TRENCHING, GEOLOGY AND GEOCHEMISTRY

OF THE

SOUTH BRUCE GROUP

Skeena Mining Division

Latitude: 56°20'N
Longitude: 130°10'W
NTS: 104B/8

OWNER: Newhawk Gold Mines Ltd.
and Granduc Mines Limited

OPERATOR: Newhawk Gold Mines Ltd.
860 - 625 Howe St.
Vancouver, B.C. V6C 2T6

REPORT BY: David A. Visagie, B.Sc., P.Geo.
and Barry McDonough, B.Sc.

October 15, 1992

Distribution:
2 - Government
2 - Newhawk

SU92-440

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APPENDICES

1.0 INTRODUCTION

The South Bruce claim group is situated within the "Golden Triangle" of north-western British Columbia. The group is part of Newhawk Gold Mines/Granduc Mines' Bruceside property, commonly referred to as Sulphurets. The South Bruce claim group occurs immediately to the south of the Newhawk Gold Mines/Granduc Mines' North Bruce claim group and to the east of Placer Dome's Kerr property. It is underlain by quartz-sericite-pyrite altered Lower Jurassic Hazelton Group rocks locally consisting of andesitic tuffs and flows along with intercalated sediments that have been intruded by quartz-diorite to granodiorite. Previous exploration programs have shown the South Bruce area to host several zones of gold-silver bearing quartz veins and stockwork. Included among these zones are the West, Galena and Gossan Hills, Shore, Bridge and Quartz Hill. In 1992 exploration programs were completed on several of the zones however only the work completed on the Bridge and Quartz Hill is being filed for assessment purposes. A total of 30 man-days were spent mapping and sampling the zones. As a result a total of 22 hand sawn trenches totalling 68.3 metres were cut on the Quartz Hill Zone. Including the channel samples and those taken at the Bridge Zone, a total of 107 rock chip samples were sent for analysis.

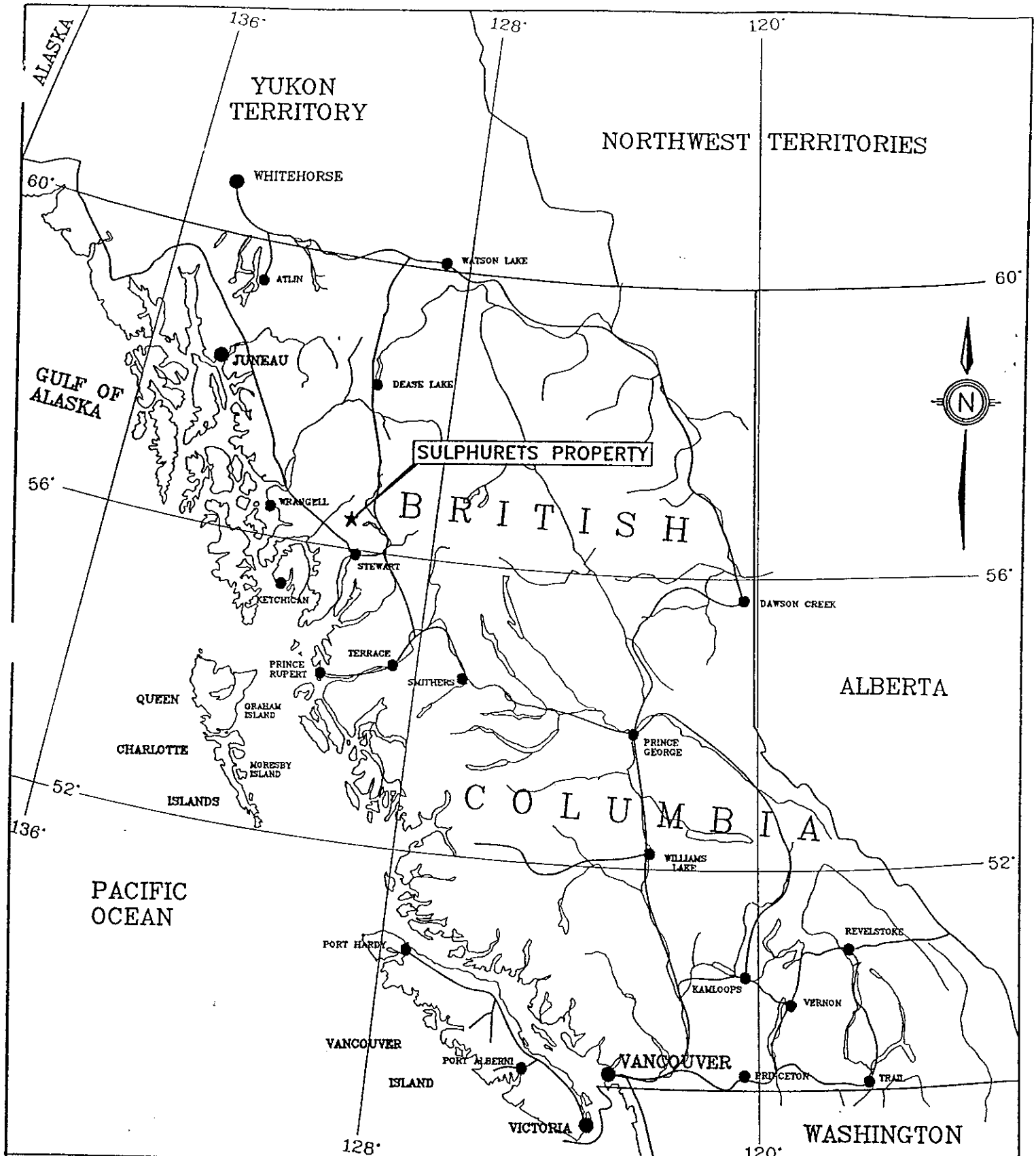
2.0 LOCATION AND ACCESS (Figures 1 & 2)

The property is located within the Coast Range Mountains of northwestern B.C., some 65 kilometres northwest of the village of Stewart approximately 920 kilometres northwest of Vancouver, B.C. It is centred at 130°10'W, 56°20'N occurring on NTS sheet 104B/8. For access purposes supplies were mobilized from Stewart to the Tide Lake airstrip, 35 kilometres to the south then ferried to the property by helicopter. For the 1992 season Frontier Helicopter's Jet Ranger based at Placer Dome's Kerr camp was used for the mobilization of crews and supplies.

3.0 PROPERTY DESCRIPTION (Figure 3)

The South Bruce Group is comprised of the following claims:

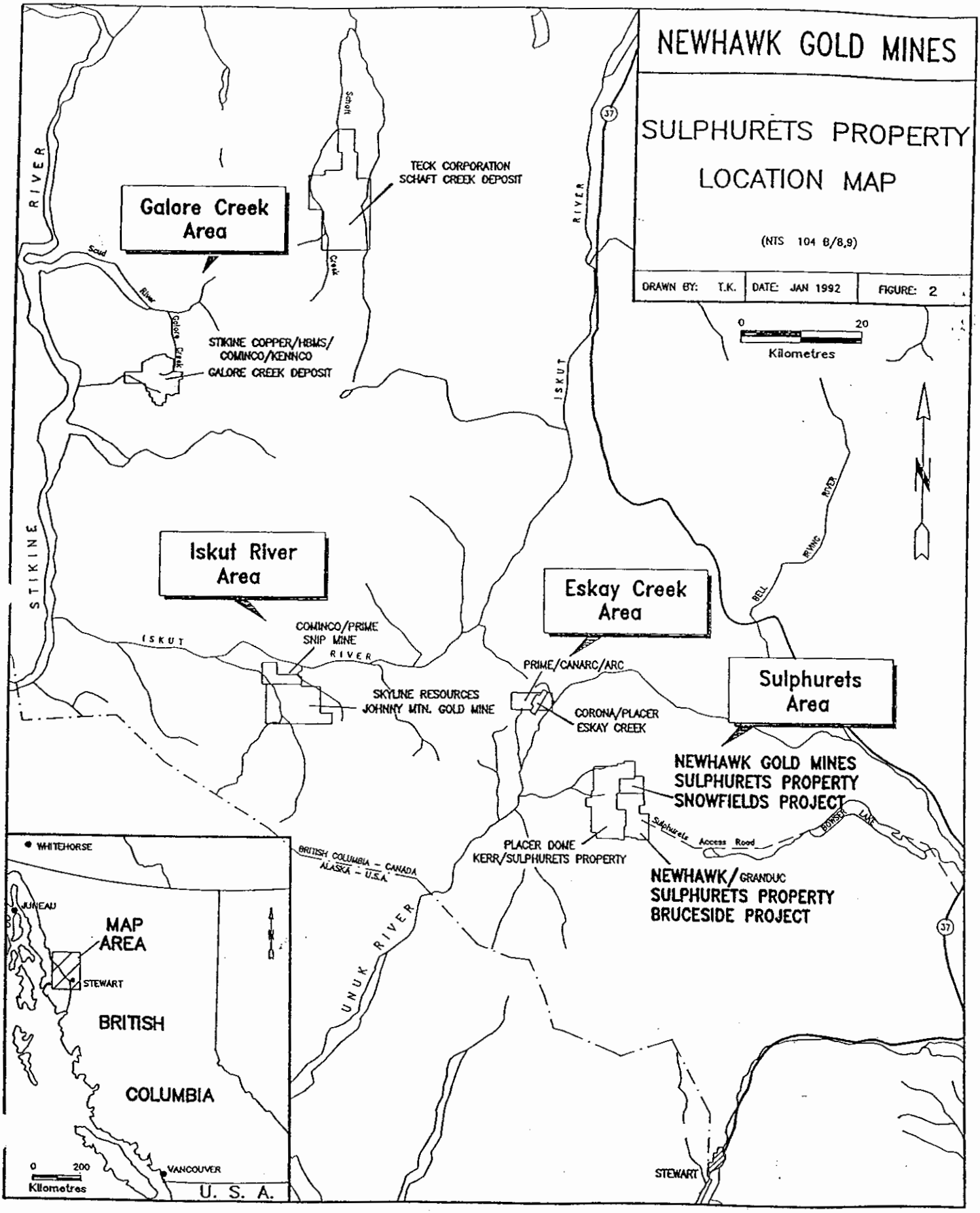
Claim Name	Record #	Units	Expiry Date
Red River 3	250899	2	Sept 2, 2002
Red River 4	250939	12	Nov. 3, 2002
Red River 5	250940	2	Nov. 3, 2002
Red River 6	250985	12	June 30, 2002
Red River 8	251022	2	Sept 29, 2002
Red River 9	251023	2	Sept 29, 2002
Red River 10	251058	12	July 12, 2002
Red River 11	251059	6	July 12, 2002
OK# 6	251285	4	Dec. 10, 2002
OK# 7	251286	12	Dec. 10, 2002



NEWHAWK GOLD MINES

SULPHURETS PROPERTY LOCATION MAP

DRAWN BY: T.K.	FIGURE NO: 1
DATE: MARCH/1992	SCALE:


NEWHAWK GOLD MINES
SULPHURETS PROPERTY
LOCATION MAP
(NTS 104 B/8,9)
DRAWN BY: T.K.
DATE: JAN 1992
FIGURE: 2
0 20
Kilometres
Galore Creek Area
TECK CORPORATION
SCHAFT CREEK DEPOSIT
STIKINE COPPER/HBMS/
COMINCO/KENNCO
GALORE CREEK DEPOSIT
Iskut River Area
COMINCO/PRIME
SNIP MINE
SKYLINE RESOURCES
JOHNNY MTN. GOLD MINE
Eskay Creek Area
PRIME/CANARC/ARC
CORONA/PLACER
ESKAY CREEK
Sulphurets Area
NEWHAWK GOLD MINES
SULPHURETS PROPERTY
SNOWFIELDS PROJECT
PLACER DOME
KERR/SULPHURETS PROPERTY
NEWHAWK/GRANDUC
SULPHURETS PROPERTY
BRUCESIDE PROJECT
Sulphurets Access Road
BOWSER LAKE
BRITISH COLUMBIA - CANADA
ALASKA - U.S.A.
UNUK RIVER
STIKINE RIVER
ISKUT RIVER
BELL IRVING RIVER
STEWART
WHITEHORSE
JUNEAU
MAP AREA
STEWART
BRITISH COLUMBIA
VANCOUVER
0 200
Kilometres
U. S. A.

