Ridge immediately west of the Brucejack Fault.

Disseminated gold mineralization occurs along a broad area of sericite and chlorite alteration in an andesite breccia carrying about 10 percent pyrite with local molybdenum along the jointing. The zone is nearly devoid of quartz veining and carries very little silicification.

THE 1985 FIELD PROGRAM

The field season got underway on July 31, 1985 with a 4-man construction crew dismantling the old Mitchell Creek camp and moving it up to an alpine meadow about one-quarter mile west of Brucejack Lake on the edge of Brucejack Creek. This camp spot is immediately adjacent to the West Zone and within easy walking distance of all the drilling on the West Zone. The camp consisted of seven tents: one kitchen, one dining, one dry, two sleeping, one office and one core shack tent.

The drill contractor was F. Boisvenue Diamond Drilling Ltd. who provided a J.K. Smit 300 diamond drill with 700 feet of BQ rods manned by two, two-man drill crews.

Drilling got underway on August 7 and by October 1, 29 holes for 3,984 meters (13,066 feet) was completed. The drilling consisted of:

- 3,248 meters (10,652 feet) in 22 holes on the West Zone,
- 736 meters (2,427 feet) in 5 holes on the Snowfield Zone.

A total of 56 days were required to complete the program during which 12 moves were made and 6 days were lost due to bad flying weather. The drill crews averaged 152 feet per shift on drilling shifts and 117 feet per shift overall, including moves and delays.

The core was hand carried from the drill to the core shack where it was logged, split and put into bags for delivery to the assay lab. Norlite Assay Co. of Stewart was used for the assaying and checks were sent to Vangeochem in Vancouver. Mr. Norman Hamilton, former chief assayist for Scottie Gold Mines Ltd., Scottie Mine, did the fire assays for Norlite. In all, 1,003 assays were run for gold and silver by Norlite and 73 of these were run for gold and silver as checks by Vangeochem in Vancouver. In addition, 19 samples of ore grade material were chosen from core rejects and run on the I.C.P. 31-element scan by Vangeochem. The results of the checks and the I.C.P. are not available at the time of writing.

Drill moves were done by Vancouver Island Helicopters with the Bell Longranger helicopter. On the average, short moves were done in about 2 hours flying time.

In order to reduce the expense of demobilization and future remobilization a 12 x 24 foot A-frame cache was constructed and upon completion of the program the camp equipment and some drill equipment was stored for the winter. The core was arranged in four stacks near the "A"-frame.

Expediting was done out of Stewart by Linmar Industries on a per hour as required basis. Communications was provided by a SBX 121 single side band short wave radio supplied by Lacana. The most useful frequency was found to be 2768 kh on which contact could be made with the Stewart expediter approximately 80 per cent of the time.

Vancouver Island Helicopters helicopter support out of Stewart provided access for personnel and transport for supplies and samples. In most flights a backhaul of samples or personnel was arranged to increase efficiencies.

INTERPRETATION

West Zone

A drilling program on the West Zone was laid out to intersect the zone on 20-meter (66 feet) intervals on 40-meter (132 feet) spaced sections. This was done by setting the drill approximately 60 meters (200 feet) east of the zone and drilling three hole fans to the west (230°) consisting of -35°, -50° and -65° holes, from 100 - 150 meters (300 - 500 feet) in length. This pattern was modified or adjusted to fit in with previous drilling done in 1983 by Esso Minerals. As the zone appears to be dipping steeply to the east this pattern is more difinitive than the previous drilling, most of which was drilled toward the east. All holes on the West Zone were drilled on an azimuth of 230°. Ground conditions were excellent in the

West Zone with wall rock cutting easily and giving excellent recoveries. The veins are extremely hard and are difficult to cut but gave excellent recoveries with no losses of core. Ten-foot runs commonly produced ten-foot core sticks in this zone.

The results of the drilling confirmed the continuity of the zone over a length of 340 meters (1,100 feet). Ore shoots within the zone show good continuity over the central portion of the zone from section 49+80S to 52+00S, a distance of 220 meters (722 feet) but become somewhat scattered toward the ends of the zone. The zone is open to the south and at depth and may be plunging to the north. Continuity of the ore shoots on section appears to be typical of vein type deposits and should not produce more than the normal problems associated with vein mining underground.

Snowfield Zone

In order to drill the Snowfield Zone a two-tent fly camp was set up near the northern edge of the zone. The initial drilling consisted of a 3-hole horizontal fan drilled south from the base line at 50+00E. The holes (S-85-112, S-85-113, S-85-114) were drilled on azimuth of 135^{o}, 180^{o} and 215^{o} respectively, all at -50^{o}. Results from this initial work were sufficiently encouraging to warrant a second two-hole (S-85-130, S-85-131) vertical fan drilled south from the base line at 50+60E meters east

on an azimuth of 180° at -50° and -70° respectively. Results of this drilling compared favorably with the first three holes.

The previous trenching work on the Snowfield Zone indicated a broad area of mineralization, the central core of which is approximately 240 meters by 120 meters, indicating a tonnage factor of 94,000 tonnes per vertical meter at a grade of 0.088 oz. gold per tonne. The drilling has shown that this mineralization is continuous at comparable grades to a depth of at least 75 meters. Further drilling will be required to define the lateral extent of this central core to the west, east and at depth to the south.

Shore Zone

No drilling was done on the Shore Zone in the 1985 field season. However, this zone will certainly require more drilling in the future as it is open both to the northwest and southeast. In preparing for the possibility of drilling from the winter ice on the southeast end of this zone, soundings were made of the lake in an area where the drilling would be required. The sounding was done with the use of the helicopter by lowering a large rock into the lake tied with a long rope. A second attempt with additional rope sounded bottom at 200 feet just east of the strike of the Shore Zone and approximately on section 110 west.

LEGEND

2	Volcanic, andesite
1	Sediments, argillite greywacke conglomerate
4	Syenite
7	Quartz stockwork
8	Ore shoots
~~	Faults

ORE RESERVES

(.844)
0.181, 33.15
7.20

(Gold equivalent oz. per ton)
Gold in oz. per ton, silver in oz. per ton
width in meters

20H - horizontal projection of ore block

(2) - block number

CONCLUSIONS

The 1985 summer field program was successful in providing sufficient information to establish that the zone was continuous over 340 meters and ore grade shoots greater than 0.20 oz. gold-equivalent per tonne were shown to be sufficiently continuous so as not to provide excessive problems in underground mining. The zone is clearly open at depth and may be open both north and south.

In addition, the program provided drill information on the Snowfield Zone showing that values from the previous trenching program continued from surface to a depth of 75 meters. The Snowfield Zone is open to the east and west and may plunge to the south.

COST STATEMENT

The costs are summarized as follows:

Brucejack Group

West Zone	
Drilling - Boisvenue Diamond	$ 138,476.00
Drilling	
3,248 meters (10,652 feet)	
@ $42.63/m. ($13.00/foot)	
Helicopter support	62,417.84
Vancouver Island Helicopters	
	$ 200,893.84

Snowfield Group

Snowfield Zone	
Drilling - Boisvenue Diamond Drilling	$ 31,382.00
736 meters (2,414 feet)	
@ $42.63/m. ($13.00/foot)	
Assaying - Norlite Assay Co. (Stewart)	2,414.00
$3.28/meter x 736 m.	
Helicopter support V.I.H.	9,000.00
15 hrs. @ $600./hr.	
Camp	1,600.00
10 days - 4 men @ $40./man	
Labor	3,500.00
1 geologist (Tribe), 1 core-houseman (Vilac)	
10 days @ $350./day	
	$ 47,896.00

STATEMENT OF QUALIFICATIONS

The project was supervised by and all core was logged by the writer, N. L. Tribe, P. Eng.

I am a registered Professional Engineer in the Province of British Columbia (11330). I graduated from the University of British Columbia with a Bachelor of Applied Science degree in Geological Engineering in 1964.

I have 23 years varied experience, both in exploration and production situations.

Respectfully submitted,

N. L. Tribe, P. Eng.

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APPENDIX I

CORE LOGS

DDH S-85-106

TO

DDH S-85-134

INCLUSIVE

NOTES: Assays are in ounces per short ton and intervals are in meters.

150 CA refers to 15° from the core axis.

Faulting:

#1 fault - having only a trace - 1 mm. of fault gouge

#2 fault - having 1 mm. - 1 cm. of fault gouge

#3 fault - having 1 cm. - 2 cm. of fault gouge

#4 fault - having 2 cm. - 4 cm. of fault gouge

#5 fault - having more than 4 cm. of fault gouge

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-106

Section 50+00S Az. 230°

Date August 9, 1985 Elev.

Lat. Depth 109.45 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-35°	-35°

Depth From	Depth To	Description
0	3.05	Casing.
3.05	109.45	Andesite lapilli tuff. Dull grey to dull grey-green. Hardness 3.5. Fine grained, phaneritic, vague foliation at ±60° CA. ±5% fine quartz veinlets, ±5% very fine grained pyrite. Weakly sericitized throughout.
		11.89 - 12.80 - dull grey-grey porphyritic dyke rock. 15 cm vein with ±15% pyrite, trace of galena.
		12.80 - 14.94 - moderately sericitized.
		14.94 - 15.85 - breccia zone with ±15% very fine grained pyrite.
		15.85 - 36.59 - weakly to moderately silicified. ±5% vein quartz.
		36.59 - 39.02 - dark silicified vein with ±10 - 15% pyrite and pyrrhotite.
		39.02 - 41.46 - dark silicified vein. ±20% very fine grained pyrite.
		41.46 - 51.37 - light grey, moderately carbonatized. ±10% pyrite, vague brecciation.
		51.37 - 60.06 - weakly sericitized, weakly carbonatized, fragments are visible.
		60.06 - 60.67 - intensely silicified. Hardness 7. ±15% pyrite.
		60.67 - 62.50 - Hardness 3.5. Dark carbonate vein with ±30% sulphides, mainly pyrite. Foliation at

Property BRUCEJACK Sheet No. 2 of 2

Hole No. S-85-106

Depth From	Depth To	Description
		50° CA.
		62.50 - 71.34 - Light and dark patches, some brecciation. Hardness 3 - 5. ±15% sulphides, mainly pyrite.
		71.34 - 71.95 - Vein. Quartz carbonate sulphide with ±20% pyrite, foliation 55° CA.
		71.95 - 75.61 - Dark grey. ±10% quartz carbonate veinlets, foliation at 55°CA. Sulphides less than 5%.
		75.61 - 76.22 - Jade-green serpentinized carbonate.
		76.22 - 80.79 - dark foliated section, intensely silicified with ±20% sulphide, pyrite, some ∓jade green carbonate patches.
		80.79 - 85.06 - pale grey, intensely silicified, some pyrite, textures visible and some fragments.
		85.06 - 89.94 - dark grey, intensely silicified, moderately foliated, ±30% very fine grained sulphides, pyrite.
		89.94 - 96.04 - medium greys, hardness 7, intensely silicified, locally foliated with ±10% pyrite.
		96.04 - 97.56 - Vein. Medium grey, hardness 7. Foliated and contorted with ±50% quartz vein material.
		97.56 - 104.27 - quartz vein, mottled, silicified, hardness 7+.
		104.27 - 109.45 - dark grey with ±50%quartz vein, intensely silicified, less than 5% pyrite.
		109.45 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-106

Sample No.	From	To	Width	Au	Ag	Au-e.	
11126	11.89	12.80		.056	1.03		
11127	12.80	15.85	0.91	Tr	.24		
11128	36.59	39.02	2.43	Tr	Tr		
11129	39.02	41.46	2.44	.006	Tr		
11130	41.46	44.51	3.05	.008	Tr		
11131	44.51	47.56	3.05	Tr	Tr		
11132	47.56	50.61	3.05	.006	Tr		
11133	50.61	51.37	0.76	.008	.18		
11134	57.01	58.84	1.83				
11135	58.84	60.67	1.83	Tr	.04		
11136	60.67	62.50	1.83	.006	Tr		
11137	62.50	65.55	3.05	Tr	Tr		0.123 Au,
11138	65.55	68.59	3.04	Tr	Tr		14.78 Ag
11139	68.59	71.65	3.05	.170	20.08)	.572)	4.57 m. of
11140	71.65	73.17	1.52	.030	4.15)	.113)	.419 oz.
11141	73.17	76.22	3.05	.008	Tr		Au-e. @
11142	76.22	79.27	3.05	Tr	.04		68.59 m.
11143	79.27	82.01	2.74	.006	.16		
11144	82.01	85.06	3.05	.004	.06		
11145	85.06	86.59	1.52	.032	.48		
11146	86.59	88.72	2.13	.006	Tr		
11147	88.72	89.94	1.22	.008	Tr		0.046 Au,
11148	92.99	96.04	3.05	.004	1.07	.025	4.580 Ag
11149	96.04	99.08	3.05	.046	4.58	.138)	3.05 m. of
11150	99.08	102.13	3.05	.008	1.07	.029	.138 oz.
							Au-e. @
11176	102.13	105.18	3.05	.010	.08		96.04 m.
11177	105.18	108.23	3.05	.006	Tr		
11210	89.94	92.99	3.05	.014	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-107

Section 50+00S Az. 230°

Date August 12, 1985 Elev.

Lat. Depth 152.44 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-	-50°
91.46	-54°	-45°
152.44	-53°	-43.5°

Depth From	Depth To	Description
0	3.05	Casing.
3.05	152.44	Andesite lapilli tuff. Dull grey, white. Mostly medium greys. Phaneritic 1 - 2 mm. Some weak foliation. 3.05 - 5.80 - Moderately carbonatized, moderately silicified with up to 20% pyrite in several small veins and breccia zones. 5.80 - 13.41 - Moderately to intensely sericitized, carbonatized, ±10% pyrite. Weakly to moderately silicified. 13.41 - 15.55 - Weak zone of veins with some sheared aphanitic carbonatized alteration, up to 25% pyrite, traces of chalcopyrite and tetrahedrite. Very fine grained. 15.55 - 29.27 - Medium greys, moderately to intensely sericitized, moderately carbonatized, weakly silicified. A no. 2 fault with minor gouge at 60° at 25.00 m. 29.27 - 31.40 - Vein. Minor pyrite, moderately to intensely silicified, good foliation at 60°, ±20% sulphides, pyrite, weakly carbonatized and silicified, intensely

Property BRUCEJACK Sheet No. 2 of 4

Hole No. S-85-107

Depth From	Depth To	Description
		sericitized.
		31.40 - 35.37 - Pale grey, intensely silicified, ±10% pyrite.
		35.37 - 37.50 - Weak vein. Pale grey, mottled. ±20% pyrite.
		37.50 - 39.63 - Pale grey, intensely sericitized, texture appears aphanitic, less than 5% pyrite.
		39.63 - 40.55 - Weak vein. Moderate foliation at 55°, 15 - 20% pyrite.
		40.55 - 41.77 - Moderately carbonatized, moderately sericitized, moderately silicified, ±5% pyrite.
		41.77 - 43.60 - Weak vein. Moderately foliated at 40°, streaky sulphides, ±8% minor brecciation.
		43.60 - 55.79 - Weakly to moderately sericitized, weakly carbonatized. Hardness 4 - 5. Medium grained.
		55.79 - 57.62 - Mottled, silicified zone. Very fine grained pyrite. Intensely silicified.
		57.62 - 58.84 - Vein. Sheared, silicified. ±20% fine to medium grained pyrite. Foliated at 40°. Minor concordant vein quartz.
		58.84 - 64.33 - Intensely sericitized, moderately foliated at 50°. ±15% sulphides. Mainly very fine grained pyrite.
		64.33 - 65.85 - Weakly sericitized, dark grey rock. ±5% pyrite.
		65.85 - 74.09 - Pale grey-pink, very fine grained, intensely silicified.
		74.09 - 74.70 - Fault zone. 40° to the core axis. Mostly gouge.
		74.70 - 78.66 - Intensely silicified, intensely sericitized, blotches of sulphide, mainly pyrite, weakly foliated.

Property BRUCEJACK Sheet No. 3 of 4

Hole No. S-85-107

Depth From	Depth To	Description
		78.66 - 79.57 - Dark grey, weakly foliated, ±30% coarse pyrite.
		79.57 - 83.23 - Moderately sericitized, moderately to intensely silicified, 20 - 25% sulphide, mainly pyrite, weakly mottled.
		83.23 - 93.29 - Medium to dark greys, intensely silicified, moderately to intensely sericitized, up to 50% sulphides as very fine grained pyrite.
		93.29 - 108.50 - Vein. Mottled. Hardness 7. White to grey, pale mauve, grey-pink. Vague foliation at 40°. Good sulphides, 20 - 30% with traces of galena.
		108.50 - 115.00 - Dark grey, weakly foliated at 35° to the core axis, ±30% sulphide, weakly mottled, hardness 7, intensely silicified.
		115.24 - 116.92 - Vein. White quartz. Intensely silicified, less than 20% pyrite.
		116.92 - 122.87 - Medium greys, weakly mottled, intensely silicified, 20% sulphides. Hardness 7. Foliated at 35° to the core axis.
		122.87 - 124.85 - Vein. White quartz. Intensely silicified. Less than 1% sulphides. Hardness 7.
		124.85 - 127.74 - Weak vein. Weakly mottled, intensely silicified, weakly foliated at 35° to the core axis.
		127.74 - 129.88 - Intensely silicified, less than 5% sulphides.
		129.88 - 132.93 - Intensely silicified, 15 - 20% pyrite.
		132.93 - 133.54 - Weak vein. Less than 1% sulphide.
		133.54 - 135.98 - Weak vein. ±15% sulphides in fine streaks and small

Property BRUCEJACK Sheet No. 4 of 4

Hole No. S-85-107

Depth From	Depth To	Description
		blebs, mainly pyrite. Foliation at 60° to the core axis.
		135.98 - 138.41 - Intensely silicified, ±15% sulphides as streaks of fine pyrite.
		138.41 - 139.02 - Intensely silicified, weakly brecciated, sulphide up to 30% in medium grained blebs.
		139.02 - 142.68 - Mixed bull quartz veins with intense silicification and ±5% sulphides.
		142.68 - 142.99 - Barren quartz vein.
		142.99 - 147.71 - Medium grey, intensely silicified, moderately brecciated with stockworks, ±15% sulphides, mainly pyrite.
		147.71 - 148.93 - Vein. Intense silicification, good brecciation, stockwork with ±20% very fine grained sulphides.
		148.93 - 152.13 - Intense silicification. 5% very fine grain sulphides, mainly pyrite.
		152.13 - 152.40 - Barren quartz vein.
		152.44 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-107

Sample No.	From	To	Width	Au	Ag	Au-e.	
11178	3.05	5.79	2.74	Tr	.21		
11179	13.41	15.55	2.13	.006	.59		
11180	29.27	31.40	2.13	.004	.20		
11181	32.62	35.37	2.74	Tr	Tr		
11182	35.37	37.50	2.13	Tr	.11		
11183	37.50	39.63	2.13	.004	.06		
11184	39.63	40.55	0.91	Tr	Tr		
11185	40.55	41.77	1.22	Tr	Tr		
11186	41.77	43.60	1.83	Tr	Tr		
11187	57.62	58.84	1.22	Tr	Tr		
11188	58.84	61.89	3.05	.006	Tr		
11189	61.89	64.33	2.13	.004	Tr		
11190	64.33	67.38	3.05	Tr	Tr		
11191	72.87	74.09	1.22	.004	Tr		
11192	74.09	74.70	0.61	Tr	Tr		
11193	74.76	76.83	2.13	Tr	Tr		
11194	76.83	78.66	1.83	Tr	.06		
11195	8. 6	79.57	0.91	.006	.42		
11196	79.51	82.62	3.05	.006	.31		
11197	82.62	85.67	3.05	.006	.28		
11198	85.67	88.72	3.05	.006	.11		
11211	88.72	91.77	3.05	.028	2.01	.068)	
11212	91.77	93.29	1.52	.028	5.40	.136)	.073 Au,
11213	93.29	94.51	1.22	.028	1.68	.062)	2.91 Ag
11214	94.51	96.34	1.83	.124	9.02	.300)	19.82 m.
11215	96.34	99.39	3.05	.024	4.16	.107)	of .140
11216	99.39	102.44	3.05	.050	2.69	.104)	oz. Au-e.
11217	102.44	105.49	3.05	.238	2.92	.300)	@ 88.72 m.
11218	105.49	108.54	3.05	.036	1.00	.056)	
11219	108.54	111.59	3.05	.014	.36		
11220	111.59	114.63	3.05	.018	Tr		
11221	114.63	115.24	0.61	.014	.05		
11222	115.24	116.77	1.53	.014	.94		
11223	116.77	119.82	3.05	.008	Tr		
11224	119.82	122.87	3.05	.006	Tr		
11225	122.87	124.85	1.98	.012	Tr		
11226	124.85	127.74	2.90	.008	.10		
11227	127.74	129.88	2.30	.012	.06		
11228	129.88	132.93	3.05	.010	.27		
11229	132.93	135.98	3.05	.008	.15		
11230	135.98	139.02	3.05	.008	.16		
11231	141.16	142.99	1.83	.030	.25		
11232	142.99	144.97	1.98	.010	.06		
11233	144.97	147.71	2.74	.018	.18		
11134	147.71	148.93	1.22	.004	.06		
11235	148.93	151.98	3.05	.030	.22		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-108

Section 50+00S Az. 230°

Date August 10, 1985 Elev.

Lat. Depth 179.88 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-65°
133.53	-67°	-60°

Depth From	Depth To	Description
0	3.05	Casing.
3.05	155.49	Andesite lapilli tuff. Light grey to medium and dark greys, white. Hardness 3 - 7, variable. Medium grained, phaneritic, often brecciated, often fragmental, occasionally aphanitic, alteration varies from unaltered to intensely sericitized, intensely silicified and moderately carbonatized, moderate pyrite, some weakly developed stress foliation. 3.05 - 7.01 - Light grey, very fine grained, intensely silicified veinlets and patches of pyrite, occasionally quartz veinlets. 7.01 - 10.06 - Vein. Brecciated, quartz healed with 30 - 50% sulphides. 10.06 - 10.67 - Intensely silicified, poorly foliated at 40° CA. 10.67 - 13.11 - Vein. Brecciated, healed with quartz and minor carbonate, ±20% pyrite, veinets at 0° to the core axis. Foliation at 40% to the core axis. 13.11 - 27.74 - Medium grained grainey rock with up to 15% very fine grained pyrite. 27.74 - 44.82 - Fine grained light to medium grey, 10 - 15% pyrite,

Property BRUCEJACK Sheet No. 2 of 4

Hole No. S-85-108

Depth From	Depth To	Description
		No. 2 fault at 33.20 at 35° to the core axis; No. 2 fault at 38.70 at 30° to the core axis.
44.82	47.56	Medium grey, medium grainey, 1 - 2 m., ±5% pyrite.
47.56	65.85	Light grey, vaguely mottled patches and disseminations of pyrite, up to 10%. Less than 5% quartz veining. Intensely sericitized, moderately to intensely silicified.
65.85	67.68	Vein. White, grey, mottled, brecciated, intensely silicified, ±15% pyrite.
67.68	84.91	Medium to dark grey, weakly to moderately sericitized, weakly silicified. Less than 2% vein quartz with a fine grainey texture, less than 5% pyrite.
84.91	85.82	Vein. Mottled, patchy with 40% vein quartz, intensely silicified, ±20% pyrite.
85.82	90.55	Intensely silicified, intensely sericitized, contact zone with ±25% pyrite in fine grained disseminations and small blebs.
90.55	96.65	Vein. Mineralized zone, mottled, less than 50% vein quartz, intensely silicified. ±25% sulphides, up to 90% pyrite, trace of tetrahedrite.
96.65	97.87	Intensely sericitized. ±15% pyrite. Very fine grained, pale grey.
97.87	98.17	Quartz vein. White, less than 2%sulphide.
98.17	99.70	Medium grey, moderately sericitized, intensely silicified.

