

LOG NO:	APR 01 1993	RD.
ACTION:		
FILE NO:		

1992 EVALUATION

KNIPPLE PROPERTY

Latitude: 56°23'N
Longitude: 130°00'W
NTS: 104A/5 & 104B/8

Skeena Mining Division

OWNER: Newhawk Gold Mines Ltd.
Granduc Mines Limited

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

REPORT BY: Dave Visagie, B.Sc., P.Geo.
March 25, 1993



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,832

SU93-430.20

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1.0 INTRODUCTION

The Knipple property is situated within the "Golden Triangle" of northwestern British Columbia. The property, consisting of 144 units in 13 claims is located 55 km north of the village of Stewart. Mapping has shown it to be underlain by Lower-Middle Jurassic aged Hazelton Group rocks locally consisting of volcanic breccias and tuffs along with intercalated sediments. Previous exploration programs outlined a 100 x 300 metre area of narrow, up to 0.8 metre wide, galena, sphalerite, chalcopyrite and silver bearing quartz veining. The purpose of the 1993 program was to evaluate the potential of both the veins and the surrounding area by mapping, prospecting and soil and rock chip sampling. Between July 21 and 26, fourteen man-days of labour were spent evaluating the property. As a result a total of 47 rock chip, 95 soil and 8 silt samples were collected and sent for analysis. In addition prior to, during and after the property evaluation a total of 90 man-days were spent rehabilitating 6 km of local roads and a bridge with the purpose of providing access throughout portions of the property for future exploration.

2.0 LOCATION AND ACCESS (Figures 1 and 2)

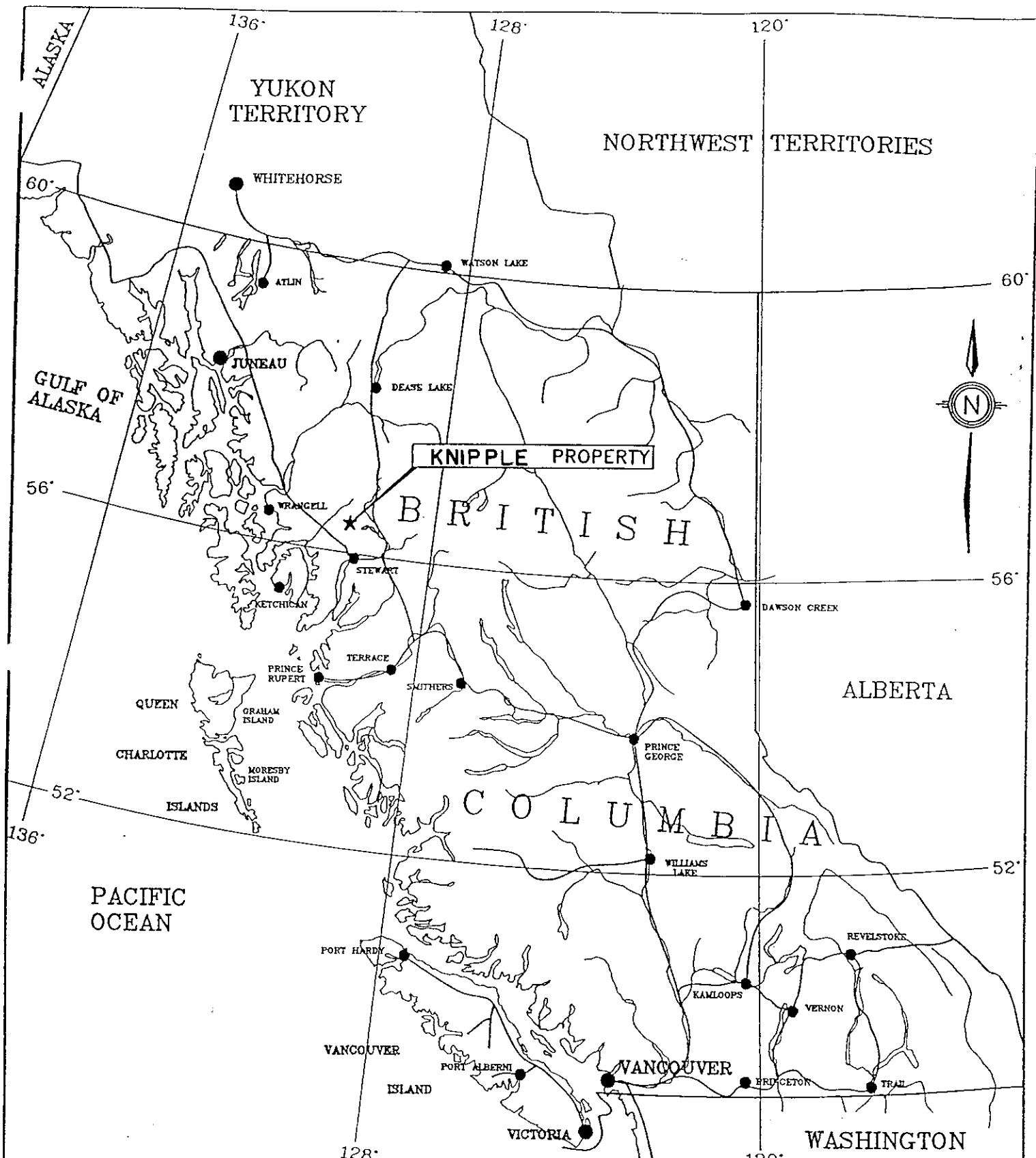
The property is located within the Coast Range Mountains of northwestern B.C., some 55 kilometres northwest of the village of Stewart approximately 910 kilometres northwest of Vancouver, B.C. It is centred at 129°58'W, 56°25'N. For access purposes supplies were mobilized from Stewart to the Tide Lake airstrip then ferried for 20 km to the property by helicopter. For the 1992 field season Frontier Helicopter's Jet Ranger based at Placer Dome's Kerr camp was used. At the property itself limited road access is available.

3.0 PROPERTY DESCRIPTION (Figure 3)

The Knipple property consisting of 144 units in 13 claims has been split into two groups: East and West Knipple. The property is comprised of the following claims:

<u>Group</u>	<u>Claim Name</u>	<u>Record #</u>	<u>Units</u>	<u>Expiry Date</u>
West	Knip 1	309940	1	May 27, 1996
West	Knip 2	309941	1	May 27, 1996
West	Knip 3	309943	12	May 27, 1996
West	Knip 4	309944	12	May 27, 1996
West	Tiger CGH	309942	10	May 27, 1996
West	Knipple 1	308696	18	April 4, 1996
East	Knipple 2	308697	20	April 4, 1996
East	Knipple 3	308698	18	April 4, 1996
East	Knipple 4	308699	12	April 4, 1996
East	Knipple 5	308700	20	April 4, 1996
East	Knipple 6	308701	20	April 4, 1996

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



NEWHAWK GOLD MINES

KNIPPLE PROPERTY LOCATION MAP

DRAWN BY: T.K.

FIGURE NO: 1

DATE: MARCH/1993

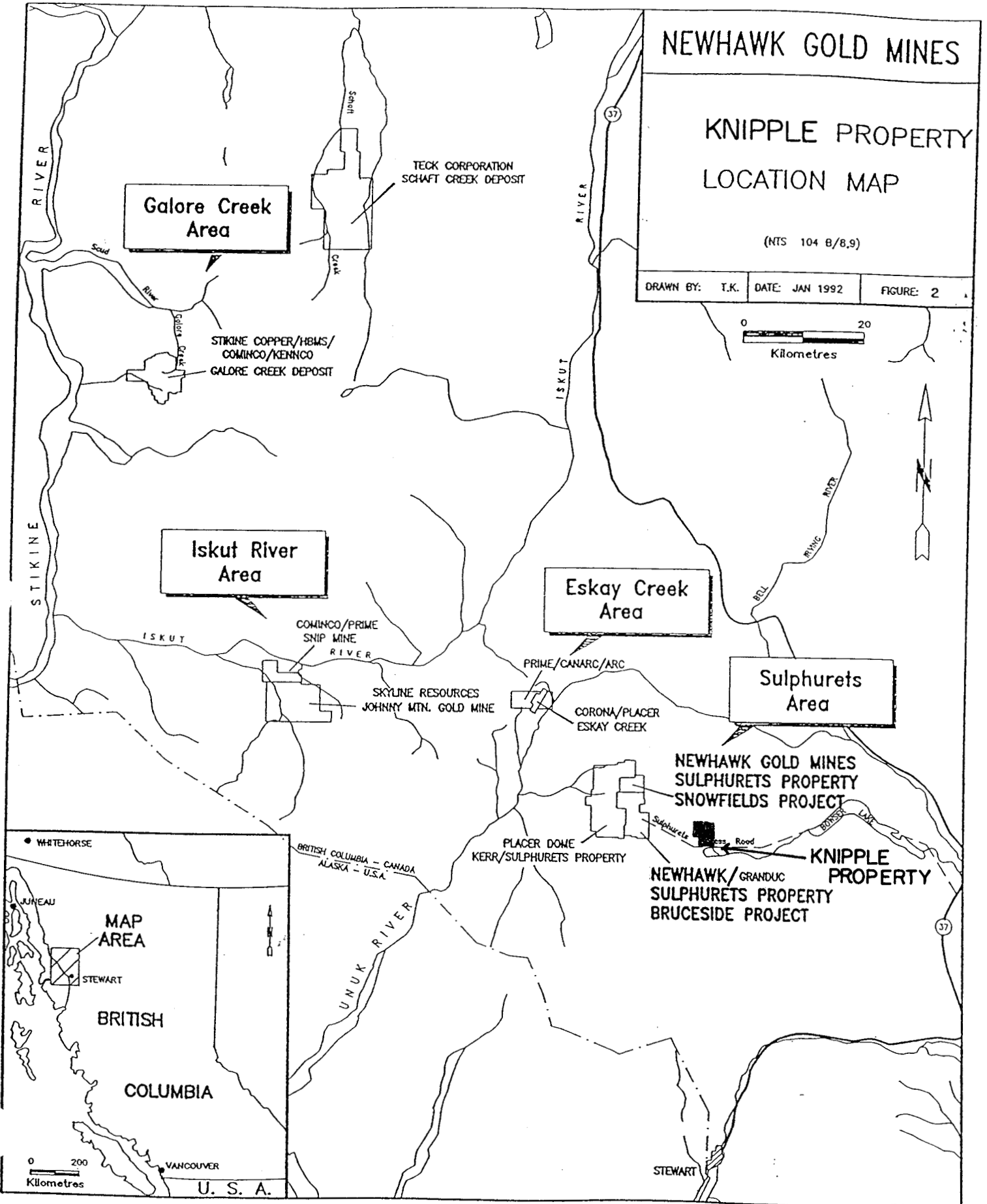
SCALE:

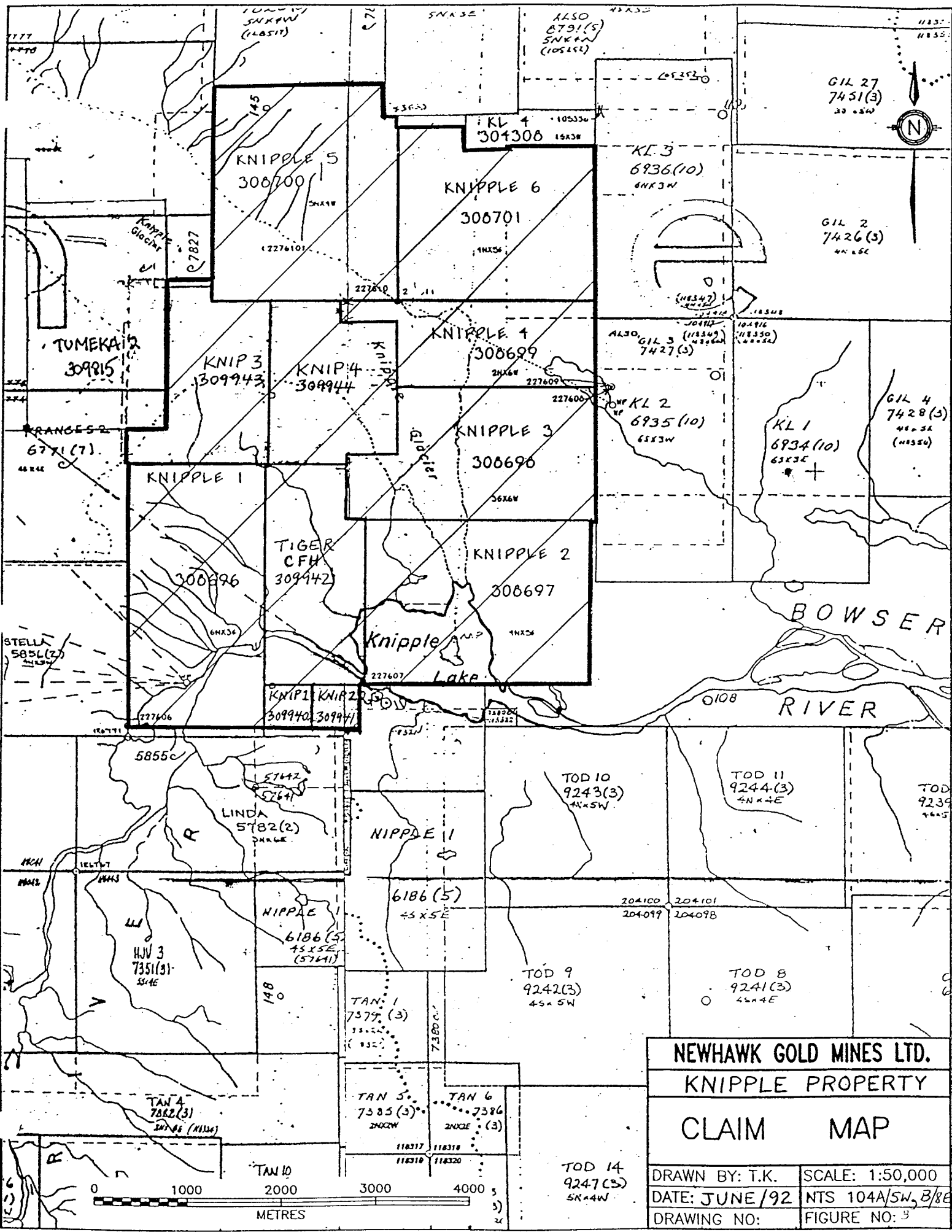
NEWHAWK GOLD MINES

KNIPPLE PROPERTY LOCATION MAP

(NTS 104 8/8,9)

DRAWN BY: T.K. DATE: JAN 1992 FIGURE: 2





NEWHAWK GOLD MINES LTD.	
KNIPPLE PROPERTY	
CLAIM MAP	
DRAWN BY: T.K.	SCALE: 1:50,000
DATE: JUNE/92	NTS 104A/SW ₃ B/8E
DRAWING NO:	FIGURE NO: 3

4.0 PHYSIOGRAPHY AND VEGETATION

The Knipple property occurs immediately to the north of Knipple Lake. Topography is typical of the Coast Range Mountains with steep glaciated U-shaped valleys being the norm. Elevations range from 460 metres at Knipple Lake to in excess of 1,100 metres at some of the ridges. Upper portions of the claims are rugged while sections around Knipple Lake are relatively moderate.

Heavy alders and brush cover many of the slopes with the timberline occurring between 800 and 1100 metres.

The climate is typical of the north coast mountains with frequent precipitation throughout the year with the winters tending to be cool and wet with heavy snowfall accumulation.

5.0 PROPERTY HISTORY

The Knipple property has been intermittently explored since the mid 1960's. The following is a summary of the published exploration activities:

- 1964-66 Regional mapping by the B.C.D.M. led to the discovery of silver and base metal mineralization near Knipple Glacier.
- 1980-82 The Knip property was optioned to E & B Exploration by Elan Exploration Ltd who undertook a program consisting of limited prospecting, sampling and geological mapping before returning the property to Elan.
- 1983 The property was optioned by Teuton Resources Corp. who completed a prospecting and sampling program that resulted in the discovery of argentiferous quartz veins in an area referred to as Mineral Hill located immediately to the north of Knipple Lake.
- 1984-86 Teuton completed an airborne EM and Mag survey over the claim along with trenching, sampling, mapping and prospecting.
- 1987 Teuton optioned the property to Crystal Cove Resources Ltd. who completed limited bulk sampling of the veins and a small drill program.
- 1992 The property was staked for Newhawk and Granduc.

6.0 1992 WORK PROGRAM

The purpose of the 1992 program was to evaluate the quartz veins located at Mineral Hill and to determine the potential of the readily accessible ground. To accomplish the above the following were completed:

- i) detailed mapping on a grid basis of Mineral Hill at a 1:1000 scale,
- ii) the taking of 36 rock chip samples from Mineral Hill,
- iii) the collecting of 11 rock chip, 8 silt and 95 soil samples from elsewhere on the property.

The geologic evaluation of the property required fourteen man-days of labour. All samples were sent to Vangeochem Labs, Vancouver, B.C. for analysis.

Prior to, during and after the geologic work a program consisting of 6.0 km of road rehabilitation and bridge repair was completed on the property to provide access for future work programs. Equipment used for this maintenance included a Caterpillar D-7 bulldozer, a Sullivan 750 CFM compressor and an Ingersoll Rand CM 350 air trac. To complete the road and bridge up-grading required 90 man-days of labour.

The personnel employed to complete the above program consisted of the following:

Dave Visagie	Senior Geologist
Brian Malahoff	Contract Geologist
Barry McDonough	Contract Geologist
Dave Green	Cat/Air trac/Compressor operator
Shaun Edwards	Labourer
Bob Eckess	Labourer

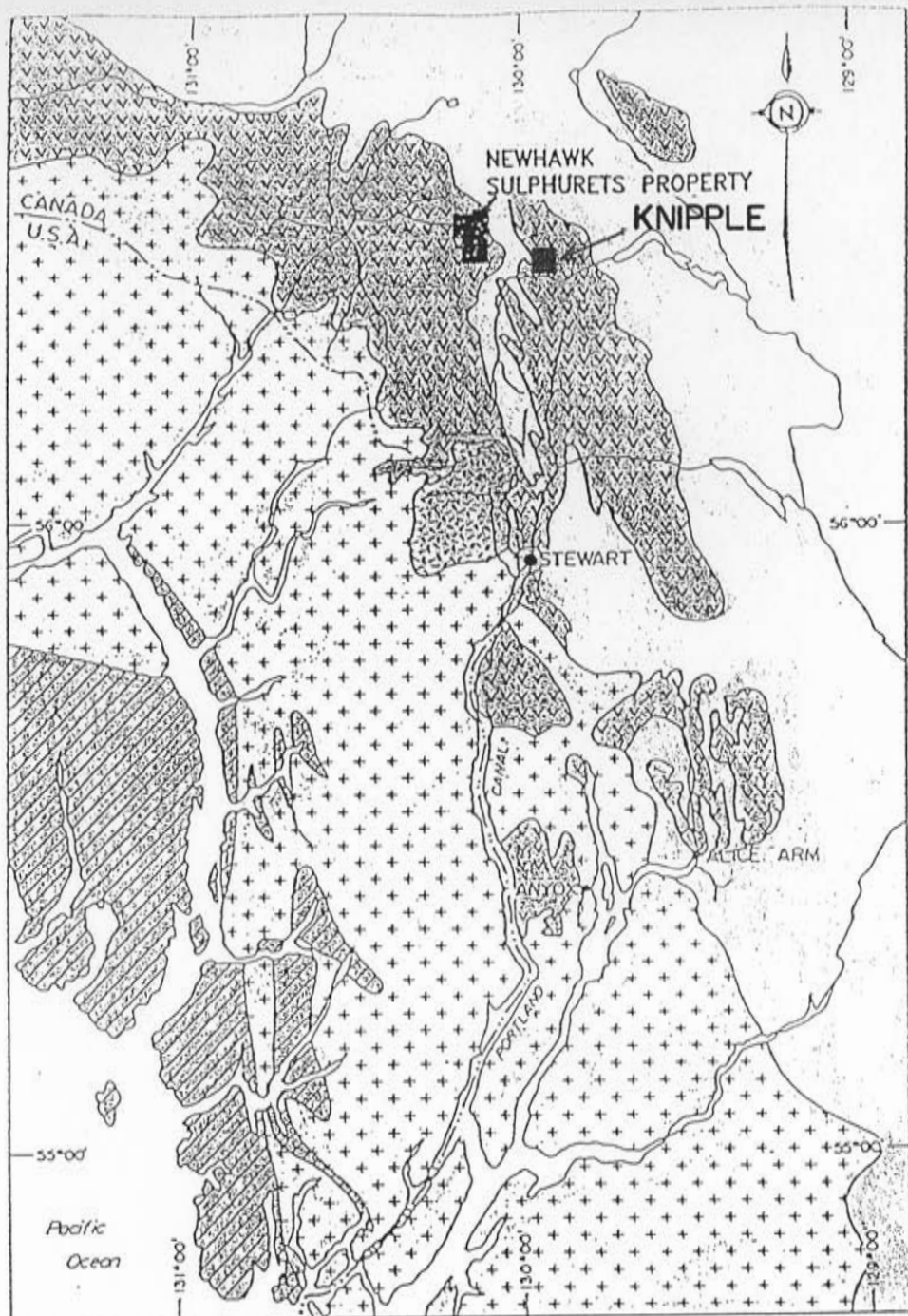
7.0 REGIONAL GEOLOGY (Figure 4)

The Knipple property occurs immediately to the east of the Coast Crystalline Complex within the westernmost portion of the Bowser Basin. The underlying rocks belong to the Mesozoic Hazelton Group rocks and have been intruded by Cenozoic and Mesozoic aged intrusive plugs. At the base of the Hazelton Group is the Lower Jurassic marine (submergent) and non-marine (emergent) volcanoclastic Unuk River Formation. This is overlain, at steep discordant angles, by a second, lithologically similar, Middle Jurassic volcanic cycle (Betty Creek Formation), that in turn is overlain by Middle and Upper Jurassic non-marine and marine sediments, with minor volcanics, of the Salmon River and Nass Formations.

The oldest rocks in the area belong to the Lower Jurassic Unuk River Formation which forms a north-northwesterly trending belt from Alice Arm to the Iskut River. It consists of green, red, and purple volcanic breccia, volcanic conglomerate, sandstone and siltstone with minor crystal and lithic tuff, limestone, chert and coal. Also included in the sequence are pillow lavas and volcanic flows.

The Betty Creek Formation is another cycle of trough-filling submarine pillow lavas, broken pillow breccias, andesitic and basaltic flows, green, red, purple and black volcanic breccia, with self erosional conglomerate, sandstone and siltstone, and minor crystal and lithic tuffs, chert, limestone and lava. The overlying Salmon River Formation is a late to post volcanic episode of banded, predominantly dark coloured, siltstone, greywacke, sandstone, intercalated, minor limestone, argillite, conglomerate, littoral deposits, volcanic sediments and minor flows.