OK# 8	251287	2	Dec. 10, 2002
Red River 51	254206	2	June 28, 2002
Red River 52	254207	2	June 30, 2002
Red River 54	254209	1	June 29, 2002
OK Fr.	313086	1	Sept 9, 2002
Red River Fr.	313085	1	Sept 9, 2002

The claims all occur within the Skeena Mining Division and are 60% owned by Newhawk Gold Mines with the remaining 40% being held by Granduc Mines. Newhawk is the project operator.

4.0 PHYSIOGRAPHY AND VEGETATION

The topography of the Sulphurets property is typical of the Coast Range Mountains with steep glaciated U-shaped valleys being the norm. Elevations range from 1070 metres at Sulphurets Glacier to in excess of 1830 metres on some of the mountain ranges. Extensive ice-fields are common throughout the property.

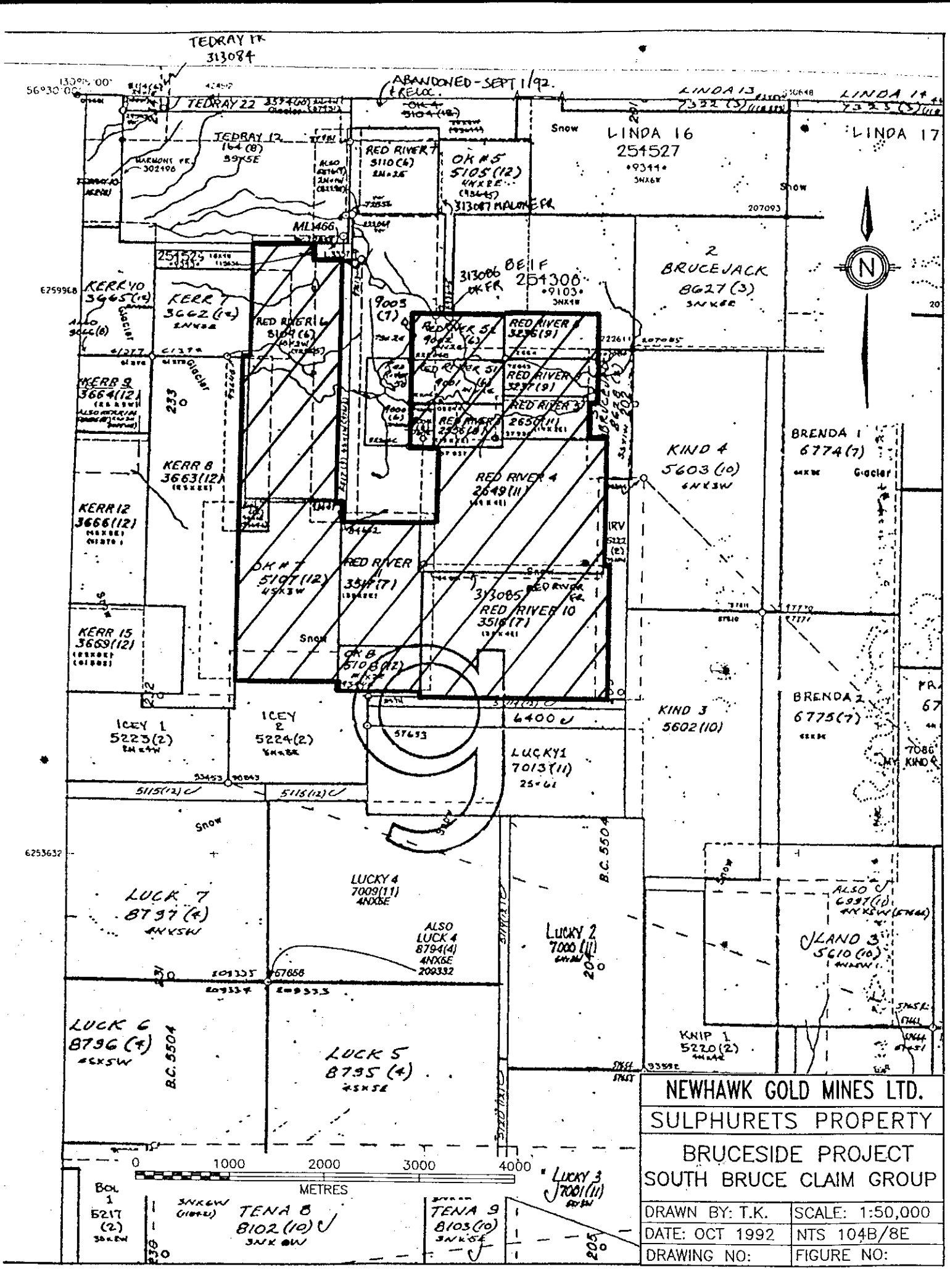
Winters tend to be severe with extensive snowfall and winds while summers tend to be cool and wet. Most of the snowfall occurs between mid-February and mid-April.

Vegetation throughout the property is varied with spruce and fir trees occurring at the lower elevations while lichens, mosses and scrub timber dominate the uplands.

5.0 PROPERTY HISTORY

Exploration in the area dates back to the 1880's when placer gold was located in Sulphurets Creek. In 1935, copper-molybdenum mineralization was located in the vicinity of the Main Copper showing. Until 1959 the property was intermittently evaluated. In 1959, gold and silver values were located in the Brucejack Lake area. Granduc Mines, as a result of this work, staked the main claim area in 1960. Follow-up work included an airborne magnetometer survey, a few ground follow-up magnetometer lines and reconnaissance geology. As a result, copper mineralization was located along the Mitchell-Sulphurets Ridge while gold and silver values were discovered at the base of the Iron Cap area.

In 1961, Granduc drilled 224 metres of packsack core in 32 holes at four locations to test the extent of the known copper showings. Additional prospecting resulted in the discovery of gold/silver mineralization in the Hanging Glacier area and molybdenite on the south side of Mitchell Glacier. In 1962, two diamond drill holes, totalling 611 metres in length, tested molybdenum mineralization in the Quartz Stockwork Zone. In 1968, Granduc drilled 1016 metres in six holes on the Main Copper Zone and mapped the area below the Hanging Glacier.



NEWHAWK GOLD MINES LTD.	
SULPHURETS PROPERTY	
BRUCESIDE PROJECT SOUTH BRUCE CLAIM GROUP	
DRAWN BY: T.K.	SCALE: 1:50,000
DATE: OCT 1992	NTS 104B/8E
DRAWING NO:	FIGURE NO:

In 1970, plane table mapping was carried out from the Hanging Glacier to the south edge of the Mitchell Glacier. Granduc in 1974/75 carried out bedrock geochemical sampling and geological reconnaissance and prospecting throughout much of the property.

In 1980, Esso Minerals optioned the property from Granduc and subsequently completed between then and 1985, an extensive program consisting of mapping, trenching, geochemical sampling that resulted in the discovery of several showings including Snowfields, Shore, West and Galena. Esso surrendered its interest in 1985.

In 1985, Newhawk Gold Mines optioned the property from Granduc. Since then it has completed work on several other zones including the Bridge and Quartz Hill. Grab samples, taken in 1991, returned values of up to .114 opt Au for the Bridge and .122 opt for the Quartz Hill Zones.

6.0 1992 WORK PROGRAM

The purpose of the 1992 program was to evaluate the Bridge and Quartz Hill Zones by mapping and sampling. To accomplish the above the following were completed:

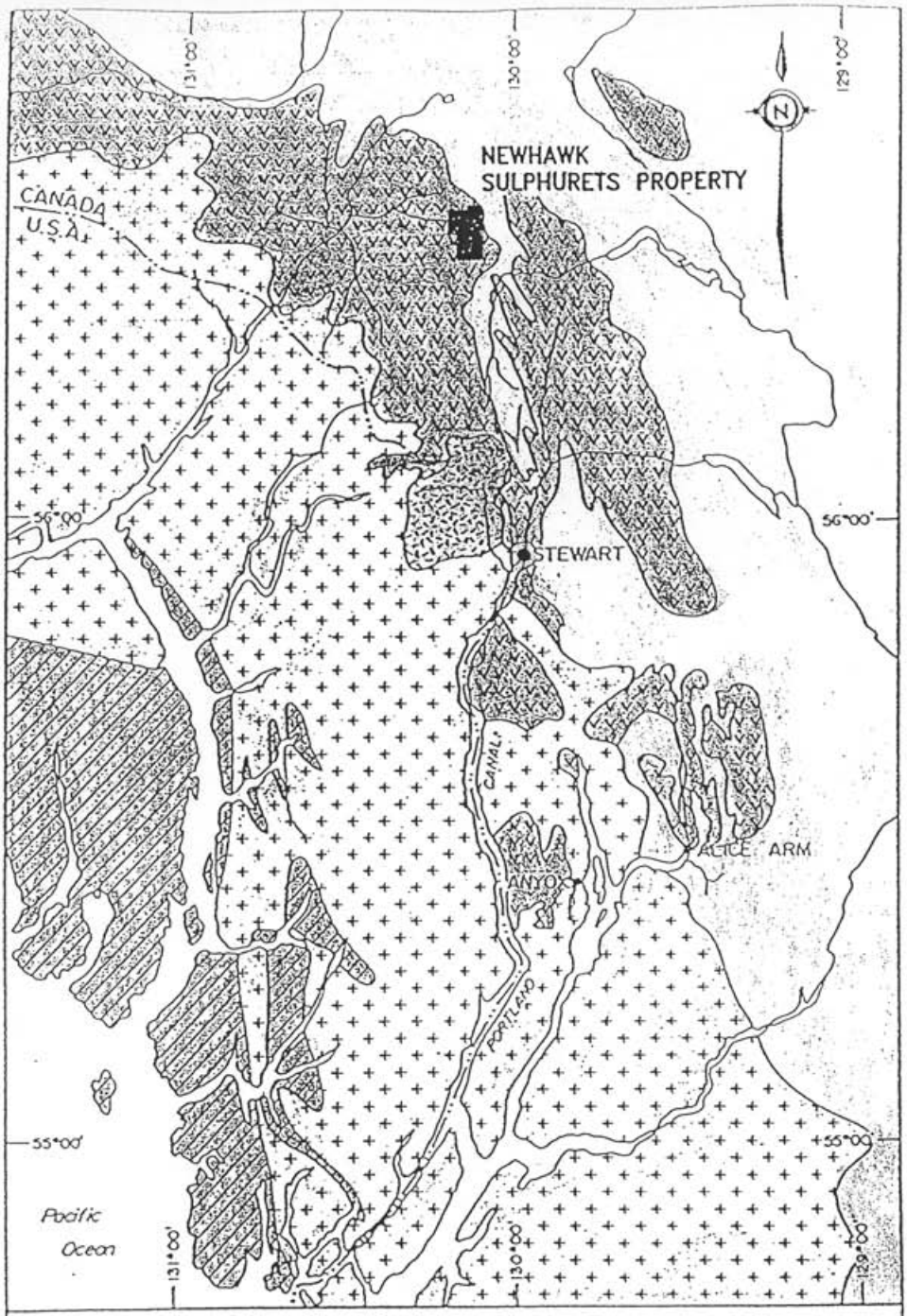
i) mapping of the zones at a 1:250 scale, with the trenches being mapped at a 1:50 scale,
ii) rock saw channel sampling of 22 trenches totalling 68.3 metres on the Quartz Hill Zone,
iii) the taking of 107 rock chip samples from both the trenches and bedrock exposures, and
iv) the surveying of all trenches at the Quartz Hill Zone and the establishment of survey control points at the Bridge Zone.