Property BRUCEJACK Sheet No. 3 of 4

Hole No. S-85-108

Depth		Description
From	To	
		99.70 - 107.62 - Vein. Mottled with 60 - 70% vein quartz, intensely silicified, intensely sericitized. ±15% pyrite.
		107.62 - 111.28 - Intensely silicified, intensely sericitized, ±15% pyrite.
		111.28 - 116.01 - Vein. Mottled, ±70% vein quartz, intensely silicified. Less than 5% pyrite.
		116.01 - 117.68 - Weakly sericitized, moderately silicified, ±10% pyrite in streaks.
		117.68 - 117.99 - Vein. Mottled, intensely silicified with up 25% pyrite, 80% vein quartz.
		117.99 - 146.34 - Dark grey, weakly sericitized, moderately silicified, ±5% pyrite.
		121.34 - 124.39 - Vein. Moderately mottled with 0.91 m. good strong quartz vein, ±10% pyrite.
		124.39 - 126.07 - Dark grey, unfoliated, ±20% pyrite.
		126.07 - 126.83 - Vein. Weakly mottled, weakly foliated at 30° to the core axis.
		126.83 - 128.96 - Dark grey, unfoliated, streaky pyrite, up to 25% aphanitic.
		128.96 - 136.59 - Light grey, aphanitic, hardness 7. ±15 - 20% pyrite, locally up to 60%, may be a rock change here.
		136.59 - 138.72 - Medium grey, moderately brecciated, intensely silicified, 30% pyrite, less than 20% vein quartz.
		138.72 - 142.68 - Medium grey, intensely silicified, less than 10% quartz, ±15% pyrite.
		142.68 - 149.09 - Vein. Mottled, brecciated, intensely silicified, 50% quartz, 20% pyrite.
		149.09 - 155.49 - Light grey, mixed vein and light intensely silicified wall rock. ±20% pyrite, aphanitic, diss-

Property BRUCEJACK Sheet No. 4 of 4

Hole No. S-85-108

Depth		Description
From	To	
		eminated sulphides, foliation indistinct.
155.49	179.88	Andesite tuff. Light grey, aphanitic, hardness 7. Moderately pyritized throughout, 10 - 15% pyrite, some large quartz veins showing some brecciation and pyritization near the contacts. 160.37 - 162.50 - Quartz vein. 163.41 - 164.36 - Quartz veining, often shows some pink coloration. 178.05 - 179.88 - Quartz vein, with ±10% pyrite, ±25% vein quartz, small blebs of electrum (3 mm.) enclosed in quartz at 179.88.
	179.88	END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-108

Sample No.	From	To	Width	Au	Ag	Au-e.	
11199	7.01	10.06	3.05	.004	.29		
11200	10.06	13.11	3.05	.004	Tr		
11201	13.11	14.94	1.83	.008	.19		
11202	14.94	17.99	3.05	.004	.07		
11203	17.99	21.04	3.05	.006	.27		
11204	21.04	24.08	3.05	.008	.26		
11205	24.08	27.13	3.05	Tr	Tr		
11206	27.13	30.18	3.05	Tr	.03		
11207	30.18	33.23	3.05	.008	Tr		
11208	33.23	35.27	2.13	Tr	Tr		
11209	35.37	38.41	3.05	.004	Tr		
11236	65.85	67.68	1.83	.012	Tr		
11237	84.91	85.82	0.91	.008	.71		
11238	85.82	87.50	1.68	.010	.13		
11239	87.50	90.55	3.05	.008	.47		
11240	90.55	93.60	3.05	.008	Tr		
11241	93.60	96.65	3.05	.010	Tr		
11242	96.65	99.70	3.05	.004	Tr		
11243	99.70	102.74	3.05	.004	Tr		
11244	102.74	105.79	3.05	.004	Tr		
11245	105.79	107.62	1.83	Tr	Tr		
11246	107.62	110.67	3.05	.006	.13		
11247	110.67	111.28	0.61	.004	.47		
11248	111.28	113.41	2.13	.002	.32		
11249	113.41	116.01	2.90	.006	Tr		
11250	116.01	112.38	1.68	.014	Tr		
11251	117.68	117.99	.31	.010	.07		
11252	121.34	124.39	3.05	.034	2.65	.087)	3.05 m. of .087 Au-e. @ 121.34 m.
11253	126.07	126.83	.76	.014	.19		
11254	128.96	132.01	3.05	.024	1.99	.064)	3.05 m. of .064 Au-e. @ 128.96 m.
11255	132.01	135.06	3.05	.030	.40		
11256	135.06	136.59	1.52	.012	Tr		
11257	136.59	138.72	2.13	.016	Tr		
11258	138.72	141.16	2.44	.018	Tr		
11259	141.16	142.60	1.52	.018	0.25		
11260	142.60	145.73	3.05	.044	Tr		
11261	145.73	148.78	3.05	.064	.15		
11262	148.78	148.83	3.05	.020	.45		
11263	148.83	154.88	3.05	.016	.15		
11264	154.88	155.49	.61	.342	.31	.348)	0.61 m. of .348 Au-e. @ 154.88 m.
11265	178.05	179.88	1.83	.020	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-109

Section 51+00S Az. 230°

Date August 1985 Elev.

Lat. Depth 100.91 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-35°	-35°
100.91	-39°	-32°

Depth From	Depth To	Description
0	100.91	Andesite lapilli tuff. Light to medium grey. Hardness 4 - 6. Aphanatic to phaneritic. 1 mm. grains. Weakly foliated. 20.73 - 23.48 - Medium grained, phaneritic. 28.35 - 29.27 - Medium grained. 29.88 - 30.18 - Medium grained. 38.11 - 39.02 - Distinctly grainy, moderately sericitized, weakly silicified. 39.33 - 43.29 - Arkosic section. Medium grey to black, distinctly banded. Hardness 3. Up to 50% sulphides, moderately carbonatized, moderately brecciated with fragments ranging from 1 cm. to clay size. Foliation at 50°. No. 1 fault at 35.67 at 10°CA; No. 1 fault at 40.24 at 50°CA; No. 1 fault at 41.46 at 40°CA. 43.29 - 47.56 - Pale grey, 10% quartz veins ±20% sulphides. 47.56 - 52.44 - Good vein. ±70% quartz, 10 - 15% pyrite, intensely silicified, weakly foliated with patches of very fine grained pyrite. 52.44 - 57.01 - Intensely silicified tuff. Weakly foliated at 50°CA. Up to 20% quartz.

Property BRUCEJACK Sheet No. 2 of 2

Hole No. S-85-109

Depth From	Depth To	Description
		57.01 - 81.40 - Vein. Mottled quartz vein, including some brecciation and bleaching. Fragments occuring throughout with patches, blebs and disseminations of pyrite. Hardness 7. Intensely silicified. Foliation at 60°CA.
		81.40 - 87.96 - Light grey to pale grey-pink. Hardness 7. Aphanatic, weakly crushed, moderately foliated at 60° CA, ±15% sulphides, moderately silicified.
		87.96 - 94.51 - Vein. Hardness 3 and 7. Moderately silicified, dark in color, weakly mottled, moderately brecciated with 25 - 30% sulphides.
		94.51 - 100.91 - Light grey. Hardness 7. Aphanatic crackled, healed with pyrite and pyrite disseminations. Weak vein at 96.34 - 97.56 m. with 15% vein quartz.
	100.91	END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-109

Sample No.	From	To	Width	Au	Ag	Au-e.	
11266	39.33	40.85	1.52	.012	0.13		
11267	40.85	43.29	2.44	.036	Tr		
11268	43.29	43.75	0.46	.018	0.51		
11269	47.56	50.61	3.04	.076	2.00)	.116 Au-e.	
11270	50.61	52.43	1.83	.016	1.18	@ 3.04 m.	
11271	52.43	53.96	1.52	.006	0.11	0.034,	
11272	53.96	57.01	3.05	.006	0.20	5.510	
11273	57.01	59.76	2.74	.046	5.29)	.144 Au-e.	
11274	59.76	61.89	2.13	.018	5.81)	@ 4.88 m.	
11275	61.89	64.63	2.74	.030	1.49		
11276	64.63	66.16	1.52	.022	1.27		
11277	66.16	67.68	1.52	.012	0.38		
11278	67.68	70.73	3.05	.026	1.48		
11279	70.73	71.95	1.22	.134	0.23)	.139 Au-e.	
11280	71.95	78.05	3.05	.026	0.98	@ 1.22 m.	
11281	78.05	81.10	3.05	.016	1.01		
11282	81.10	84.15	3.05	.010	Tr		
11283	84.15	85.67	1.52	.008	0.64		
11284	85.67	87.96	2.29	.008	0.63		
11285	87.96	91.01	3.05	.012	0.41		
11286	91.01	93.90	2.90	.010	Tr		
11287	96.34	98.17	1.83	.048	0.11		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-110

Section 51+00S Az. 230°

Date August 1985 Elev.

Lat. Depth 109.76 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-50°	-50°
83.23	-57°	-50°

Depth From	Depth To	Description
0	.91	Casing.
.91	109.76	Andesite lapilli tuff. Medium grey to light grey, white, grey-green. Hardness 6 - 7. Vague fragments visible, often sheared and foliated, may be grainy, up to 3 mm. Phaneritic occasionally, porphyritic. Weakly to moderately sericitized throughout. 0.91 - 29.88 - Moderately sericitized, less than 1% pyrite. No. 2 fault at 35° at 19.21 m. Foliated at 40°CA. Less than 1% quartz. 29.88 - 40.85 - Grainy tuff with fragments included. Moderately sericitized, less than 1% pyrite, less than 1% quartz. 40.85 - 49.70 - Light grey, aphanatic, less than 1% pyrite, less than 1% quartz. Small crush vein at 49.09 m. 49.69 - 53.05 - Good vein. Mottled, 50% quartz, 40% sulphides. Mainly pyrite, trace of galena, 1 - 2% red colored mineral, probably pyrargite. 53.05 - 54.88 - Light grey phaneritic rock. Intensely sericiticized, moderately silicified. 54.88 - 55.79 - Vein. 80% quartz, 25% massive pyrite.

Property BRUCEJACK Sheet No. 2 of 2

Hole No. S-85-110

Depth From	Depth To	Description
		55.79 - 63.41 - Vein zone. Mottled with some wall rock. 70% quartz vein, ±15% sulphides, pyrite. Intensely sericitized, intensely silicified.
		63.41 - 65.40 - Dark wall rock and 20% quartz veins, 25 - 30% very fine grained pyrite.
		65.40 - 71.95 - Vein. Very little wall rock, 75% quartz vein, mottled, light grey and white, intensely silicified. Fault zone from 67.99 - 71.95 at ±10°CA, very broken with abundant mud slips, 20% sulphides.
		71.95 - 97.35 - Vein. Pale vein zone. 10 - 15% sulphides, pyrite. Very fine grained, intensely silicified, moderately crackled to mildly brecciated, good sulphides from 96.04 - 97.35 m. (±25%).
		97.35 - 102.44 - Pale grey, aphanitic, intensely silicified, 10% disseminated pyrite, 15% quartz, moderately foliated at 40°CA.
		102.44 - 107.62 - Vein. 80% vein quartz, moderately crackled, mottled and mildly brecciated. ±15% sulphides, pyrite in blebs.
		107.62 - 109.76 - Pale grey, intensely silicified, aphanatic, less than 5% sulphides, less than 1% quartz.
		109.76 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-110

Sample No.	From	To	Width	Au	Ag	Au-e.	
11288	48.78	49.70	0.91	.556	132.91)	7.01 of	1.970 Au
11289	49.70	51.22	1.52	2.718	574.84)	m. of	260.96 Ag
11290	51.22	53.05	1.83	3.842	379.51)	(7.189	Au-e)
11291	53.05	54.88	1.83	0.030	3.154)		
11292	54.88	55.79	0.91	2.272	144.39)		
11293	55.79	57.32	1.52	.014	2.73)	518 of	.018 Au
11294	57.32	60.06	2.74	.025	7.14)	m. of	4.627 Ag
11295	60.06	60.98	0.91	.006	.25)	(.111	Au-e)
11296	60.98	63.41	2.44	.236	10.65)	6.40 of	0.361 Au
11297	63.41	65.40	1.98	.076	3.43)	m. of	16.772 Ag
11298	65.40	67.38	1.98	.800	37.65)	(0.696	Au-e)
11299	67.38	70.43	3.05	.034	.96		
11300	70.43	71.95	0.91	.024	1.12		
12085	45.73	48.78	3.05	.006	.41		
	48.78	67.38	18.60	.872	105.46	(2.981	Au-e.)
11301	71.95	75.00	3.05	.016	1.01		
11302	75.00	77.13	2.13	.012	1.57		
11303	77.13	78.35	1.22	.234	11.30	1.22 m. of	.460
11304	78.35	81.40	3.05	.038	.62	Au-e.	
11305	86.28	89.33	3.05	.015	Tr		
11306	89.33	92.38	3.05	.012	.54		
11307	92.38	94.21	1.83	.051	.31		
11308	94.21	96.04	1.83	.006	.45		
11309	96.04	97.41	1.31	.010	.26		
11310	97.41	99.70	2.35	.010	Tr		
11311	99.70	102.44	2.74	.030	.56		
11312	102.44	105.49	3.05	.014	Tr		
11313	105.49	108.23	2.74	.024	.89		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK — HOLE NO. S-85-111

Section 51+00S — Az. 230°

Date August, 1985 — Elev.

Lat. — Depth 166.46 m.

Dep. — Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-65°
91.46	-68°	-61°
166.46	-71°	-65°

Depth From	Depth To	Description
0	.91	Casing.
.91	47.87	Andesite tuff. Medium grey to pale grey-white, pale grey-green. Hardness 4. Fine grained phaneritic, 1 - 2 mm., moderately sericitized, less than 1% quartz vein, less than 2% pyrite, weakly foliated, 40° at 7.01 m., 50° at 12.20 m., 50° at 21.34 m., 50° at 31.10 m., 40° at 39.02 m. Paler and intensely sericitized toward the end of this section.
47.87	56.71	Breccia zone. Pale grey to pale grey-white. Hardness: variable - 3 and 7. Very fine grained in most fragments. Some fragments are banded, most are andesitic (intensely sericitized, intensely silicified) or quartz. 25% are coarse fragments of very fine grained pyrite, up to 10 cm. Breccia fragments are angular, slightly distorted, ±10% secondary sulphides in streaks and veinlets. No. 2 fault at 50.61 m. at 65°CA.
56.71	72.87	Andesite tuff. Pale grey, very fine grained, ±5% quartz, weakly foliated at 60°CA, less than 5% pyrite, intensely sericitized, moderately to intensely silicified.
72.87	117.68	Vein zone. Dark to light mottled. More than 50% vein quartz. ±20% pyrite, moderately to intensely silicified, intensely sericitized. 72.87 - 76.83 - Less than 50% vein quartz, ±20% pyrite.

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-111

Depth From	Depth To	Description
		76.83 - 78.05 - Some wall rock included, intensely silicified, intensely brecciated, 70% vein quartz. 78.05 - 83.54 - 50% vein quartz, 15% pyrite. 83.54 - 85.37 - Good white and grey mottled vein, ±30% pyrite, trace of galena. 85.37 - 86.59 - Intensely silicified, intensely sericitized wall rock with 80% quartz, 15% very fine grained sulphides, pyrite. 86.59 - 87.80 - Good vein, white and grey mottled, ±25% sulphides, mainly pyrite, trace galena, trace tetrahedrite, numerous specks electrum at 86.89 m. 87.80 - 102.13 - Vein. Pale grey and white. Very fine grained, dense and silicified. Greater than 50% quartz, intensely silicified, ±15% sulphides, pyrite. 102.13 - 108.84 - Quartz vein. Pale and mottled with some pale jade-green carbonate, ±10% sulphides, pyrite. 108.84 - 112.35 - White quartz vein with a few grey patches, less than 5% sulphides. 112.35 - 117.68 - Dark breccia vein, abundant jade-green carbonate, ±30% sulphides, pyrite, trace galena, trace tetrahedrite, vague foliation at 40°CA.
117.68	166.46	Andesite lapilli tuff. Light grey to medium grey to white. Hardness 5 - 6. Aphanitic with aphanatic ground mass, lapillis to ±1 cm. welded into a solid massive rock. Weak to moderately sericitized, moderately silicified. 117.99 - 120.43 - ±20% pyrite. 120.43 - 122.87 - Less than 1% pyrite. 122.87 - 123.78 - ±10% pyrite.

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-111

Depth		Description
From	To	
		123.78 - 124.69 - Less than 1% sulphides, pyrite.
		124.69 - 125.30 - ±15% sulphides, trace electrum.
		125.30 - 129.27 - Intensely silicified, ±5% sulphide.
		129.27 - 130.79 - Vein. Brecciated. ±20% pyrite.
		130.79 - 166.46 - Pale grey lapilli tuff. Less than 2% sulphides.
		166.46 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-111

Sample No.	From	To	Width	Au	Ag	Au-e.	
11314	47.56	50.61	3.05	.006	Tr		
11315	50.61	53.66	3.05	.006	Tr		
11316	53.66	56.71	3.05	.004	Tr		
11317	64.63	67.38	2.74	.010	0.36		
11318	72.87	73.78	0.91	.006	0.38		
11319	73.78	76.83	3.05	.010	0.82		
11320	76.83	79.88	3.05	.026	2.55)		
11321	79.88	82.93	3.05	.026	1.83)		
11322	82.93	83.54	0.61	.056	7.97)	4.27	
11323	83.54	86.98	2.44	.954	66.23)	) m. of	0.900 Au
11324	85.98	87.80	1.83	.848	63.67)	)	65.13 Ag
11325	87.80	89.33	1.52	.064	3.60)		
11326	89.33	92.38	3.05	.036	2.04)	(2.20 Au-e) @	
11327	92.38	95.43	3.05	.178	3.07)	76.83	
11328	95.43	98.48	3.05	.074	3.56)		
11329	98.48	101.52	3.05	.068	1.49)		
11330	101.52	104.57	3.05	.128	3.79)		
11331	104.57	107.32	2.74	.008	0.29)		
11332	107.32	108.84	1.52	.028	12.62)		
11333	108.84	110.67	6.00	.062	23.38)		
11334	110.67	112.35	5.50	.030	3.19)		
11335	112.35	115.40	10.00	.012	.28		
11336	115.40	117.68	7.50	.008	.13		
11337	117.68	120.42	8.00	.016	Tr		
11338	122.87	124.70	6.00	.028	.33		
11339	124.70	125.30	2.00	.146	.06		
11340	129.27	130.79	5.00	.022	Tr		
	76.83	112.35	35.52	.165	11.61	(.397 Au-e.)	

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD ZONE — HOLE NO. S-85-112

Section 0+00 — Az. 180°

Date August 24, 1985 — Elev.

Lat. — Depth 151.83 m.

Dep. — Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-50°	-50°
91.46	-55°	-46°
151.83	-56°	-47°

Depth From	Depth To	Description
0	0.91	Casing.
0.91	151.83	Andesite lapilli tuff. Dull grey-green, Hardness 3 - 4. Fine grained to very fine grained. Weakly to moderately sheared to weakly schistose. Texture aphanitic to very fine grained phaneritic and fragmental with fragments to 3 cm.
		0.91 - 2.44 - Moderately chloritized. ±5% pyrite.
		2.44 - 3.96 - Light grey, moderately sericitized, weakly silicified, weakly carbonatized. ±5% pyrite.
		3.96 - 5.49 - Moderately chloritized, less than 5% pyrite.
		5.49 - 11.89 - Moderately bleached, intensely sericitized, moderately foliated at 70°CA, ±10% pyrite. ±.12 m. fault gouge at 6.10 at 80°; .03 m. fault gouge at 11.59 at 70°.
		11.89 - 13.11 - Moderately chloritized.
		13.11 - 20.43 - Intensely bleached, intensely propylitized, ±20% pyrite. 0.03 m. fault gouge at 19.00 at 70°.
		20.43 - 21.65 - Moderately chloritized.
		21.65 - 23.78 - Moderately propylitized, weakly bleached. ±7% pyrite.
		23.78 - 25.30 - Moderately chloritized. ±7% pyrite.

Property SNOWFIELD ZONE Sheet No. 2 of 3

Hole No. S-85-112

Depth From	Depth To	Description
		25.30 - 29.57 - Moderately chloritized, weakly propylitized, ±5% pyrite.
		29.57 - 34.76 - Moderately chloritized, moderately propylitized, less than 5% pyrite.
		34.76 - 41.77 - Intensely propylitized, foliation at 60°, ±7% pyrite.
		41.77 - 43.60 - Weakly propylitized, moderately chloritized, less than 5% pyrite, ghosts of fragments.
		43.60 - 44.82 - Intensely propylitized, 5 - 10% pyrite.
		44.82 - 45.12 - Fault. Mixed fault gouge and rock fragments.
		45.12 - 50.00 - Moderately sericitized, pyrite replacing selected lapilli and in veinlets, moderately chloritized, ±10% pyrite.
		50.00 - 50.30 - Moderately bleached, intensely sericitized, ±15% pyrite.
		50.30 - 65.55 - Moderately to intensely chloritized, moderately propylitized, ±7% pyrite disseminated and in veinlets.
		65.55 - 75.61 - Very pale zone. Intensely propylitized, ±15% pyrite, locally up to 30%, traces of silicification and foliation is at 70°CA.
		75.61 - 96.65 - Intensely chloritized, moderately propylitized, less than 5% pyrite, visible ghosts of fragments.
		96.65 - 99.39 - Moderately to intensely propylitized, moderately bleached, ±7% pyrite.
		99.39 - 117.68 - Moderately to intensely chloritized, short sections of bleaching. Sericitization and pyritization.