According to Grove the majority of the rocks from the Hazelton Group were derived from the erosion of andesitic volcanoes subsequently deposited as overlapping lenticular beds varying laterally in grain size from breccia to siltstone. Evidently, in regional terms, submarine spreading-line basaltic lava platforms marked by massive sulphide "black smoker" features gave way to resubduction-melt, violent, feldspathic volcanoes along or parallel to trough lines. Violent cauldric collapse subsidence and self erosion separated the two major volcanic cycles (Unuk River, Betty Creek) at steep angles. The episodes settled to gentler tuff-distal sedex precipitate sulphides episodes (Salmon River) and back-arc and continental sedimentation (Salmon River) with occasional intercalated flows and minor fumarolic hot spring activity.



LEGEND

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

REGIONAL GEOLOGY OF THE STEWART - ANYOX AREA



Figure 4 (after Dykes et al, 1988)

Coast Plutonic Complex granodiorite largely engulfs the Mesozoic volcanic terrain to the west. East of these, in the claim area, smaller intrusive plugs ranging from quartz monzonite to granite to highly felsic, that are, in all probability, related late phase offshoots of the Coast plutonism, while others are synvolcanic, and others Tertiary. Of particular interest are Eocene feldspar porphyry stocks appearing intermittently along the eastern margin of the Stewart Complex. These stocks often contain significant sulphide mineralization and typically feature argentiferous veins developed in post-crystallization fractures and breccia zones.

Double plunging, northwesterly trending synclinal folds of the salmon river and underlying Betty Creek Formations dominate the structural setting of the area. These folds are locally disrupted by small east-overthrusts (Tippy Lake, Knipple Lake) on strikes parallel to the major fold axes, cross-axis steep wrench faults which locally turn beds.

8.0 PROPERTY GEOLOGY (Figures 5 and 6)

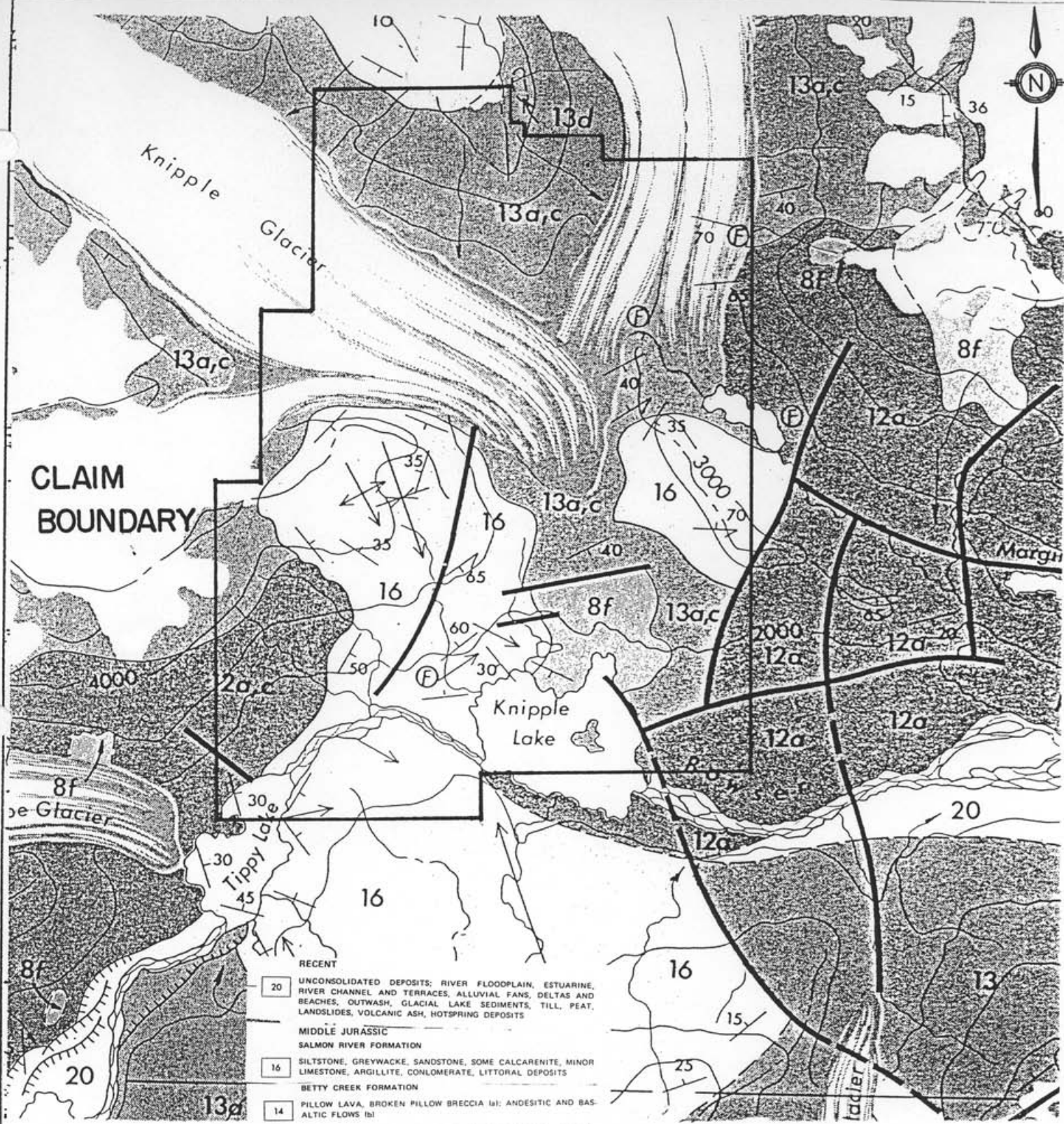
The oldest unit in the claim area are Lower Jurassic aged Unuk River Formation rocks exposed in the northeast corner of the Knipple 3 claim and in the Glacier toe area immediately north of Knipple Lake. This unit is generally in fault contact with Middle Jurassic rocks of the Betty Creek Formation including green, purple and red volcanic breccia, conglomerate, sandstone and siltstone, crystal and lithic tuffs. Augite porphyry flows and fossiliferous limestone are found in the Betty Creek at various locations throughout the property. To date all of the significant mineral occurrences on the property occur within Betty Creek Formational rocks. Middle Jurassic Salmon River Formation rocks consisting of siltstones, greywacke, sandstone, argillite, conglomerate and littoral deposits unconformably overlie the Betty Creek Formation. Semi-massive bands of pyrite ranging in width to two centimetres occur within the Salmon River Formation. Eocene coarse-grained feldspar porphyry intrusive occur throughout the property.

Structurally, the sediments on the property have been folded with predominantly northwest trending fold axes. Irregular warping has occurred due to the intrusion of the Eocene feldspar porphyry.

A major northwest-southeast trending fault cuts the Eocene intrusive resulting in approximately 100 metres of right lateral movement. Other faults on the property cut the rocks with varying strike directions and movement.

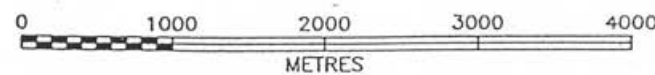
Detailed mapping and trenching at Mineral Hill showed interbedded andesitic flows and tuffs and breccia of the Betty Creek Formation to host narrow, sulphide bearing quartz veins. The andesitic rocks are typically fine grained, light to dark green coloured, feldspar porphyritic with calcite and sometimes quartz filled amygdaloids. The rocks have been moderately to strongly chlorite-carbonate altered. The tuffs are highly gossanous with strong limonite alteration occurring throughout in association with zones of faulting and shearing. The breccia is volcanic in origin and has been extensively carbonate altered.

Trenching of several pronounced lineaments at Mineral Hill exposed a series of widely spaced, northeasterly trending, steeply dipping, argentiferous, quartz-carbonate sulphide veins ranging in width from a few centimetres to 0.8 metres in width. Individual veins are up to 100 metres long and exhibit pinch and swell characteristics. These veins are in turn cut by northwest trending argentiferous quartz-calcite veins of much smaller dimension.



**CLAIM
BOUNDARY**

- RECENT**
- 20 UNCONSOLIDATED DEPOSITS: RIVER FLOODPLAIN, ESTUARINE, RIVER CHANNEL AND TERRACES, ALLUVIAL FANS, DELTAS AND BEACHES, OUTWASH, GLACIAL LAKE SEDIMENTS, TILL, PEAT, LANDSLIDES, VOLCANIC ASH, HOTSPRING DEPOSITS
- MIDDLE JURASSIC**
- SALMON RIVER FORMATION**
- 16 SILTSTONE, GREYWACKE, SANDSTONE, SOME CALCARENITE, MINOR LIMESTONE, ARGILLITE, CONLOMERATE, LITTORAL DEPOSITS
- BETTY CREEK FORMATION**
- 14 PILLOW LAVA, BROKEN PILLOW BRECCIA (a); ANDESITIC AND BASALTIC FLOWS (b)
 - 13 GREEN, RED, PURPLE, AND BLACK VOLCANIC BRECCIA, CONLOMERATE, SANDSTONE, AND SILTSTONE (a); CRYSTAL AND LITHIC TUFF (b); SILTSTONE (c); MINOR CHERT AND LIMESTONE (INCLUDES SOME LAVA (14)) (d)
- LOWER JURASSIC**
- UNUK RIVER FORMATION**
- 12 GREEN, RED, AND PURPLE VOLCANIC BRECCIA, CONLOMERATE, SANDSTONE, AND SILTSTONE (a); CRYSTAL AND LITHIC TUFF (b); SANDSTONE (c); CONLOMERATE (d); LIMESTONE (e); CHERT (f); MINOR COAL (g)
- PLUTONIC ROCKS**
- EOCENE (STOCKS, ETC.) AND OLDER**
- 8 QUARTZ DIORITE (a); GRANODIORITE (b); MONZONITE (c); QUARTZ MONZONITE (d); AUGITE DIORITE (e); FELDSPAR PORPHYRY (f)



NEWHAWK GOLD MINES LTD.	
KNIPPLE PROPERTY	
PROPERTY GEOLOGY	
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9247 (CS)
SKAW

Typically the sulphide mineralization consists of semi-massive galena with lesser sphalerite, chalcopyrite, pyrite and tetrahedrite generally within small pods and clots within a quartz-carbonate gangue. The northeast trending set of veins are in part cut-off by an east-west trending fault.

9.0 GEOCHEMISTRY

All samples were sent to Vangeochem Labs, 1630 Pandora Street, Vancouver, B.C. for analysis by I.C.P. with gold being determined geochemically. Rock samples that contained greater than 100 ppm Ag were assayed.

9.1 Field Procedure (Figures 7 and 8)

Rock chip, soil and silt samples were collected during the course of the property evaluation. Rock chip samples consisting of both grab and measured width were taken from outcrop using a hammer and moil, identified, described and stored in plastic bags. Soil samples were collected at 25 metre intervals along a road side traverse located over a gossanous area. The samples were taken, where possible from the "B" horizon, identified then stored in kraft paper sample bags. In several instances, due to the lack of suitable material "C" horizon samples were taken instead. Silt samples, collected during a prospecting traverse, were taken from the active portion of a stream, using a trowel, stored in kraft paper sample bags and identified. Prior to shipping both the soil and silt samples were dried. The sample locations are plotted on figures 7 and 9 while the rock sample descriptions are listed in Appendix 1.

9.2 Analytical Procedure

For 30 element I.C.P. analysis a 10 gram sample is digested with 3 ml of 3:1:3 nitric acid to hydrochloric acid to water at 90°C for 1.5 hours. The sample is then diluted to 20 mls with demineralized water and analyzed. The leach is partial for the following elements: Al, B, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sb, Ti, U and W.