The evaluation required 30 man-days of labour. The following personnel were employed for the program:

D. Visagie	Senior Geologist
B. McDonough	Contract Geologist
B. Hardy	Contract Geologist
T. Kirby	Technician
D. Kosmynka	Surveyor
B. Kinney	Labourer

7.0 REGIONAL GEOLOGY (Figure 4)

The Bruceside property occurs within Stikine Terrane. It is underlain by Upper Triassic and Lower to Middle Jurassic Hazelton Group volcanic, volcaniclastic and sedimentary rocks. The lithostratigraphic assemblage as compiled by Kirkham (1963), Britton and Alldrick (1988), Alldrick and Britton (1991) and Kirkham et al (in preparation) consists (from oldest to youngest)



LEGEND

- LOWER - MIDDLE JURASSIC BOWSER ASSEMBLAGE
- UPPER TRIASSIC - LOWER JURASSIC TAKLA & HAZELTON ASSEMBLAGE (STEWART COMPLEX)
- WRANGELL METAMORPHIC BELT (UNDEFINED AGE)
- UPPER TRIASSIC - LOWER JURASSIC TEXAS CREEK INTRUSION
- CRETACEOUS - TERTIARY COAST RANGE INTRUSIONS

REGIONAL GEOLOGY OF THE STEWART - ANYOX AREA

20 10 0 20 40 60 kilometres

Figure (after Dykes et al, 1988)

FIGURE 4

of alternating siltstones and conglomerates (Lower Unuk Formation); alternating intermediate volcanic rocks and siltstones (Upper Unuk Formation); alternating conglomerates, sandstones, intermediate and mafic volcanic rocks (Betty Creek Formation); felsic pyroclastic rocks and flows, including tuffaceous rocks ranging from dust tuff to tuff breccias and localized welded ash tuffs (Mount Dilworth Formation); and finally alternating siltstones and sandstones (Salmon River and Bowser Formations).

At least three intrusive episodes occur in the area: intermediate to felsic plutons that are probably coeval with volcanic and volcaniclastic supracrustal rocks; small stocks related to Cretaceous Coast Plutonic Complex rocks and minor Tertiary dykes and sills. Stikine Terrane rocks are thought to be part of an island arc sequence that extends from south of Stewart near Anyox, north to the Iskut River for a distance of 150 km.

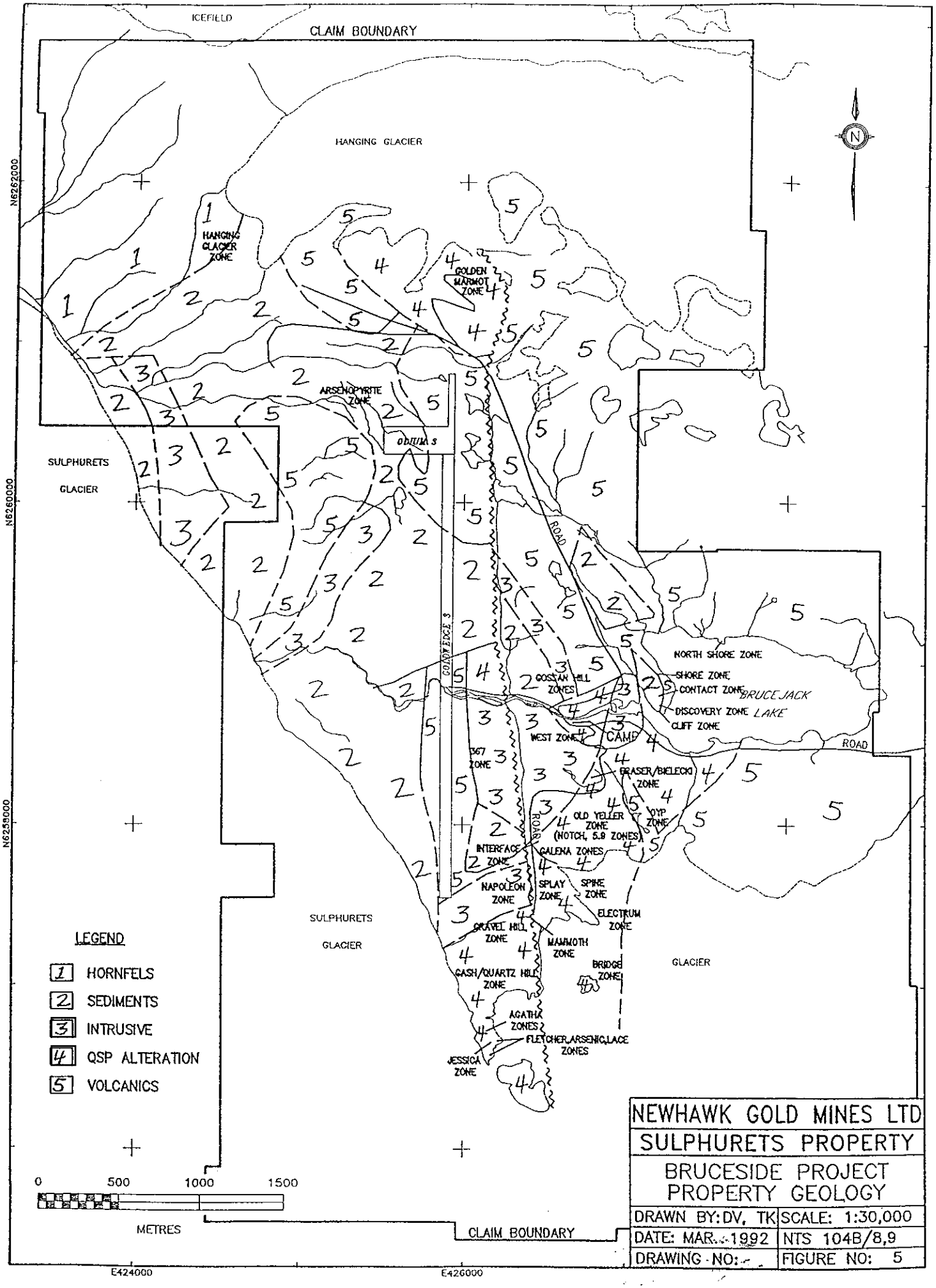
Folding is commonly exhibited throughout the Hazelton Group rocks with the andesitic tuffs and flows south east of Brucejack Lake being gently warped while Salmon and Bowser Formation rocks tend to be tightly folded. Faulting is common throughout the area with north striking steep normal faults (eg. Brucejack) and west dipping thrusts (eg. Sulphurets, Mitchell).

8.0 PROPERTY GEOLOGY (Figure 5)

The Bruceside property is comprised of both the North and South Bruce claim groups. Mapping has shown the Bruceside property to be underlain by a thick sequence of Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group that have been intruded by plutons of sub-alkaline composition. This complex has been folded and faulted and is now elongated in a northerly direction. It is bounded to the west by the Coast Crystalline complex and to the east by Bowser Basin sediments.

The oldest rocks on the property are Lower Sediments, reported to have a minimum thickness of 1500 metres, consisting mainly of argillites, siltstone and cherts along with minor amounts of wackes, arenites, tuffs and trachytes. Younger pyroclastic rocks, that range from fine tuff to breccias, are evidence of a major volcanic event in the area. These sometimes contain blocks greater than one metre in size and occur in a northerly trending elongate zone through the central part of the area.

Most of the pyroclastics are of andesitic composition and have been subjected to varying degrees of alteration. These altered tuffs and breccias are host for most of the vein deposits in the Stewart area and are the most favourable host rocks on the Sulphurets property.


ICEFIELD
CLAIM BOUNDARY
HANGING GLACIER
HANGING GLACIER ZONE
GOLDEN MARMOT ZONE
ARSENOPYRITE ZONE
SULPHURETS GLACIER
COLOR EDGE 3
ROAD
NORTH SHORE ZONE
SHORE ZONE
CONTACT ZONE
DISCOVERY ZONE
CLIFF ZONE
BRUCE JACK LAKE
GOSSAN HILL ZONES
WEST ZONE
CAMP
ROAD
367 ZONE
FRASER/BIELECKI ZONE
OLD YELLER ZONE (NOTCH, 5.9 ZONES)
'OYP' ZONE
INTERFACE ZONE
GALENA ZONES
NAPOLEON ZONE
SPLAY ZONE
SPIKE ZONE
ELECTRUM ZONE
GRAVEL HILL ZONE
MAMMOTH ZONE
BRIDGE ZONE
CASH/QUARTZ HILL ZONE
AGATHA ZONES
FLETCHER, ARSENIC, LACE ZONES
JESSICA ZONE
SULPHURETS GLACIER
GLACIER
CLAIM BOUNDARY
N6262000
N6260000
N6259000
E424000
E426000
0
500
1000
1500
METRES
LEGEND
1 HORNFELS
2 SEDIMENTS
3 INTRUSIVE
4 QSP ALTERATION
5 VOLCANICS
NEWHAWK GOLD MINES LTD
SULPHURETS PROPERTY
BRUCESIDE PROJECT
PROPERTY GEOLOGY
DRAWN BY: DV, TK
SCALE: 1:30,000
DATE: MAR. 1992
NTS 104B/8,9
DRAWING NO:
FIGURE NO: 5

The Upper Sediments consist of an extensive sequence of black shales and argillites that are similar in character to the Lower Sediments.

The volcanic-sedimentary sequence is cut by numerous elongated, sub-parallel northerly trending, late stage intrusive plutons that are probably of Mid-Jurassic age. These intrusives range from diorite to granite in composition and appear to be sub-alkaline.

The emplacement of these plutons appears to be related to faulting and associated intense alteration, silicification and mineralization. Sericite and pyrite are the most abundant alteration minerals with other assemblages locally dominated by-feldspar, chlorite and propyllitic minerals. Some clay alteration minerals have also been recognized in the Brucejack Lake Zones. Porphyry copper-gold mineralization occurs in the northern and central parts of the property and is often associated with K-spar and sericitic alteration.

Structurally controlled gold/silver bearing veins occur mainly in volcanic rocks within one kilometre wide zones of intense predominantly sericitic alteration. The veins consist of quartz, minor calcite, and trace to 20% sulphide minerals. These range from simple single veins to complex vein zones and stockworks. Sulphides within these veins consist of pyrite, sphalerite, galena, tetrahedrite, electrum and chalcopyrite along with argentite, pyragerite and polybasite.

9.0 GEOCHEMISTRY

9.1 Field Procedure

At Quartz Hill four distinct vein structures were selected for channel sampling using a cut-off saw. The samples were taken across measured widths, generally perpendicular to the strike of the veins. The channel cuts varied from 4-6 cm in width and were up to 10 cm deep. In addition to the channel samples, measured width rock chip and grab samples were taken at both the Quartz Hill and Bridge Zones. All samples were initially identified in the field, described, stored in plastic bags then sent for analysis. The sample locations for the Quartz Hill Zone are plotted on Figures 6 & 7. While those for the Bridge are on Figure 8. The sample descriptions are listed in Appendix 1.

9.2 Assay Procedure

All of the samples were initially prepped to a pulp stage at Westmin's Premier Mine site assay lab located near Stewart with some of the samples being fire assayed for gold and silver there while the rest were sent to Eco-Tech Labs, 10041 East Trans-Canada Highway, Kamloops, B.C. The following is an outline of the

procedure involved in the preparation and assaying of the samples.

i) Sample Preparation

The sample is dried then crushed to 1/4" or finer and riffled to a 250 gram size. This sub-sample is ring pulverized to approximately -100 mesh.

ii) Assay Procedure

Au-Ag: Fire assay, gravimetric finish on 1/2 assay ton sample. Samples sent to Eco-Tech that assayed >0.150 opt Au are screened for metallics and fire assayed.

10.0 GEOLOGY AND ASSAY RESULTS: QUARTZ HILL (Figures 6&7)

The Quartz Hill Zone occurs immediately to the west of the Brucejack Fault in the southern extremity of the claim group. The area is underlain by intense pervasively potassically altered granodiorite in which local zones of quartz-sericite-pyrite alteration are developed in association with some of the larger veins. Throughout the zone extensive quartz vein stockwork occurs in which four distinct parallel west trending, steeply dipping mineralized structures have been located. These structures, designated A, B, C and D consist of quartz vein, stockwork and breccia.

Vein A is primarily a quartz breccia structure that has been traced for over 170 metres with widths variable to two metres. Along strike to the west, the vein is talus covered while to the east it is covered by snow. In the centre of the vein the breccia fragments display distinctive cryptocrystalline zonation. Mineralization consists of trace to 2% pyrite along with trace arsenopyrite. Six trenches tested the zone over a 150 metre strike length. In general, the gold values are anomalous but low being less than .050 opt Au. However in trench QHZ-3 a one metre section assayed 2.826 opt Au with 1.37 opt Ag. This assay is due in part to a narrow cross-cutting sulphide bearing vein in which visible gold was observed. Seventy-five metres along strike to the west a one metre section averaging .184 opt Au with .29 opt Ag was located in trench QHZ-2.