Property SNOWFIELD ZONE Sheet No. 3 of 3

Hole No. S-85-112

Depth		Description
From	To	
		117.68 - 121.95 - Unaltered to weakly propylitized.
		121.95 - 139.33 - Moderately to intensely propylitized, moderately chloritized, fragments visible, ~7% pyrite, mainly in stringers.
		139.33 - 151.83 - Intensely propylitized, pale grey, ~15% pyrite. Slightly mottled, weak foliation at 70°CA.
		151.83 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD ZONE Sheet No. 1 of 2

Hole No. S-85-112

Sample No.	From	To	Width	Au	Ag	Au-e.
11341	0.91	3.96	3.05	.084	.04)	
11342	3.96	5.49	1.52	.054	Tr)	
11343	5.49	8.54	3.05	.044	Tr.)	
11344	8.54	11.59	3.05	.044	Tr)	
11345	11.59	14.63	3.05	.070	Tr)	
11346	14.63	17.68	3.00	.124	.14)	
11347	17.68	20.73	3.05	.064	Tr)	
11348	20.73	23.78	3.05	.070	Tr)	
11349	23.78	26.83	3.05	.050	Tr)	
11350	26.83	29.88	3.05	.066	Tr)	
11351	29.88	32.93	3.05	.058	Tr)	
11352	32.93	35.98	3.05	.094	Tr)	0.91 - 69.51 m.
11353	35.98	39.02	3.05	.074	Tr)	68.60 m. of .072
11354	39.02	42.07	3.05	.044	Tr)	oz. Au/T.
11355	42.07	45.12	3.05	.182	Tr)	
11356	45.12	48.17	3.05	.048	Tr)	
11357	48.17	51.22	3.05	.052	Tr)	
11358	51.22	54.27	3.05	.074	Tr)	
11359	54.27	57.32	3.05	.070	Tr)	
11360	57.32	60.37	3.05	.040	Tr)	
11361	60.37	63.41	3.05	.056	Tr)	
11362	63.41	66.46	3.05	.088	Tr)	
11363	66.46	69.51	3.05	.092	Tr)	
11364	69.51	72.56	3.05	.028	Tr)	
11365	72.56	76.61	3.05	.032	Tr)	
11366	76.61	78.66	3.05	.062	Tr)	
11367	78.66	81.71	3.05	.074	Tr)	
11368	81.71	84.76	3.05	.046	Tr)	
11370	84.76	87.80	3.05	.044	Tr)	
11371	87.80	90.85	3.05	.040	Tr)	
11372	90.85	93.90	3.05	.058	Tr)	82.32 m. of .041
11373	93.90	96.95	3.05	.060	Tr)	Au/T.
11374	96.95	100.00	3.05	.036	Tr)	
11375	100.00	103.05	3.05	.038	Tr)	
11376	103.05	106.10	3.05	.026	.12)	
11377	106.10	109.15	3.05	.030	Tr)	
11378	109.15	112.20	3.05	.046	.10)	
11379	112.20	115.24	3.05	.054	.47)	
11380	115.24	118.29	3.05	.016	Tr)	
11381	118.29	121.34	3.05	.022	Tr)	
11382	121.34	124.39	3.05	.020	Tr)	
11383	124.39	127.44	3.05	.028	Tr)	
11384	127.44	130.49	3.05	.032	Tr)	
11385	130.49	133.54	3.05	.032	Tr)	
11386	133.54	136.59	3.05	.030	Tr)	
11387	136.59	139.63	3.05	.046	.12)	

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD ZONE Sheet No. 2 of 2

Hole No. S-85-112

Sample No.	From	To	Width	Au	Ag	Au-e.	
11388	139.63	142.68	3.05	.064	Tr)		
11389	142.68	145.73	3.05	.034	Tr)		
11390	145.73	148.78	3.05	.048	Tr)		
11391	148.78	151.83	3.05	.050	Tr)		

DIAMOND DRILL RECORD

PROPERTY SNOWFIELDS HOLE NO. S-85-113

Section N/A Az. 215°

Date August, 1985 Elev.

Lat. Depth 152.44 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-50°	-50°
91.46	-55°	-46°
152.44	-59°	-51°

Depth From	Depth To	Description
0	1.52	Casing.
1.52	152.44	Andesite lapilli tuff. Pale grey-green to pale grey. Hardness 4 - 6. Aphanitic to fine grained, weakly to moderately foliated, occasional ghosts of fragments visible. 1.52 - 3.05 - Moderately to intensely chloritized. 3.05 - 4.27 - Intensely sericitized and propylitized. 4.27 - 7.01 - Intensely chloritized, ghosts of fragments visible, ±7% pyrite. 7.01 - 27.44 - Pale grey, intensely propylitized, moderately foliated, weakly silicified, ±15% pyrite. 27.44 - 40.55 - Pale grey to pale grey-green, moderately foliated, moderately propylitized, weakly chloritized. Foliation at 60°CA. 3 - 5% pyrite. 40.55 - 45.12 - Medium greys, ghosts of fragments visible, some grainyness visible, unaltered to weakly propylitized, weakly chloritized, ±2% pyrite. 45.12 - 54.27 - Moderately propylitized, moderately chloritized, ±2% pyrite.

Property SNOWFIELDS Sheet No. 2 of 3

Hole No. S-85-113

Depth From	Depth To	Description
		54.27 - 57.32 - Medium greys, moderately to intensely propylitized, ±7% - 10% pyrite, minor fine quartz veinlets with associated sulphides. No. 2 fault zone with 1 cm. gouge at 55.79 m.
		57.32 - 61.89 - Moderately propylitized, moderately to weakly chloritized, 10 - 15% pyrite, traces of very fine quartz veinlets, less than 1 cm. Moderately foliated at 45° CA.
		61.89 - 64.63 - Pale grey, finely banded or foliated at 55 - 60° CA, a few quartz veinlets, up to 4 cm. Patches and bands of pyrite, ±5%.
		64.63 - 69.51 - Moderately propylitized, moderately to weakly chloritized, 2 - 3% pyrite, moderately foliated.
		69.51 - 75.61 - Medium greys, intensely cerecitized, numerous very fine quartz veinlets, ±2% pyrite.
		75.61 - 97.26 - Moderately propylitized, moderately chloritized, ghosts of fragments visible, less than 2% pyrite, occasional veinlets of pyrite and ore. Very fine quartz veinlets.
		97.26 - 98.17 - Moderately chloritized, several .2 to 1 cm. quartz veinlets, less than 1% pyrite.
		98.17 - 152.44 - Weakly to moderately propylitized with short sections of intense propylitization, ±10% pyrite in veinlets, moderately chloritized, weakly to moderately

Property SNOWFIELDS Sheet No. 3 of 3

Hole No. S-85-113

Depth		Description
From	To	
		foliated. Intense propylitization is from 100.00 - 100.61 m. with 5% pyrite; 102.74 - 103.05 with 2% pyrite; 106.71 - 107.62 with 7% pyrite; 109.15 m. - 110.06 m. with 15% pyrite; 129.57 - 130.18 m. with quartz veinlets. Ghosts of fragments are visible throughout most of this section except where foliation and propylitization is moderate or intense. No. 1 fault at 122.71 m. at 40°CA, No. 1 fault at 129.57 m. at 40°CA, No. 1 fault at 130.18 m. at 40°CA. 1 - 2 cm. mud in each of these faults. Moderately chloritized to the end of the hole, intense propylitization: 0.91 at 122.27 m.; 0.30 at 136.89 m.; 0.61 at 151.83 m.
	152.44	END OF HOLE

DIAMOND DRILL RECORD

PROPERTY SNOWFIELDS Sheet No. 1 of 2

Hole No. S-85-113

Sample No.	From	To	Width	Au	Ag	Au-e.	
11418	1.22	2.44	1.22	.108	Tr)		
11419	2.44	5.49	3.05	.078	Tr)		
11420	5.49	8.54	3.05	.054	Tr)		
11421	8.54	11.59	3.05	.056	Tr)		
11422	11.59	14.63	3.05	.028	Tr)	1.22 - 81.71 =	
11423	14.63	17.68	3.05	.010	Tr)	80.49 m. of .073	
11424	17.68	20.73	3.05	.056	Tr)	Au	
11425	20.73	23.78	3.05	.090	Tr)		
11426	23.78	26.83	3.05	.064	Tr)		
11427	26.83	29.88	3.05	.056	.15)		
11428	29.88	32.93	3.05	.070	Tr)		
11429	32.93	35.98	3.05	.086	Tr)		
11430	35.98	39.02	3.05	.096	Tr)		
11431	39.02	42.07	3.05	.096	Tr)		
11432	42.07	45.12	3.05	.102	.19)		
11453	45.12	48.17	3.05	.084	Tr)		
11454	48.17	51.22	3.05	.104	Tr)		
11455	51.22	54.27	3.05	.114	Tr)		
11456	54.27	57.32	3.05	.104	Tr)		
11457	57.32	60.37	3.05	.072	Tr)		
11458	60.37	63.41	3.05	.074	.11)		
11459	63.41	66.46	3.05	.066	Tr)		
11460	66.46	69.51	3.05	.062	Tr)		
11461	69.51	72.56	3.05	.058	Tr)		
11462	72.56	76.61	3.05	.014	Tr)		
11463	75.61	78.66	3.05	.084	Tr)		
11464	78.66	81.71	3.05	.096	Tr)		
11465	81.71	84.76	3.05	.062	Tr)		
11466	84.76	87.80	3.05	.058	Tr)		
11492	87.80	90.85	3.05	.058	.11)		
11493	90.85	93.90	3.05	.056	.10)		
11494	93.90	96.95	3.05	.044	Tr)		
11495	96.95	100.00	3.05	.058	.18)		
11496	100.00	103.05	3.05	.040	Tr)		
11497	103.05	106.10	3.05	.032	Tr)	54.88 m. of	
11498	106.10	109.15	3.05	.053	Tr)	.050 oz. Au/T.	
11499	109.15	112.20	3.05	.050	Tr)	@ 81.71 m.	
11500	112.20	115.24	3.05	.052	Tr)		
11501	115.24	118.29	3.05	.034	Tr)		
11502	118.29	121.34	3.05	.048	Tr)		
11503	121.34	124.39	3.05	.030	Tr)		
11504	124.39	127.44	3.05	.046	Tr)		
11505	127.44	130.49	3.05	.062			

DIAMOND DRILL RECORD

PROPERTY SNOWFIELDS Sheet No. 2 of 2

Hole No. S-85-113

Sample No.	From	To	Width	Au	Ag	Au-e.	
11533	130.49	133.54	3.05	.058	.15)		
11534	133.54	136.59	3.05	.050	Tr)		
11535	136.59	139.63	3.05	.032	.17)		
11536	139.63	147.68	3.05	.036	.22)		
11537	142.68	145.73	3.05	.034	.19)	.034 Au/15.85 m.	
11538	145.73	148.78	3.05	.034	Tr)		
11539	148.78	151.83	3.05	.036	Tr)		
11540	151.83	152.44	0.61	.022	Tr)		
					1.22	136.59 = 135.37 m.	
					of .064 oz. Au/Ton		

DIAMOND DRILL RECORD

PROPERTY SNOWFIELDS HOLE NO. S-85-114

Section N/A Az. 135°

Date August, 1985 Elev.

Lat. Depth 126.82 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-50°	-50°
84.76	-57°	-48°
126.82	-55.5°	-46°

Depth From	Depth To	Description
0	1.22	Casing.
1.22	126.82	Andesite lapilli tuff. Pale grey, dull grey-green. Hardness 4 - 5. Ghosts of fragments up to 5 cm. Moderately to intensely propylitized and chloritized. 1.22 - 1.83 - Intensely chloritized. 1.83 - 3.96 - Intensely serecitized and propylitized. ±2 - 3% pyrite. 3.96 - 11.58 - Moderate chloritization, moderate propylitization, ±10% pyrite. 11.58 - 17.68 - Intense propylitization, moderate to intense pyritization, 10% fine pyrite as stringers and disseminations. 17.68 - 26.83 - Intense propylitization, moderate chloritization, occasional quartz veinlets with pyrite. Pyrite up to 15%. 26.83 - 54.27 - Weakly to moderately propylitized, moderately chloritized, more intesely prophylitized sections carry up to 20% pyrite, overall ±10% pyrite, weakly foliated at 60°CA. 54.27 - 67.07 - Intensely propylitized,

Property SNOWFIELDS Sheet No. 2 of 2

Hole No. S-85-114

Depth From	Depth To	Description
		±7 - 8% pyrite, unaltered to weakly chloritized.
67.08	78.35	Weakly propylitized, moderately to intensely chloritized, 8% pyrite, 1' quartz vein at 78.35 m. at 75°CA.
78.35	88.11	Intensely propylitized, unaltered to traces of chlorite, ±10 - 12% fine pyrite and stringers.
88.11	91.77	Weakly propylitized, weakly chloritized, fine grained with fine fragments, ±.5 cm.; ~3% fine pyrite stringers.
91.77	97.56	Intensely propylitized, weakly silicified, ±15% pyrite associated with shearing and faulting. No chlorite alteration. No. 2 fault with 0.31 m. fault gouge at 95.12 m. at 55°CA. No. 1 fault with 1 cm. fault gouge at 95.58 m. at 50°CA. Minor quartz on both these faults.
97.56	102.74	Good visible fragments, weakly propylitized, weakly chloritized, moderately pyritized, up to 10% weakly silicified.
102.74	126.82	Fine grained, weakly propylitized, weakly to moderately chloritized, ±3% quartz carbonate veinlets, less than 2% pyrite. No. 2 fault at 119.82 at 65°CA; No. 1 fault at 119.51 m. at 65°CA.
126.82		END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY SNOWFIELDS Sheet No. 1 of 1

Hole No. S-85-114

Sample No.	From	To	Width	Au	Ag	Au-e.	
11541	1.22	2.44	1.22	.064	Tr)		
11542	2.44	5.49	3.05	.048	Tr)		
11543	5.49	8.54	3.05	.062	Tr)		
11544	8.54	11.58	3.05	.026	Tr)		
11545	11.58	14.63	3.05	.076	Tr)		
11557	14.63	17.68	3.05	.072	Tr)		
11558	17.68	20.73	3.05	.072	Tr)		
11559	20.73	23.78	3.05	.096	Tr)		1.22 m. -
11560	23.78	26.83	3.05	.074	Tr)		78.66 m. =
11561	26.83	29.88	3.05	.110	Tr)		77.44 m. of
11562	29.88	32.93	3.05	.098	Tr)		0.072 oz.
11563	32.93	35.98	3.05	.056	Tr)		Au/T. @
11564	35.98	39.02	3.05	.076	Tr)		1.22
11565	39.02	42.07	3.05	.076	Tr)		
11566	42.07	45.12	3.05	.076	Tr)		
11567	45.12	48.17	3.05	.144	Tr)		
11568	48.17	51.22	3.05	.096	Tr)		
11569	51.22	54.27	3.05	.086	Tr)		
11570	54.27	57.32	3.05	.048	Tr)		
11571	57.32	60.37	3.05	.030	Tr		
11572	60.37	63.41	3.05	.036	Tr		
11573	63.41	66.46	3.05	.058	.79)		
11574	66.46	69.51	3.05	.086	Tr		
11575	69.51	72.56	3.05	.086	Tr)		
11576	72.56	75.61	3.05	.078	Tr)		
11577	75.61	78.66	3.05	.068	Tr)		
11578	78.86	81.71	3.05	.020	Tr)		
11579	81.71	84.76	3.05	.074	Tr		
11580	84.76	87.80	3.05	.054	Tr)		30.49 m.
11581	87.80	90.85	3.05	.080	Tr)		of 0.064
11582	90.85	93.90	3.05	.090	Tr)		oz. Au/T.
11583	93.90	96.95	3.05	.050	Tr)		@ 78.66 m.
11584	96.95	100.00	3.05	.046	Tr)		
11585	100.00	103.05	3.05	.072	Tr)		
11586	103.05	106.11	3.05	.064	Tr)		
11587	106.10	109.15	3.05	.092	Tr)		
11588	109.15	112.20	3.05	.044	Tr)		
11589	112.20	115.24	3.05	.046	Tr)		
11590	115.24	118.29	3.05	.046	Tr)		
11591	118.29	121.34	3.05	.032	Tr)		17.69 m.
11592	121.34	124.39	3.05	.032	.13)		of 0.038
11593	124.39	126.82		.026	Tr)		oz. Au/T.
							@ 109.15 m.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK WEST HOLE NO. S-85-115

Section 51+40S Az. 230°

Date August, 1985 Elev.

Lat. Depth 117.99 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-35°	-35°
103.05	-45.5°	-38°

Depth		Description
From	To	
0	0.91	Casing.
0.91	5.03	Fragmental (conglomerate). Light greys, hardness 3 - 4. Fine to medium grained matrix supported fragmental, 1 mm. 2 cm. Moderately to intensely propylitized, may be andesite lapilli tuff.
5.03	5.64	Andesite lapilli tuff. Medium to dark grey. Hardness 4 - 5. Fine to medium grained, grainy in appearance. Fragments up to 10 cm.
5.64	16.46	Andesite lapilli tuff. Medium greys, to grey-green. Moderately foliated with weakly schistose sections. Moderately propylitized, weakly chloritized.
16.46	31.09	Andesite lapilli tuff. Medium to dark greys, white. Hardness 3 - 4. Medium grained, grainy thoughout with 25% white grains, ±1 - 2 mm. Slightly foliated at 60°CA, occasional ghosts of fragments, less than 5% pyrite.
31.09	35.67	Andesite lapilli tuff. Same as above, but light grey. Intensely propylitized. ±15% pyrite, weakly foliated at 60°CA.
35.67	42.07	Sedimentary-fragmental, clean fragmental. Light grey to medium greys, pale grey-pink. White fragments are clean, angular and some

Depth From	Depth To	Description
		are near massive in pyrite or selectively replaced, minor pyrite veinlets, weakly foliated at 65°, weakly silicified in some areas, up to 20% pyrite. No. 2 fault with 5 cm. good gouge at 38.11 m.
42.07	47.56	Andesite lapilli tuff. Medium to pale grey. Hardness 5 ~ 6. Fine grained phaneritic. ±5% pyrite veinlets, minor quartz veinlets, weakly propylitized, even textured to massive, moderately silicified.
47.56	85.98	Vein zone. Pale grey-white. Hardness 7. Very fine grained aphanitic, ±50% quartz vein. Intensely silicified. 47.56 - 51.22 - Weaker vein. ±30% quartz, ±10% pyrite, except in the following patches: 10 cm. at 48.17 m. and 5 cm. at 50.61 m. Up to 30% pyrite. No. 1 fault at 44.82 m. at 60°CA. 51.22 - 54.57 - 60% quartz, intensely silicified, foliated at 65° CA. 54.57 - 55.95 - Pale, massive wall rock. Intensely propylitized, intensely silicified. 55.95 - 61.59 - Good vein. ±50% quartz vein, ±15% sulphides. 61.59 - 65.24 - 80% vein quartz, ~7% sulphides. 65.24 - 67.68 - Intensely silicified, intensely propylitized wall rock with 20% vein quartz. 67.68 - 73.78 - Good white vein quartz. ±80% quartz, ±7% sulphides, intensely silicified. No. 2 fault at 50°CA at 70.73 m. 73.78 - 79.27 - ±40% vein quartz. Wall rock is intensely silicified and intensely propylitized with numerous small quartz veinlets. ±5% sulphides, ±1% pale creamy colored

Property BRUCEJACK WEST Sheet No. 3 of 3

Hole No. S-85-115

Depth From	Depth To	Description
		sphalerite, trace of pyrargyrite. 79.27 - 81.71 - White quartz vein, ±90% quartz, ±2% pyrite. 81.71 - 85.98 - Medium to pale grey, intensely propylitized, moderately foliated at 60°CA. ±10% pyrite, 10% jade-green serpentinized carbonate.
85.98	117.99	Pebble conglomerate. Dark matrix with white pebble-size fragments. Fragments are well-rounded. Both matrix and pebbles are intensely silicified. 86.59 - 87.20 - BROKEN CORE with some mud on slips. 87.20 - 96.65 - Pale grey with lighter pebble-sized fragments, ±1 cm. Less than 5% pyrite. 96.65 - 102.44 - Medium grey, pale grey-green. Hardness 3. Moderately foliated. Some short sections of massive sulphides. 0.05 at 98.17, 98.78, 99.08, 99.39, 100.61, and 101.83 m. 102.44 - 103.96 - Vein. ±30% vein quartz in pale, foliated rock at 60° CA. Light flecks of altered feldspar, up to ±2 mm. 103.96 - 117.99 - Pale to medium grey, moderately propylitized coarse sand to pebble-size particles, sub-angular to sub-rounded, mostly pale fragments supported in a dark matrix with ±2% pyrite. 117.99 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK WEST Sheet No. 1 of 1

Hole No. S-85-115

Sample No.	From	To	Width	Au	Ag	Au-e.	
11392	12.80	15.85	3.05	.014	Tr		
11393	31.10	34.15	3.05	.014	Tr		
11394	34.15	35.67	1.52	.016	Tr		
11395	35.67	38.72	3.05	.012	Tr		
11396	38.72	41.77	3.05	.010	Tr		
11397	46.04	47.57	1.52	.014	Tr		
11398	47.57	50.61	3.05	.226	3.27	.291	8.38 m. of /.207 Au-e./ T @ 47.57 m.
11399	50.61	53.66	3.05	.096	3.11	.158	
11400	53.66	55.95	2.29	.070	4.53	.161	
11401	55.95	57.01	1.07	.034	.98	.054	
11402	57.01	60.06	3.05	.018	2.47	.067	
11403	60.06	63.11	3.05	.074	2.30	.120	
11404	63.11	66.16	3.05	.026	1.48	.056	
11405	66.16	69.21	3.05	.026	1.70	.060	
11406	69.21	72.26	3.05	.054	1.71	.088	
11407	72.26	75.30	3.05	.044	1.46	.073	
11408	73.30	78.36	3.05	.036	1.21	.060	
11409	78.36	81.40	3.05	.016	2.13		
11410	81.40	84.45	3.05	.022	.26		
11411	84.45	87.50	3.05	.034	Tr		
11412	87.50	99.70	3.05	.006	Tr		
11413	99.70	102.74	3.05	.008	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-116

Section 51+40S Az. 230°

Date August, 1985 Elev.