For gold determination by atomic absorption a 10 gram sample that has been ignited overnight at 600°C is digested with hot dilute aqua regia and the clear solution obtained is extracted with Methyl Isobutyl Ketone (MIBK). Gold is determined in the MIBK extract by atomic absorption using a background detection (detection limit 5 ppb).

For samples that returned values greater than 100 ppm Ag by I.C.P. analysis the sample was fire assayed using a 1/2 assay ton sample.

The results are listed in Appendix 2.

9.3 Results (Figures 9)

Assay results for the samples taken in the Mineral Hill area show anomalous silver values to coincide with significant lead, zinc and copper values. In general the veins are narrow, with the widest sample averaging 20.85 opt Ag, 0.88% Cu, >2.00% Pb and >2.00% Zn over 0.70 metres. Gold values are all less than 0.030 opt Au.

Soil sample results for silver, copper, lead and zinc failed to outline any significant anomalous trends. Gold values are generally low throughout with only a few erratics containing >100 ppb Au with the maximum value being 170 ppb Au.

Silt sample results returned low values for Cu, Pb, and Zn. In addition gold values are generally low, less than 70 ppb Au, with one sample assaying 170 ppb Au, being highly anomalous. The cause of this spot high is not presently known.

10.0 SUMMARY AND CONCLUSIONS

Fourteen man-days were spent evaluating the Knipple property presently held by Newhawk Gold Mines and Granduc Mines. In addition 90 man-days were spent rehabilitating the roads and a bridge on the property for the 1992 and future programs. The exploration program showed the property to be primarily underlain by Hazelton Group andesitic volcanics and intercalated sediments.

Narrow sulphide bearing, argentiferous quartz-carbonate veins occur within the volcanics. In general the mineralization consists of semi-massive pods and clots of galena and sphalerite along with lesser chalcopyrite and pyrite. The best chip sample averaged 20.85 opt Ag, .88% Cu, >2.00% Pb and >2.00% Zn over a 0.80 metre width. In all samples gold values are insignificant being less than 0.030 opt. In addition to being narrow the veins appear to have limited strike length with the longest vein having been traced for 100 metres. Due to the size and distribution of the veins the potential to develop significant reserves at mineral hill appears to be limited.

Soil and silt sample results failed to locate any significant anomalous trends for silver, copper, lead and zinc. Gold values are generally low with only spot erratic highs assaying between 100 and 300 ppb being detected. The source of these erratic high values has not been located.

Elsewhere on the property several gossanous areas have been located however due to the lack of funding they have not been evaluated.

11.0 RECOMMENDATIONS

It is recommended that no further work be completed in the Mineral Hill area as there appears to be little potential to locate significant reserves that would be feasible to mining. Future exploration programs should be concentrated on evaluating gossanous zones located on the property.

12.0 COST STATEMENT: KNIPPLE PROPERTY

1. Labour					\$15,290.00
Dave Visagie, geologist	2 days @ \$295/day	590			
Brian Malahoff, geologist	6 days @ \$225/day	1350			
Barry McDonough, geologist	6 days @ \$225/day	1350			
Dave Green, cat operator	60 days @ \$150/day	9000			
Bob Eckess, labourer	15 days @ \$100/day	1500			
Shawn Edwards, labourer	15 days @ \$100/day	1500			
TOTAL	110 man-days				
2. Room & Board					\$11,100.00
	110 man-days @ \$100/day				
3. Transportation					\$13,290.00
i. Airfare		600			
	Malahoff: Vancouver-Stewart return				
ii. Helicopter		8,190			
	July 15 1.0 hrs July 21 0.5 hrs July 23 0.4 hrs				
	July 26 0.6 hrs Aug. 5 0.5 hrs Aug. 12 0.9 hrs				
	Aug. 13 1.1 hrs Aug. 24 1.0 hrs Aug. 26 1.0 hrs				
	Sept. 2 1.3 hrs Sept. 3 0.8 hrs Sept. 8 0.8 hrs				
	Sept. 20 0.8 hrs Oct. 6 1.0 hrs				
	TOTAL 11.7 hrs x \$700/hr				
iii. Truck rental		4,500			
	60 days @ \$75/day				
4. Supplies & Equipment					\$500.00
	Equipment rental, sample bags, flagging, radio rental, etc.				
5. Assaying					\$2,330.36
Type	Samples	Prep.	Geochem Au	Assay Ag	ICP Analysis
Rock	47	3.00	7.50	15 x 8.50	6.50
Soil	95	1.00	5.50		6.50
Silt	8	1.00	5.50		6.50
6. Expediting & Freight					\$500.00
7. Heavy Equipment rental					\$31,725.00
i. Compressor	10 days x 10 hrs/day x \$112.75/hr	11,725			
ii. Bulldozer	40 days x 10 hrs/day x \$75/hr	30,000			
8. Report					\$1,000.00
9. Office overhead					\$3,000.00
SUB-TOTAL					\$50,185.36
10. Management fee (10%)					\$5,018.54
TOTAL					\$55,203.90

Cost distribution:

East Knipple \$37,319.50

West Knipple \$17,844.40

Total: \$55,203.90

13.0 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 Knipple group was under my supervision.

Dated at Vancouver, British Columbia, this 25th day of March, 1993.

APPENDIX 1
ROCK SAMPLE DESCRIPTIONS

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIPPLE PROPERTY

Sampler B. Mahhoff ① of ④

Date	Sample No.	Type	Location				Sample Data				Assay Data			Alteration	Sample Description
			Claim	Northing	Eastng	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Au (ppb)	Ag		
July 22, 92	18651	Rock				Knipple Lake Grid		0	.17	.17		90	57.20ppt	STR. SIL STR. CHL STR. CARB.	Qtz + Carb vein in veinlet. Pinch and swell. Semi-massive to massive Gr, 1-30% Cpy, 1/2 Tet, Tr SP?
"	18652	Rock				"		0	.34	.34		20	15.20ppt	STR. SIL STR. CHL STR. CARB.	Qtz + Carb Vein Pinch and swell Semi-massive Gr, 10% Cpy, Tet? Tr SP.
"	18653	Rock				"		0	.40	.40		20	35ppm	STR. CARB STR. SIL STR. CHL STR. CARB	Qtz-Carb Vein + vein Bx; mod. Z str. Lim, Fe. No visible sulphides
"	18654	Rock				"		0	.20	.20		10	6.40ppt	STR. SIL STR. CARB STR. CHL	Qtz-Carb Vein Bx 1-20% Cpy, Tr Gr? SP? STR. Lim, Fe?
"	18655	Rock				"		0	.14	.14		30	2.2ppm	STR. SIL STR. CARB STR. CHL	Qtz-Carb. Vein Bx. No visible sulphides.
"	18656	Rock				"		0	.08	.08		300	62.70ppt	STR. SIL STR. CARB	Qtz-Carb Veinlet with STR. Py along fractures. STR. Lim, in row and along vein Massive Gr, 1-20% SP? Tet?

THE
NORHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIPPLE PROPERTY

Sampler B. Malakoff (284)

Date	Sample No.	Type	Location				Sample Data				Assay Data			Alteration	Sample Description
			Claim	Northing	Eastings	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Ag			
July 27/82	18657	Rock				Knipple Lake Grid	0	.19	.19			710	15.90	STR SIL STR CAL	Qtz-Carb Ven semi massive to massive Ga 2-3% Cr, Tr. Sp, Tr
"	18658	Rock				"	0	.50	.50			20	21 ppm	STR SIL STR CARB. STR CHL	Qtz-Carb. Ven BX. No visible sulphides
"	18659	Rock				"	0	.13	.13			10	124 ppm	STR SIL	Qtz-Carb. Ven BX in fault or shal. zone? No visible sulphides
July 23/82	18660	Rock				"	0	.34	.34			40	16.25	STR SIL STR CARB STR CHL	Qtz-Carb. very small. Pinal and small. Max width in swell = .34m Massive Ga, 1-2% Cr Tr. Tet, 1-2% Sp
"	18661	Rock				"	0	.20	.20			20	18.37	STR SIL STR CHL W/C CARB.	Qtz - mica Carb. Va Semi-massive Ga, 1-2% Cr, 2% Sp, Tr Tet Mod. Ven BX. Mod. Lim Fe
"	18662	Rock				"	0	.70	.70			10	2005	STR SIL STR CARB STR CHL	Qtz-Carb. Vein in fault zone Massive Ga, 1-2% Cr Tr malachite, 1-2% Tet Tr Sp
"	18663	Rock				"	0	.44	.44			10	7.15	STR SIL	Qtz-Carb vein BX Semi-massive Ga, Tr Sp Tr Cr

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KIMBLE PROPERTY

Samplers B. Malhotra ³¹⁴

Date	Sample No.	Type	Location				Sample Data			Assay Data			Alteration	Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Alb			Ag
July 23/72	18664	Rock				Kimble Cr. Grid		0	2m	2m		10	14.4ppm	SV SEP 314	STR line Fe + Py rich sed. unit fossiliferous sed + tuff 35% of Fe Py to semi massive py stringers. Highly altered
"	18665	Rock				"		0	.40	.40		30	11.52ppm	MOD. CHL mod Carb	Qtz Carb vein massive Qz 1-2% Sp Tr 10% SP, 10% Mod. vein Bx. Ankerite STR Lime Fe along vein + pyrite rich tuffs + sands
"	18666	Rock				"		0	.7	.7m		20	.4ppm	STR CARB	Bx Carb. Vein Black hematite 2-3%
"	18667	Rock				"		0	.35	.35		10	2.3ppm	MOD. CHL STR SIL	Qtz vein in vein Bx
"	18668	Rock				"		0	.20	.20		20	13.5ppm	STR CHL STR SIL	TR Sp py Qtz Carb. Vein Lime Pyrichard Small Tr -> 10% Ca Tr Sp. Coy same as above
"	18669	Rock				"		0	.20	.20		20	27ppm	STR CHL STR SIL	

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIPPIE PROPERTY

Sampler B Malahoff (4) (4)

Date	Sample No.	Type	Location				Sample Data			Assay Data			Alteration	Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Ag			Ag
Jul 1977	18670	Rock				DE JUNG		0	.10	.10		10	.3ppm		Dark grey to black fine grained Arg. 1-3% fine Py bands 1-2cm wide
"	18671	Rock				"		0	.5m	.5m		10	60.1ppm	Wkch int. Arg.	Light green Arg. 1-1% P
"	18672	Rock				"		0	.5m	.5m		20	.2ppm	Mod. SIL	STR Lim. Fr dark grey to black 1-1% P 1-1% P
"	18673	Rock				"		0	1m	1m		20	.4ppm		1-1% P 1-1% P 1-1% P
"	18674	Rock				Knippie Class. Rd.		0	1m	1m		40	.1ppm		Dark grey to black Argillitic to silty 1-1% P
"	18675	Rock				"		0	1m	1m		30	.2ppm		Dark grey, black 1-1% P 1-1% P WK Lim.

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIDDLE LAKE

P.1 of 5

Sampler B. McDONOVAN

Date	Sample No.	Type	Location				Sample Data				Assay Data			Alteration	Sample Description
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu	Alt	Ag (ppm)		
July 27/93	13701	Grab		0103	145E							30	3.2ppm		Gossanous zephyritic andesite with sericite alt'n and 2-3% fine py (OSP)
	13702			0103	220E							10	4.1ppm		15-20cm wide white (massive) quartz vein in alt - vein becomes gossanous to (gr) south
	13703			0475	245E							110	8ppm		10cm wide pinching and swelling quartz in minor chlorite and to galena - long vein best contact
	13704			0655	240E							10	17ppm		Along strike of #13703 0.5-1% galena, to Tet, to spy (?) within 0.1m wide vein.
	13705			0535	218E							10	7ppm		0.3m wide pinching and swelling quartz vein south of blowout. To go ross to Tet.