Vein B is located 40 metres south of Vein A. The structure, consisting of quartz stockwork, vein and breccia, has been traced for 225 metres with widths variable to 1.5 metres. It is talus covered to the west while to the east it is snow covered. Within the veins up to 20% pyrite, as disseminations and seams, along with trace arsenopyrite occurs. On occasion the breccia fragments are zoned. Eight trenches tested the vein over its exposed length. Trenching showed Vein B to generally contain anomalous but low, less than 0.050 opt Au, values throughout its length. On occasion

narrow, high grade sections occur. The best trench intersection averaged .746 opt Au, .77 opt Ag over 1.3 metres. Within this trench fine grained pyrite was noted to be in association with breccia fragments. Approximately 60 metres along strike to the east a 0.7 metre intersection of the vein assayed .348 opt Au and .58 opt Ag while 32 metres to the west a 1.0 metre section averaged .108 opt Au and .76 opt Ag.

Vein C occurs 20 metres to the south of Vein B and is exposed for 30 metres. The vein pinch and swells along strike with a maximum width of .8 metres. Mineralization consists of 1-2% disseminated pyrite. Two trenches located 25 metres apart tested the zone. The results show the vein to contain low gold values with the best trench averaging 0.014 opt Au with .41 opt Ag over one metre.

Vein D consists of a series of quartz veins that are up to 30 cm wide. The zone has been traced for over a 100 m strike length with the western extension being drift covered. Three trenches tested the zone over a 25 metre strike length. In general the trench assays are low with the best intersection assaying 0.060 opt Au with 0.12 opt Ag over 1.1 metres.

11.0 GEOLOGY AND ASSAY RESULTS: BRIDGE ZONE (Figure 8)

The Bridge Zone is exposed in a 100 m x 100 m nunatuk located within the Sulphurets Glacier in the southern extremity of the claim group. It occurs immediately to the east of the Brucejack Fault. Mapping has shown the area to be underlain by quartz-sericite-pyrite altered syenodiorite in which an extensive zone of quartz stockwork and veining occurs. The preferred orientation for the veins is west-northwest with the dips being steep. Within the veins 1-5% disseminated pyrite occurs. Twenty-two rock chip and grab samples were taken from the zone. In general the samples returned anomalous but low, less than .050 opt Au values. A notable exception was a continuous chip sample located in the centre of the zone that assayed 0.211 opt Au and 1.21 opt Ag over 1.9 metres. The along strike length of this zone is not known as no other samples were taken along strike.

12.0 SUMMARY AND CONCLUSIONS

Previous mapping and sampling on the South Bruce Group located several zones of gold bearing quartz vein, stockwork and breccia. Included among these zones are the Bridge and Quartz Hill. A total of 30 man-days of labour were spent evaluating the two zones using mapping, trenching and sampling. As a result a total of 22 hand sawn trenches totalling 68.3 metres in length were cut, 107 rock chip and trench samples taken and the zones mapped at a 1:250 scale. Mapping has shown the Quartz Hill Zone to occur to the west of the Brucejack Fault while the Bridge occurs to the east.

Both zones are underlain by altered intrusive rocks.

At Quartz Hill mapping has shown the area to be underlain by intense pervasively altered granodiorite in which local zones of quartz-sericite-pyrite alteration are developed in association with quartz veining. To date four distinct west trending, steeply dipping, structures composed of quartz veining, stockwork and breccia have been located. These structures, referred to as Veins A, B, C and D are up to 225 metres long with widths variable to 1.5 metres. Mineralization consists of trace to 5% disseminated pyrite with occasional trace arsenopyrite. Although trench values are generally low, less than .050 opt Au, there are in Veins A and B high values that require further work to determine their extent. In Vein A at the intersection of Vein A and a narrow quartz vein in which pyrite and gold were observed a 1 metre sample assayed 2.826 opt Au with 1.37 opt Ag. Seventy-five metres along strike to the west of this intersection a 1 metre channel sample assayed .184 opt Au with .29 opt Au. There are no trenches between these two intersections. At Vein B a 1.3 metre trench averaged 0.746 opt Au with 0.77 opt Ag. Sixty metres along strike to the east a 0.7m channel cut averaged 0.348 opt Au with 0.58 opt Ag while 32 metres to the west a 1 metre sample assayed 0.108 opt Au with 0.76 opt Ag.

At the Bridge Zone mapping has shown quartz-sericite-pyrite altered syenodiorite to host both quartz vein and stockwork. Chip sampling has shown the zone to contain generally low, less than 0.050 opt gold values. An exception to this was a quartz vein located in the centre of the zone that averaged 0.211 opt Au with 1.21 opt Ag over 1.9 metres.

13.0 RECOMMENDATIONS

At Quartz Hill it is recommended that the following work be undertaken:

i) further mapping and sampling of the zone to determine the extent of the high grade gold values and

ii) if the results warrant the follow-up drilling of selected targets to determine the consistency of the gold values.

At the Bridge Zone it is recommended that:

i) additional sampling be completed along strike from the chip samples that averaged .211 opt Au with 1.21 opt Ag over 1.9 metres.

14.0 COST STATEMENT

Labour Costs **Total: $ 6094.00**

D. Visagie	Aug. 10	1 day @ $294/day
B. McDonough	Aug. 13,14,19-26	10 days @ $225/day
B. Kinney	Aug. 13-20, 23-26	12 days @ $160/day
T. Kirby	Aug. 20	1 day @ $190/day
D. Kosmynka	Aug. 20	1 day @ $190/day
B. Hardy	Aug. 27-31	5 days @ $250/day

Room & Board **Total: $ 3000.00**

30 man-days @ $100/day

Trenching Costs **Total: $ 1995.00**

Rock saw rental	$100
Hose purchase	$100
Pump rental	$100
Blade purchase	$1695

Transportation **Total: $ 4100.00**

Kinney airfare, Kelowna to Smithers return	$300
Hardy airfare, Vancouver to Terrace return	$600
Helicopter: 10 days @ .4 hrs/day x $650/hr	$2600

Supplies **Total: $ 150.00**

Flagging, pickets, paint, tags, plastic bags, etc.

Assaying **Total: $ 1491.00**

107 samples x $13/sample $1391
5 samples screened x $20/sample

Report **Total: $ 1000.00**

Writing report, xeroxing, typing, etc.

Sub-total: $17830.00

Management fee (10%) **Total: $ 1783.00**

TOTAL: $19613.00

15.0 STATEMENT OF QUALIFICATIONS

I, D.A. Visagie of 860 - 625 Howe Street, Vancouver, British Columbia, do hereby declare that:

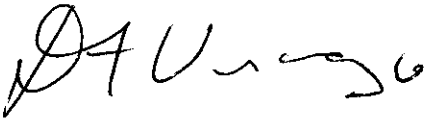
1. I graduated from the University of British Columbia with a Bachelor of Science Degree, majoring in Geology, in 1976.

2. I am a registered member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

3. I have been steadily employed in the mining industry since 1976 and have been employed by International Northair Mines Ltd. as Senior Geologist since January 1990.

4. The work undertaken on the South Bruce group was under my supervision.

Dated at Vancouver, British Columbia, this 15th day of October, 1992



Appendix 1 Sample Descriptions

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project Quartz Hill

Sampler B. McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data				Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag		Alteration	
Aug 14/92	17976	Grab		5960S	2030E	Qtz Hill						.004	.12			- .25m wide qtz vein - mostly barren except for trace py, tr Tet along vein/host contact
	17977	"		5970S	2007E	"						.094	.035			- .1m wide QV within QTSW beside QBX minor (.5-1%) Tet, Py .5-1%
	17978			5970S	2023E	"						1.285	.90			- 0.2m wide QV w 1-2% py, minor Tet (trace) observed on weathered surface.
	17979			5968.5S	2022.5E	"						.005	.023			- .25m wide blowout, Py .5-1%, runs 3.8 opt Ag on MAP.
Aug 23/92	17980			5969S	2001.5E							.017	.07			- .15m blowout (convergence of two subparallel veins) S.I w minor bleaching host within vein w 1-2% Py
"	17981			5978.5S	2021E							.003	.05			- .7m wide qtz blowout within stockwork grid east of 'A' Vein. Barren qtz w tr py, no carb

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project: QUARTZ HILL

Sampler: B. McDONOUGH

Date	Sample No.	Type	Zone Claim	Location Northing	Location Easting	TRENCH Zone	Sample Data No.	From (m)	To (m)	Int. (m)	Assay Data Cu	Au oz/T	Ag	Alteration	Sample Description
Aug 12/96	17901	Channel	'A' Vein			QHZ-6		0.0	1.0	1.0		.011	.146		- light grey silicified host rock crossed by stockwork veins & diss py 1-2% - host is brecciated in veining ~20-25% VEIN 'A'
	17902	"				QHZ-6		1.0	2.0	1.0		.026	.262		- as above, host more porphyritic
	17903	"				QHZ-6		2.0	3.0	1.0		.008	.321		- end of trench, host more brecciated surrounding veining with fine diss py (replacing host??) 2-3%
	17904					QHZ-5		0.0	1.0	1.0		.028	.204		- Second trench testing VEIN 'A', increase in veining - up to 70%, host well brecciated, with 1-2% py
	17905					QHZ-5		1.0	2.0	1.0		.024	.146		- end of cut. - increase in veining to 70-75%, py 1-2%. - fine grained dark mineralization (chl-rich?)

THE NORTHAIR GROUP **SAMPLE DESCRIPTION**

Project Quail Hill

Sampler B. McDonough

Date	Sample No.	Type	Zone / Claim	Location Northing	Location Easting	Trench / Zone	Sample Data No.	From (m)	To (m)	Int. (m)	Assay Data Cu	Au	Ag	Alteration	Sample Description
Aug 18/92	17906	Channel	A Vein			QHZ-4		0.0	1.0	1.0		.012	.146		- Third trench to test Vein A - increase in quartz alteration of vein material and zonation of altered host within vein - breccia textures strong - trace apy, py.
	17907	"	"			QHZ-4		1.0	2.0	1.0		.024	.146		- vein content lessening to 30%, py increases to 2-3%, increase in percentage of host rocks, brecciation textures remain strong but zonation has dissipated
	17908	"	"			QHZ-4		2.0	2.7	0.7		.016	.204		- increase in vein percent to 90%, little host remaining, possesses qtz-carb vein. Little mineralization noted, yet runs 3.7 opt Ag on MAP.
	17909		"			QHZ-3		0.0	1.0	1.0		.008	.233		- Fourth trench testing Vein 'A'. Vein content up to 60%, diss py 1-2%, minor cockade textures along some veins, does not display zonation seen previously.

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project Quartz Hill

Sampler B. McDONOUGH

Date	Sample No.	Type	Zone / Claim	Location Northing	Location Easting	TRENCH Zone	Sample Data No.	From (m)	To (m)	Int. (m)	Assay Data Cu	Au	Ag	Alteration	Sample Description
Aug 19/92	17910	Channel	A' Vein			QHZ-3		1.0	2.0	1.0		.014	.175		- Interval begins in QTSW, gives way to QTBX (veining 25%) Py in Bxs 2-3%
	17911		"			QHZ-3		2.0	3.0	1.0		7.826	1.37		- Begins in QTBX and gives way to QTSW, (20% veining) with trace - .5% Py
	17912		"			QHZ-2		0.0	1.0	1.0		.042	.408		- QTBX, interval cut by discreet QTVN's, also a small "alteration zone" Characterized by zonation of alteration and cockade(?) textures.
	17913		"			QHZ-2		7.0	2.0	1.0		.090	.437		- Interval begins in QTBX, gives way to QTSW before returning to QTBX. Py 1% in QTSW & fr spl. Py 1-2% in QTBX
	17914		"			QHZ-2		2.0	3.0	1.0		.184	.292		- Predominantly QTBX, gives way to QTVN over last .1m. Py 1-2% in QTBX, Py in discontinuous stringers in QTVN, 1%.