Lat. Depth 125 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-50°	-50°
125	-56.5°	-48°

Depth		Description
From	To	
0	0.91	Casing.
0.91	2.44	Andesite tuff. Pale grey. Hardness 3. Coarse grained. ±1mm. to pebbly, 5 mm. Intensely propylitized, moderately kaolinized.
2.44	7.01	Andesite lapilli tuff. Pale to medium grey. Hardness 3. Aphanatic, moderately foliated at 60°CA, intensely propylitized.
7.01	38.41	Andesite lapilli tuff. Pale to medium greys. Hardness 5 - 6. 7.01 - 15.55 - Moderately chloritized, moderately propylitized. 15.55 - 23.17 - Fine grained, massive, moderately propylitized, 1 - 2% pyrite. 23.17 - 30.49 - Weakly propylitized, weakly chliritized, suggestion of graininess with weak foliation at 55°CA. ±3 - 4% pyrite. 30.49 - 38.41 - Pale grey, some graininess with ±5% pyrite, moderately to intensely propylitized. Hardness 4. No. 1 fault at 50°CA at 33.38 m. Contact with the following section along a No. 1 fault at 60°CA at 38.41 m.

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-116

Depth		Description
From	To	
38.41	46.04	Sedimentary fragmental. Bright greys. Hardness 4 - 6. Very fine grained aphanitic fragments. Fragments are up to 10 cm., very angular, ±10% of fragments are sulphide, mostly pyrite. Strong foliation ±50°CA. Some fragments appear slightly elongated.
46.04	62.50	Andesite lapilli tuff. Medium grey to white. Hardness 5 - 7. Very fine grained to aphanatic, cut by 20% quartz veinlets, moderate to intensely silicified, intensely propylitized. 46.04 - 51.22 - ±5% pyrite. 51.22 - 61.59 - ±10 - 20% pyrite as blebs, veinlets, disseminations and fragments which are preferentially replaced by pyrite. This section is darker than similar sections. 61.59 - 62.50 - Paler grey, less than 2% pyrite.
62.50	88.57	Vein. Medium grey to white, mottled in appearance. Hardness 7. ±50% vein quartz. Intensely propylitized, intensely silicified, containing wall rock fragments which are very fine grained to aphanatic. 1' of broken core at 78.35 m. Less than 5% pyrite, locally up to 40% pyrite with traces of galena and sphalerite. Sulphide sections: 0.15 at 85.98 m. and 0.15 at 87.80 m.
88.57	91.77	Andesite lapilli tuff. Medium greys flecked with white. Hardness 4.5. Very fine grained to aphanatic, very fine grained porphyritic, moderately brecciated, moderately foliated, up to 30% sulphides, mainly pyrite with a trace of electrum, ±15% sulphides overall. Foliation at 60°CA.
91.77	97.87	Vein. Pale grey to white, mottled. Hardness 7. Very fine grained wall rock. Vein is clean quartz, less than 10% pyrite.
97.87	125.00	Pebble conglomerate. Medium to pale grey. Hardness 5. Pebbly texture. ± 1cm. down to coarse sand size. 0.5 mm. Locally

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-116

Depth		Description
From	To	
		foliated. Some sorting with sections of bigger particles, moderately sericitized. No. 1 fault at 35° at 123.17 m.
		125.00 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-116

Sample No.	From	To	Width	Au	Ag	Au-e.	
11414	25.00	28.05	3.05	.010	Tr		
11415	28.05	30.79	2.74	.016	Tr		
11416	38.41	41.46	3.05	.006	Tr		
11417	41.46	44.51	3.05	.008	Tr		
11433	44.51	47.56	3.05	.006	Tr		
11434	47.56	50.61	3.05	.008	Tr		
11435	50.61	53.66	3.05	.008	Tr		
11436	53.66	56.71	3.05	Tr	.26		
11437	56.71	59.76	3.05	.016	.56		
11438	59.76	62.80	3.05	.010	.72		
11439	62.80	65.85	3.05	.156	2.97	.215)	6.10 m. of
11440	65.85	68.90	3.05	.034	4.94	.133)	0.095 Au
11441	68.90	71.95	3.05	.048	1.64)	.080	3.960 Ag
11442	71.95	75.00	3.05	.024	1.24	.049	(0.174 Au-e.
11443	75.00	78.05	3.05	.008	3.00	.068	@ 62.80 m.
11444	78.05	81.10	3.05	.010	2.04	.051	
11445	81.10	84.15	3.05	.028	1.53	.095	
11446	84.15	85.98	3.05	.024	2.10	.066	
11447	85.98	88.57	2.59	.046	2.64	.099	
11448	88.57	91.62	3.05	.006	Tr		
11449	91.62	94.66	3.05	.032	Tr		
11450	94.66	97.71	3.05	.046	.53		
	62.80	88.57				.092	

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-117

Section 51+40S Az. 230°

Date August 31, 1985 Elev.

Lat. Depth 161.28 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-65°	-65°
76.22	-69°	62.5°
161.28	77.5°	72.0°

Depth From	Depth To	Description
0	0.91	Casing.
0.91	8.84	Sedimentary fragmental. Pale to medium grey. Hardness 6 - 7. Pebble conglomerate. Moder- propylitized, fragments are sub-angular to sub-rounded, some distortion, elongated with the foliation. 0.91 - 4.27 - Weakly foliated, moderately propylitized. 4.27 - 8.84 - Much finer grained, moder- ately foliated at 55° CA.
8.84	46.95	Andesite lapilli tuff. Pale, medium grey, grey-green. Hardness 4 - 5. Usually dark aphanitic, occasionally lighter in color and grainy with moderately sericitization. 8.84 - 18.29 - Moderately propylitized, moderately to intensely chloritized. Less than 1% sulphide. 18.29 - 22.56 - Intensely propylitized, fine to medium grainy in texture. 22.56 - 25.30 - Weakly propylitized. 25.30 - 28.35 - Weakly propylitized, med- ium dark grey, medium grainy. 7% pyrite. 28.35 - 33.23 - Weakly propylitized, weakly chloritized. 2 - 3% pyrite. 33.23 - 35.67 - Weakly propylitized, grainy with ghosts of fragments.

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-117

Depth From	Depth To	Description
		35.67 - 36.89 - Intensely propylitized, weakly chloritized. 7 - 10% pyrite. 36.89 - 39.63 - Weakly propylitized, weakly silicified. ±15% pyrite. One strong mineralized slip at 39.02 m. at 45°CA. 39.63 - 46.95 - Medium grey, moderately propylitized, vague graininess. ±5% pyrite. Occasional good fragmental sections.
46.95	53.05	Sedimentary fragmental. Pale to medium grey. Hardness 4. Coarse fragments, up to 10 cm. Fragments are angular with up to 15% fragments rich in sulphides, pyrite, many barren, moderately to intensely propylitized, fragments are elongated by 50%.
53.05	90.85	Andesite lapilli tuff. Pale to medium to dark greys, whites. Hardness 5 - 7. Very fine grained, aphanitic. 5% quartz veins. Crackled with dark staining and core of pyrite along the crackles. Some disseminated pyrite. Most of the sections 5% pyrite, except for: .30 at 53.05 is 25%, .62 at 60.06 is 25%, 3.35 at 61.28 is 15%, .30 at 70.43 is 20%, 70.42 - 82.93 is 15%, .91 at 86.59 is 25% and brecciated, 86.59 - 90.85 is 15%.
90.85	107.62	Vein. Medium grey to white. Hardness 7. Very fine grained, aphanitic. 60 - 75% quartz as coarse veins with numerous fine, 1 - 2 mm., quartz veinlets, mottled looking. 90.85 - 100.00 - 15% pyrite as fine stringers and disseminations, intensely silicified. 100.00 - 105.49 - White bull quartz, trace pyrite stringers. 105.49 - 107.62 - Dark grey, moderately foliated, 20 - 25% sulphides, trace of pink staining after pyrargyrite.

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-117

Depth From	Depth To	Description
107.62	161.28	Pebble conglomerate. Medium grey, white. Hardness 6 - 7. Fragments .2 - 1.5 cm. White, aphanatic with a dark matrix. Fragments slightly elongated, weakly foliated at 40°CA. 117.07 - 120.12 - Well foliated, 15% pyrite, very fine grained, 15% quartz veins, intensely silicified. 120.12 - 129.35 - Compact, massive section. Pebble ghosts visible, intensely silicified, intensely sericitized, 2% pyrite. 129.35 - 137.50 - Coarser fragments, up to 3 cm. with black matrix, intensely sericitized, intensely silicified, matrix may have disseminated pyrite. 137.50 - 140.85 - Fragments are sharply outlined, moderately to weakly sericitized, weakly silicified, weakly foliated at 40°CA. 140.85 - 142.07 - Moderately to intensely sericitized, weakly silicified, 142.07 - 150.30 - Vein. Moderate vein with 50% enclosed wall rock, 40% quartz, some pink-orange quartz. Ground is a little broken with a No. 1 fault at 148.78 m. at 60°CA. Mineralization is 2 - 3% sulphide, but shows some red staining (pyrargyrite). Ground core: 0.30. 150.30 - 161.28 - Mottled, pebble rock, moderately sericitized, weakly silicified, less than 1% pyrite, less than 1% quartz. 161.28 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-117

Sample No.	From	To	Width	Au	Ag	Au-e.	
11451	33.23	35.67	2.44	.006	Tr		
11452	36.89	39.63	2.74	.008			
11467	43.90	46.95	3.05	.006	Tr		
11468	46.95	50.00	3.05	.014	Tr		
11469	50.00	53.05	3.05	.006	Tr		
11470	53.05	56.10	3.05	.008	Tr		
11471	56.10	59.15	3.05	.036	.39		
11472	59.15	62.20	3.05	.010	.33		
11473	62.20	65.24	3.05	.004	Tr		
11474	65.24	68.29	3.05	.014	.42		
11475	68.29	71.34	3.05	.006	Tr		
11476	71.34	74.39	3.05	.008	Tr		
11477	74.39	77.44	3.05	.008	Tr		
11478	77.44	80.49	3.05	.006	Tr		
11479	80.49	83.54	3.05	.010	Tr		
11480	83.54	86.59	3.05	.006	Tr		
11481	86.59	89.63	3.05	.016	.99		
11482	89.63	90.85	1.22	.008	Tr		
11483	90.85	93.90	3.05	.028	2.91	.086)	0.055 Au
11484	93.90	96.95	3.05	.054	5.49	.164)	4.410 Ag
11485	96.95	100.00	3.05	.046	3.43	.115)	(0.143 Au-e)
11486	100.00	103.05	3.05	.052	1.57	.083)	over 14.64 m
11487	103.05	105.49	2.44	.106	9.70	.300)	
11488	105.49	107.93	2.44	.012	1.02	.032	
11489	107.93	110.98	3.05	.020	.99	.040	
11490	110.98	114.02	3.05	.028	1.04	.049	
11491	114.02	117.07	3.05	.032	Tr		
11506	117.07	120.12	3.05	.402	.37	.409	
11507	130.18	133.23	3.05	.016	Tr		
11508	133.23	136.28	3.05	.008	Tr		
11509	136.28	137.80	1.52	.020	Tr		
11510	142.07	145.12	3.05	.008	Tr		
11511	145.12	148.17	3.05	.020	Tr		
11512	148.17	150.30	2.13	.020	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-118

Section 51+80S Az. 230°

Date August, 1985 Elev.

Lat. Depth 152.44 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-70°	-70°
76.22	-73.5°	-68°

Depth From	Depth To	Description
0	1.22	Casing.
1.22	7.01	Andesite tuff. Medium grey. Hardness 4 - 5. Fine grained, tuffaceous arkosic texture with no bedding or sorting. Grain size: 1 mm., weakly foliated at 45 - 50°, intensely sericitized and propylitized. Contact with the next section at 25°.
7.01	35.06	Andesite lapilli tuff. Medium grey, dark grey. Hardness 4 - 5. Aphanitic to vaguely grainy, porphyritic. 7.01 - 20.12 - Dark grey with vague mottled sections, weakly propylitized. ±20% pyrite. 20.12 - 30.49 - Medium dark grey with occasional short lighter sections. Some ghosts of fragments visible. Moderately sericitized, weakly propylitized, 2% pyrite. 30.48 - 35.06 - Medium mauve-grey. Very fine grained, phaneritic to massive with black flecks, 0.5 mm. Trace pyrite.
35.06	44.21	Sedimentary fragmental. Light matrix with dark fragments. Hardness 3 - 5. Fragments are up to 10 cm. Mostly 2 - 5, very angular, often tuffaceous looking. Up to 10% fragments are fine grained pyrite. Overall, pyrite is

Property BRUCEJACK Sheet No. 2 of 4

Hole No. S-85-118

Depth		Description
From	To	
		15%. Moderately to intensely propylitized with matrix going to kaolin. Less than 5% quartz veins, weakly silicified.
44.21	125.76	Andesite lapilli tuff. Pale grey to medium grey, white. Hardness 5 - 6. Very fine grained, aphanitic, occasionally ghosts of fragments with moderately to intensely propylitized, moderately silicified.
		44.21 - 49.70 - Very fine grained ground mass with occasional fragments similar to the section above, crackled with pyrite along the fractures.
		49.70 - 71.65 - Very fine grained with occasional fragments of sulphide, some crackling and/or disseminations, 10 - 15% pyrite, moderately silicified, intensely propylitized.
		71.65 - 74.39 - Vein. 40% vein quartz, 15% sulphides, pyrite, 45% pale aphanatic wall rock with 15% disseminated sulphides.
		74.39 - 80.49 - Altered wall rock or weak vein. Medium grey, intensely crackled to mildly brecciated, healed with pyrite - 15 - 20%, moderately foliated at 55° CA, intensely propylitized, intensely silicified, intensely pyritized, less than 5% vein quartz.
		80.49 - 82.62 - Tuff. Medium grey, very fine grained, moderately foliated at 40° CA. Indistinct banding.
		82.62 - 88.11 - Wall rock. Hardness 7. Intensely altered, intensely propylitized, intensely silicified, moderately to intensely brecciated. 20% quartz veining, 20% pyrite.

Property BRUCEJACK Sheet No. 3 of 4

Hole No. S-85-118

Depth From	Depth To	Description
		88.11 - 104.57 - Vein. Pale grey, white. Hardness 7. Weakly mottled. ±30% wall rock, intensely silicified, intensely propylitized, very fine grained with 40% fine quartz and stockworks, 25% coarse grained, heavy quartz veins, 5% sulphide, mainly pyrite.
		104.57 - 116.77 - Intensely altered wallrock, with intense stockwork. Medium grey to white quartz. Rock is intensely propylitized, intensely silicified. 30% fine quartz stockworks, 5% coarse quartz veins, 25% wall rock, 10% sulphides, mainly pyrite, often angular fragments completely suspended in quartz.
		116.77 - 117.99 - Intensely crackled, intensely silicified, intensely propylitized, 10% fine quartz stringers, 8% very fine grained pyrite.
		117.99 - 125.76 - Vein. Medium greys to white. Hardness 7. Wall rock 60%, quartz vein 30%, pyrite 10%, mainly as disseminations, wall rock is crackled and welded with quartz veinlets and quartz alteration. Contact with the following section sharp at 60° CA.
125.76	140.40	Andesite. Pale grey-green to pale grey, some olive greens. Hardness 6 - 7, decreasing to 4 toward the end. Very fine grained, aphanitic, crackled with suggestion of epidote alteration, moderately propylitized, moderately silicified, less than 1% vein quartz, 2 - 3% pyrite. Foliation is indistinct to undeveloped.

Property BRUCEJACK Sheet No. 4 of 4

Hole No. S-85-118

Depth		Description
From	To	
140.40	152.44	Pebble conglomerate. Medium to pale greys, minor dark matrix. Hardness 4 - 7. Pebbles are rounded to sub-rounded and sub-angular. Moderately propylitized near the beginning and intensely silicified near the end. Fragments distinctly throughout, weakly foliated at 55° CA at 143.00 m. 140.40 - 142.99 - Less than 1% pyrite. 142.99 - 148.78 - 15% pryite. 148.78 - 150.15 - Less than 1% pyrite. 150.15 - 151.98 - 5% pyrite with some fragments selectively replaced and some jade-green carbonate alteration. 151.98 - 152.44 - Less than 2% pyrite. 152.44 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-118

Sample No.	From	To	Width	Au	Ag	Au-e.	
11513	7.31	10.37	3.05	.006	Tr		
11514	10.37	13.41	3.05	.012	Tr		
11515	13.41	16.46	3.05	.006	Tr		
11516	16.46	17.99	1.52	.010	Tr		
11517	17.99	20.12	2.13	.006	Tr		
11518	34.76	37.80	3.05	.010	Tr		
11519	37.80	40.85	3.05	.010	Tr		
11520	40.85	43.90	3.05	.020	Tr		
11521	43.90	45.53	1.52	.010	Tr		
11522	45.43	47.56	2.13	.008	Tr		
11523	47.56	50.61	3.05	.012	Tr		
11524	50.61	52.44	1.83	.006	Tr		
11525	52.44	54.16	1.68	.010	Tr		
11526	58.54	60.06	1.52	.006	Tr		
11527	64.33	66.46	2.13	.004	Tr		
11528	66.46	69.21	2.74	.006	Tr		
11529	69.21	71.65	2.44	.016	1.40		
11530	71.65	74.39	2.74	.014	.93		
11531	74.39	77.44	3.05	.026	.56		
11532	77.44	80.49	3.05	.022	.64		0.027 Au 3.030 Ag
11546	82.62	84.76	2.12	.022	3.32	.088)	.088 Au-e/
11547	84.76	87.80	3.05	.016	1.29	.042)	8.23 m.
11548	87.80	90.85	3.05	.042	4.59	.134)	
11549	90.85	93.90	3.05	.020	Tr		
11550	96.95	100.00	3.05	.022	1.81		
11551	100.00	103.05	3.05	.024	.92		
11552	103.05	106.10	1.52	.030	.42		
11553	106.10	107.62	3.05	.018	.55		
11554	107.62	110.67	3.05	.056	.89	.074)	0.107 Au
11555	110.67	113.71	3.05	.050	.63	.063)	0.066 Ag/
11556	113.71	116.77	3.05	.194	.85	.211)	21.34 m.
11594	116.77	119.82	3.05	.056	.52	.066)	(.120
11595	119.82	112.87	3.05	.084	1.49	.114)	Au-e.) from
11596	112.87	125.91	3.05	.194	.25	.199)	107.62 m.
11597	125.91	128.96	3.05	.116	Tr	.116)	
11598	142.38	145.43	3.05	.006	Tr		
11599	145.43	146.34	0.91	.006	Tr		
11600	146.34	148.78	2.44	.016	.14		
11601	148.78	151.83	3.05	.064	Tr		
11602	151.83	152.44	0.61	.018	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-119

Section 52+20S Az. 230°

Date August, 1985 Elev.

Lat. Depth 145.43 m.

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-35°	-35°
76.22	-41.5°	-34°
145.43	44.5°	-37°

Depth		Description
From	To	
0	0.61	Casing.
0.61	37.19	Andesite tuff. Pale to medium grey. Hardness 4 - 5. Very fine grained, aphanitic to fine grained tuffaceous. Weakly to moderately foliated. 0.61 - 12.20 - Aphanitic, weakly crackled, ±5% pyrite. 12.20 - 19.82 - Tuffaceous greywacke. 5% angular fragments to 1 cm. in a sandy matrix. Moderately propylitized, moderately foliated, 50 - 60° CA. Less than 2% pyrite. 19.82 - 23.17 - Tuffaceous greywacke. Coarse grained, up to 2 cm. Less than 2% pyrite. 23.17 - 31.10 - Cherty tuff, aphanitic, moderately foliated, moderately crackled, ± 10% pyrite. No. 1 fault at 27.13 m. at 65°. 31.10 - 37.20 - Sedimentary fragmental. Sharp greys, aphanitic sections intermixed with fragmental sections. Some fragments 90% pyrite, some kaolinization with foliation at 50° CA. 15% pyrite. No. 2 fault at 70° at 35.67 m.

Property BRUCEJACK Sheet No. 2 of 4

Hole No. S-85-119

Depth From	Depth To	Description
37.19	100.61	Andesite. Dull greys, white. Hardness 7. Very fine grained, aphanitic, intensely propylitized, intensely silicified. ±10% pyrite in veinlets and disseminations. 37.20 - 40.29 - Pale grey, intensely propylitized, intensely silicified, less than 10% pyrite. 43.29 - 51.83 - Dark grey to white. Hardness 5. ±10% quartz veinlets, weakly to moderately propylitized, weakly silicified, less than 2% pyrite. 51.83 - 57.97 - Dark grey, moderately foliated at 50°CA. Up to 35% pyrite, weakly silicified in places, no quartz. Intensely pyritized. 57.93 - 64.63 - Vein. Good mottled vein zone, 60% quartz veining, half fine, 10% pyrite, intensely silicified. 64.63 - 100.61 - Intensely altered wall rock (weak veining). Pale grey to pale grey-pink, intensely silicified, ±10% pyrite, weakly crackled. Up to 30% vein quartz, 20% vein quartz overall. 78.05 - 78.66 - vein is mottled; 64.63 - 81.71 - contains 20% vein quartz, 15% pyrite. 81.71 - 96.34 - very pale, aphanitic with less than 5% quartz. 96.34 - 100.61 - weak vein or altered mineralized wall rock, ±30% vein quartz, ±20% pyrite.
100.61	130.18	Vein zone. Pale, medium greys, white, jade-green carbonate. Hardness 3 - 7. Very fine grained, aphanitic, crackled, brecciated, sheared, intensely propylitized, intensely silicified.