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIPPLE LAKE

P. 2 of 5

Sampler B. McDougall

Date	Sample No.	Type	Location			Sample Data			Assay Data			Sample Description		
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu		Au (ppm)	Ag (ppm)
	18706	Grab		0555	190E						nd	6.1ppm		0.1 m wide qtz w chl, some goss (siderite?)
	18707			0455	138E						nd	.7ppm		Highly siliceous quartz altered andesite flow (?) P. 15-20%, + spul.
	18703			2955	155E						50	50.17ppm		Sample taken from 0.3m vein in old trend 1-2% spg, 0.5-1% malachite, 1-2% go, + 0.5% Tet, + py
	18709			1005	177E						10	23.1ppm		0.2m wide qtz blowout, minor chl, poss Tet within vein.
	18710			1005	190E						10	16.0ppm		0.25m wide barren qtz vein

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIPPLE LAKE

Sampler B H McDONOUGH P 375

Date	Sample No.	Type	Location			Sample Data			Assay Data			Alteration	Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)	Cu			Ag ppm
July 23/92	18711	Grab		150S	015E						540	2 ppm		0.1m wide discontinuous qtz-carb vein - no sulfide Sample taken from veins close to drill
	18712			158S	030E						50	13.7 ppm		-0.25m pinching vein - massive contains 1-2% Ga, silice and h. qtz and 0.5-1% disc py in a hard matrix.
	18713			150S	037E						280	44.92 g/t		0.3m wide amorphous vein contains 5-8% Ga, 1-2% cpq, 3-5% py with interstitial carb.
	18714			158S	042E						80	21.82 g/t		0.25m wide qtz-carb vein - previous, fractured containing 5-8% Ga, 0.5-1% cpq, h. sph, 1-2% py

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIPPLE LAKE

Sampler B. McDONOUGH P. 495

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
July 23/92	18715	Grab		143S	045E						210	4.00 g/t		- 0.2m pinching and Swelling qtz-vein 3-5% Ga, 1-2% cpq
	18716			153S	105E						80	2.0 ppm		Gossens: qtz-vein alt pyrophytic flow at junction of two lineaments 2-3% py, vein is w. py
	18717			140S	170E						10	.6 ppm		But white qtz-vein mass: convergence of two structures Gossens, to west.
July 24/92	18718			See Regional Map							40	.4 ppm		From Knipple Traverse - Bousier sed's siltstone/ argillite, gossens & 0.5% - 1% py
	18719			"	"						30	.2 ppm		Graphitic argillite (silt- stone) near silt sample KS-002-92 by second stream.

THE
NORTHAIR
GROUP

SAMPLE
DESCRIPTION

Project KNIPPLE LAKE

Sampler B. McDONOUGH 1.5 of 5

Date	Sample No.	Type	Location			Sample Data			Assay Data		Alteration	Sample Description	
			Claim	Northing	Easting	Zone	No.	From (m)	To (m)	Int. (m)			Cu
July 24/92	13720	Grab		See Regional Map							10	1.9 ppm	- From gossanous boulder Near stream at base of cliff. Sample at/d int Flow 1-2% py (to Tot?) Host either a breccia or pyroclastic zone - (Knappe Traverse)
	13721										790	4.1 ppm	- Welded tuff/mudstone Subangular frags - 1.4% or no matrix. O/c is massive. Some frags replaced by py. (Knappe Traverse)
	13722										60	4.1 ppm	- Massive int. bedded Subangular to rounded frags (frags 10-15%) pass. Sed. but o/c is volcanic in appearance. Py replacing some frags and strings 1-2%.

APPENDIX 2
ASSAY RESULTS

CC → Camp.

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: NEWHAWK GOLD MINES LTD.
ADDRESS: 860 - 625 Howe St.
: Vancouver, BC
: V6C 2T6

DATE: AUG 10 1992

REPORT#: 920070 GA
JOB#: 920070

PROJECT#: NONE GIVEN
SAMPLES ARRIVED: AUG 06 1992
REPORT COMPLETED: AUG 10 1992
ANALYSED FOR: Au (FA/AAS) ICP

INVOICE#: 920070 NA
TOTAL SAMPLES: 47
SAMPLE TYPE: 47 ROCK
REJECTS: SAVED

SAMPLES FROM: MR. DAVE VISAGIE
COPY SENT TO: NEWHAWK GOLD MINES LTD.

PREPARED FOR: MR. DAVE VISAGIE

ANALYSED BY: Raymond Chan

SIGNED: _____

Raymond Chan

GENERAL REMARK: SAMPLE SHIPMENT # 1
RESULTS FAXED TO MR. DAVE VISAGIE @ 689-5041.
COPY SENT TO MR. DAVE VISAGIE AT STEWART BC.

REPORT NUMBER: 920070 GA

JOB NUMBER: 920070

NEWHAWK GOLD MINES LTD.

PAGE 1 OF 2

SAMPLE #	Au ppb
18651	90
18652	20
18653	20
18654	10
18655	30
18656	300
18657	910
18658	20
18659	10
18660	40
18661	20
18662	10
18663	10
18664	10
18665	30
18666	20
18667	10
18668	20
18669	20
18670	10
18671	10
18672	20
18673	20
18674	40
18675	30
18701	30
18702	10
18703	110
18704	10
18705	10
18706	nd
18707	nd
18708	50
18709	10
18710	10
18711	540
18712	50
18713	280
18714	80

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

REPORT NUMBER: 920070 GA

JOB NUMBER: 920070

NEWHAWK GOLD MINES LTD.

PAGE 2 OF 2

SAMPLE #	Au
	ppb
18715	210
18716	80
18717	10
18718	40
18719	30
18720	10
18721	290
18722	60

DETECTION LIMIT

nd = none detected

-- = not analysed

5

is = insufficient sample

ASSAY ANALYTICAL REPORT

CLIENT: NEWHAWK GOLD MINES LTD.
ADDRESS: 860 - 625 Howe St.
: Vancouver, BC
: V6C 2T6

DATE: AUG 14 1992

REPORT#: 920070 AA
JOB#: 920070

PROJECT#: NONE GIVEN
SAMPLES ARRIVED: AUG 06 1992
REPORT COMPLETED: AUG 14 1992
ANALYSED FOR: Ag

INVOICE#: 920070 NA
TOTAL SAMPLES: 15
REJECTS/PULPS: 90 DAYS/1 YR
SAMPLE TYPE: 15 ROCK

SAMPLES FROM: MR. DAVE VISAGIE
COPY SENT TO: NEWHAWK GOLD MINES LTD.

PREPARED FOR: MR. DAVE VISAGIE

ANALYSED BY: Raymond Chan

SIGNED: _____

Registered Provincial Assayer

GENERAL REMARK: SAMPLE SHIPMENT # 1
RESULTS FAXED TO MR. DAVE VISAGIE @ 689-5041.
COPY SENT TO MR. DAVE VISAGIE AT STEWART BC.

REPORT NUMBER: 920070 AA

JOB NUMBER: 920070

NEVARK GOLD MINES LTD.

PAGE 1 OF 1

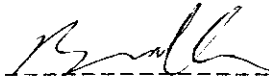
SAMPLE #	Ag oz/st
18651	57.20
18652	15.20
18654	8.42
18656	62.71
18657	15.90
18660	18.25
18661	18.37
18662	20.85
18663	7.15
18665	11.52
18669	2.71
18708	50.17
18713	44.92
18714	21.82
18715	4.00

DETECTION LIMIT

0.01

1 Troy oz/short ton = 34.28 ppm 1 ppm = 0.0001 % ppm = parts per million < = less than

signed: _____



ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 920070 PA

NEWHANK GOLD MINES LTD.