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project Quartz Hill

Sampler B. McDonough

Date	Sample No.	Type	Zone / Claim	Location Northing	Location Easting	Trench / Zone	Sample Data No.	From (m)	To (m)	Int. (m)	Assay Cu	Assay Au	Assay Ag	Alteration	Sample Description
Aug 19/92	17915	Channel	'A' Vein			QHZ-2		3.0	4.0	1.0		.046	.233	-	QTVN, discontinuous stringers py 1%
	17916	"	"			QHZ-1		0.0	1.0	1.0		.078	.292	-	Begins in QTVN (vuggy, fractured) and ends in QTBX (veining 20%) with .5-1%
	17917					QHZ-1		1.0	2.0	1.0		.034	.175	-	QTBX (veining 20%), py .5-1%, tr apy, small 1m QTVN ± ½ of interval
	17918					QHZ-1		2.0	2.7	0.7		.026	.292	-	QTVN/QTSW, py 1%, gives way to QTBX/QTSW (veining 75%) with trace py, trace apy
	17919					QHZ-1		2.7	3.4	0.7		.022	.146	-	QTVN, trace py, sericite alteration along fractures, rafts of host within vein
Aug 20/92	17920		'B' Vein			QHZ-7		0.0	1.0	1.0		.008	.117		1m banded QTVN at top of interval. Altered QSP (s.i - see alt'd GRDT), some euhedral unaltered fsgs py 1-2%

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project: Quartz Hill

Sampler: R McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data			Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag	Alteration	
Aug 20/92	17921	Channel				'B' Vein	QHZ-7	1.0	2.0	1.0		.010	.029	Sil-ser	QSP for half of interval, contact with QTBX, py .5-1%, veining 30% in QTBX.
"	17922	"				"	"	2.0	3.0	1.0		.008	.029		QSP, heavily silicified and sericite altd. Py 1-2%
"	17923	"				"	"	3.0	4.0	1.0		.006	.058		QSP (sil-ser altd GRDT) w .05m qtz stringers.
"	17924	"				"	"	4.0	5.0	1.0		.004	.058		Massive heavily sil-ser altered QSP with qtz eyes (10%) and py 1-2%
"	17925	"				"	"	5.0	5.9	0.9		.006	.087		QSP brecciated near end of sample w ser altn along late fracture. Occasional subrounded qtz eyes in altered host. Py .5%
"	17926	"				"	QHZ-8	0.0	1.0	1.0		.044	.437		S.I-ser altd GRDT cut by qtz veins. Py 1-2%, locally up to 2-3% (within veins)
"	17927	"				"	"	1.0	2.0	1.0		.046	.379		QSP cut by small qtz veins w 1-2% py (locally 5-8% py)

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project Quarry Hill

Sampler B. McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data				Alteration	Sample Description
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag			
Aug 20/92	17928	Channel				'B' Vein	QHZ-8	2.0	3.0	1.0		.050	.262			QSP in local weak to moderate stkwk and larger veins containing up to 2-3% py (1-2% py overall)
"	17929	"				"	QHZ-9	0.0	1.0	1.0		.108	.758			- QTSW (20% veining) in crustiform py, also QSP cut by small qtz stringers Overall py 2-3%
"	17930	"					"	1.0	2.0	1.0		.042	.204			- QSP heavily jointed in weak stkwk at end of sample, overall py 1-3%
"	17931	"				"	"	2.0	2.7	0.7		.038	.146			- Mostly QSP in stkwk over last .2m (veining 20%, QSP weakly foliated in py 2-5%
"	17932	"					QHZ-10	0.0	1.0	1.0		.020 .052	.117			- Massive QSP in .5-1% py, small stringer at top of interval, stkwk at end (py in stkwk 1-2%
"	17933	"				"	"	1.0	1.9	0.9		.054	.350			- QTSW (veining 20%, py 1-2%) gives way to massive QSP. Small stkwk at end, in crustiform py; poss tet or fahlore. (Hace)

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project Quartz Hill

Sampler B. McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data				Alteration	Sample Description
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag			
Aug 20/92	17934	Channel				'B' Vein	QH2-10	1.9	2.7	0.8		.002	.117			QSP w increase in py 2-3%. Small qtz vein at top of interval.
"	17935	"				"	QH2-11	0.0	1.0	1.0		.104	.233			- QSP cut by small QTVN's w pyritiferous stringers py 1-2% overall, up to 25-30% locally (.1m pyritiferous vein) Small stockwork @ top of interval
"	17936	"				"	"	1.0	2.0	1.0		.016	.087			- QSP w minor qtz string and a bleached zone (increase in silicification) py 1%
	17937					"	"	2.0	2.5	0.5		.018	.204			- QSP - one small qtz stringer, vuggy. py .5-1% overall
	17938					"	"	2.5	3.5	1.0		.020	.233			- QSP cut by .15m vuggy barren vein gives way to QTSW (20% veins and 2-3% py (3-5% py locally)

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project Quartz Hill

Sampler B. McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data				Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag		Alteration	
Aug 20/92	17939	Chan-1				'B' Vein	QH2-11	3.5	4.2	0.7		.102	.467			.2m wide vein ± cockade texture (crustiform?) py at top of interval. QSP ± weak stockwk gives way to QTBX ± 30% veining and 2-3% py
	17940	"				"	"	4.2	4.8	0.6		1.494	1.196			QTBX - 30% veining, 2-3% py (8-10% locally) ± Unknown fg dark mineral in mtx of breccia (ch). End of interval is QSP
Aug 23/92	17941						QH2-12	0.0	1.0	1.0		.034	1.050			QSP ± tr py cut by QTBX (QTVN) ± 20-25% py locally ± "cockade" texture. Also a .1m 8-10% py (locally) vein at end of interval
"	17942						"	1.0	2.0	1.0		.010	.087			Highly bleached QSP ± .05m qtz stringer ± replacement py. Overall trace py.
"	17943						"	2.0	2.8	0.8		.006	.058			QSP cut by many fractures ± tr py and tr - .5% apy. Small stringer at the end of the interval ± 3-5% py

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project: Quartz Hill   Sampler: B. McDONOUGH

Date	Sample No.	Type	Location: Claim	Northing	Easting	Zone	Sample Data: No.	From (m)	To (m)	Int. (m)	Assay Data: Cu	Au	Ag	Alteration	Sample Description
Aug 23/92	17944	Channel				B' Vein	QHZ-12	2.8	3.6	0.8		.074	.612 ~~.117~~		- QTBX [illegible] of frags and replacement (py 8-10% locally) gives way to QTVN [illegible] sheared and bleached [illegible]
"	17945	"					QHZ-12	3.6m	4.4	0.8		.006	.058 ~~.029~~		- QSP, cut by many small fractures [illegible] py
"	17946	"					QHZ-13	0.0	1.0	1.0		.012	.117 ~~.117~~		QSP (py 1-2%) cut by .1m qv [illegible] 20-25% py locally [illegible] .05m qtz stringer [illegible] 3-5% py. Interval ends in qtz vein.
	17947						"	1.0	2.0	1.0		.014	.029 ~~.117~~		- Begins in same vein sampled by 17946 then [illegible] into QTSW (veining 30%, py [illegible] .5%) then intersects QSP [illegible] 1-2% py
	17948						"	2.0	2.9	0.9		.010	.117		QSP py 1-2%
	17949						"	2.9	3.9	0.9		.024	.117		- QSP gives way to QTBX (20% veining and .5% py) Interval ends in QTSW (20% veining) [illegible] ser alt'n along fractures and [illegible] py.

THE NORTHAIR GROUP **SAMPLE DESCRIPTION**

Project Quash Hill

Sampler B. McDONOUGH

Date	Sample No.	Type	Location				Sample Data				Assay Data			Alteration	Sample Description
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag		
Aug 23/92	17950	Channel				Vein 'B'	QH2-14	0.0	0.7	0.7		.006	.117		QSP (py .5-1%) cut by small fractures, py stringers
"	17951	"				"	"	0.7	1.5	0.8		.016	.117		- QSP (py .5-1%) gives way to QTSW (veining 35%, py 3-5% locally to 4 cpy) over last .15m
"	17952	"				"	"	1.5	2.2	0.7		.348	1.575		- QTVN/QTBX in 3 veins of bxed host, veining is 8-10% py (replacement) cpy 1-2% and tr. sph
"	17953	"				"	"	2.2	3.0	0.8		.024	.146		QSP (py 2-3%) gives way to QTVN over last .1m (containing tr py)
"	17954	"				Vein 'C'	QH2-15	0.0	1.0	1.0		.002	.204		Highly s.h.f. (bleached) QSP (vn 0.5-1% py) pass vein w .5-1% cut by highly fractured .15m wide banded QTVN
"	17955	"				"	"	1.0	2.0	1.0		.006	.146		- Highly s.i (bleached) QSP (w 1-2% py, tr cpy; vein 10%) gives way to weak QTSW decreasing along interval. Also small py stringers (1-2%)

THE NORTHAIR GROUP **SAMPLE DESCRIPTION**

Project Quark Hill

Sampler B. McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data				Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag		Alteration	
Aug 23/92	17956	Channel				Vein 'c'	QH-17-16	0.0	1.0	1.0		.006	.379			- Highly ser alt'd (bleached) QSP ± weak (10-15%) stockwork. Trench intersects s.f. QSP ± 1-2% py overall
"	17957	"				"	"	1.0	1.7	0.7		.010	.292			- QTVN (1-2% py), fractured ± sericitic. 90% of vein composed of brecciated and bleached host. minor QSP (as in -16) at end of interval
"	17958	"				"	"	1.7	2.5	0.8		.008	.175			- 5-1 QSP ± stringers py (1-2%) ± apy (blades) and minor (5-10%) qtz ±,
"	17959	"				"	QH-17	0.0	0.8	0.8		.014	.408			- .2m of QSP then trench ± QTVN ± 2-3% py, apy intersecting QTSW ± 20% pigmentic stringers in qtz and py stringers. (Pg 3-5
"	17960	"				"	"	0.8	1.5	0.7		.008	.321			- QSP cut by QTVN/QTBX ± 60-65% vein material (brecciated host being digested by vein. Pg 4-5%, Interval ends in QTSW (25-30% qtz veins) ± 2-3% diss & stringers py

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project: Quartz Hill

Sampler: B. McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data			Alteration	Sample Description
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag		
Aug 22/92	17961	Channel				?	QHZ-18	0.0	0.8	0.8		.006	.117		QSP ≤ 1% py grades way to QTSx / QTVN ≤ 2-3% py (locally 3-5%) and 50-60% vein. Interval ends in QSP ≤ 2-3% dis. py
"	17962	"				"	QHZ-19	0.0	0.8	0.8		.016	.292		- QSP ≤ 3-5% py and th. apy ≤ a large (.3m wide) qtz-carb vein at end of interval.
"	17963	"				"	"	0.8	1.4	0.6		.022	.175		- Primarily QTSW ≤ veining 20-30%, py 2-3% (5-8% locally). Also a small (5cm) qtz string
	17964					"	QHZ-20	0.0	1.1	1.1		.002	.146		- Top of interval 0.25m QTVN ≤ 2-3% py (replaces hwall QSP) - gives way to QSP cut by qtz stringers ≤ 1% py (3-5% locally in stringers).
	17965						"	1.1	2.2	1.1		.060	.117		- QSP cut by .15m wide qtz-carb vein. Gives way to QTB: ≤ 40% veining and 2-3% py (locally 5-8% in stringers) Interval ends in pyritic QSP (1-2%)