Property BRUCEJACK Sheet No. 3 of 4

Hole No. S-85-119

Depth From	Depth To	Description
		100.61 - 103.66 - Brecciated. ±75% vein quartz. 103.66 - 104.57 - Dark, mauve cast, brecciated, ±5% pyrite. 104.57 - 107.93 - Dark jade-green, finely brecciated to sheared green carbonate, 5% pyrite, moderately to intensely carbonatized. 107.93 - 109.45 - 75% white vein quartz. 109.45 - 110.06 - Finely brecciated, with moderate jade-green carbonatization, less than 2% pyrite. 110.06 - 114.94 - Moderate brecciation, intensely silicified, medium grey, 15% pyrite. 114.94 - 117.38 - Intensely silicified, 40% vein quartz, 7% pyrite in patches. 117.38 - 117.99 - Fine breccia, dark matrix, 10% pyrite. 117.99 - 123.48 - Fine quartz vein breccia. 5% pyrite. 123.48 - 127.13 - Intense jade-green carbonate alteration (supentinization), moderately foliated at 60° CA (rock change at 123.48 m. to pebble conglomerate shows small, pale pebble ghosts). 127.13 - 130.18 - Dark, fine breccia, moderately foliated at 50°, 30% pyrite, fragments may be cemented by pyrite. Rock is approaching a mylonite. This subsection is grading into the next.
130.18	145.43	Pebble conglomerate. Pebbles fragmental. Dark grey, pale grey-white, dark grey-green. Hardness 4 - 7. Light pebbles 2 cm. in a dark, fine-grained matrix. 130.18 - 134.60 - Dark fragments with some sulphide fragments (5%). Some fragments angular, most sub-rounded. Pyrite

Property BRUCEJACK Sheet No. 4 of 4

Hole No. S-85-119

Depth		Description
From	To	
		20%, less than 2% vein quartz.
		134.60 - 137.65 - Vein. Mottled, grey-white. 70% vein quartz, 5% sulphides, pyrite.
		137.65 - 140.24 - Dark, very fine grained, massive, crackled, welded with pyrite and quartz.
		140.24 - 145.43 - Very dark mottled, pebbled texture with sulphide fragments, moderately propylitized, moderately chloritized, weakly silicified, olive grey color, perhaps more mafic in composition. Less than 1% vein quartz, 2% pyrite.
		145.43 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-119

Sample No.	From	To	Width	Au	Ag	Au-e.	
11603	.61	2.74	2.13	.010	Tr		
11604	25.00	28.05	3.05	.006	Tr		
11605	28.05	31.10	3.05	.004	Tr		
11606	31.10	34.15	3.05	.006	Tr		
11607	34.15	37.20	3.05	Tr	Tr		
11608	37.20	40.24	3.05	.008	.029		
11609	40.24	43.29	3.05	.006	.44		
11610	43.29	46.34	3.05	.006	Tr		
11611	50.00	51.83	1.03	.010	Tr		
11612	51.83	54.88	3.05	.006	Tr		
11613	54.88	57.93	3.05	.012	.42	.020)	
11614	57.93	59.45	1.52	.014	.68	.028)	
11615	59.45	60.98	1.52	.030	.69	.044)	
11616	60.98	62.50	1.52	.026	.78	.042)	
11617	62.50	64.63	2.13	.026	.53	.037)	
11618	64.63	67.68	3.05	.034	1.25	.059)	.039/26.22 m
11619	67.68	70.73	3.05	.020	.31	.026)	
11620	70.73	73.78	3.05	.022	.28	.028)	
11621	73.78	75.00	1.22	.024	.27	.029)	
11622	75.00	78.05	3.05	.036	.42	.044)	
11623	78.05	81.10	3.05	.044	.95	.063)	
11624	96.10	97.56	1.52	.044	.27	.049)]	.056/4.57 m.
11625	97.56	100.60	3.05	.048	.54	.059)]	
11626	100.60	103.66	3.05	.020	.51	.030)	
11627	103.66	106.70	3.05	.016	.77	.031)	
11628	106.70	109.45	2.74	.008	1.34	.035)	.028/14.33 m
11629	109.45	111.89	2.44	.008	Tr	.008)	
11630	111.89	114.94	3.05	.034	Tr	.034)	
11631	114.94	117.99	3.05	.014	Tr	.014	
11632	117.99	121.04	3.05	.016	Tr	.016	
11633	121.04	124.09	3.05	.024	Tr	.024	
11634	124.09	127.13	3.05	.020	Tr	.020	
11635	124.13	130.18	3.05	.006	Tr		
11697	131.71	134.60	2.89	.014	.21	.018	
11698	134.60	137.65	3.05	.028	.94	.047	.049/5.64 m.
11699	137.65	140.24	2.59	.048	.21	.052	@ 131.71 m.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-120

Section 52+20S Az. 230°

Date September, 1985 Elev.

Lat. Depth 178.96 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-50°	-50°
117.99	58.5°	-50°

Depth From	Depth To	Description
0	1.22	Casing.
1.22	23.17	Tuffaceous greywacke and fine andesite tuff. Dull to medium grey throughout. Hardness 4 - 5. Fine grained, grainy in places with occasional fragmental textures. Moderately to intensely propylitized and sericitized, ±some kaolinization. Weakly to moderately foliated at 60° CA.
23.17	31.70	Andesite lapilli tuff. Dark grey, medium grey. Hardness 4. Very fine grained with some fragments visible, up to 5 cm. Moderately foliated at 50° CA.
31.70	43.90	Angular fragmental. Dark to medium and pale grey. Hardness 3. Fine grained. Fragments are sharp, angular to sub-rounded in sheared sections. Pyrite in blebs and streaks along the foliation. No. 2 fault at 38.11 m. at 70° CA. 31.70 - 36.90 - Foliated, fragmental, sub-rounded, ±5% pyrite. 36.90 - 43.90 - Pale, sharp grey, angular fragments, weakly silicified, moderately propylitized, weakly kaolinized, ±5% pyrite. No. 1 fault at 38.72 at 60° CA. 0.30 m. broken core at 43.29 m.

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-120

Depth From	Depth To	Description
43.90	57.01	Andesite tuff. Medium to pale grey to dark grey, white. Hardness 5. Fine grained, no gragments visible. ±15% vein quartz, less than 1% pyrite.
57.01	78.35	Vein. Pale to medium grey, mottled. Hardness 7. Very fine grained, aphanitic, crackled to welded with quartz, intensely propylitized, intensely silicified, less than 50% vein quartz, less than 5% pyrite. 57.01 - 63.11 - 50% vein quartz, ±10% pyrite. 63.11 - 65.24 - 15% vein quartz, less than 2% pyrite. 65.24 - 71.95 - 60% vein quartz, ±7% pyrite. 0.61 meters ground core at 69.21 m. Open vuggy quartz, trace sphalerite, trace galena. 71.95 - 72.56 - Crackled wall rock. Intensely silicified. 72.56 - 78.35 - 70% quartz, up to 15% fine grained pyrite and stringers.
78.35	85.98	Andesite. Pale grey-green to pale grey. Hardness 7. Very fine grained to aphanitic. Ghosts of plagioclase phenocrysts visible. Moderately sericitized, intensely silicified, weakly crackled. 78.35 - 82.93 - Pale green-grey with some small zones of silicification and veining. ±3% pyrite. 82.93 - 85.98 - Increasing silicification, up to 20% fine grained vein quartz, ±5% pyrite.
85.98	98.32	Vein. Pale grey-white, dark grey, mottled. Hardness 7. Very fine grained, aphanitic, intensely sericitized, intensely silicified. ±60% vein quartz, 15% pyrite as blebs, disseminations and along the crackles, trace of galena.

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-120

Depth From	Depth To	Description
98.32	133.23	Andesite. Dark grey to medium grey. Very fine grained, aphanitic. Moderately sericitized, intensely silicified, up to 15% pyrite, mainly along the crackling. Less than 5% vein quartz.
133.23	178.96	Pebble, fragmental. Dull medium greys, pale grey. Hardness 3 - 4. Very fine grained matrix, dark in color with light pebble-sized fragments rounded to sub-rounded, less than 1% vein quartz, 3% pyrite. Weakly to moderately carbonatized. 133.23 - 139.33 - Moderately carbonatized, moderately foliated at 45°CA. Less than 1% pyrite. 139.33 - 139.94 - Quartz veins. No sulphides. 139.94 - 140.85 - Moderately to intensely carbonatized, moderately foliated at 45°CA. Less than 2% pyrite. 140.85 - 146.34 - Moderately sericitized, medium grey, pebble texture partially masked, less than 1% pyrite. 146.34 - 154.57 - Moderately carbonatized in jade-green serpentenized carbonate with up to 15% pyrite and locally patches up to 25% pyrite, weak foliation at 45°CA. 154.57 - 159.45 - Vein. Mottled, pale grey, medium grey. 80% vein quartz, 15% sulphides, pyrite. 159.45 - 165.55 - Weak vein. Intensely altered wall rock. Moderately brecciated. 15% pyrite, intensely silicified. 165.55 - 178.96 - Pebble rock, unaltered, weakly propylitized, good pebble texture 2 - 3% pyrite.
	178.96	END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-120

Sample No.	From	To	Width	Au	Ag	Au-e.	
11636	32.62	35.67	3.05	.020	.18		
11637	35.67	38.72	3.05	.010	Tr		
11638	57.01	59.45	2.44	.018	.93	.037)	
11639	59.45	62.50	3.05	.024	.45	.033)	
11640	62.50	65.55	3.05	.016	.53	.035)	
11641	65.55	68.60	3.05	.020	1.40	.044)	28.96 m.
11642	68.60	71.65	3.05	.014	.55	.025)	of .031
11643	71.65	74.70	3.05	.014	.56	.025)	@ 57.01 m.
11644	74.70	76.22	1.52	.020	.52	.030)	
11645	76.22	78.35	2.13	.014	.56	.025)	
11646	78.35	81.40	3.05	.022	.17	.025)	
11647	81.40	82.93	1.52	.016	Tr	.016)	
11648	82.93	85.98	3.05	.026	.50	.036)	9.45 m.
11649	85.98	89.02	3.05	.038	2.67	.091)	of .065
11650	89.02	91.77	2.74	.024	.65	.037)	@ 85.98 m.
11651	91.77	93.60	1.83	.036	2.25	.081)	
11652	93.60	95.43	1.83	.020	1.36	.047)	
11653	95.43	98.32	2.90	.030	Tr	.030	
11654	98.32	101.22	2.90	.022	.27	.027	
11655	133.23	136.28	3.05	.106	Tr	.106	3.05 m. of .106 @ 133.23 m.
11656	148.47	151.52	3.05	.136	.21	.140	3.05 m. of .140 @ 148.47 m.
11657	151.52	154.57	3.05	.016	Tr	.016	
11658	154.57	157.62	3.05	.010	.39		
11659	157.62	160.67	3.05	.024	.17		
11660	160.67	163.72	3.05	.010	Tr		
11661	163.72	165.85	2.13	.032	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-121

Section 52+20S Az. 230°

Date September 12, 1985 Elev.

Lat. Depth 170.12 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-65°	-65°
45.73	67.5°	-60°
170.12	67.5°	-60°

Depth		Description
From	To	
0	0.61	Casing.
0.61	15.24	Andesite tuff. Medium greys. Hardness 6. Fine grained to very fine grained to aphanitic. Moderately sericitized, very weakly foliated, weakly crackled, welded with pyrite, 10% pyrite. No. 1 fault at 13.72 m. at 35°CA.
15.24	31.55	Tuffaceous greywacke. Medium greys, speckled. Hardness 4 - 5. Fine to medium grained, grainy. Short section of sharp fragmental 0.31 m. at 15.24 m. Moderately propylitized, trace of kaolin. No quartz. Less than 2% pyrite. No. 1 fault at 22.26 at 70°.
31.55	43.29	Sharp fragmental, sharp greys. Hardness 4. Very fine grained matrix with coarse angular fragments, up to 10 cm., some aphanatic, intensely crackled sections, some fragments of sulphides. Overall 20% sulphide, pyrite, weakly foliated.
43.29	49.09	Tuffaceous greywacke. Pale grey to medium grey. Hardness 4. Fine grained with feldspar phenocrysts kaolinized, moderately foliated at 50°CA. 5% pyrite in blebs, less than 1% quartz veins.
49.09	75.61	Andesite lapilli tuff with veins. Medium greys, white. Hardness 7. Very fine grained to aphanitic, intensely propylitized, intens-

Property BRUCEJACK Sheet No. 2 of 4

Hole No. S-85-121

Depth From	Depth To	Description
		ely silicified. 49.09 - 50.91 - Good vein. Dark brecciated with up to 20% pyrite, sphalerite (pale, creamy), 50% quartz veins. 50.91 - 53.66 - Very fine grained, aphanitic, intensely sericitized, intensely silicified, less than 2% pyrite, 10% quartz. 53.66 - 56.55 - Vein. ±75% quartz, brecciated, broken, loosely cemented, 10% pyrite. 56.55 - 59.45 - Very fine grained to aphanatic wall rock, intensely sericitized, intensely silicified, moderately crackled with pyrite and/or quartz healing, 15% quartz, 15% pyrite. 59.45 - 75.61 - Vein. Pale greys. Hardness 6 - 7. Intensely crushed, partially healed with silica. Still broken in some areas. 75% quartz vein, 10% pyrite, open grained and vuggy. 59.45 - 62.50 - Weak vein. 15% vein quartz, 3% pyrite. 62.50 - 71.65 - Good vein, mottled, 80% vein quartz, 10% pyrite. 71.65 - 72.87 - Intensely altered wall rock with 15% fine quartz veinlets, 10% pyrite. 72.87 - 75.61 - Intensely crackled to mildly crushed, welded with quartz veins. ±30% bull quartz, ±25% fine quartz veinlets, 45% wallrock fragments, 5% pyrite.

Property BRUCEJACK Sheet No. 3 of 4

Hole No. S-85-121

Depth		Description
From	To	
75.61	162.96	Andesite laiplli tuff. Pale greys, white. Hardness 6 - 7. Very fine grained, aphanitic, intensely sericitized, intensely propylitized, intensely silicified. 75.61 - 91.16 - Intensely silicified, mildly crackled, 15% very fine grained pyrite as disseminations and in the crackles. 91.16 - 92.07 - Intensely silicified, 50% vein quartz, 25% pyrite. 92.07 - 100.91 - Intensely silicified, moderately crackled, healed with quartz and pyrite. Pyrite up to 12%. 100.91 - 162.96 - Generally intensely silicified with moderate crackling healed with pyrite. ±10% vein quartz. 1.52 meters broken core and fault gouge at 121.03 m.; 0.31 m. fault zone at 121.65 m. Sections containing vein material are: 114.33 - 116.77 - Vein. 40% vein quartz, 20% pyrite. 125.91 - 127.13 - Vein. Weakly mottled, 2% pyrite. 128.96 - 129.57 - Vein. 1 - 2% pyrite, 50% bull quartz. 129.57 - 132.01 - Intensely silicified, vuggy vein. 10% vein quartz, 15% pyrite. 135.06 - 135.37 - Quartz vein. No pyrite. 140.85 - 141.16 - Quartz vein. Less than 1% sulphides. 141.16 - 142.07 - Intensely crackled, intensely silicified, welded with pyrite, 20% pyrite.

Property BRUCEJACK Sheet No. 4 of 4

Hole No. S-85-121

Depth		Description
From	To	
		142.07 - 142.38 - Breccia zone with 50% sulphides, pyrite. 145.73 - 153.20 - Vein. 50% vein quartz, 15% sulphides, pyrite, well foliated at 45°. Fragments visible towards the end of this section. Hardness 4 - 5. No. 1 fault mineralized at 158.38.
162.96	170.10	Pebble, fragmental. Medium grey, pale grey with light grey pebbles. Hardness 4. Moderately to intensely sericitized. Less than 2% pyrite, less than 1% quartz veining.
		170.12 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-121

Sample No.	From	To	Width	Au	Ag	Au-e.	
11662	37.20	40.24	3.05	.010	Tr		
11663	40.24	43.29	3.05	Tr	Tr		
11664	43.29	46.34	3.05	Tr	Tr		0.010 Au
11665	46.34	49.09	2.74	.006	.16		6.760 Ag
11666	49.09	50.91	1.83	Tr	24.41	.488)	.149 Au-e./
11667	50.91	53.66	3.05	.012	.98	.032)	7.47 m.
11668	53.66	56.55	2.29	.018	1.25	.043)	
11669	56.55	59.45	2.90	Tr	Tr		
11670	59.45	62.50	3.05	.006	.40		0.015 Au
11671	62.50	65.55	3.05	.012	.20		1.250 Ag
11672	65.55	68.60	3.05	.012	1.19	.036)	.040 Au-e./
11673	68.60	71.65	3.05	.018	1.30	.044)	6.10 m.
11674	71.65	72.56	0.90	.014	.63		
11675	72.56	75.61	3.05	.016	Tr		
11676	75.61	78.66	3.05	.006	.52		
11677	78.66	81.71	3.05	.010	.51		
11678	81.71	84.76	3.05	.020	7.45	.169	
11679	84.76	87.80	3.05	.020	.10		
11680	87.80	90.85	3.05	.010	Tr		
11681	90.85	92.38	0.91	.008	Tr		
11682	92.38	95.12	2.74	.014	Tr		
11683	95.12	98.17	3.05	.018	Tr		
11684	98.17	101.22	3.05	.026	Tr		
11685	104.88	107.93	3.05	.024	.36		
11686	107.93	110.98	3.05	.022	.34		
11687	110.98	114.02	3.05	.018	.28		
11688	114.02	117.07	3.05	.024	.18		
11689	125.91	127.13	1.22	.034	.18		
11690	128.66	129.27	3.05	.022	Tr		
11691	130.49	132.31	1.83	.058	.30	.064	
11692	141.01	143.29	2.29	.056	.35	.063	
11693	143.29	146.34	3.05	.030	Tr		
11694	146.34	148.48	2.13	.018	.10		
11695	148.48	151.52	3.05	.066	.19	.070	
11696	151.52	153.05	1.52	.022	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-122

Section 49+20S Az.

Date September, 1985 Elev.

Lat. Depth 114.94 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0		35°
91.46	41°	-34°

Depth From	Depth To	Description
0	1.52	Casing.
1.52	44.82	Tuffaceous greywacke. Medium grey, pale grey, white. Hardness 4. Fine grained, grainy, very fine grained, grainy. .1 mm. to 1 mm. Weakly to moderately foliated, moderately propylitized. 20% pyrite as fine blebs and fine disseminations. Less than 1% quartz vein. 19.20 - 19.92 - Mottled quartz vein. No. 1 fault at 19.00 m. at 25°. 19.92 - 21.34 - Small veining welded with pyrite. 32.01 - 32.03 - Fine grey dyke. 37.20 - 38.11 - Shear vein. 25% quartz.
44.82	80.49	Andesite lapilli tuff. Medium grey, pale grey, white. Hardness 5 and 7 mixed. Very fine grained, aphanitic, moderately brecciated, locally weakly foliated, moderately to intensely propylitized, moderately silicified. 44.82 - 46.34 - Weak vein. 15% vein quartz, 15% pyrite. Moderately foliated at 70°CA. 46.34 - 60.98 - Moderately brecciated, 10% very fine quartz veinlets, silica as matrix, 20% pyrite. No. 1 fault at 52.59 m. at 45°CA; No. 1 fault at 55.33 m. at 55°CA. 60.98 - 65.55 - Vein. Mottled, intensely silicified, 50% vein quartz,

Depth From	Depth To	Description
		15% pyrite. 65.55 - 67.38 - Massive andesite dyke. Very fine grained, 10% quartz. 67.38 - 74.39 - Vein. Mottled to white. Brecciated from 72.87 m. to 73.87 m. with sulphides as fragments in silica matrix. 75% vein quartz overall; 7% pyrite. 74.39 - 80.49 - Weak vein. 35% vein quartz, 5% pyrite. Intensely propylitized, intensely silicified. Vein quartz as fine veinlets average 3 mm. Contact with the following section across a crush zone.
80.49	110.37	Black argillite. Black, very dark grey, white. Hardness 5, 6, 7 in quartz, 3 in carbonate. Very fine grained, argillaceous with patches of greywacke. Fine quartz carbonate veinlets throughout. Weak to moderately foliated at 45° CA. 80.49 - 82.32 - Argillite. 20% quartz carbonate veinlets, 15% pyrite. 82.32 - 83.84 - Breccia, argillite, andesite, siliceous greywacke breccia with 50% vein quartz, 2% pyrite. 83.84 - 87.50 - Black argillite. 20% white veinlets of QC. 87.50 - 92.07 - Vein. 75% vein quartz as matrix between fragments of argillite. Veins, veinlets with 2% pyrite. 92.07 - 96.65 - Black argillite. Patches of grey with patches of pyrite, very fine grained sulphide, 5% vein quartz, 10% pyrite. 96.65 - 99.09 - Massive QC vein. No sulphide. 99.09 - 105.49 - Black argillite. Moderately crackled with 30%

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-122

Depth From	Depth To	Description
		QC veinlets, 10% fine disseminated pyrite. 105.49 - 107.01 - Massive QC vein, trace of sulphide. 107.01 - 110.37 - Black argillite. Moderately to intensely crackled with ±10% QC.
110.37	114.94	Andesite. Pale grey to white. Hardness 6 - 7. Very fine grained, aphanitic. Moderately crackled, healed with QC, 15% QC veinlets, 3% very fine grained pyrite.
		114.94 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-122

Sample No.	From	To	Width	Au	Ag	Au-e.	
11701	18.90	21.95	3.05	.006	Tr		
11702	36.89	38.11	1.22	.006	Tr		
11703	44.82	47.87	3.05	.008	.22		
11704	47.87	50.91	3.05	.008	.31		
11705	50.91	53.96	3.05	Tr	.44		
11706	53.96	57.01	3.05	Tr	1.25		
11707	57.01	60.06	3.05	.036	2.82	.092	
11708	60.06	63.11	3.05	.014	.94		
11709	63.11	66.16	3.05	.020	.35		0.048 Au
11710	66.16	67.38	1.22	.010	Tr		1.370 Ag
11711	67.38	70.43	3.05	.036	1.48	.066	.076 Au-e./
11712	70.43	73.48	3.05	.060	1.26	.085	6.10 m.
11713	73.48	76.52	3.05	.018	.60		
11714	76.52	79.57	3.05	.030	Tr		
11715	79.57	80.49	.91	.028	Tr		
11716	80.49	83.54	3.05	.034	.35		
11717	83.54	86.59	3.05	.026	.17		
11718	86.59	89.33	2.74	.024	.44		
11719	89.33	92.38	3.05	.018	Tr		
11720	92.38	95.43	3.05	.024	Tr		
11721	95.43	96.65	1.22	.022	.10		
11722	96.65	99.09	2.44	.026	Tr		
11723	99.09	102.13	3.05	.028	.22		
11724	102.13	105.18	3.05	.020	.25		
11725	105.18	108.23	3.05	.028	.44		
11726	108.23	110.37	2.13	.024	.19		
11727	110.37	113.41	3.05	.244	.49	.254	
11728	113.41	114.94	1.52	.010	.44		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-123

Section 49+20E Az. 230°

Date September, 1985 Elev.