PROJECT: None Given

DATE IN: AUG 06 1992

DATE OUT: AUG 12 1992


ATTENTION: MR. DAVE VISAGIE

Sample Name	Ag	Al	As	*Au	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
18651	>50	0.10	105	90	19	<3	6.05	>1000	<1	<1	11177	6.41	<0.01	0.82	2373	94	>10	6	0.05	>20000	1979	<2	247	<5	<3	>20000
18652	>50	0.18	<3	20	13	<3	0.19	>1000	<1	13	5332	2.59	<0.01	0.07	189	107	>10	<1	0.04	>20000	126	<2	13	<5	<3	>20000
18653	35.0	0.84	<3	20	34	<3	6.05	16.3	11	30	548	5.60	<0.01	1.04	2604	8	0.21	<1	0.08	1315	<2	<2	341	<5	<3	1705
18654	>50	1.05	372	10	31	<3	7.09	10.2	10	23	6886	9.81	<0.01	1.26	2679	46	0.33	5	0.04	639	10	<2	417	<5	<3	2535
18655	2.2	0.49	<3	30	54	<3	6.28	0.8	11	24	50	6.19	<0.01	1.04	2806	<1	0.06	<1	0.04	87	<2	<2	311	<5	<3	189
18656	>50	0.07	<3	300	14	56	0.24	67.4	4	8	4945	1.47	<0.01	0.03	158	10	0.08	1	0.01	>20000	1551	<2	10	<5	<3	373
18657	>50	0.21	<3	910	30	58	3.19	16.9	5	26	4015	5.39	<0.01	0.50	1379	<1	0.12	1	0.04	>20000	175	<2	164	<5	<3	579
18658	2.1	1.30	<3	20	306	<3	1.00	0.5	6	36	63	3.88	<0.01	0.61	568	4	0.07	5	0.06	1519	<2	<2	54	<5	<3	256
18659	12.4	0.28	<3	10	43	<3	1.81	<0.1	3	45	387	1.66	<0.01	0.12	666	7	0.03	4	0.04	1006	<2	<2	125	<5	<3	131
18660	>50	1.56	584	40	<1	<3	5.27	>1000	<1	<1	981	8.37	<0.01	1.55	3046	124	>10	<1	0.03	674	224	<2	162	<5	<3	>20000
18661	>50	0.04	<3	20	1	<3	0.87	403.2	<1	34	1986	1.43	<0.01	0.18	421	21	4.85	<1	0.01	>20000	202	<2	42	<5	<3	>20000
18662	>50	0.74	<3	10	29	<3	4.11	>1000	<1	6	8857	5.76	<0.01	0.84	1503	59	>10	<1	0.13	>20000	231	<2	213	<5	<3	>20000
18663	>50	0.36	<3	10	49	<3	4.30	129.5	14	33	495	3.96	<0.01	0.81	1599	12	1.44	3	0.04	>20000	128	<2	204	<5	<3	13221
18664	1.4	0.52	<3	10	67	<3	1.46	0.3	19	7	62	6.79	<0.01	0.05	714	19	0.15	<1	0.33	1232	<2	<2	56	<5	<3	400
18665	>50	0.47	3	30	43	<3	8.32	>1000	<1	3	3601	5.75	<0.01	1.06	2705	68	>10	5	0.15	>20000	51	<2	381	<5	<3	>20000
18666	0.4	0.22	<3	20	38	<3	>10	9.4	9	4	39	>10	<0.01	0.11	8323	37	0.18	<1	0.03	257	<2	<2	364	<5	<3	1345
18667	2.8	0.13	<3	10	50	<3	2.58	4.0	4	46	84	2.53	<0.01	0.36	1386	18	0.09	<1	0.03	639	2	<2	119	<5	<3	439
18668	13.5	0.36	604	20	34	<3	7.58	59.5	12	24	106	5.36	<0.01	1.10	2913	5	0.90	<1	0.12	1760	<2	<2	410	<5	<3	8195
18669	>50	0.38	665	20	20	<3	1.09	657.3	<1	46	274	2.42	<0.01	0.27	590	36	>10	2	0.06	>20000	85	<2	72	<5	<3	>20000
18670	0.3	3.38	<3	10	20	<3	2.78	5.8	3	5	28	9.06	<0.01	2.08	517	61	0.19	23	0.05	222	<2	<2	107	<5	<3	821
18671	<0.1	1.51	<3	10	22	<3	6.74	0.3	8	9	11	6.10	<0.01	0.59	2134	14	0.08	5	0.39	129	<2	<2	240	<5	<3	200
18672	0.2	0.90	<3	20	37	7	0.45	1.9	2	29	15	4.14	<0.01	0.47	383	32	0.18	6	0.07	79	<2	<2	31	<5	<3	1060
18673	0.4	1.30	<3	20	118	<3	0.24	<0.1	3	14	10	4.90	<0.01	0.68	241	12	0.10	7	0.13	56	<2	<2	17	<5	<3	70
18674	0.1	3.15	<3	40	122	<3	1.16	<0.1	24	105	72	6.30	<0.01	2.09	715	3	0.97	131	0.17	<2	<2	<2	106	<5	<3	180
18675	0.2	1.26	94	30	169	<3	3.07	<0.1	47	18	118	4.07	<0.01	1.38	4312	6	0.04	175	0.08	21	<2	<2	262	<5	<3	343
18701	0.3	0.39	<3	30	70	10	0.62	<0.1	9	23	6	3.72	<0.01	0.10	253	16	0.09	5	0.11	60	<2	<2	26	<5	<3	89
18702	<0.1	0.44	<3	10	37	<3	0.24	<0.1	4	52	3	1.38	0.37	0.13	171	4	0.03	<1	0.03	41	<2	<2	16	<5	<3	41
18703	0.8	0.26	<3	110	56	<3	7.17	0.3	8	30	4	4.31	<0.01	0.60	2154	5	0.05	1	0.04	342	<2	<2	347	<5	<3	85
18704	17.0	0.04	<3	10	19	8	0.52	6.4	<1	63	3	0.93	<0.01	0.02	310	6	0.11	3	<0.01	7693	5	<2	14	<5	<3	757
18705	0.7	0.15	<3	10	21	<3	0.05	0.2	5	58	4	0.66	0.79	0.03	86	26	0.04	3	0.01	89	<2	<2	3	<5	<3	44
18706	<0.1	0.12	<3	<5	4	<3	0.36	<0.1	1	69	2	0.97	0.26	0.08	201	4	0.03	3	<0.01	29	<2	<2	27	<5	<3	18
18707	0.7	0.58	<3	<5	66	<3	0.33	<0.1	2	15	4	4.09	<0.01	0.09	145	22	0.08	<1	0.12	31	<2	<2	14	<5	<3	30
18708	>50	0.37	>2000	50	42	137	1.05	85.5	6	49	>20000	4.56	<0.01	0.15	534	9	1.02	2	0.08	11903	>2000	<2	63	<5	<3	8999
18709	23.1	0.17	14	10	32	<3	0.52	1.3	1	52	301	1.55	<0.01	0.04	504	8	0.03	2	0.01	114	105	<2	9	<5	<3	100
18710	16.0	0.27	1916	10	47	<3	1.52	<0.1	1	61	86	1.49	<0.01	0.10	954	3	0.04	4	0.01	45	33	<2	82	<5	<3	50
18711	0.2	0.42	<3	540	60	4	>10	<0.1	3	10	15	6.23	<0.01	1.64	7454	2	<0.01	<1	0.02	<2	<2	<2	1273	<5	<3	32
18712	13.7	0.07	<3	50	5	<3	>10	1.3	2	21	42	>10	<0.01	2.81	4301	<1	0.12	<1	0.03	5033	<2	<2	621	<5	<3	539
18713	>50	0.17	463	280	25	<3	4.33	>1000	<1	<1	8234	4.89	<0.01	0.84	1342	104	>10	<1	0.06	>20000	576	<2	170	<5	<3	>20000
18714	>50	0.07	1931	80	13	3	4.38	106.1	2	20	7055	4.98	<0.01	0.80	1637	9	1.94	1	0.03	>20000	213	<2	221	<5	<3	17204

Minimum Detection 0.1 0.01 3 5 1 3 0.01 0.1 1 1 1 0.01 0.01 0.01 1 1 0.01 1 0.01 2 2 2 1 5 3 1
 Maximum Detection 50.0 10.00 2000 10000 1000 1000 10.00 1000.0 20000 1000 20000 10.00 10.00 10.00 20000 1000 10.00 20000 10.00 20000 2000 1000 10000 100 1000 20000
 < - Less Than Minimum > - Greater Than Maximum is - Insufficient Sample ns - No Sample *Au Analysis Done By Fire Assay Concentration / AAS Finish.

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: 

REPORT #: 920070 PA

NEWHAWK GOLD MINES LTD.

PROJECT: None Given

DATE IN: AUG 06 1992

DATE OUT: AUG 12 1992

ATTENTION: MR. DAVE VISA61E

PAGE 2 OF 2

Sample Name	Ag	Al	As	*Au	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn	
	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
18715	>50	0.41	<3	210	13	9	1.53	18.0	5	40	6137	2.95	<0.01	0.37	723	<1	0.26	6	0.05	>20000	109	<2	87	<5	<3	2307	
18716	2.0	0.84	<3	80	10	<3	1.43	<0.1	35	16	122	>10	<0.01	0.30	696	29	0.23	8	0.15	1288	<2	<2	25	<5	<3	150	
18717	0.6	0.14	<3	10	53	<3	0.09	0.8	1	51	22	0.78	0.17	0.03	147	<1	0.02	5	0.01	293	<2	<2	5	<5	<3	58	
18718	0.4	3.09	<3	40	99	<3	0.09	<0.1	30	80	79	7.22	<0.01	1.67	4497	8	0.05	168	0.09	34	<2	<2	23	<5	<3	253	
18719	0.2	1.56	<3	30	87	10	0.06	<0.1	14	32	34	4.62	<0.01	0.98	296	4	0.07	41	0.05	31	<2	<2	7	<5	<3	95	
18720	0.1	0.21	36	10	115	<3	0.04	<0.1	<1	23	3	1.61	0.21	0.02	92	3	0.04	1	0.03	69	<2	<2	10	<5	<3	65	
18721	<0.1	2.02	<3	290	47	<3	0.30	<0.1	34	22	19	7.36	<0.01	0.84	2499	18	0.02	17	0.06	19	<2	<2	16	<5	<3	116	
18722	<0.1	3.17	<3	60	71	<3	0.27	<0.1	75	20	19	9.72	<0.01	0.95	2188	30	0.10	27	0.14	<2	<2	<2	12	<5	<3	77	
Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1	
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000	
< - Less Than Minimum	> - Greater Than Maximum																										
				is - Insufficient Sample				ns - No Sample				*Au Analysis Done By Fire Assay Concentration / AAS Finish.															

GEOCHEMICAL ANALYTICAL REPORT

CC -> Camp.

CLIENT: **NEWHAWK GOLD MINES LTD.**
ADDRESS: 860 - 625 Howe St.
: Vancouver, BC
: V6C 2T6

DATE: **AUG 11 1992**

REPORT#: **920072 GA**
JOB#: **920072**

PROJECT#: **NOEN GIVEN**
SAMPLES ARRIVED: **AUG 08 1992**
REPORT COMPLETED: **AUG 11 1992**
ANALYSED FOR: **Au ICP**

INVOICE#: **920072 NA**
TOTAL SAMPLES: **8**
SAMPLE TYPE: **8 SILT**
REJECTS: **DISCARDED**

SAMPLES FROM: **MR. DAVE VISAGIE**
COPY SENT TO: **NEWHAWK GOLD MINES LTD.**

PREPARED FOR: **MR. DAVE VISAGIE**

ANALYSED BY: **Raymond Chan**

SIGNED: _____

GENERAL REMARK: **SAMPLE SHIPMENT # 1**
RESULTS FAXED TO MR. DAVE VISAGIE @ 689-5041.
COPY SENT TO MR. DAVE VISAGIE AT STEWART BC.

REPORT NUMBER: 020072 GA

JOB NUMBER: 020072

HEVHAWK GOLD MINES LTD.

PAGE 1 OF 1

SAMPLE #	Au ppb
KS-001-92	10
KS-002-92	100
KS-003-92	20
KS-004-92	170
KS-005-92	45
KS-006-92	85
KS-007-92	65
KS-008-92	20

DETECTION LIMIT
nd = none detected

5
-- = not analysed

is = insufficient sample

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 920072 PA NEWHAWK GOLD MINES LTD. PROJECT: None Given DATE IN: AUG 06 1992 DATE OUT: AUG 12 1992 ATTENTION: MR. DAVE VISAGIE PAGE 1 OF 1

Sample Name	Ag	Al	As	*Au	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
KS-001-92	1.3	0.88	8	10	144	16	0.16	3.8	18	20	49	5.94	<0.01	0.43	3315	25	0.02	81	0.09	40	9	<2	23	<5	<3	441
KS-002-92	0.5	0.87	<3	100	139	<3	0.16	<0.1	11	13	25	4.42	<0.01	0.25	1597	15	<0.01	29	0.09	43	12	<2	16	<5	<3	272
KS-003-92	0.4	0.73	<3	20	159	14	0.12	1.5	6	5	13	3.08	<0.01	0.12	2495	17	<0.01	11	0.07	133	13	<2	18	<5	<3	404
KS-004-92	0.3	0.86	<3	170	129	4	0.27	<0.1	9	11	15	3.73	<0.01	0.37	1369	8	<0.01	19	0.12	50	6	<2	24	<5	<3	214
KS-005-92	0.3	0.92	<3	45	110	26	0.14	<0.1	7	17	21	3.43	<0.01	0.33	1127	9	<0.01	33	0.08	47	6	<2	19	<5	<3	183
KS-006-92	0.1	0.93	<3	85	155	12	0.25	<0.1	7	11	13	3.14	<0.01	0.24	1810	11	<0.01	18	0.08	23	16	<2	26	<5	<3	182
KS-007-92	0.1	1.15	<3	65	62	19	0.38	<0.1	12	27	25	4.08	<0.01	0.89	764	5	<0.01	34	0.11	<2	6	<2	26	<5	<3	116
KS-008-92	0.2	1.01	<3	20	63	7	0.23	<0.1	9	27	29	2.14	<0.01	0.54	235	3	<0.01	44	0.07	<2	5	<2	36	<5	<3	98
Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000

< - Less Than Minimum > - Greater Than Maximum is - Insufficient Sample ns - No Sample *Au Analysis Done By Aqua Regia Digestion / Solvent Extraction / AAS.

GEOCHEMICAL ANALYTICAL REPORT

CC → Camp.

CLIENT: NEWHAWK GOLD MINES LTD.
ADDRESS: 860 - 625 Howe St.
: Vancouver, BC
: V6C 2T6

DATE: AUG 11 1992

REPORT#: 920071 GA
JOB#: 920071

PROJECT#: NOEN GIVEN
SAMPLES ARRIVED: AUG 06 1992
REPORT COMPLETED: AUG 11 1992
ANALYSED FOR: Au ICP

INVOICE#: 920071 NA
TOTAL SAMPLES: 95
SAMPLE TYPE: 95 SOIL
REJECTS: DISCARDED

SAMPLES FROM: MR. DAVE VISAGIE
COPY SENT TO: NEWHAWK GOLD MINES LTD.