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project: Quartz Hill

Sampler: B. McDonough

Date	Sample No.	Type	Location: Claim	Northing	Easting	Zone	Sample Data: No.	From (m)	To (m)	Int. (m)	Assay Data: Cu	Au	Ag		Alteration	Sample Description
Sept 5/92	17966	Channel				'A' Vein	QHZ-3	3.0	3.7	0.7					-	QSP w 1-2% py. Small stringers of [illegible] mineral ([illegible]). .5-1% [illegible] by [illegible] small [illegible]. Top of [illegible] [illegible] [illegible] [illegible] [illegible]
"	17967	"				"	"	3.7	4.6	0.9					-	Massive [illegible] [illegible] some limonite staining, [illegible] fractured [illegible] [illegible] and QCV [illegible] interval.
"	17968	"				'B' Vein	QHZ-11	4.8	5.8	1.0					+	QSP - massive silica alt'd GRDT (less altered could be described as [illegible] GRDT) w small mafic [illegible] (CL)), py
"	17969	"				"	"	5.8	6.8	1.0					-	Massive QSP w py [illegible] diss and [illegible] [illegible] ([illegible]). Tet .5-1% ([illegible]) [illegible] sphalerite
"	17970	"				"	"	6.8	7.8	1.0					-	QSP, massive bleaching w diss and str. py and Tet 1.5-1% combined over interval cut by [illegible] [illegible] small, QCB+ w 5-10% py [illegible] w [illegible] of [illegible] [illegible] ([illegible] [illegible])

THE NORTHAIR GROUP **SAMPLE DESCRIPTION**

Project Trinity Hill

Sampler RMCD

Date	Sample No.	Type	Location				Sample Data				Assay Data				Alteration	Sample Description
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag			
7/12/92	17971	Channel				B Vein	QHZ-22	0.0	0.8	0.8		.078	.029			– QTVN (20% brecc'd host) ± 1-.5% py (melnyrite?) at top of unit gives way to QSP (massive grey silic'd, GRDT) ± .5-1% py (light green stringers)
"	17972	"				"	"	0.8	1.6	0.8		.018	.029			– Massive grey silic'd GRDT (QSP), 2% .5-1% py (light green stringers)
"	17973	"				"		1.6	2.6	1.0		.034	.233			1-1 ½ w 5-10% brecc'd host replaced by v.f.g py (melnyrite), 2-3%, gives way to highly silic'd (bleached) QSP w melnyrite stringers (1-.5%) [illegible] QHZ-11
	17974					'B Vein'	QHZ-21	0.0	1.0	1.0		.010	.029			– QSP, light grey, silicified GRDT w .5-1% py, cut by [illegible] QTVN
	17975						"	1.0	2.0	1.0		.026	.117			– QSP, light grey [illegible] ± 1-.5% py [illegible] QHZ-9

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

·02916 — 1419

Project: BRIDGESIDE (Bridge) — Sampler: B. HARDY

Date	Sample No.	Type	Location: Claim	Location: Northing	Location: Easting	Location: Zone	Sample Data: No.	From (m)	To (m)	Int. (m)	Assay Data: Cu	Au	Ag	Alteration	Sample Description
8/23/92	09001	Chip				Bridge		0	6	≈6m		.004	0.729		Limonitic Qtz vein to 5% (py)
"	09002	Chip				"		0	1.5	≈1.5m		.072	0.406		Lim. Qtz vein to → 5-15% (py)
8/26/92	09003	Chip				Bridge		0	.6	0.6m		.009	.16	QSP	Qtz stwk (≈20%) PY (5-10%)
	09004							0	1.5	1.5		.016	.17		" " (10-20%) PY (5%)
	09005							1.5	3.0	1.5		.025	.25		" " " PY (10%)
	006							3.0	4.5	1.5		.032	.40		" " (5-10%) PY (15%)
	007							4.5	6.0	1.5		.031	.39		" " (10-15%) PY (15%)
	008							0	.6	0.6m		.043	.37		Qtz VN (70%) PY (20%)
	009							.6	1.9	1.3		.048	.40		Qtz stwk (5-10%) PY (15-20%)
	010							1.9	2.3	0.4		.122	2.27		Qtz VN (90%) PY (≈10%)
	011							2.3	3.4	1.1		.011	.34		Qtz stwk (10%) PY (≈15%)
	012							3.4	3.8	0.4		.849	2.53	1.9m	Qtz VN (95%) PY (1%)
	013							0	1.0	1.0		.013	.20		Qtz/Carb VN (40%/60%) PY (tr)
	014							0	1.5	1.5		.010	.18		HW QSP PY (10-15%)
	015							1.5	3.0	1.5		.023	.43		Qtz VN/stwk (70%) PY (20%)
	016							3.0	4.5	1.5		.029	14.82		VN Brxx (70%) PY (25%)
	017							4.5	6.0	1.5		.027	.35		Qtz VN (80%) PY (20%)
	018							6.0	7.0	1.0		.035	.72		VN Brx (40%) PY (1%)
8/26/92	09019	Chip				Bridge		7.0	8.5	1.5		.039	1.14		FW Sple ± stwk PY (20%)
8/31/92	09020	Chip	33m @ 340° from Stn 220			Bridge	040°	0	2.2	2.2		0.008	0.204	Vint QSP	Qtz VN: Brxx texture, traces of v. fine Sx (PY) on Wbs and on rxn rims. White/grey.
	09021	Chip	18.1m @ 323° from Stn 220			Bridge	010°	0	1.5	1.5		0.396	0.292	v.int QSP.	QtSW: 40% Qtz ≈50% Py on stringers and diss. Dk grey/white.
	09022	Chip	15.0m @ 004° from Stn 220			Bridge	020°	0	2.2	2.2		0.020	0.204	v.int QSP	QtSW: 40% Qtz ≈40% Py on diss and stringers. Dk grey/white

THE NORTHAIR GROUP

SAMPLE DESCRIPTION

Project Dunky Hill

Sampler B. McDonough

Date	Sample No.	Type	Location				Sample Data				Assay Data				Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au	Ag		Alteration	
Aug 25/92	17982	Grab		5983S N	2021E							.050	.28			- 2% bxcia ± 40% vein material, py 1-2% apy 2-3% (cubic & diss) - v.fg. py (sand?)
"	17983	"		6009.5N	2012E							.011	.06			- .4m blowout along weak qtz stockwork wk. & highly altered GRDT (QSP). apy 2-3%, py 2-3% within vein. apy 1-2% py .5-1% within host
"	17984	"		5991N	2018E							.028	.08			- 2% vein/stockwork (grid) east of Vein 'A' ± 1-2% diss py.
"	17985	"		6000N	2015E							.015	.15			- 'A' Vein, stockwk section of breccia zone (bxa ± 15% vein material) py 2-3%, apy 1-2%

Appendix 2 Assay Results

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 08-25-92
ASSAY LAB FILE: A082592.ALH
TRANSFER TEXT FILE: NG082592.OTH
PAGE: 2
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Au Oz/t
17901	0.014
17902	0.026
17903	0.008
17904	0.028
17905	0.024
17906	0.012
17907	0.024
17908	0.016
17909	0.008

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 08-25-92
ASSAY LAB FILE: A082592.ALC
TRANSFER TEXT FILE: NS082592.OTC
PAGE: 3
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Ag g\ton
17901	5.0
17902	5.0
17903	11.0
17904	7.0
17905	5.0
17906	5.0
17907	5.0
17908	7.0
17909	8.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALA
TRANSFER TEXT FILE: NG082892.OTA
PAGE: 3
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Au Oz/t
17910	0.014
17911	2.826
17912	0.042
17913	0.090
17914	0.164
17915	0.046
17916	0.074
17917	0.034
17918	0.026
17919	0.022
17920	0.008
17921	0.010
17922	0.008
17923	0.006
17924	0.004
17925	0.006
17926	0.044
17927	0.046
17928	0.050
17929	0.108
17930	0.042
17931	0.038
17932	0.020
17933	0.054

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALA
TRANSFER TEXT FILE: NG082892.OTA
PAGE: 4
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Au Oz/t
17934	0.002
17935	0.104
17936	0.016
17937	0.018
17938	0.020
17939	0.102
17940	1.494

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 08-27-92
ASSAY LAB FILE: A082792.ALF
TRANSFER TEXT FILE: NS082792.OTF
PAGE: 3
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Ag g\ton
17910	6.0
17911	47.0
17912	14.0
17913	15.0
17914	10.0
17915	8.0
17916	10.0
17917	5.0
17918	10.0
17919	5.0
17920	4.0
17921	1.0
17922	1.0
17923	2.0
17924	2.0
17925	3.0
17926	15.0
17927	13.0
17928	9.0
17929	26.0
17930	7.0
17931	5.0
17932	4.0
17933	12.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 08-27-92
ASSAY LAB FILE: A082792.ALF
TRANSFER TEXT FILE: NS082792.OTF
PAGE: 4
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Ag g\ton
17934	4.0
17935	9.0
17936	3.0
17937	7.0
17938	9.0
17939	16.0
17940	41.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALH
TRANSFER TEXT FILE: NG082892.OTH
PAGE: 1
SAMPLE TYPE: ORIGINALS

(SHIPMENT 8:)

SAMPLE IDENTITY	Au Oz/t
17941	0.034
17942	0.010
17943	0.006
17944	0.074
17945	0.006
17946	0.012
17947	0.014
17948	0.010
17949	0.024
17950	0.006
17951	0.016
17952	0.348
17953	0.024
17954	0.002

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALH
TRANSFER TEXT FILE: NG082892.OTH
PAGE: 2
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Au Oz/t
17955	0.006
17956	0.006
17957	0.010
17958	0.008

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALI
TRANSFER TEXT FILE: NS082892.OTI
PAGE: 1
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Ag g\ton
17941	36.0
17942	3.0
17943	2.0
17944	21.0
17945	2.0
17946	4.0
17947	1.0
17948	4.0
17949	4.0
17950	4.0
17951	4.0
17952	54.0
17953	5.0
17954	7.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALI
TRANSFER TEXT FILE: NS082892.OTI
PAGE: 2
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Ag g\ton
17955	5.0
17956	13.0
17957	10.0
17958	6.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

Ship # 943

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 09-08-92
ASSAY LAB FILE: A090892.ALB
TRANSFER TEXT FILE: NG090892.OTB
PAGE: 1
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Au Oz/t
17959	0.014
17960	0.008

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....Ilona.....

Ship# 9[44]

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 09-09-92
ASSAY LAB FILE: A090992.ALB
TRANSFER TEXT FILE: NS090992.OTB
PAGE: 1
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Ag g\ton
17959	14.0
17960	11.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....Fiona.....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALC
TRANSFER TEXT FILE: NG082892.OTC
PAGE: 1
SAMPLE TYPE: ORIGINALS

(SHIPMENT 7:)

SAMPLE IDENTITY	Au Oz/t
17961	0.006
17962	0.016
17963	0.022
17964	0.002
17965	0.060

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 08-28-92
ASSAY LAB FILE: A082892.ALB
TRANSFER TEXT FILE: NS082892.OTB
PAGE: 1
SAMPLE TYPE: ORIGINALS

(SHIPMENT 7?)

SAMPLE IDENTITY	Ag g\ton
17961	4.0
17962	10.0
17963	6.0
17964	3.0
17965	4.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- GOLD

DATE: 09-24-92
ASSAY LAB FILE: A092492.ALA
TRANSFER TEXT FILE: NG092492.OTA
PAGE: 5
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Au Oz/t
17971	0.078
17972	0.018
17973	0.084
17974	0.010
17975	0.026

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

WESTMIN RESOURCES LIMITED
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: BRUCE MCLEOD

PROJECT >>> NEWHAWK -- SILVER

DATE: 09-24-92
ASSAY LAB FILE: A092492.ALB
TRANSFER TEXT FILE: NS092492.OTB
PAGE: 5
SAMPLE TYPE: ORIGINALS

SAMPLE IDENTITY	Ag g\ton
17971	1.0
17972	1.0
17973	8.0
17974	1.0
17975	4.0

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....