Lat. Depth 179.27 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-50°
91.46	-55°	-46°
179.27	-58°	-49°

Depth From	Depth To	Description
0	0.91	Casing.
0.91	50.00	Tuffaceous arkose. Medium grey, pale grey. Hardness 5, 7. Fine grained, sandy texture, some small shards, moderately sericitized, moderately pyritized. Foliation at 40° CA. 15 - 20% pyrite. 0.30 m. weak pyritized vein at 33.54; 0.91 m. weak pyritized vein at 37.50.
50.00	99.09	Andesite. Medium grey to pale grey. Hardness 3 and 7. Fine grained, aphanitic, intensely propylitized, intensely pryitized. 50.00 - 75.00 - Moderately brecciated, intensely propylitized, intensely pyritized. 15 - 20% pyrite. Some green serpentenized carbonate healed with quartz carbonate and pyrite. 75.00 - 78.66 - Andesite tuff. Moderately to intensely propylitized, intensely sericitized. 5% pyrite localized along small shear zones. 78.66 - 91.77 - Vein. Sheared, brecciated, mottled quartz and carbonate. Some pinkish sections. 15% pyrite. Locally foliated at 40° - 50°. 91.77 - 93.14 - Pale green dyke rock with dark green flecks. Very fine grained, aphanitic, 5% clean

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-123

Depth From	Depth To	Description
		quartz veins.
		93.14 - 99.09 - Vein. Mottled, 75% vein quartz, 10% pyrite. Host rock may be pebble conglomerate.
99.09	151.83	Black argillite and greywacke. Black, white, medium greys. Hardness 4 - 6. Very fine grained, argillaceous to medium grained aranaceous.
		99.09 - 103.05 - Black argillite with quartz stockworks, 25% fine quartz vein. Foliation weak to moderate at 40°CA. 15% very fine grained pyrite.
		103.05 - 105.79 - Greywacke. 5% very fine grained quartz vein, 10% very fine grained pyrite.
		105.79 - 110.06 - Mixed argillite and greywacke with bedding at 45 - 50°. 10% vein quartz, 7% pyrite.
		110.06 - 117.68 - Pale grey greywacke with minor argillite. 3% pyrite as small veinlets and blebs, 10% quartz carbonate veinlets.
		117.68 - 118.29 - Quartz carbonate vein. 1% pyrite, 1% wall rock fragments.
		118.29 - 127.44 - Black argillite. Crackled and veined. 15% quartz carbonate veinlets, 10% pyrite as healing in the crackling.
		127.44 - 128.35 - QC vein. 2% pyrite.
		128.35 - 143.60 - Black argillite. Minor blebs greywacke, crackled, healed with quartz carbonate, 10% pyrite, mostly as disseminations and small veinlets. Bedding at 65 - 70°CA.
		143.60 - 145.12 - Quartz carbonate vein. 1% pyrite. Mildly crushed.

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-123

Depth		Description
From	To	
		145.12 - 151.83 - Black argillite. Intensely crackled to moderately crushed. Healed with quartz carbonate and pyrite.
151.83	179.27	Andesite tuff. Pale grey. Hardness 6 - 7. Very fine grained to aphanitic, weakly crackled. 1% quartz veins. Moderately sericitized. 151.83 - 152.13 - Quartz carbonate vein. Mildly crushed. 152.13 - 153.05 - Moderately sericitized. 2% quartz veins. 153.05 - 154.88 - Intensely altered, 20% fine quartz stringers, intensely sericitized, 2% pyrite. 154.88 - 168.60 - Weakly propylitized, weakly chloritized, 2% quartz vein. 168.60 - 170.43 - Quartz carbonate vein. White. 20% wall rock fragments. 1% pyrite. 170.43 - 176.22 - 3% fine quartz carbonate stringers. 176.22 - 177.44 - Quartz carbonate vein. 1% pyrite. 177.44 - 179.27 - Less than 5% quartz veining.
		179.27 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-123

Sample No.	From	To	Width	Au	Ag	Au-e.	
11729	33.54	34.15	0.61	Tr	Tr		
11730	37.50	39.02	1.52	Tr	Tr		
11731	46.95	50.00	3.05	Tr	Tr		
11732	50.00	53.05	3.05	Tr	Tr		
11733	53.05	56.10	3.05	Tr	.13		
11734	56.10	59.15	3.05	Tr	Tr		
11735	59.15	62.20	3.05	Tr	Tr		
11736	62.20	65.24	3.05	Tr	Tr		
11737	65.24	68.29	3.05	Tr	Tr		
11738	68.29	71.34	3.05	Tr	Tr		
11739	71.34	72.56	1.22	.014	.24		
11740	72.56	75.00	2.44	.064	.30		
11741	75.00	76.83	1.83	.006	.25		
11742	76.83	78.66	1.83	Tr	.57		
11743	78.66	81.71	3.05	.006	.26		
11744	81.71	84.76	3.05	.010	1.73		
11745	84.76	87.80	3.05	.010	.58		
11746	87.80	90.85	3.05	.006	.49		
11747	90.85	91.77	0.91	.008	.55		
11748	91.77	93.14	1.37	.006	Tr		
11749	93.14	96.04	2.90	.028	.58		
11750	96.04	99.09	3.05	.006	Tr		
11751	99.09	102.13	3.05	.012	Tr		
11752	102.13	105.18	3.05	.026	Tr		
11753	105.18	108.23	3.05	.024	Tr		
11754	108.23	111.28	3.05	.016	.12		
11755	111.28	114.33	3.05	.036	Tr		
11756	114.33	117.38	3.05	.020	Tr		
11757	117.38	118.90	1.52	.028	Tr		
11758	118.90	121.95	3.05	.044	.13		
11759	121.95	125.00	3.05	.044	Tr		
11760	125.00	128.05	3.05	.042	Tr		
11761	128.05	131.10	3.05	.184	.23	.189	
11762	131.10	134.15	3.05	.032	Tr		
11763	134.15	137.20	3.05	.018	Tr		
11764	137.20	140.24	3.05	.012	Tr		
11765	140.24	143.29	3.05	.012	Tr		
11766	143.29	146.34	3.05	.010	Tr		
11767	146.34	149.39	3.05	.014	Tr		
11768	149.39	151.83	2.44	.018	Tr		
11769	151.83	154.27	0.91	.024	Tr		
11770	167.38	170.43	3.05	.026	Tr		
11771	176.22	177.44	1.22	.028	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-124

Section 49+20S Az. 230°

Date September, 1985 Elev.

Lat. Depth 176.52 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-65°
106.71	-69°	-63°
176.52	64°	.56°

Depth		Description
From	To	
0	1.52	Casing.
1.52	83.84	Arkosic tuff with fragments. Medium greys. Hardness 3 - 4.5. Medium to fine grained, grainy. ±1 mm. fragments up to 2 cm. Angular, moderately to intensely sericitized. Less than 1% quartz carbonate veinlets. Locally some secondary crushing welded by silicification. ±5% sulphides, pyrite, increasing to 10% pyrite toward the end of this section often in blotches and blebs.
83.84	107.32	Breccia zone. Dark greys. Siliceous, aphanitic. Fragments welded by very fine grained silica and/or pyrite. Pyrite is in the fragments and disseminated in knots, blotches and blebs as well as veinlets and fracture fillings. Broken core from 84.76 m. - 90.85 m. 86.59 - 89.33 m. - mostly loose, angular fragments with some mud gouge, ±30% sulphide. Less than 1% quartz veins. 105.18 - 107.32 - Vein. White to pink. Intensely silicified, vein breccia.
107.32	171.95	Andesite tuff. Dark to medium grey. Intensely propylitized, moderately to intensely sericitized, moderately silicified, 5% quartz carbonate veinlets, 15% fine grained pyrite, moderately foliated at 50°CA. 115.85 - 120.43 - Vein. Weak to moderate

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-124

Depth From	Depth To	Description
		vein, moderately mottled, 30% vein quartz, up to 20% sulphides, pyrite, trace sphalerite.
		120.43 - 126.22 - Moderately to intensely sericitized, moderately pyritized, 15% pyrite, 4% quartz veins as very fine veinlets.
		126.22 - 127.74 - Vein. Moderately mottled, 75% vein quartz, 20% sulphides, 5% wall rock fragments, trace of peach pink carbonate (calcite).
		127.74 - 134.15 - Intensely sericitized, intensely pryitized, intensely silicified, 15% vein quartz (weak vein), 20% sulphides.
		134.15 - 142.68 - Vein. White, pale grey. 90% vein quartz, 5% sulphides, pyrite, sphalterite, galena. 0.91 m. of open vuggy vein with crystal and galena, sphalerite, quartz and pyrite.
		142.68 - 149.39 - Vein. Intensely crushed to mylonitized. Medium grey, probably 80% vein quartz. This rock has a gneissic texture. Foliation at 35 - 40°CA. 7% sulphide, pyrite, sphalerite, galena and pyrargyrite.
		149.39 - 156.40 - Vein. White quartz, some clear, some milky, some pale pink. 2% sulphide, pyrite.
		156.40 - 159.76 - Heavily foliated, sheared country rock with 25% sulphides, pyrite.
		159.76 - 160.37 - Massive carbonate vein. Some pale peach with white sections of angular breccia.
		160.37 - 168.29 - Mixed zone of quartz carbonate with angular fragments of country rock.

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-124

Depth From	Depth To	Description
		Undeformed country rock (tuff) and highly foliated, intensely mineralized. Country rock locally carbonitized and serpentenized.
		168.29 - 171.95 - Massive quartz carbonate vein. Mildly brecciated. 1% sulphides.
171.95	176.52	Pebbled conglomerate. Medium grey, white. Hardness 5 - 6. Pea-sized pale colored pebbles in darker matrix. Moderately sericitized, moderately to intensely silicified. 3% very fine quartz veins. Mild brecciation. 10% sulphides.
		176.52 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-124

Sample No.	From	To	Width	Au	Ag	Au-e.	
11772	80.49	83.54	3.05	.016	.26		
11773	83.54	86.59	3.05	.012	.14		
11774	86.59	89.63	3.05	.008	.20		
11775	89.63	92.68	3.05	.010	.12		
11776	92.68	95.73	3.05	.010	.49		
11777	95.73	98.78	3.05	.008	2.35		
11778	98.78	101.83	3.05	.008	.55		
11779	101.83	104.88	3.05	.008	.39		
11780	104.88	107.31	2.44	.010	Tr		
11781	107.32	110.37	3.05	.014	.12		
11782	110.37	113.41	3.05	Tr	.19		
11783	113.41	115.55	0.91	.006	Tr		
11784	115.55	118.60	3.05	.016	.54		
11785	118.60	121.65	3.05	.016	.25		
11786	121.65	125.70	3.05	.016	Tr		
11787	125.70	126.22	1.52	.006	.17		
11788	126.22	127.74	1.52	.016	.16		
11789	127.74	130.79	3.05	.014	.48		
11790	130.79	133.84	3.05	.016	1.83	.053)	
11791	133.84	136.89	3.05	.068	1.01	.088)	0.065 Au
11792	136.89	139.94	3.05	.096	.32	.102)	2.910 Ag
11793	139.94	142.99	3.05	.232	10.98	.452)	.123 Au-e./
11794	142.99	146.04	3.05	.048	1.70	.082)	24.40 m.
11795	146.04	149.09	3.05	.018	4.13	.101)	
11796	149.09	152.13	3.05	.024	1.69	.058)	
11797	152.13	155.18	3.05	.014	1.60	.046)	
11798	155.18	157.32	2.13	.014	.21		
11799	157.32	159.76	2.44	.014	.63		
11800	159.76	162.80	3.05	.014	.29		
11801	162.80	165.85	3.05	.008	Tr		
11802	165.85	168.29	2.44	,020	.16		
11803	168.29	171.34	3.05	.114	.27	.119	
11804	171.34	173.48	2.13	.018	Tr		
11805	173.48	176.52	3.05	.020	.34		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-125

Section 48+80S Az. 230°

Date Sept. 21, 1985 Elev.

Lat. Depth 77.74 meters

Dep. Logged by N.L.T.

DIP

Footage Reading Dip

Depth		Description
From	To	
0	0.61	Casing.
0.61	69.82	Andesite lapilli tuff. Pale to medium grey, white. Hardness 4 - 6. Fine grained (1 mm.), occasional ghosts of fragments, moderately to intensely sericitized, moderately to intensely propylitized, moderately silicified, trace of kaolinization. 0.61 - 3.35 - Vuggy quartz vein. Less than 1% sulphides. 3.35 - 14.94 - Intensely propylitized, intensely silicified, 2% pyrite, 20% vein quartz. 14.94 - 38.41 - Intensely propylitized, weakly silicified, 15 - 20% pyrite, less than 2% vein quartz. 38.41 - 56.10 - Intensely propylitized, weakly to moderately silicified, weakly brecciated, 2% vein quartz, 4% - 6% sulphide, pyrite. 56.10 - 59.60 - Weak vein. Intensely propylitized, intensely crackled with 50% fine quartz veinlets and stockwork, 5% sulphide, pyrite. 59.60 - 67.23 - Vein. White, grey. Hardness 7. 75% vein quartz, 5% sulphide, mustard yellow sphalerite, galena, pyrite.

Property BRUCEJACK Sheet No. 2 of 2

Hole No. S-85-125

Depth From	Depth To	Description
		67.23 - 67.84 - Pale grey, aphanatic sheared dyke. 67.84 - 68.60 - Vein. Moderately brecciated, 2% sulphide, pyrite. 68.60 - 68.90 - Black argillite. Intensely crackled, 7% sulphide, pyrite. 68.90 - 69.82 - Vein. 90% vein quartz, 2% sulphide, 8% wall rock.
69.82	77.74	Arkosic tuff. Pale grey-white. Aphanitic to very fine grained, grainy. Some very fine fragments, up to 5 mm. and larger ghosts. 4% sulphides, pyrite. Hardness 3. Intensely sericitized, 5% vein quartz.
		77.74 *END OF HOLE.*

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-125

Sample No.	From	To	Width	Au	Ag	Au-e.	
11806	.61	3.05	2.44	.012	.18		
11807	3.05	6.10	3.05	.036	.12		
11808	6.10	9.15	3.05	.014	Tr		
11809	9.15	12.20	3.05	.014	Tr		
11810	12.20	15.24	3.05	.012	Tr		
11811	23.48	26.52	3.05	.010	Tr		
11812	26.52	29.57	3.05	.006	Tr		
11813	36.89	39.94	3.05	.010	.30		
11814	39.94	42.99	3.05	.006	Tr		
11822	42.99	45.43	2.44	.010	1.51		
11815	45.43	48.48	3.05	Tr	.75		
11816	56.10	59.15	3.05	.010	Tr		
11817	59.15	62.20	3.05	.036	.93)	.055	
11818	62.20	65.24	3.05	.020	.30		
11819	65.24	67.23	1.98	.052	2.94)	.111	
11820	67.23	68.29	1.07	.018	.53		
11821	68.29	69.82	1.52	.014	Tr		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-126

Section 48+80S Az. 230°

Date Sept. 21, 1985 Elev.

Lat. Depth 123.78 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-50°
123.78	-56°	-47°

Depth		Description
From	To	
0	0.61	Casing.
0.61	18.60	Andesite lapilli tuff. Medium greys to pale grey. Hardness 3 and 6. Fine grained, well foliated in some sections at 35 - 40°CA. Fragments visible throughout, up to 3 cm. 0.61 - 3.66 - Vein. White, vuggy quartz. 3.66 - 6.71 - Open, vuggy, partially-weathered vein, 40% vein quartz, 3% pyrite, weakly silicified. 6.71 - 14.63 - Moderately to intensely sericitized, less than 1% pyrite, 10% vein quartz. 14.63 - 18.60 - Vein. Mottled, brecciated, moderately siiicified, intensely propylitized, 3% pyrite. Contact with the following section across a No. 3 fault with 0.31 m. fault gouge at 50°CA.
18.60	32.32	Arkosic andesite tuff. Pale to medium grey. Hardness 3. Fine grained, grainy, arkosic texture, occasional fragments, no bedding apparent, intensely sericitized, 1% vein quartz, 3% very fine grained pyrite.
32.32	71.95	Andesite lapilli tuff. Dark grey to white. Hardness 3 and 6. Fine to very fine grained, grainy to well foliated at 40 - 50°, moderat-

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-126

Depth From	Depth To	Description
		ely crushed to brecciated, intensely propylitized, moderately silicified, 15% pyrite as pyrite fragments with some disseminations and stringers. 32.32 - 59.15 - Less than 1% vein quartz, 0.31 meters quartz vein at 51.83 m. Moderately foliated at 60° at 45.73 m. 59.15 - 67.99 - Moderately to intensely silicified, 15% pyrite. 67.99 - 71.95 - Vein. 40% vein quartz, 2%sulphide, pyrite.
71.95	99.09	Pebble fragmental. Medium grey to white. Hardness 3 and 6. Very fine grained, dark matrix with pale pebbles, up to 1.5 cm., weakly to intensely propylitized, locally crushed. 71.95 - 75.00 - Moderately crushed, intensely propylitized, 40% vein quartz, less than 2% pyrite. 75.00 - 80.18 - Weakly to moderately propylitized, moderately silicified, 15% vein quartz, 2% pyrite. 80.18 - 90.85 - Vein. Quartz carbonate vein, 60% coarse carbonate, moderately silicified, very brecciated, 40% sulphides, pyrite, trace of mustard sphalerite, broken core at 87.80 m. to 88.11 m., 89.33 - 89.63 m., 90.24 m. - 90.55 m. 90.85 - 99.09 - Weak vein. Moderately to intensely brecciated, intensely sericitized, intensely silicified, 2% sulphides, mustard sphalerite, galena, very fine grained pyrite.
99.09	108.54	Black argillite. Black, white, pale grey. Hardness 5 - 6. No bedding visible, moderately to intensely brecciated, 15% coarse quartz veins, 10% fine quartz veins, 10% fine pyrite.

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-126

Depth From	Depth To	Description
		99.09 - 101.83 - Brecciated, black argillite. 60% vein quartz, 7% fine pyrite.
		101.83 - 103.66 - Dyke. Pale grey-green with dark flecks. Contacts at 35°CA.
		103.66 - 105.79 - Black argillite. Crackled, 15% vein quartz as fine veinlets, 7% pyrite as fine disseminations and blebs.
		105.79 - 106.40 - Pale grey, sandy arkose. Intensely sericitized, 2% vein quartz, 1% pyrite.
		106.40 - 108.54 - Black argillite. Intensely crackled, healed with vein quartz and pyrite, 15% vein quartz, 10% pyrite.
108.54	123.78	Arkosic tuff. Pale grey, white. Hardness 5 - 7. Fine grained to grainy, generally massive, intensely sericitized, weakly silicified, 10% vein quartz, 4% pyrite, weakly foliated at 35 - 45°CA.
	123.78	END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-126

Sample No.	From	To	Width	Au	Ag	Au-e.	
11823	.61	3.66	3.05	.016	Tr		
11824	3.66	6.71	3.05	.012	Tr		
11825	6.71	9.76	3.05	.008	Tr		
11826	14.63	15.55	0.91	.016	Tr		
11827	15.55	18.60	3.05	.008	Tr		
11828	33.54	36.59	3.05	.008	Tr		
11829	36.59	39.63	3.05	.006	.30		
11830	39.63	42.68	3.05	.010	.97		
11831	42.68	45.73	3.05	.008	.55		
11832	45.73	48.78	3.05	.010	.27		
11833	48.78	51.83	3.05	.008	Tr		
11834	51.83	54.88	3.05	.008	.21		
11835	54.88	57.93	3.05	.016	Tr		
11836	57.93	60.98	3.05	.010	Tr		
11837	60.98	64.02	3.05	.006	.40		
11838	64.02	67.07	3.05	Tr	.46		
11839	67.07	70.12	3.05	.010	.14		
11840	70.12	73.17	3.05	.016	.18		
11841	73.17	76.22	3.05	Tr	.12		
11842	76.22	79.27	3.05	.016	.25		
11843	79.27	82.32	3.05	.018	.93		
11844	82.32	85.37	3.05	.020	1.06		
11845	85.37	88.41	3.05	.008	.26		
11846	88.41	91.46	3.05	.036	Tr		
11847	91.46	94.51	3.05	.014	1.37		
11848	94.51	97.56	3.05	.022	Tr		
11849	97.56	100.61	3.05	.018	Tr		
11850	100.61	101.83	1.22	.016	Tr		
11851	101.83	103.66	1.83	.010	.22		
11852	103.66	105.79	2.13	.012	Tr		
11853	105.79	106.40	3.66	.010	Tr		
11854	106.40	109.45	3.05	.030	.48		
11855	116.16	119.21	3.05	.020	.14		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-127

Section 48+80S Az. 230°

Date Sept. 23, 1985 Elev.