PREPARED FOR: MR. DAVE VISAGIE

ANALYSED BY: Raymond Chan

SIGNED: 

GENERAL REMARK: SAMPLE SHIPMENT # 1
RESULTS FAXED TO MR. DAVE VISAGIE @ 689-5041.
COPY SENT TO MR. DAVE VISAGIE AT STEWART BC.

REPORT NUMBER: 920071 GA

JOB NUMBER: 920071

NEVRAK GOLD MINES LTD.

PAGE 1 OF 3

SAMPLE #	Au ppb
KR-92-01	20
KR-92-02	15
KR-92-03	170
KR-92-04	20
KR-92-05	10
KR-92-06	105
KR-92-07	155
KR-92-08	50
KR-92-09	35
KR-92-10	140
KR-92-11	15
KR-92-12	15
KR-92-13	170
KR-92-14	70
KR-92-15	15
KR-92-16	15
KR-92-17	40
KR-92-18	25
KR-92-19	25
KR-92-20	55
KR-92-21	50
KR-92-22	30
KR-92-23	60
KR-92-24	140
KR-92-25	30
KR-92-26	75
KR-92-27	55
KR-92-28	25
KR-92-29	15
KR-92-30	30
KR-92-31	55
KR-92-32	30
KR-92-33	50
KR-92-34	125
KR-92-35	25
KR-92-36	20
KR-92-37	165
KR-92-38	120
KR-92-39	15

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

REPORT NUMBER: 920071 GA

JOB NUMBER: 920071

NEVADA GOLD MINES LTD.

PAGE 2 OF 3

SAMPLE #	Au ppb
KR-92-40	5
KR-92-41	15
KR-92-42	25
KR-92-43	30
KR-92-44	40
KR-92-45	40
KR-92-46	10
KR-92-47	5
KR-92-48	45
KR-92-49	45
KR-92-50	85
KR-92-51	35
KR-92-52	15
KR-92-53	145
KR-92-54	145
KR-92-55	55
KR-92-56	30
KR-92-57	55
KR-92-58	10
KR-92-59	30
KR-92-60	10
KR-92-61	20
KR-92-62	50
KR-92-63	55
KR-92-64	40
KR-92-65	30
KR-92-66	65
KR-92-67	20
KR-92-68	75
KR-92-69	20
KR-92-70	10
KR-92-71	10
KR-92-72	20
KR-92-73	35
KR-92-74	25
KR-92-75	10
KR-92-76	10
KR-92-77	55
KR-92-78	10

DETECTION LIMIT 5

nd = none detected

-- = not analysed

ls = insufficient sample

REPORT NUMBER: 920071 GA

JOB NUMBER: 920071

NEVADA GOLD MINES LTD.

PAGE 3 OF 3

SAMPLE #	Au ppb
KR-92-79	10
KR-92-80	5
KR-92-81	100
KR-92-82	15
KR-92-83	60
KR-92-84	75
KR-92-85	5
KR-92-86	30
KR-92-87	15
KR-92-88	5
KR-92-89	10
KR-92-90	25
KR-92-91	30
KR-92-92	15
KR-92-93	20
KR-92-94	15
KR-92-95	20

DETECTION LIMIT

nd = none detected

-- = not analysed

ls = insufficient sample

5

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 920071 PA

NEWHAWK GOLD MINES LTD.

PROJECT: None Given

DATE IN: AUG 06 1992

DATE OUT: AUG 12 1992

ATTENTION: MR. DAVE VISAGIE

PAGE 1 OF 3

Sample Name	Ag	Al	As	*Au	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
KR-92-01	0.3	2.46	<3	20	423	<3	3.67	<0.1	10	7	15	6.94	<0.01	1.04	1667	7	<0.01	12	0.38	6	<2	<2	254	<5	<3	232
KR-92-02	0.2	2.23	<3	15	397	<3	4.15	<0.1	11	7	15	6.33	<0.01	1.00	1424	8	0.01	25	0.36	<2	<2	<2	239	<5	<3	255
KR-92-03	0.1	1.96	<3	170	133	<3	3.56	<0.1	11	8	18	5.69	<0.01	0.96	1227	8	0.01	29	0.26	<2	<2	<2	143	<5	<3	244
KR-92-04	0.1	1.86	<3	20	167	<3	2.57	<0.1	10	8	15	6.09	<0.01	0.81	1295	13	<0.01	21	0.31	<2	<2	<2	138	<5	<3	234
KR-92-05	0.2	1.58	<3	10	120	<3	4.15	0.6	11	13	35	4.85	<0.01	0.94	1038	19	0.03	54	0.16	<2	<2	<2	132	<5	<3	357
KR-92-06	0.2	1.40	<3	105	107	<3	5.33	2.7	11	17	42	4.73	<0.01	0.96	924	21	0.03	75	0.11	<2	<2	<2	151	<5	<3	454
KR-92-07	0.1	1.24	<3	155	268	<3	1.90	2.8	19	12	40	4.49	<0.01	0.85	1293	16	0.04	73	0.14	4	<2	<2	61	<5	<3	479
KR-92-08	1.1	1.40	<3	50	112	6	3.09	<0.1	14	30	48	5.04	<0.01	1.04	1046	13	0.05	63	0.12	<2	<2	<2	100	<5	<3	293
KR-92-09	0.3	2.06	<3	35	123	<3	1.99	<0.1	26	63	64	5.63	<0.01	1.46	1432	6	0.06	123	0.11	<2	<2	<2	126	<5	<3	257
KR-92-10	0.3	1.86	<3	140	113	<3	1.14	<0.1	25	59	61	5.40	<0.01	1.29	1246	7	0.07	123	0.11	<2	<2	<2	81	<5	<3	254
KR-92-11	0.3	1.72	<3	15	104	<3	1.02	<0.1	21	50	53	5.17	<0.01	1.15	1000	6	0.07	97	0.13	<2	<2	<2	64	<5	<3	235
KR-92-12	0.3	2.13	<3	15	130	<3	1.14	<0.1	24	68	64	5.48	<0.01	1.35	913	7	0.05	115	0.13	<2	<2	<2	76	<5	<3	251
KR-92-13	0.3	1.37	<3	170	121	<3	0.69	1.9	16	22	34	5.10	<0.01	0.87	1084	8	0.04	52	0.15	<2	<2	<2	41	<5	<3	333
KR-92-14	0.4	1.53	<3	70	126	<3	0.96	3.2	16	21	58	5.23	<0.01	0.94	1139	16	0.06	75	0.13	<2	<2	<2	50	<5	<3	435
KR-92-15	0.4	1.62	<3	15	165	3	3.16	6.0	18	28	67	4.76	<0.01	1.12	1451	14	0.05	103	0.11	<2	<2	<2	83	<5	<3	658
KR-92-16	0.3	2.41	<3	15	99	6	3.45	5.1	14	28	48	4.46	<0.01	1.03	1172	11	0.04	89	0.11	<2	<2	<2	86	<5	<3	554
KR-92-17	0.1	1.46	<3	40	113	<3	0.98	1.9	16	28	41	5.07	<0.01	0.92	968	11	0.06	77	0.13	<2	<2	<2	46	<5	<3	362
KR-92-18	0.6	1.40	<3	25	92	<3	1.06	1.0	16	28	38	4.83	<0.01	0.92	921	9	0.05	65	0.13	<2	<2	<2	47	<5	<3	316
KR-92-19	0.2	1.56	<3	25	103	<3	0.60	1.8	25	42	62	5.71	<0.01	0.99	1267	13	0.07	106	0.14	<2	<2	<2	43	<5	<3	384
KR-92-20	<0.1	2.20	<3	55	162	<3	1.75	<0.1	38	83	88	5.86	<0.01	1.48	1200	5	0.05	166	0.12	<2	<2	<2	114	<5	<3	321
KR-92-21	0.1	1.67	<3	50	151	12	0.56	2.3	25	35	58	6.11	<0.01	0.98	1548	11	0.05	91	0.16	4	<2	<2	46	<5	<3	401
KR-92-22	<0.1	1.76	<3	30	255	<3	1.77	1.5	15	20	35	5.27	<0.01	0.98	1090	17	0.03	58	0.15	<2	<2	<2	76	<5	<3	333
KR-92-23	<0.1	1.60	<3	60	199	3	0.83	1.1	23	29	54	5.55	<0.01	0.96	1321	12	0.05	82	0.15	17	<2	<2	56	<5	<3	371
KR-92-24	<0.1	1.77	<3	140	146	<3	0.73	1.7	29	49	68	5.96	<0.01	1.08	1254	11	0.08	117	0.14	<2	<2	<2	63	<5	<3	422
KR-92-25	0.2	2.06	<3	30	302	<3	1.06	0.2	46	72	98	6.39	<0.01	1.33	1418	9	0.07	174	0.16	19	<2	<2	83	<5	<3	440
KR-92-26	<0.1	1.86	<3	75	191	<3	1.12	<0.1	29	63	64	5.49	<0.01	1.25	1118	6	0.05	129	0.12	<2	<2	<2	89	<5	<3	284
KR-92-27	<0.1	1.95	<3	55	168	<3	0.98	<0.1	33	67	68	5.64	<0.01	1.34	1190	6	0.06	143	0.13	<2	<2	<2	78	<5	<3	262
KR-92-28	0.4	1.63	<3	25	252	<3	0.97	2.0	41	52	82	5.92	<0.01	1.07	2598	9	0.08	160	0.13	<2	<2	<2	102	<5	<3	550
KR-92-29	0.3	2.01	<3	15	130	<3	0.63	<0.1	29	67	76	5.89	<0.01	1.39	1231	6	0.05	138	0.13	<2	<2	<2	64	<5	<3	273
KR-92-30	0.2	1.73	<3	30	120	<3	0.44	<0.1	33	56	83	5.84	<0.01	1.06	1144	9	0.09	136	0.12	<2	<2	<2	46	<5	<3	470
KR-92-31	0.1	1.90	<3	55	88	7	0.46	<0.1	39	64	76	6.36	<0.01	1.20	1609	9	0.07	165	0.14	<2	<2	<2	51	<5	<3	362
KR-92-32	0.3	2.23	<3	30	189	6	0.57	2.4	54	78	87	6.95	<0.01	1.26	7368	12	0.03	209	0.14	<2	<2	<2	64	<5	<3	483
KR-92-33	<0.1	1.82	<3	50	65	<3	0.45	<0.1	28	67	54	5.50	<0.01	1.18	778	7	0.05	123	0.13	<2	<2	<2	44	<5	<3	252
KR-92-34	<0.1	1.95	<3	125	94	<3	0.39	1.7	22	72	58	5.76	<0.01	1.20	702	10	0.07	131	0.13	<2	<2	<2	43	<5	<3	318
KR-92-35	<0.1	1.75	<3	25	71	4	0.40	<0.1	24	62	61	5.85	<0.01	1.09	908	10	0.06	121	0.13	<2	<2	<2	45	<5	<3	276
KR-92-36	<0.1	1.55	<3	20	38	<3	0.22	<0.1	14	59	33	4.76	<0.01	0.99	510	7	0.04	90	0.12	<2	<2	<2	20	<5	<3	154
KR-92-37	<0.1	1.67	<3	165	48	8	0.20	<0.1	13	60	29	4.75	<0.01	0.97	401	6	0.04	86	0.10	<2	<2	<2	19	<5	<3	142
KR-92-38	0.1	2.06	<3	120	73	<3	0.22	<0.1	14	76	41	5.68	<0.01	1.26	523	9	0.06	100	0.10	<2	<2	<2	23	<5	<3	163
KR-92-39	0.2	2.01	<3	15	66	<3	0.33	<0.1	15	76	43	5.88	<0.01	1.28	660	9	0.07	117	0.12	<2	<2	<2	31	<5	<3	186

Minimum Detection 0.1 0.01 3 5 1 3 0.01 0.1 1 1 1 0.01 0.01 0.01 1 1 0.01 1 0.01 2 2 2 1 5 3 1
 Maximum Detection 50.0 10.00 2000 10000 1000 1000 10.00 1000.0 20000 1000 20000 10.00 10.00 10.00 20000 1000 10.00 20000 10.00 20000 2000 1000 10000 100 1000 20000
 (- Less Than Minimum) - Greater Than Maximum is - Insufficient Sample ns - No Sample *Au Analysis Done By Aqua Regia Digestion / Solvent Extraction / AAS.