Trench no.	Sample no.	Au oz/t	Ag oz/	Width(m)
QHZ-3	17909	0.008	0.26	1.0
"	17910	0.014	0.20	1.0
"	17911	2.826	1.54	1.0
"	17966	MISSING SAMPLE		0.7
"	17967	MISSING SAMPLE		0.9
QHZ-4	17906	0.012	0.16	1.0
"	17907	0.024	0.16	1.0
"	17908	0.016	0.23	0.7
QHZ-5	17904	0.028	0.23	1.0
"	17905	0.024	0.16	1.0
QHZ-6	17901	0.014	0.16	1.0
"	17902	0.026	0.16	1.0
"	17903	0.008	0.36	1.0
QHZ-14	17950	0.006	0.13	0.7
"	17951	0.016	0.13	0.8
"	17952	0.348	1.76	0.7
"	17953	0.024	0.16	0.8
QHZ-17	17959	0.014	0.46	0.8
"	17960	0.008	0.36	0.7
GRAB	17976	0.004	0.12	--
GRAB	17977	0.094	0.04	--
GRAB	17978	1.285	0.90	--
GRAB	17979	0.005	0.03	--
GRAB	17980	0.017	0.07	--
GRAB	17981	0.003	0.05	--
GRAB	17982	0.050	0.28	--
GRAB	17983	0.011	0.06	--
GRAB	17984	0.028	0.08	--
GRAB	17985	0.015	0.15	--

POND

GLACIER

POND

GLACIER

2100E

2050E

2000E

5850N

5900N

5950N

6000N

glacial debris

QHZ-4 QHZ-5 QHZ-6 QHZ-3 QHZ-14 QHZ-17 QHZ-16 QHZ-15 QHZ-12

SEE SHEET 585-185 FOR ASSAYS

NORTH
MINE GRID NORTH

LEGEND

5 INTERMEDIATE TO MAFIC INTRUSIVES

5A UNSUBDIVIDED, 5B DIORITE (DIOT), 5C GABBRO (GABR), 5D DIABASE (DIAB), 5E LAMPROPHYRE DYKES-SILLS (LAMP)

4 FELSIC TO INTERMEDIATE INTRUSIVES

4A UNSUBDIVIDED, 4B GRANITE (GRAN), 4C SYENITE (SYEN), 4D QUARTZ-MONZONITE (QMON), 4E MONZONITE (MONZ), 4F GRANODIORITE (GRAD), 4G QUARTZ-EYE PORPHYRY (PPQE), 4H FELDSPAR-PORPHYRY (PPFP), 4I QUARTZ-FELDSPAR PORPHYRY (QFPP), 4J HORNBLENDE-FELDSPAR PORPHYRY (PPHB)

3 CHEMICAL METASEDIMENTS

3A CHERT (CHER), 3B CHERTY TUFF (CTUF), 3C OXIDE FACIES IF (OXIF), 3D CARBONATE-FACIES IF (CIRF), 3E SILICATE-FACIES IF (SIIF), SULPHIDE-FACIES IF (SPIF)

2 METASEDIMENTS

2A UNSUBDIVIDED, 2B ARENITE (ARNT), 2C ARKOSE (ARKS), 2D ARGILLITE (ARGT), 2E GREYWACKE (GRWK), 2F CONGLOMERATE (CONG), 2G CHERT (CERT), 2H LIMESTONE (LIME)

1 METAVOLCANICS - RHYOLITE (RH), DACITE (DA), ANDESITE (AN), BASALT (BA)

1A UNSUBDIVIDED, 1B MASSIVE FLOWS (ANFL), 1C PORPHYRITIC FLOWS (ANPO), 1D PILLOWED FLOWS/PILLOW BRECCIA (ANPL), 1E TUFF (ANTF), 1F LAPILLI TUFF (ANLT), 1G TUFF-BRECCIA (ANBX), 1H CRYSTAL TUFF (ANXT), 1I PORPHYRY (ANPF), 1J VOLCANICLASTIC-LAHAR (ANVL)

ALTERED ROCKS

ALB	ALBITIZATION
BIO	BIOTIFEROUS
CB	CARBONATE ALTERATION
CHL	CHLORITIZATION, CHLORITIC
KSP	POTASSIC ALTERATION
PROP	PROPHYLITIC ALTERATION
QSP	QUARTZ-SERICITE, PYRITE SCHIST
QP	QUARTZ-PYRITE (KSPAR ALTERATION)
SER	SERICITIZATION; SERICITIC
SIL	SILICIFICATION; SILICIFIED

WK - WEAK MOD - MODERATE STR - STRONG

SYMBOLS

- OUTCROP BOUNDARY
- BEDDING (VERTICAL, INCLINED)
- FOLIATION (VERTICAL, INCLINED)
- JOINTING (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION WITH PLUNGE
- PILLOWS (TOPS UNKNOWN, KNOWN)
- GEOLOGICAL CONTACT (OBSERVED, ASSUMED)
- FAULT (DEFINED, ASSUMED)
- SHEAR ZONE, LINEAMENT
- TRENCH, PIT
- DRILL HOLE (VERTICAL, INCLINED)
- DIAMOND SAW CHANNEL INTERVAL

ABBREVIATIONS

AU	NATIVE GOLD	HEM	HEMATITE
AG	NATIVE SILVER	LIM	LIMONITE
ANK	ANKERITE	MAG	MAGNETITE
ARG	ARGENTITE	MAL	MALACHITE
ASPY	ARSENOPYRITE	MOLY	MOLYBDENITE
AZ	AZURITE	POLY	POLYBASITE
BA	BARITE	PY	PYRITE
BWN	BARITE VEIN	PYRA	PYRARGYRITE
BN	BORNITE	PYROL	PYROLUSITE
BX	BRECCIA	PYROP	PYROPHYLLITE
CHAL	CHALCOCITE	PO	PYRRHOTITE
CPY	CHALCOPYRITE	QCS/QCV	QUARTZ-CARBONATE STRINGER/VEIN
CU	NATIVE COPPER	QS/QV	QUARTZ STRINGER/VEIN
DOL	DOLOMITE	SID	SIDERITE
EL	ELECTRUM	SP	SPHALERITE
GF	GRAPHITE	TENN	TENNANTITE
GN	GALENA	TET	TETRAHEDRITE
HB	HORNBLENDE		

- QSP-QP QTZ-SER-PY
- ARGILLIC CHL-SER-PY
- QTVN - QUARTZ VEIN >80% QV/QS
- QTSW - QUARTZ STOCKWORK 20%-80% QV/QS
- QTBX - QUARTZ BRECCIA

0 5 10 15 20 25
METRES

SCALE 1:250

NEWHAWK GOLD MINES
SULPHURETS PROPERTY
QUARTZ HILL ZONE
GEOLOGY

DRAWN BY:B.McD.,TK | SHEET NO: 585-200
DATE: OCT 1992 | FIGURE NO: 6

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,636

SEE SHEET 585-200 FOR ASSAYS

VEIN A

VEIN B

VEIN C

VEIN D

1950E

1900E

1850E

5950N

5900N

5850N

6000N

LEGEND

5 INTERMEDIATE TO MAFIC INTRUSIVES

5A UNSUBDIVIDED, 5B DIORITE (DIOT), 5C GABBRO (GABR), 5D DIABASE (DIAB), 5E LAMPROPHYRE DYKES-SILLS (LAMP)

4 FELSIC TO INTERMEDIATE INTRUSIVES

4A UNSUBDIVIDED, 4B GRANITE (GRAN), 4C SYENITE (SYEN), 4D QUARTZ-MONZONITE (QMON), 4E MONZONITE (MONZ), 4F GRANODIORITE (GRAD), 4G QUARTZ-EYE PORPHYRY (PPQE), 4H FELDSPAR-PORPHYRY (PPXF), 4I QUARTZ-FELDSPAR PORPHYRY (QPFP), 4J HORNBLENDE-FELDSPAR PORPHYRY (FPHB)

3 CHEMICAL METASEDIMENTS

3A CHERT (CHEP), 3B CHERTY TUFF (CTUF), 3C OXIDE FACIES IF (OXIF), 3D CARBONATE FACIES IF (CBIF), 3E SILICATE-FACIES IF (SIIF), SULPHIDE-FACIES IF (SUIF)

2 METASEDIMENTS

2A UNSUBDIVIDED, 2B ARENITE (ARNT), 2C ARKOSE (ARKS), 2D ARGILLITE (ARGT), 2E GREYWACKE (GRWK), 2F CONGLOMERATE (CONG), 2G CHERT (CERT), 2H LIMESTONE (LIME)

1 METAVOLCANICS - RHYOLITE (RH), DACITE (DA), ANDESITE (AN), BASALT (BA)

1A UNSUBDIVIDED, 1B MASSIVE FLOWS (ANFL), 1C PORPHYRITIC FLOWS (ANFL), 1D PILLOWED FLOWS/PILLOW BRECCIA (ANPL), 1E TUFF (ANTF), 1F LAPILLI TUFF (ANLT), 1G TUFF-BRECCIA (ANBR), 1H CRYSTAL TUFF (ANXT), 1I PORPHYRY (ANPY), 1J VOLCANICLASTIC-LAHAR (ANVL)

ALTERED ROCKS

ALB	ALBITIZATION
BIO	BIOTITEROUS
CB	CARBONATE ALTERATION
CHL	CHLORITIZATION; CHLORITIC
KSP	POTASSIC ALTERATION
PROP	PROPYLITIC ALTERATION
QSP	QUARTZ-SERICITE, PYRITE SCHIST
QP	QUARTZ-PYRITE (PSEPHIC ALTERATION)
SER	SERICITIZATION; SERICITIC
SIL	SILICIFICATION; SILICIFIED

WK - WEAK MOD - MODERATE STR - STRONG

SYMBOLS

- OUTCROP BOUNDARY
- BEDDING (VERTICAL, INCLINED)
- FOLIATION (VERTICAL, INCLINED)
- JOINTING (HORIZONTAL, INCLINED, VERTICAL)
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- FAULT (DEFINED, ASSUMED)
- SHEAR ZONE, LINEAMENT
- TRENCH, PIT
- DRILL HOLE (VERTICAL, INCLINED)
- DIAMOND SAW CHANNEL INTERVAL

ABBREVIATIONS

AU	NATIVE GOLD	HEM	HEMATITE
AG	NATIVE SILVER	LIM	LIMONITE
ANK	ANKERITE	MAG	MAGNETITE
ARG	ARGENTITE	MAL	MALACHITE
ASPY	ARSENOPYRITE	MOLY	MOLYBDENITE
AZ	AZURITE	POLY	POLYBASITE
BA	BARITE	PY	PYRITE
BAVN	BARITE VEIN	PYBA	PYRARGYRITE
BN	BORNITE	PYROL	PYROLUSITE
BX	BRECCIA	PYRUP	PYRRHOTHELITE
CHAL	CHALCOCITE	PO	PYRRHOTITE
CPY	CHALCOPYRITE	QCV/QCV	QUARTZ-CARBONATE STRINGER/VEIN
CU	NATIVE COPPER	QS/QV	QUARTZ STRINGER/VEIN
DOL	DOLOMITE	SID	SIDERITE
EL	ELECTRUM	SP	SPHALERITE
GF	GRAPHITE	FEAN	TENNANTITE
GN	GALENA	TET	TETRAHEDRITE
HB	HORNBLENDE		

- QSP-QP QTZ-SER-PY
- ARGILLIC CHL-SER-PY
- QTVN - QUARTZ VEIN >80% QV/QS
- QTSW - QUARTZ STOCKWORK 20%-80% QV/QS
- QTBX - QUARTZ BRECCIA