Lat. Depth 175.91 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-65°
108.84	70.5°	-64°
154.51	73°	-68°

Depth From	Depth To	Description
0.0	0.61	Casing.
0.61	97.87	Andesite lapilli tuff. Pale grey, medium grey, white. Hardness 5 - 7. 0.61 - 6.71 - Vein. White, coarse grained, vuggy, trace of carbonate, 1% sulphide. 6.71 - 11.28 - Weak vein. Weakly mottled, moderately crushed, moderately silicified, 50% quartz veining, occasional sulphide fragments, 3% pyrite. 11.28 - 15.85 - Intensely sericitized, intensely silicified, 1% sulphide. 15.85 - 17.68 - Intensely sericitized, moderately silicified, intensely carbonatized, 1% pyrite. 17.68 - 22.56 - Intensely sericitized, intensely propylitized, weakly silicified, moderately to intensely crushed, 15% pyrite. 22.56 - 32.01 - Intensely sericitized, good arkosic texture, weakly foliated at 45° CA, 1% quartz veins, 1% pyrite. 32.01 - 32.62 - Vein. Moderately crushed, 20% pyrite, 25% vein quartz. 32.62 - 85.06 - Arkosic texture, intensely sericitized, moderately

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-127

Depth From	Depth To	Description
		silicified, trace of serpentinized green carbonate, 1% pyrite as veinlets and disseminations. 85.06 - 88.11 - Moderately brecciated, healed with 15% quartz carbonate, 5% pyrite. 88.11 - 92.68 - Vein. Mottled, white-grey. Moderately brecciated, intensely silicified, 5% pyrite, some massive blebs with traces of pale sphalerite. 92.68 - 97.87 - Weak vein. Intensely crushed, intensely silicified, medium greys, 2% pyrite, 30% vein quartz.
97.87	124.39	Andesite lapilli tuff. Medium grey to dark grey, white. Hardness 6 - 7. Lapilli textures visible as fragment ghosts, moderately to intensely sericitized, moderately to intensely silicified. Rock type change is probably at 88.11 m. 97.87 - 107.01 - Intensely sericitized, intensely silicified, moderately brecciated, 20% vein quartz, 15% pyrite, trace of jade-green serpentinized carbonate. 107.01 - 118.29 - Moderately sericitized, intensely silicified, 2% pyrite. 118.29 - 121.65 - Dark crush zone with up to 35% pyrite as fragments and shards. Hardness 4. 121.65 - 124.39 - Vein. White, moderately crushed, intensely silicified, 1% sulphide.
124.39	175.91	Pebble conglomerate. Pale to moderate grey, white, jade green. Hardness 3 and 5 - 7. Dark, fine grained matrix with pale pebble-sized fragments, more angular than normal to rounded and sub-angular, often foliated to gneissic in appearance. Foliation at 55° CA at 128.05 m., 45° CA at 134.15 m., 40° CA at

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-127

Depth From	Depth To	Description
		149.39 m., 30°CA at 158.34 m.
		124.39 - 125.30 - Pale, well foliated, 1% pyrite, mildly kaolinized.
		125.30 - 131.71 - Moderately crushed, large blotches of sulphide, up to 3 cm. in diameter, 20% sulphide, pyrite, moderately carbonatized.
		131.71 - 132.00 - Pale grey, aphanitic dyke.
		132.01 - 161.89 - Moderately foliated, trace of carbonate, 3% vein quartz, 15% pyrite.
		161.89 - 168.90 - Vein. Weakly mottled, 80% vein quartz, intensely silicified, 2% sulphide.
		168.90 - 175.91 - Vein. 65% vein quartz, 30% dark wall-rock fragments, intensely silicified, 5% pyrite.
		175.91 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-127

Sample No.	From	To	Width	Au	Ag	Au-e.	
11856	.61	3.66	3.05	.010	.35		
11857	3.66	6.71	3.05	.018	Tr		
11858	6.71	8.84	2.13	.014	Tr		
11859	8.84	11.89	3.05	.024	Tr		
11860	17.38	20.43	3.05	.012	Tr		
11861	20.43	23.48	3.05	Tr	Tr		
11862	32.01	32.62	.61	Tr	Tr		
11863	85.06	88.11	3.05	.114	.43	.123)	0.042 Au
11864	88.11	91.16	3.05	.028	.53	.039)	3.000 Ag
11865	91.16	92.99	1.83	.058	29.88	.656)	.102 Au-e./
11866	92.99	96.04	3.05	.030	.48	.040)	23.17 m.
11867	96.04	99.09	3.05	.034	2.43	.083)	@ 85.06 m.
11868	99.09	102.13	3.05	.028	.70	.042)	
11869	102.13	105.18	3.05	.048	.32	.054)	
11870	118.60	121.65	3.05	.004	.21		
11871	121.65	124.39	3.05	.008	Tr		
11872	124.39	127.44	3.05	.006	Tr		
11873	127.44	130.49	3.05	.008	Tr		
11874	130.49	133.54	3.05	.008	Tr		
11875	133.54	136.59	3.05	.016	.13		
11876	136.59	139.63	3.05	.016	.33		
11877	139.63	142.68	3.05	.006	Tr		
11878	142.68	145.73	3.05	.010	.42		
11879	145.73	148.78	3.05	.016	.52		
11880	148.78	151.83	3.05	.014	.27		
11881	151.83	154.88	3.05	.030	.25		
11882	154.88	157.93	3.05	.020	.17		
11883	157.93	160.98	3.05	.032	.24		
11884	160.98	164.02	3.05	.020	.53		
11885	164.02	167.07	3.05	.016	.15		
11886	167.07	170.12	3.05	.022	.24		
11887	170.12	173.17	3.05	.026	Tr		
11888	173.17	175.91	2.74	.016	.30		

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK GOSSAN HILL HOLE NO. S-85-128

Section 48+70S Az. 000°

Date September, 1985 Elev.

Lat. Depth 81.71 meters

Dep. 00+94E Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-40°

Depth From	Depth To	Description
0	0.91	Casing.
0.91	81.71	Andesite tuff. Pale grey, white. Hardness 6. Very fine grained, aphanitic, moderately to intensely sericitized. 0.91 - 8.54 - Moderately brecciated, 5% pyrite, moderately propylitized. 8.54 - 16.77 - Intensely silicified, intensely seriticized, weakly crackled, weakly foliated. 16.77 - 17.99 - Intensely silicified, intensely sericitized, moderately brecciated, 2% pyrite. 17.99 - 28.66 - Medium, grainy rock, 10% quartz veins, intensely sericitized, intensely silicified, 3% pyrite. 28.66 - 33.54 - Intensely sericitized, intensely silicified, 3% pyrite, 5% quartz veins. 33.54 - 51.52 - Very fine grained, aphanitic, intensely silicified, intensely sericitized, 1% pyrite as weak crackle fillings. 51.52 - 52.13 - Vein. Mottled quartz vein with 20% sulphides, pyrite, sphalerite.

Property BRUCEJACK GOSSAN HILL Sheet No. 2 of 2

Hole No. S-85-128

Depth		Description
From	To	
		52.13 - 55.79 - Very fine grained, aphanitic, intensely silicified, intensely sericitized, moderately to intensely crackled with blebs of sphalerite and pyrite (5%).
		55.79 - 56.40 - Vein. Mottled quartz, intensely silicified, intensely brecciated.
		56.40 - 75.30 - Pale, aphanitic, moderately crackled, healed with pyrite, 2% quartz vein.
		75.30 - 78.66 - Stockwork. Weakly to intensely silicified, 7% pyrite, sphalerite, healed with quartz, large 0.5 cm. nugget of electrum with several more flecks at 78.31 m.
		78.66 - 81.71 - Moderately crackled, healed with sulphides, 8% sulphides, pyrite, intensely silicified, intensely sericitized.
		81.71 END OF HOLE.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK GOSSAN HILL Sheet No. 1 of 1

Hole No. S-85-128

Sample No.	From	To	Width	Au	Ag	Au-e.	
11889	22.26	24.24	1.98	.016	1.69	.050	
12051	51.52	52.13	.61	.096	0.78	.112)	
11890	52.13	54.27	2.13	.034	1.12	.057)	.062/7.93 m.
11891	54.27	56.40	2.13	.036	1.32	.062)	
11892	56.40	59.45	3.05	.046	0.44	.056)	
11893	59.45	62.50	3.05	.026	.49	.036	
11894	71.34	74.39	3.05	.024	.51		
11895	74.39	77.44	3.05	.016	Tr		
11896	77.44	78.66	1.22	10.930	11.99	11.170	11.17/1.22 m
12052	78.66	81.71	3.05	.028	1.53	.059	

DIAMOND DRILL RECORD

PROPERTY GOSSAN HILL — HOLE NO. S-85-129

Section 48+70S — Az. 330°

Date September 1985 — Elev.

Lat. — Depth 87.80 meters

Dep. 00+94E — Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-40°
87.80	-47°	-38°

Depth From	Depth To	Description
0	0.91	Casing.
0.91	77.13	Andesite tuff. Pale, medium greys. Hardness 4 - 7. Very fine grained, aphanitic, angular, fragmental. 0.91 - 3.66 - Fine grainy tuff. Intensely sericitized. 3.66 - 19.21 - Fine, tight, angular, fragmental cemented with carbonate and pyrite. Pyrite to 15%, intensely sericitized, weakly silicified. 19.21 - 21.65 - Fine tuff. Intensely sericitized, moderately silicified, 1% pyrite. 21.65 - 22.87 - Pale grey-green, aphanitic dyke rock. 22.87 - 28.05 - Mixed quartz vein and wall rock with 1% pyrite, 30% vein quartz. 28.05 - 50.91 - Very fine grained, aphanitic mildly crackled, healed with pyrite, 2% vein quartz, 0.31 m. quartz vein at 43.60 with visible electrum. 50.91 - 52.44 - Intensely silicified, moderately crushed, 10% very fine grained pyrite, weak vein. 52.44 - 57.93 - Intensely silicified, moderately crackled, healed

Property GOSSAN HILL Sheet No. 2 of 3

Hole No. S-85-129

Depth From	Depth To	Description
		with pyrite, 1% quartz veins, 8% pyrite as disseminations and crackle healings.
		57.93 - 59.45 - Crush zone with 0.31 m. quartz sulphide vein at 58.24 m., intensely silicified, moderately crackled, healed with pyrite, up to 15%.
		59.45 - 68.29 - Dark grey, intensely sericitized, moderately to intensely silcified, mildly crushed, moderately to intensely pyritized, up to 20% pyrite.
		68.29 - 73.17 - Very fine grained, aphanitic, pale, medium grey, intensely sericitized, intensely silicified, mildly crackled, healed with up to 10% pyrite.
		73.17 - 75.61 - Crush zone. Intensely sericitized, intensely silicified, moderately to intensely crushed, 40% quartz as matrix and veins.
		75.61 - 77.13 - Crush zone. Vein. Intensely crushed, intensely silicified, up to 60% sulphides, overall 40% sulphides, pyrite.
77.13	87.80	Sediments. Medium grey, black to white. Hardness 5. Very fine grained, argillaceous with no bedding to coarse grained greywacke with weak bedding at 40° CA.
		77.13 - 78.05 - Crush zone. Intensely silicified, 20% pyrite.
		78.05 - 78.66 - Black argillite, unaltered.
		78.66 - 79.11 - Greywacke.
		79.11 - 80.33 - Argillite. Moderately silicified, crackled, healed with quartz, 20% sulphides, pyrite.
		80.33 - 80.79 - Greywacke.

Property GOSSAN HILL Sheet No. 3 of 3

Hole No. S-85-129

Depth		Description
From	To	
		80.79 - 81.40 - Greywacke and vein. Quartz vein with 10% pyrite. 81.40 - 81.80 - Greywacke. 81.80 - 82.93 - Argillite, 7% pyrite. 82.93 - 83.99 - Coarse grit greywacke. 83.99 - 84.60 - Black argillite. 84.60 - 87.50 - Medium greywacke with 5% pyrite. 87.50 - 87.80 - Black argillite. 87.80 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY GOSSAN HILL Sheet No. 1 of 1

Hole No. S-85-129

Sample No.	From	To	Width	Au	Ag	Au-e.	
11897	16.77	19.82	3.05	.008	Tr		
11898	24.09	27.13	3.05	.020	.27		
11899	27.13	28.35	1.22	.020	.43		
11900	43.29	43.90	0.61	1.666	4.16	1.749	
11901	50.91	53.05	2.13	.022	.36		
11902	57.93	59.45	1.52	.010	Tr		
11903	59.45	62.20	2.74	.010	Tr		
11904	62.20	64.02	1.83	.034	.29		
11905			2.29	.030	.21		
11906			2.90	.012	.11		
11907			.76				
11908			2.13	.024	.14		
12048			3.05	.020	.26		
12049			3.20	.018	.15		
11250			2.90	.022	.48		

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD HOLE NO. S-85-130

Section 50+60E Az. 180°

Date September, 1985 Elev.

Lat. 00+00 Depth 154.88 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-50°	-50°
76.52	-53.5°	-44°
154.88	-50°	-40°

Depth From	Depth To	Description
0	3.05	Casing.
3.05	154.88	Andesite lapilli tuff. Hardness 4 - 5. Fine grained, occasional ghosts of fragments visible, moderate to intensely propylitized throughout, moderately chloritized and moderately to intensely sericitized locally, 7 - 10% pyrite, trace of MoS_2.
		3.05 - 82.32 - Mixed, moderately chloritized and sericitized.
		82.32 - 84.76 - Moderately to intensely sericitized, 10% pyrite, ghosts of fragments clearly visible.
		84.76 - 92.99 - Weakly propylitized, weakly sericitized, moderately to intensely chloritized, 7% pyrite.
		92.-9 - 95.12 - Pale, intensely sericitized, 10% pyrite, No. 3 fault with 20 cm. fault gouge at 60° at 94.51 m.
		95.12 - 139.63 - Weakly to moderately sericitized, weakly to moderately chloritized, 7% pyrite, 1% quartz veins, 0.31 m. broken core at 108.84 m., ghosts of fragments visible throughout.
		108.84 - 148.78 - Moderately propylitized with numerous veinlets of pyrite, 2 mm. wide with sericite alteration halos, total

Property SNOWFIELD Sheet No. 2 of 2

Hole No. S-85-130

Depth		Description
From	To	
		pyrite 10%.
		148.78 - 154.88 - Moderately propylitized, moderately chloritized, 5% pyrite, No. 1 fault sericitized and bleached 70° CA at 150.91 m.
		154.88 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD Sheet No. 1 of 2

Hole No. S-85-130

Sample No.	From	To	Width	Au	Ag	Au-e.	
11909	3.05	6.10	3.05	.070	.24)		
11910	6.10	9.15	3.05	.094	Tr)		
11911	9.15	12.20	3.05	.082	Tr)		
11912	12.20	15.24	3.05	.056	Tr)		
11913	15.24	18.29	3.05	.070	Tr)		
11914	18.29	21.34	3.05	.104	.22)		
11915	21.34	24.39	3.05	.096	Tr)		
11916	24.39	27.44	3.05	.074	Tr)		
11917	27.44	30.49	3.05	.072	Tr)		94.5 m. of
11918	30.49	33.54	3.05	.068	Tr)		.081 g/T.
11919	33.54	36.59	3.05	.062	Tr)		of Au @
11920	36.59	39.63	3.05	.068	Tr)		3.05 m.
11921	39.63	42.68	3.05	.088	.14)		
11922	42.68	45.73	3.05	.074	Tr)		
11923	45.73	48.78	3.05	.088	Tr)		
11924	48.78	51.83	3.05	.088	Tr)		
11925	51.83	54.88	3.05	.094	Tr)		
11926	54.88	57.93	3.05	.114	.21)		
11927	57.93	60.98	3.05	.092	Tr)		
11928	60.98	64.02	3.05	.104	Tr)		
11929	64.02	67.07	3.05	.090	Tr)		
11930	67.07	70.12	3.05	.094	Tr)		
11931	70.12	73.17	3.05	.084	.13)		
11932	73.17	76.22	3.05	.070	.14)		
11933	76.22	79.27	3.05	.070	Tr)		
11934	79.27	82.32	3.05	.070	.17)		
11935	82.32	85.37	3.05	.082	.14)		
11936	85.37	88.41	3.05	.084	Tr)		
11937	88.41	91.46	3.05	.072	Tr)		
11938	91.46	94.51	3.05	.064	Tr)		
11939	94.51	97.56	3.05	.058	.20)		
11940	97.56	100.61	3.05	.036	Tr)		
11941	100.61	103.66	3.05	.020	Tr)		57.34 m. of
11942	103.66	106.71	3.05	.024	.12)		.036 Au @
11943	106.71	109.76	3.05	.036	Tr)		97.56 m.
11944	109.76	112.80	3.05	.038	Tr)		
11945	112.80	115.85	3.05	.044	.26)		
11946	115.85	118.90	3.05	.040	.28)		
11947	118.90	121.95	3.05	.090	Tr)		
11948	121.95	125.00	3.05	.038	Tr)		
11949	125.00	128.05	3.05	.026	.16)		
11950	128.05	131.10	3.05	.036	.23)		
11951	131.10	134.15	3.05	.026	.13)		
11052	134.15	137.20	3.05	.034	.16)		
11953	137.20	140.24	3.05	.038	.16)		

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD Sheet No. 2 of 2

Hole No. S-85-130

Sample No.	From	To	Width	Au	Ag	Au-e.	
11954	140.24	143.29	3.05	.024	.18)		
11955	143.29	146.34	3.05	.024	Tr)		
11956	146.34	149.39	3.05	.026	.28)		
11957	149.39	152.44	3.05	.014	.20)		
11958	152.44	154.88	2.44	.024	.10)		

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD HOLE NO. S-85-131

Section 50+60E Az. 180°

Date Sept. 29, 1985 Elev.

Lat. Depth 152.13 meters

Dep. Logged by N.L.T.

DIP

Footage	Reading	Dip
		-70°
76.22	73.5°	-68°
152.44	71°	-65°

Depth From	Depth To	Description
0	2.13	Casing.
2.13	152.13	Andesite lapilli tuff. Grey-green to grey. Hardness 4 - 5. Fine lapilli in aphanitic matrix, slightly schistose with medium foliation, 45° at 11.28 m., 40° at 27.44 m., 50° at 42.68 m. Weakly to moderately chloritized, weakly to moderately propylitized, unaltered to moderately sericitized.
		2.13 - 14.94 - Intensely propylitized, moderately chloritized, 10% pyrite. No. 1 fault at 11.59 m. at 40°CA.
		14.94 - 17.68 - Moderately propylitized, moderately chloritized, broken section and No. 2 fault at 45° at 14.94 m.
		17.68 - 33.23 - Intensely propylitized, weakly to moderately chloritized. No. 2 fault at 19.51 m. with .61 m. broken core approximately 40°CA, No. 1 fault at 25.61 m. at 25°CA, 1.52 m. broken core at 27.13 m., .3 m. broken core at 31.71 m.
		33.23 - 40.85 - Intensely propylitized, intensely sericitized, 7% pyrite, 5% quartz veins, .6 m. broken core at 32.93 m., No. 1 fault at 34.76 m.

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD Sheet No. 1 of 2

Hole No. S-85-131

Sample No.	From	To	Width	Au	Ag	Au-e.	
11959	2.13	5.18	3.05	.078	Tr)		
11960	5.18	8.23	3.05	.082	.14)		
11961	8.23	11.28	3.05	.074	Tr)		
11962	11.28	14.33	3.05	.066	Tr)		
11963	14.33	17.38	3.05	.060	.17)		
11964	17.38	20.43	3.05	.066	Tr)		
11965	20.43	23.48	3.05	.072	Tr)		
11966	23.48	26.52	3.05	.102	Tr)		
11967	26.52	29.57	3.05	.116	Tr)		
11968	29.57	32.62	3.05	.083	.24)		
11969	32.62	35.67	3.05	.066	Tr)		
11970	35.67	38.72	3.05	.034	Tr)		
11971	38.72	41.77	3.05	.084	Tr)		
11972	41.77	44.82	3.05	.074	.14)		
11973	44.82	47.87	3.05	.088	Tr)		
11974	47.87	50.91	3.05	.076	Tr)		
11975	50.91	53.96	3.05	.088	Tr)		
11976	53.96	57.01	3.05	.078	Tr)	82.32 m of .075 Au	
11977	57.01	60.06	3.05	.188	.27)		@ 2.13 m.
11978	60.06	63.11	3.05	.056	Tr)		
11979	63.11	66.16	3.05	.054	Tr)		
11980	66.16	69.21	3.05	.052	.18)		
11981	69.21	72.26	3.05	.052	.13)		
11982	72.26	75.30	3.05	.068	Tr)		
11983	75.30	78.36	3.05	.054	.20)		
11984	78.36	81.40	3.05	.052	Tr)		
11985	81.40	84.45	3.05	.052	Tr)		
11986	84.45	87.50	3.05	.044	Tr)		
11987	87.50	90.55	3.05	.050	.18)		
11988	90.55	93.60	3.05	.044	.20)		
11989	93.60	96.65	3.05	.062	Tr)		
11990	96.65	99.70	3.05	.046	Tr)		
11991	99.70	102.74	3.05	.044	.21)		
11992	102.74	105.79	3.05	.048	.20)	36.59 m of 0.047 Au	
11993	105.79	108.84	3.05	.048	.18)		@ 84.45
11994	108.84	111.89	3.05	.062	.18)		
11995	111.89	114.94	3.05	.040	.15)		
11996	114.94	117.99	3.05	.034	.22)		
11997	117.99	121.04	3.05	.040	Tr)		
11998	121.04	124.09	3.05	.024	Tr)		
11999	124.09	127.13	3.05	.024	.13)		
12000	127.13	130.18	3.05	.034	.23)		
12001	130.18	133.23	3.05	.020	Tr		
12002	133.23	135.37	2.13	.038	Tr		
12003	135.37	138.41	3.05	.032	Tr		
12004	138.41	141.46	3.05	.030	.27		

DIAMOND DRILL RECORD

PROPERTY SNOWFIELD Sheet No. 2 of 2

Hole No. S-85-131

Sample No.	From	To	Width	Au	Ag	Au-e.	
12005	141.46	144.51	3.05	.024	.16		
12006	144.51	147.56	3.05	.030	Tr		
12007	147.56	150.61	3.05	.026	Tr		
12008	150.61	152.13	1.52	.020	.19		

Property SNOWFIELD Sheet No. 2 of 3

Hole No. S-85-131

Depth From	Depth To	Description
		at 55°CA. .61 m. broken core at 35.37 m., 1.22 m. broken core with .30 m. mud gouge (No. 3 fault) at 36.59 m. at 45°CA. .30 broken core at 39.02 m.
40.85	43.60	Intensely propylitized, moderately chloritized, ghosts of fragments clearly visible.
43.60	43.90	Intensely sericitized, well mineralized with quartz veining and pyrite and black chlorite.
43.90	46.96	Moderately propylitized, moderately chloritized, 7% very fine grained pyrite, 1% quartz veins.
46.95	50.91	Moderately prophylitized, moderately sericitized, 10% pyrite.
50.91	55.18	Weakly propylitized, good fragmental textures, moderately chloritized, 10% pyrite.
55.18	58.54	Intensely sericitized, 15% pyrite, pale grey.
58.54	87.20	Intensely propylitized, vague ghosts of fragments, moderately chloritized, very little sericite, unaltered to weakly sericitized, predominantly clays and chlorite, 2% pyrite, .5% quartz veins.
87.20	89.02	Pale grey, intensely sericitized, 2% pyrite, 10 cm. quartz vein at 89.00 m.
89.02	135.37	Intensely propylitized, vague ghosts of fragments, moderately chloritized, moderately sericitized from 117.07 - 118.29 m., otherwise very little sericite, 3% pyrite, 1% quartz veins, 10 cm. quartz vein at 128.05 at 50°CA,

Property SNOWFIELD Sheet No. 3 of 3

Hole No. S-85-131

Depth		Description
From	To	
		alteration change at 135.37 m.
		135.37 - 152.13 - Fine tuff. Fragments up to 1 cm., weakly chloritized, very weakly propylitized, 1% quartz veins, some dark grey quartz with pyrite, overall less than 1% pyrite, texture of tuff particles is clearly visible.
		152.13 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK — HOLE NO. S-85-132

Section 50+20S — Az.

Date September, 1985 — Elev.

Lat. — Depth 93.60 meters

Dep. 00+62E — Logged by N.L.T.

DIP

Footage	Reading	Dip
0	-35°	-35°
93.60	.42°	34.5°

Depth From	Depth To	Description
0	3.96	Casing.
3.96	78.96	Andesite tuff. Pale grey to medium grey, white. Hardness 4 to 7. Fine grained, tuffaceous. Broken core at 6.71 m. at 40°CA. 3.96 - 21.95 - Fine grained tuffs. Moderately sericitized, trace of kaolin, weak foliation at 50°CA, 4% pyrite. No. 2 fault at 18.60 m. at 50°CA. 21.95 - 41.77 - Medium grainy tuff, medium grained, 2 mm., light grains in dark matrix, 3% pyrite, weakly to moderately silicified. 41.77 - 47.87 - Lapilli tuff. Intensely propylitized, moderately to intensely silicified, 12% sulphides, pyrite, trace creamy sphalerite, 0.85 m. quartz vein with good pyrite, tetrahedrite, sphalerite and pyrargyrite at 45.8 m. 47.87 - 48.48 - Quartz vein with 3% sulphide sphalerite, pyrite, pyrargyrite, tetrahedrite, argentite. 48.48 - 55.18 - Intensely silicified, intensely propylitized, intensely pyritized, intensely crackled, healed with sulphides,

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-132

Depth From	Depth To	Description
		moderately brecciated, 20% sulphides, pyrite.
		55.81 - 56.10 - Intensely sericitized, moderatly silicified, 1% pyrite.
		56.10 - 60.98 - Intensely propylitized, intensely silicified, intensely crackled, healed with silica, 5% sulphides, pyrite.
		60.98 - 64.02 - Vein. 50% vein quartz, 7% sulphides, pyrite, intensely silicified wall rock fragments, moderately crushed, brecciated, healed with silica.
		64.02 - 64.94 - Dark grey, intensely crushed zone, 15% pyrite, moderately silicified.
		64.94 - 65.55 - Dyke. Pale grey with dark green phenocrysts, some quartz chips.
		65.55 - 67.38 - Andesite. Moderately to intensely sericitized, weakly silicified, 4% vein quartz, 2% sulphides.
		67.38 - 73.17 - Vein. Coarse white quartz with 3% sulphides, pyrite, creamy sphalerite, tetrahedrite, galena, argentite.
		73.17 - 76.52 - Carbonate vein. Moderately crushed, foliated, healed with jade-green carbonate and quartz, trace creamy sphalerite.
		76.52 - 78.96 - Vein. 75% vein quartz, 0.30 m. fault gouge at 76.52 m. at 45°CA, 7% sulphides, pyrite, trace pyrargyrite, intensely silicified.
78.96	93.60	Pebble conglomerate. Dark grey to medium grey, pale grey, creamy white. Hardness 4 - 6. Pale pebbles in dark matrix, moderately crushed, moderately foliated at 50°CA, moderately to intensely silicified, up to 20% pyrite.

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-132

Depth From	Depth To	Description
		78.96 - 81.40 - Intensely silicified, 20% pyrite. 81.40 - 82.93 - Moderately foliated at 75°CA. 82.93 - 86.28 - Vein. 80% vein quartz, 5% sulphide, pyrite, galena, pyrargyrite. 86.28 - 89.02 - Intensely pyritized, intensely sericitized, intensely silicified, 30% pyrite. 89.02 - 90.85 - Vein. Intensely silicified wall rock, intensely crackled and healed with silica, 8% pyrite, 50% vein quartz. 90.85 - 93.60 - Weak vein. Dark greys with white quartz pebble in darker matrix, 25% pyrite, trace galena in a very intensely silicified intensely crackled rock, 0.30 m. vuggy quartz at 93.29 m. 93.60 END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-132

Sample No.	From	To	Width	Au	Ag	Au-e.	
12009	17.99	19.21	1.22	.012	Tr		
12010	21.65	22.56	0.91	.012	.92	.030	
12011	39.63	42.68	3.05	.016	.88	.034	
12012	42.68	45.73	3.05	.018	1.17	.041	
12013	45.73	98.78	3.05	.072	21.22	.496	
12014	48.78	51.83	3.05	.026	.38	.034	
12015	51.83	54.88	3.05	.012	.37	.019	
12016	54.88	57.93	3.05	.016	.23	.021	
12017	57.93	60.98	3.05	.048	4.19	.132	
12018	60.98	64.02	3.05	.020	.47	.029	
12019	64.02	64.94	0.91	.020	.12	.022	53.96 m.
12020	64.94	67.38	2.44	.020	2.36	.067	of
12021	67.38	70.43	3.05	.152	25.74	.667	0.047 Au
12022	70.43	73.48	3.05	.014	1.07	.035	5.630 Ag
12023	73.48	76.52	3.05	.006	.41	.014	.118 Au-e.
12024	76.52	78.96	2.44	.014	.51	.024	@ 39.63 m.
12025	78.96	82.01	3.05	.010	1.78	.046	
12053	82.01	83.23	1.22	.012	.28	.018	
12054	83.23	86.28	3.05	.128	9.80	.324	
12055	86.28	89.02	2.74	.016	2.27	.061	
12056	89.02	90.85	1.83	.016	1.61	.048	
12057	90.85	93.60	2.74	.012	1.11	.034	
	39.63	93.60	53.96			.118 Au-e.	

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-133

Section 50+20S Az. 230°

Date Sept. 1985 Elev.

Lat. Depth 112.20 meters

Dep. 00+62E Logged by N.I.T.

DIP

Footage	Reading	Dip
0	-50°	-50°

Depth		Description
From	To	
0	3.96	Casing.
3.96	60.37	Andesite tuff. Light grey, medium grey. Hardness 3. Fine grained to medium grained, occasionally small fragments, moderately foliated at 50°CA, trace of kaolin. .3 m. fault zone at 8.23 m. at 35°CA, .61 m. fault zone at 28.96 m. at 35°CA. 3.96 - 50.30 - Moderately sericitized, weakly kaolinized. 50.30 - 51.52 - Vein. Mainly quartz vein, less than 1% sulphide. 51.52 - 54.57 - Medium grained tuff, 2% quartz. 54.57 - 55.49 - Quartz vein. Less than 1% sulphide. 55.49 - 59.15 - Fine grained tuff, 2% sulphides, pyrite. 59.15 - 60.37 - No. 2 fault at 30°CA.
60.37	105.49	Andesite lapilli tuff. Medium grey to pale grey, light. Hardness 7. Very fine grained, intensely silicified, moderately brecciated, locally well foliated. 60.37 - 61.89 - Intensely silicified, 3% quartz veinlets, 10% sulphides, pyrite, trace galena. 61.89 - 62.20 - Quartz vein with 5 cm. massive pyrite and broken core.

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-133

Sample No.	From	To	Width	Au	Ag	Au-e.	
12026	37.96	39.46	1.52	.006	.16		
12027	50.61	52.13	1.52	.018	1.83	.055	
12028	53.05	55.49	2.44	.014	.14		
12029	61.59	63.11	1.52	.014	.26	.019	
12030	63.11	66.16	3.05	.020	1.78	.056	
12031	66.16	69.21	3.05	.012	2.73	.067	
12032	69.21	70.73	1.52	1.738	283.53	7.409	1.52 m. of
12033	70.73	73.78	3.05	.010	.56	.021	7.409 Au-e.
12034	73.78	76.83	3.05	.012	1.05	.033	@ 69.21 m.
12035	76.83	79.88	3.05	.014	.58	.026	
12036	79.88	82.93	1.83	.036	.73	.051	4.73 m. of
12037	82.93	85.98	3.05	.030	2.97	.089)	0.028 Au
12038	85.98	87.65	1.68	.026	3.96	.105)	3.320 Ag
12039	87.65	89.48	1.83	.014	.39	.022	0.095 Au-e.
12040	89.48	92.38	2.90	.016	.27	.021	@ 82.93 m.
12041	92.38	95.43	3.05	.014	.83	.031	
12042	95.43	98.48	3.05	.018	1.38	.046	
12043	98.48	101.52	3.05	.014	1.70	.048	
12044	101.52	104.57	3.05	.010	.62	.022	
12045	104.57	107.62	3.05	.012	3.24	.077)	6.10 m. of
12046	107.62	110.67	3.05	.012	4.12	.094)	0.012 Au
12047	110.67	112.20	1.52	.012	.15	.015	3.680 Ag
							0.086 Au-e.
	63.11	110.67	47.56	.111			@ 104.57 m.

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-133

Depth From	Depth To	Description
		62.20 - 63.72 - Intensely silicified, 15% quartz vein, 15% sulphides, pyrite.
		63.72 - 69.21 - Intensely silicified, moderately to intensely crackled, healed with silica, 20% sulphides, pyrite.
		69.21 - 70.73 - High grade vein. 20% sulphides, pyrargyrite, argentite, tetrahedrite, sphalerite, pyrite, galena, electrum. Quartz is coarse-grained, rubies are dark magenta.
		70.73 - 76.52 - Intensely silicified, intensely brecciated, less than 3% quartz veinlets, 15% sulphides, pyrite, locally up to 50% pyrite.
		76.52 - 80.49 - Vein. Less than 50% quartz, 5% sulphides, pyrite, sphalerite. No. 1 fault at 78.35 m. at 25° CA.
		80.49 - 82.32 - Weak vein. 30% vein quartz, well foliated at 50° CA, 15% sulphides, pyrite, very fine grained sphalterite, Intensely silicified.
		82.32 - 87.65 - Vein. Mottled, crackled, healed with pyrite then quartz veinlets, 20% pyrite, good galena at 86.59 m.
		87.65 - 89.48 - Dyke. Pale grey-yellow with dark green phenocrysts.
		89.48 - 105.49 - Carbonate vein. Moderately sheared, weakly carbonatized with a pale purple caste, 40% vein quartz, occasional sections of jade-green serpentenized carbonate, well-foliated at 40 - 50° CA,

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-133

Depth		Description
From	To	
		small 5 cm. vein with good pyrite, sphalerite, pyrargyrite, galena at 105.18 m. at 40°CA.
105.49	112.20	Pebble conglomerate. Medium grey, white, pale grey. Hardness 7. Poorly developed pebble texture, pale pebbles in dark matrix, mostly obscured by moderate to intense brecciation, intense silicification, 40% vein quartz, 10% very fine grained pyrite.
	112.20	END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK HOLE NO. S-85-134

Section 50+20S Az.

Date October, 1985 Elev.

Lat. Depth 151.83 meters

Dep. 00+62E Logged by N.L.T.

DIP

Footage	Reading	Dip
0		-65°
127.44	69.5°	-63°

Depth From	Depth To	Description
0	3.96	Casing.
3.96	151.83	Andesite tuff. Pale grey, medium grey. Hardness 5 - 6. Fine grained, tuffaceous to medium grained, grainy. Some lapillis toward the end of the hole. Moderately to intensely sericitized, moderately propylitized weakly kaolinized, weakly to moderately pyritized. 3.96 - 10.37 - Well banded, well foliated tuff. Some kaolin alteration. 1% sulphides. 10.37 - 18.90 - Moderately sericitized, 3% pyrite. 18.90 - 37.80 - Moderately foliated at 25° CA. 5% pyrite. 37.80 - 51.22 - Moderately sericitized, 3% very fine grained pyrite. 51.22 - 77.13 - Coarse mottling of pyrite concentrations in a fine grained tuff, moderately silicified, intensely sericitized, 15% pyrite, 2% vein quartz. 77.13 - 78.05 - Vein. 90% vein quartz, intensely silicified, 3% pyrite. 78.05 - 84.15 - Pale to dark grey, 15% disseminated pyrite, intensely sericitized, intensely silicified.

Property BRUCEJACK Sheet No. 2 of 3

Hole No. S-85-134

Depth From	Depth To	Description
		84.15 - 87.80 - Pale, mottled tuff, intensely sericitized, 10% sulphides, pyrite, pale creamy sphalerite.
		87.80 - 93.90 - Intensely sericitized, 1% quartz veins, 2% very fine grained pyrite.
		93.90 - 97.26 - Vein. Intensely silicified, 35% vein quartz, 5% pyrite.
		97.26 - 106.10 - Intensely sericitized, moderately silicified, 15% vein quartz, 12% pyrite.
		106.10 - 111.59 - Intensely silicified, intensely crackled, healed with silica, 10% pyrite. Rock is probably lapilli tuff from 106.10 onward.
		111.59 - 115.55 - Vein. Stockwork and white quartz vein.
		115.55 - 120.12 - Weak vein. Intensely silicified, 20% vein quartz, 8% sulphides, pyrite, moderately crackled, healed with pyrite and silica.
		120.12 - 122.87 - Vein. White quartz vein with 2% sulphides, sphalerite and tetrahedrite.
		122.87 - 134.45 - Intensely silicified, intensely crackled, mildly crushed, 15% sulphides, pyrite, sphalterite, many as crackle healings. Crackle healed by pyrite then silicified.
		134.45 - 136.59 - Vein. Intensely silicified.
		136.59 - 144.21 - Intensely crackled, healed with pyrite and silica, intensely silicified, 20% fine quartz veinlets.
		144.21 - 146.95 - Vein. White quartz, 2% pyrite.
		146.95 - 151.83 - Intensely silicified, intensely crackled to moderately crushed, healed with pyrite, then silica,

Property BRUCEJACK Sheet No. 3 of 3

Hole No. S-85-134

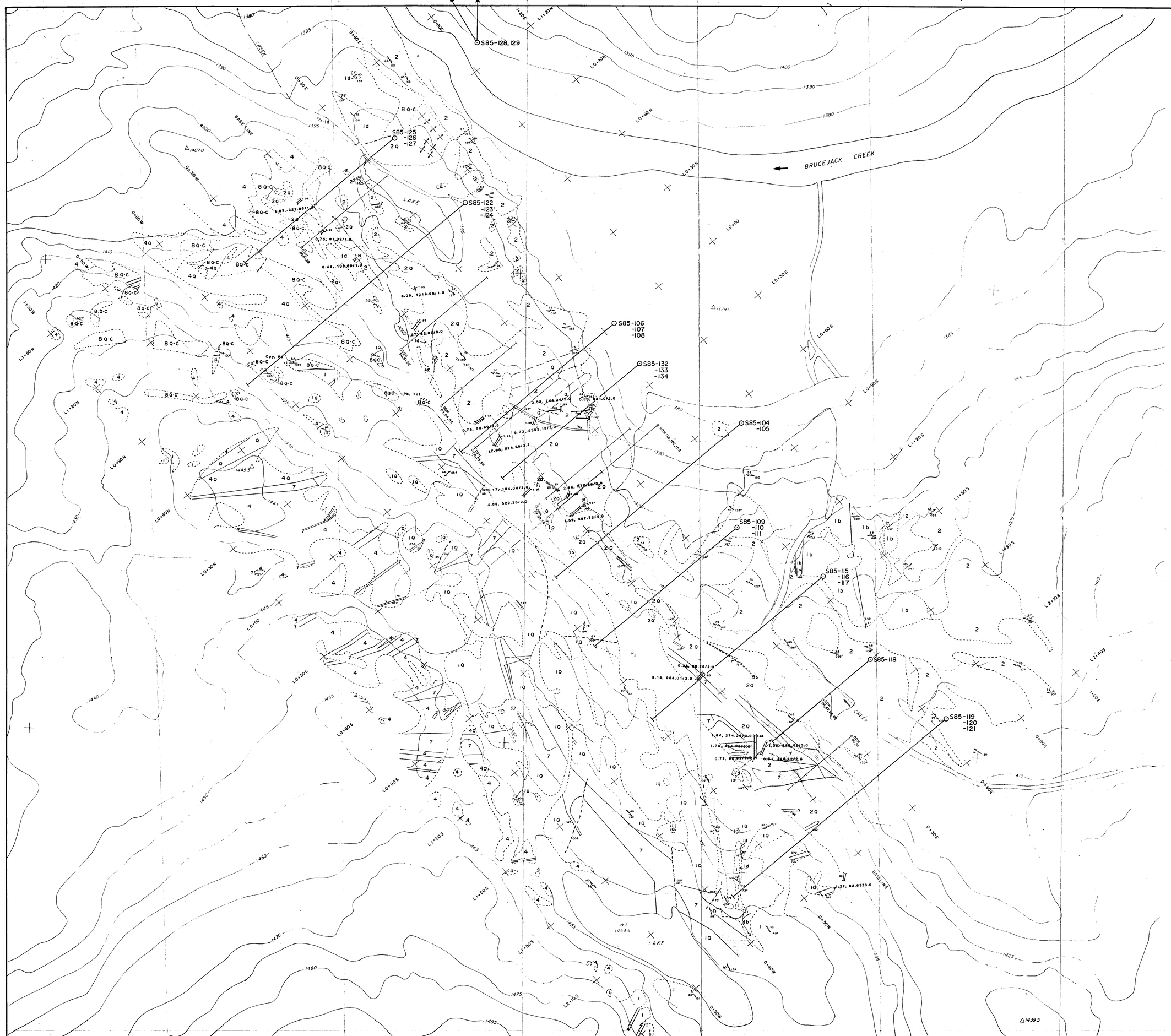
Depth		Description
From	To	
		10% pyrite.
	151.83	END OF HOLE

DIAMOND DRILL RECORD

PROPERTY BRUCEJACK Sheet No. 1 of 1

Hole No. S-85-134

Sample No.	From	To	Width	Au	Ag	Au-e.	
12058	56.71	59.76	3.05	.010	Tr		
12059	61.28	69.33	3.05	.010	.29		
12060	64.33	67.38	3.05	.010	4.17	.093	
12061	75.61	78.66	3.05	.006	.29		
12062	84.45	87.50	3.05	.010	Tr		
12063	87.50	90.55	3.05	.016	3.82	.092	
12064	90.55	93.60	3.05	.014	Tr		
12065	93.60	95.73	2.13	.012	.38		
12066	95.73	97.26	1.52	.008	Tr		
12067	97.26	100.30	3.05	.010	Tr		
12068	100.30	103.35	3.05	.008	Tr		
12069	103.35	106.10	2.74	.008	Tr		
12070	106.10	109.15	3.05	.012	.24		
12071	109.15	112.20	3.05	.008	.26		
12072	112.20	115.24	3.05	.032	2.08	.074	
12073	115.24	118.29	3.05	.024	.47	.033	
12074	118.29	121.34	3.05	.078	2.56	.129)	3.05 m. of
12075	121.34	124.39	3.05	.036	3.02	.096	0.129 @
12076	124.39	127.44	3.05	.044	.53	.055	118.29 m.
12077	127.44	130.49	3.05	.034	.64	.047	
12078	130.49	133.54	3.05	.032	.32	.038	
12079	133.54	136.59	3.05	.044	.29	.050	
12080	136.59	139.63	3.05	.166	.46	.175)	9.15 m. of
12081	139.63	142.68	3.05	.064	.15	.067)	0.105 Au
12082	142.68	145.73	3.05	.084	1.08	.106)	0.560 Ag
12083	145.73	148.78	3.05	.036	.50	.046	0.116 Au-e.
12084	148.78	151.83	3.05	.014	.21		@ 136.59 m.
	112.20	148.78	36.5			.076	



LITHOLOGY

Alteration, age relationships of alteration not known.

- **8** Intense alteration, original lithology not known.
  - Q Quartz veining or silicification
  - S Sericitization
  - P Pyritization
  - *I Intense development of above three alteration types
  - Q-C Quartz-carbonate
- **7** Quartz veins, greater than 50% vein quartz, quartz veins undifferentiated.
- **6** Intense pervasive silicification of black quartz.

Dikes, age relationships of dikes not known.

- **5a** Equigranular hornblende syenite dike.
- **5b** Hornblende-feldspar porphyry dike.
- **5c** Dark green banded "andesite" dikes.
- **5c** Lamprophyre

Intrusive rocks, age relationship based on a cross cutting hornblende-porphyry syenite dike

- **4** Hornblende-feldspar porphyry syenite, undifferentiated
- **3** Alkali feldspar porphyry syenite.

Sediments and volcanic fragmental rocks

- **2** Volcanic fragmental formation, undifferentiated due to cleavage and/or alteration.
- **2a** Low matrix, tuff-breccia to minor lapilli-tuff, monolithic
- **2b** High matrix member, up to 10% chloritic lapilli and blocks, monolithic, probably an ash flow, marker horizon
- **2c** Low matrix with interbedded heterolithic conglomerate sequences
- **1** Sandstone formation, arkose, arkosic wacke, lithic arkose and wacke, shale, pebble conglomerate and arenite
- **1a** Lithic arkose, shales, wackes and conglomerate
- **1b** Arenite member, mainly quartz rich arkose, arenite conglomerate
- **1c** Hornfels derived from sandstone formation
- **1d** Slate

SYMBOLS

- Tops known, load structures, cross bedding
- Cleavage strike and dip
- Bedding strike and dip
- Jointing, strike and dip
- Hornblende or feldspar foliation, strike and dip
- Lineation, cleavage bedding intersection, trend plunge
- Dike, strike and dip
- Quartz vein, strike and dip
- Anticline, known, overturned, inferred direction of plunge
- Syncline, known, inferred, direction of plunge
- Fault, known strike and dip
- Outcrop
- Alteration contact, known, inferred
- Lithologic contact, known, inferred
- Quartz vein stockwork zone
- TRENCH WITH GOLD, SILVER ASSAYS Gm/Tne OVER INTERVAL IN METERS

GEOLOGICAL BRANCH ASSESSMENT REPORT

14,672

SCALE

METRES 10 0 10 20 30 40 50 60 METRES

NEWCANA JOINT VENTURE

SULPHURETS PROJECT

WEST BRUCEJACK AREA GEOLOGY MAP (1)

DRAWN.		BY.	MAP No.
SCALE	1:500	DATE.	

FIG. 7

NEWCANA JOINT VENTURE
SULPHURETS PROJECT
SNOWFIELDS ZONE
GEOLOGY MAP
14,672
GEOLOGICAL BRANCH
ASSESSMENT REPORT
LEGEND
1 BASIC VOLCANIC BRECCIA variably pyritic, chloritic, sericitic
2 BASIC VOLCANIC TUFF
HYDROTHERMAL ALTERATION
SILICIFICATION
SERICITIZATION
CHLORITIZATION
.084/6.0m COMPOSITE TRENCH ASSAY OZ/TON GOLD
GEOLOGICAL FEATURES
CULTURES
L1+80W
L1+20W
L0+60W
L0+00
L0+60E
L1+20E
L1+80E
L2+40E
1+50N
1+20N
0+90N
0+60N
0+30N
BASE LINE
0+30S
0+60S
0+90S
1+20S
1+50S
1+80S
SNOW
GLACIER
S85-113
S85-114
S85-131
S85-112
S85-130
.039/7.0m
.033/6.0m
.042/6.0m
.040/4.5m
.060/6.0m
.038/5.5m
.097/8.5m
.105/6.0m
.049/5.5m
.087/12.0m
.014/9.0m
.081/8.8m
.123/6.0m
.084/6.0m
.061/6.0m
.059/4.6m
.059/6.0m
.054/11.7m
.066/10.0m
.155/11.0m
.034/8.0m
.038/8.5m
.067/7.0m
.065/6.0m
.079/11.0
.042/13.0m
.027/6.0m
.077/6.0m
.061/8.0m
.083/13.0m
.044/10.5m
.040/7.2m
SOUTH END OF TRENCH 176 IS 80m AT 144° FROM THE SOUTH END OF TRENCH 339
DRAWN.
BY.
MAP No.
SCALE. 1:500
DATE.