0 5 10 15 20 25
METRES

SCALE 1:250

Trench no.	Sample no.	Au oz/t	Ag oz/	Width(m)
QHZ-1	17916	0.074	0.33	1.0
"	17917	0.034	0.16	1.0
"	17918	0.026	0.33	0.7
"	17919	0.022	0.16	0.7
QHZ-2	17912	0.042	0.46	1.0
"	17913	0.090	0.49	1.0
"	17914	0.164	0.33	1.0
"	17915	0.046	0.26	1.0
QHZ-8	17926	0.044	0.49	1.0
"	17927	0.046	0.42	1.0
"	17928	0.050	0.29	1.0
QHZ-9	17929	0.100	0.85	1.0
"	17930	0.042	0.23	1.0
"	17931	0.038	0.16	0.7
QHZ-10	17932	0.020	0.13	1.0
"	17933	0.054	0.30	0.9
"	17934	0.002	0.13	0.8
QHZ-11	17935	0.104	0.29	1.0
"	17936	0.016	0.10	1.0
"	17937	0.018	0.23	0.5
"	17938	0.020	0.29	1.0
"	17939	0.102	0.52	0.7
"	17940	1.494	1.34	0.6
"	17968	MISSING SAMPLE		1.0
"	17969	MISSING SAMPLE		1.0
"	17970	MISSING SAMPLE		1.0
QHZ-12	17941	0.034	1.18	1.0
"	17942	0.010	0.10	1.0
"	17943	0.006	0.07	0.8
"	17944	0.074	0.69	0.8
"	17945	0.006	0.07	0.8
QHZ-13	17946	0.012	0.13	1.0
"	17947	0.014	0.03	1.0
"	17948	0.010	0.13	0.9
"	17949	0.024	0.13	0.9
QHZ-15	17954	0.002	0.23	1.0
"	17955	0.006	0.16	1.0
QHZ-16	17956	0.006	0.42	1.0
"	17957	0.010	0.33	0.7
"	17958	0.008	0.20	0.8
QHZ-18	17961	0.006	0.13	0.8
QHZ-19	17962	0.016	0.33	0.8
"	17963	0.022	0.20	0.6
QHZ-20	17964	0.002	0.10	1.1
"	17965	0.060	0.13	1.1
QHZ-21	17974	0.010	0.03	1.0
"	17975	0.026	0.13	1.0
QHZ-22	17971	0.078	0.03	0.8
"	17972	0.018	0.03	0.8
"	17973	0.084	0.26	1.0

Trench no.	Sample no.	Au oz/t	Ag oz/	Width(m)
QHZ-7	17920	0.008	0.13	1.0
"	17921	0.010	0.03	1.0
"	17922	0.008	0.03	1.0
"	17923	0.006	0.07	1.0
"	17924	0.004	0.07	1.0
"	17925	0.006	0.10	0.9

NEWHAWK GOLD MINES

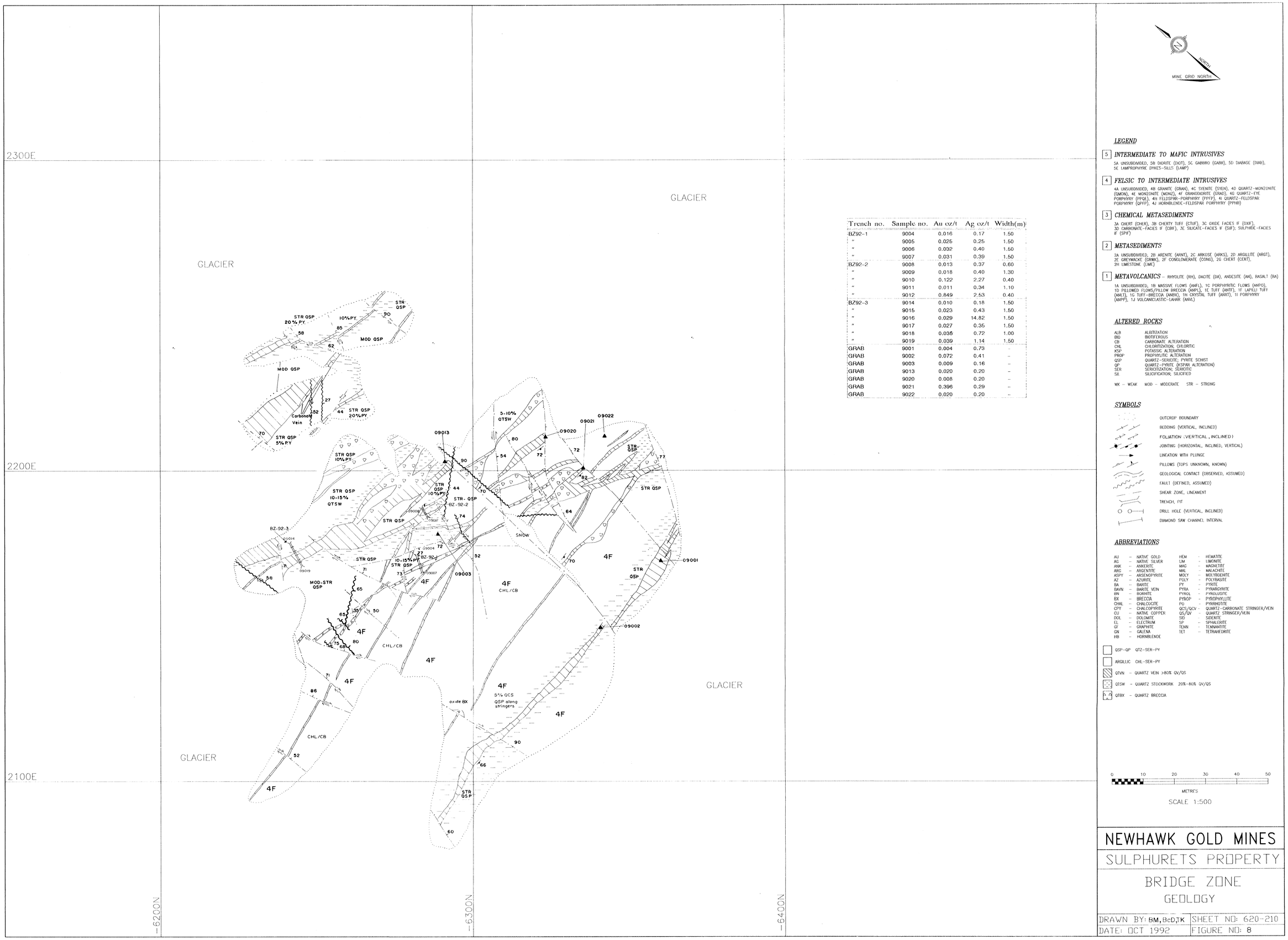
SULPHURETS PROPERTY

QUARTZ HILL ZONE GEOLOGY

DRAWN BY: B.McD., TK	SHEET NO: 585-185
DATE: OCT 1992	FIGURE NO: 7

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,636



Trench no.	Sample no.	Au oz/t	Ag oz/t	Width(m)
BZ92-1	9004	0.016	0.17	1.50
"	9005	0.025	0.25	1.50
"	9006	0.032	0.40	1.50
"	9007	0.031	0.39	1.50
BZ92-2	9008	0.013	0.37	0.60
"	9009	0.018	0.40	1.30
"	9010	0.122	2.27	0.40
"	9011	0.011	0.34	1.10
"	9012	0.849	2.53	0.40
BZ92-3	9014	0.010	0.18	1.50
"	9015	0.023	0.43	1.50
"	9016	0.029	14.82	1.50
"	9017	0.027	0.35	1.50
"	9018	0.035	0.72	1.00
"	9019	0.039	1.14	1.50
GRAB	9001	0.004	0.73	--
GRAB	9002	0.072	0.41	--
GRAB	9003	0.009	0.16	--
GRAB	9013	0.020	0.20	--
GRAB	9020	0.008	0.20	--
GRAB	9021	0.396	0.29	--
GRAB	9022	0.020	0.20	--

NORTH
MINE GRID NORTH

LEGEND

5 INTERMEDIATE TO MAFIC INTRUSIVES

5A UNSUBDIVIDED, 5B DIORITE (DIOT), 5C GABBRO (GABR), 5D DIABASE (DIAB), 5E LAMPROPHYRE DYKES-SILLS (LAMP)

4 FELSIC TO INTERMEDIATE INTRUSIVES

4A UNSUBDIVIDED, 4B GRANITE (GRAN), 4C SYENITE (SYEN), 4D QUARTZ-MONZONITE (QMON), 4E MONZONITE (MONZ), 4F GRANODIORITE (GRAD), 4G QUARTZ-EYE PORPHYRY (FPQE), 4H FELDSPAR-PORPHYRY (FYP), 4I QUARTZ-FELDSPAR PORPHYRY (QFFP), 4J HORNBLENDE-FELDSPAR PORPHYRY (FPHB)

3 CHEMICAL METASEDIMENTS

3A CHERT (CHER), 3B CHERTY TUFF (CTUF), 3C OXIDE FACIES IF (OXIF), 3D CARBONATE-FACIES IF (CBIF), 3E SILICATE-FACIES IF (SIF); SULPHIDE-FACIES IF (SPIF)

2 METASEDIMENTS

2A UNSUBDIVIDED, 2B ARENITE (ARNT), 2C ARKOSE (ARKS), 2D ARGILLITE (ARGT), 2E GREYWACKE (GRWK), 2F CONGLOMERATE (CONG), 2G CHERT (CERT), 2H LIMESTONE (LIME)

1 METAVOLCANICS -- RHYOLITE (RH), DACITE (DA), ANDESITE (AN), BASALT (BA)

1A UNSUBDIVIDED, 1B MASSIVE FLOWS (ANFL), 1C PORPHYRITIC FLOWS (ANPO), 1D PILLOWED FLOWS/PILLOW BRECCIA (ANPL), 1E TUFF (ANTF), 1F LAPILLI TUFF (ANLT), 1G TUFF-BRECCIA (ANBX), 1H CRYSTAL TUFF (ANXT), 1I PORPHYRY (ANPP), 1J VOLCANICLASTIC-LAHAR (ANVL)

ALTERED ROCKS

ALB	ALBITIZATION
BIO	BIOTITEROUS
CB	CARBONATE ALTERATION
CHL	CHLORITIZATION; CHLORITIC
KSP	POTASSIC ALTERATION
PROP	PROPYLITIC ALTERATION
QSP	QUARTZ-SERICITE; PYRITE SCHIST
QP	QUARTZ-PYRITE (KSPAR ALTERATION)
SER	SERICITIZATION; SERICITIC
SIL	SILICIFICATION; SILICIFIED

WK - WEAK MOD - MODERATE STR - STRONG

SYMBOLS

- OUTCROP BOUNDARY
- BEDDING (VERTICAL, INCLINED)
- FOLIATION (VERTICAL, INCLINED)
- JOINTING (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION WITH PLUNGE
- PILLOWS (TOPS UNKNOWN, KNOWN)
- GEOLOGICAL CONTACT (OBSERVED, ASSUMED)
- FAULT (DEFINED, ASSUMED)
- SHEAR ZONE, LINEAMENT
- TRENCH, PIT
- DRILL HOLE (VERTICAL, INCLINED)
- DIAMOND SAW CHANNEL INTERVAL

ABBREVIATIONS

AU	-	NATIVE GOLD	HEM	-	HEMATITE
AG	-	NATIVE SILVER	LIM	-	LIMONITE
ANK	-	ANKERITE	MAG	-	MAGNETITE
ARG	-	ARGENTITE	MAL	-	MALACHITE
ASPY	-	ARSENOPYRITE	MOLY	-	MOLYBDENITE
AZ	-	AZURITE	POLY	-	POLYBASITE
BA	-	BARITE	PY	-	PYRITE
BAVN	-	BARITE VEIN	PYRA	-	PYRARGYRITE
BN	-	BORNITE	PYROL	-	PYROLUSITE
BX	-	BRECCIA	PYROP	-	PYROPHYLLITE
CHAL	-	CHALCOCITE	PO	-	PYRRHOTITE
CPY	-	CHALCOPYRITE	QCS/QCV	-	QUARTZ-CARBONATE STRINGER/VEIN
CU	-	NATIVE COPPER	QS/QV	-	QUARTZ STRINGER/VEIN
DOL	-	DOLOMITE	SID	-	SIDERITE
EL	-	ELECTRUM	SP	-	SPHALERITE
GI	-	GRAPHITE	TENN	-	TENNANTITE
GN	-	GALENA	TET	-	TETRAHEDRITE
HBI	-	HORNBLENDE			

- QSP-QP QTZ-SER-PY
- ARGILLIC CHL-SER-PY
- QTVN - QUARTZ VEIN >80% QV/QS
- QTSW - QUARTZ STOCKWORK 20%-80% QV/QS
- QTBX - QUARTZ BRECCIA

0 10 20 30 40 50
METRES

SCALE 1:500

NEWHAWK GOLD MINES

SULPHURETS PROPERTY

BRIDGE ZONE

GEOLOGY

DRAWN BY: BM, BcD, TK	SHEET NO: 620-210
DATE: OCT 1992	FIGURE NO: 8

GEOLOGICAL BRANCH
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