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 920071 PA

NEWHAWK GOLD MINES LTD.

PROJECT: None Given

DATE IN: AUG 06 1992

DATE OUT: AUG 12 1992

ATTENTION: MR. DAVE VISAGIE

PAGE 2 OF 3

Sample Name	Ag	Al	As	*Au	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
KR-92-40	0.1	1.77	<3	5	66	<3	0.23	<0.1	14	67	41	4.87	<0.01	1.12	461	7	0.08	96	0.10	<2	<2	<2	22	<5	<3	156
KR-92-41	0.1	1.51	<3	15	53	<3	0.29	0.6	21	53	55	5.03	<0.01	0.99	863	8	0.07	105	0.12	<2	<2	<2	34	<5	<3	254
KR-92-42	<0.1	1.41	<3	25	45	<3	0.23	<0.1	16	50	33	4.60	<0.01	0.90	602	8	0.05	74	0.10	<2	<2	<2	22	<5	<3	175
KR-92-43	<0.1	1.36	<3	30	39	<3	0.24	<0.1	12	48	33	4.18	<0.01	0.88	436	5	0.05	73	0.11	<2	<2	<2	23	<5	<3	152
KR-92-44	<0.1	1.55	<3	40	45	<3	0.20	<0.1	12	55	33	4.75	<0.01	0.97	386	8	0.06	88	0.11	<2	<2	<2	21	<5	<3	155
KR-92-45	<0.1	1.56	<3	40	41	<3	0.19	<0.1	16	54	33	4.75	<0.01	0.95	580	6	0.04	76	0.11	<2	<2	<2	18	<5	<3	139
KR-92-46	0.2	1.16	<3	10	56	<3	0.17	0.3	12	32	31	3.64	<0.01	0.61	410	12	0.07	56	0.08	<2	<2	<2	17	<5	<3	167
KR-92-47	0.2	1.24	<3	5	39	<3	0.20	<0.1	15	42	31	4.34	<0.01	0.77	633	7	0.08	65	0.10	<2	7	<2	20	<5	<3	150
KR-92-48	0.1	1.38	<3	45	40	<3	0.25	<0.1	17	49	38	4.50	<0.01	0.87	782	5	0.04	76	0.12	<2	<2	<2	24	<5	<3	150
KR-92-49	0.2	3.22	<3	45	66	<3	0.04	<0.1	26	41	30	6.12	<0.01	0.70	1026	16	0.06	41	0.10	<2	4	<2	9	<5	<3	130
KR-92-50	0.2	1.44	<3	85	80	<3	0.14	<0.1	13	46	58	7.86	<0.01	0.16	795	12	0.13	39	0.09	<2	5	<2	30	<5	<3	67
KR-92-51	<0.1	1.72	<3	35	79	<3	0.24	<0.1	27	42	40	4.64	<0.01	0.76	1387	9	0.03	65	0.12	<2	4	<2	35	<5	<3	150
KR-92-52	<0.1	1.83	<3	15	54	<3	0.08	<0.1	14	38	39	4.79	<0.01	0.53	561	8	0.05	46	0.11	<2	2	<2	14	<5	<3	105
KR-92-53	0.5	1.50	<3	145	93	<3	0.51	0.4	30	19	42	1.66	<0.01	0.25	2311	12	<0.01	41	0.19	<2	10	<2	175	<5	<3	85
KR-92-54	0.4	3.08	<3	145	103	<3	0.09	<0.1	30	49	73	6.29	<0.01	0.99	1586	15	0.03	82	0.09	<2	2	<2	17	<5	<3	220
KR-92-55	0.3	2.82	<3	55	80	<3	0.09	<0.1	27	45	76	6.16	<0.01	0.99	1511	20	0.03	82	0.06	<2	<2	<2	14	<5	<3	241
KR-92-56	0.3	1.93	<3	30	51	<3	0.08	<0.1	11	37	26	5.16	<0.01	0.65	560	15	0.09	41	0.06	<2	4	<2	19	<5	<3	126
KR-92-57	0.1	1.38	<3	55	77	<3	0.28	<0.1	10	22	21	4.12	<0.01	0.55	670	7	0.09	31	0.09	<2	2	<2	36	<5	<3	108
KR-92-58	0.2	1.88	<3	10	44	<3	0.10	<0.1	15	29	27	5.59	<0.01	0.58	978	9	0.07	32	0.11	<2	<2	<2	12	<5	<3	99
KR-92-59	0.2	2.04	<3	30	98	<3	0.28	<0.1	23	31	36	5.19	<0.01	0.72	1351	10	<0.01	62	0.08	<2	<2	<2	45	<5	<3	168
KR-92-60	0.1	0.37	<3	10	23	<3	0.12	<0.1	3	9	12	1.79	0.01	0.16	148	3	0.05	9	0.03	<2	<2	<2	18	<5	<3	26
KR-92-61	0.4	1.59	<3	20	67	<3	0.19	<0.1	192	45	60	>10	<0.01	0.06	19734	15	<0.01	48	0.29	30	3	<2	29	<5	<3	93
KR-92-62	0.5	2.89	<3	50	63	<3	0.07	<0.1	40	53	50	8.49	<0.01	0.77	3272	18	0.08	78	0.11	<2	4	<2	14	<5	<3	239
KR-92-63	0.5	2.71	<3	55	62	<3	0.09	<0.1	15	35	30	5.83	<0.01	0.52	1336	15	0.04	65	0.10	<2	<2	<2	13	<5	<3	186
KR-92-64	0.3	2.28	<3	40	68	<3	0.16	<0.1	33	35	33	7.07	<0.01	0.62	4864	14	0.02	68	0.12	<2	5	<2	19	<5	<3	266
KR-92-65	0.2	1.53	<3	30	109	<3	0.48	<0.1	22	27	34	4.60	<0.01	0.68	1727	6	0.04	51	0.13	<2	<2	<2	42	<5	<3	159
KR-92-66	<0.1	0.59	<3	65	49	<3	0.23	<0.1	7	16	13	2.07	<0.01	0.39	533	4	0.06	19	0.07	<2	<2	<2	18	<5	<3	61
KR-92-67	0.4	1.06	<3	20	77	<3	0.31	<0.1	18	29	32	4.27	<0.01	0.69	973	7	0.06	56	0.11	<2	<2	<2	24	<5	<3	162
KR-92-68	0.2	1.55	<3	75	61	<3	0.29	0.4	21	40	50	5.72	<0.01	0.91	1204	13	0.06	78	0.14	7	<2	<2	27	<5	<3	215
KR-92-69	0.2	1.52	<3	20	65	<3	0.28	1.2	22	44	49	5.43	<0.01	0.97	1252	11	0.03	84	0.13	<2	<2	<2	32	<5	<3	215
KR-92-70	0.1	1.14	<3	10	77	<3	0.31	<0.1	17	20	32	4.57	<0.01	0.64	1578	10	<0.01	42	0.11	<2	3	<2	27	<5	<3	150
KR-92-71	0.3	1.29	<3	10	74	<3	0.32	<0.1	19	32	41	5.06	<0.01	0.83	1260	9	0.01	63	0.14	<2	3	<2	27	<5	<3	189
KR-92-72	<0.1	1.28	<3	20	64	<3	0.28	<0.1	18	36	40	4.76	<0.01	0.86	990	9	0.02	70	0.12	<2	<2	<2	25	<5	<3	181
KR-92-73	<0.1	1.24	<3	35	63	<3	0.30	<0.1	19	30	31	5.04	<0.01	0.82	1217	8	0.02	52	0.13	11	<2	<2	24	<5	<3	147
KR-92-74	<0.1	1.23	<3	25	97	<3	0.34	0.5	19	25	52	5.59	<0.01	0.84	1271	19	0.03	60	0.13	2	<2	<2	26	<5	<3	315
KR-92-75	0.2	1.48	<3	10	119	16	0.56	0.7	22	30	36	6.14	<0.01	0.92	1557	12	0.05	52	0.17	16	20	<2	45	<5	<3	192
KR-92-76	0.2	0.79	<3	10	59	5	0.28	0.1	12	15	16	3.41	<0.01	0.56	836	7	0.07	25	0.10	4	5	<2	19	<5	<3	122
KR-92-77	0.3	1.19	<3	55	80	<3	0.30	<0.1	14	26	29	4.45	<0.01	0.78	996	8	<0.01	47	0.11	<2	<2	<2	24	<5	<3	180
KR-92-78	0.1	1.12	<3	10	70	<3	0.35	<0.1	15	26	25	4.44	<0.01	0.78	941	6	0.01	40	0.12	<2	<2	<2	25	<5	<3	146

Minimum Detection 0.1 0.01 3 5 1 3 0.01 0.1 1 1 1 0.01 0.01 0.01 1 1 0.01 1 0.01 2 2 2 1 5 3 1
 Maximum Detection 50.0 10.00 2000 10000 1000 1000 10.00 1000.0 20000 1000 20000 10.00 10.00 10.00 20000 1000 10.00 20000 10.00 20000 2000 1000 10000 100 1000 20000
 < - Less Than Minimum > - Greater Than Maximum is - Insufficient Sample ns - No Sample *Au Analysis Done By Aqua Regia Digestion / Solvent Extraction / AAS.

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: 

REPORT #: 920071 PA

NEWHAWK GOLD MINES LTD.

PROJECT: None Given

DATE IN: AUG 06 1992

DATE OUT: AUG 12 1992

ATTENTION: MR. DAVE VISAGIE

PAGE 3 OF 3

Sample Name	Ag	Al	As	*Au	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
KR-92-79	0.2	0.99	<3	10	78	<3	0.40	<0.1	13	24	31	3.99	<0.01	0.74	874	6	0.02	52	0.12	<2	7	<2	27	<5	<3	154
KR-92-80	0.2	1.08	<3	5	87	8	0.36	<0.1	14	26	36	4.21	<0.01	0.76	970	6	0.01	55	0.11	<2	3	<2	26	<5	<3	173
KR-92-81	<0.1	0.99	<3	100	68	<3	0.31	<0.1	14	23	25	4.16	<0.01	0.70	981	7	0.02	40	0.11	4	4	<2	23	<5	<3	136
KR-92-82	0.2	1.08	<3	15	85	<3	0.39	<0.1	13	26	33	4.08	<0.01	0.74	986	5	<0.01	47	0.11	<2	<2	<2	28	<5	<3	157
KR-92-83	<0.1	0.95	<3	60	63	8	0.40	<0.1	8	23	22	3.03	<0.01	0.68	438	3	0.01	41	0.10	<2	<2	<2	28	<5	<3	123
KR-92-84	0.2	1.06	<3	75	42	16	0.20	<0.1	9	31	21	4.42	<0.01	0.71	522	7	0.05	47	0.09	<2	4	<2	17	<5	<3	95
KR-92-85	0.1	1.21	<3	5	60	<3	0.31	<0.1	16	28	31	4.62	<0.01	0.84	1007	6	0.01	51	0.11	<2	<2	<2	22	<5	<3	130
KR-92-86	0.2	1.14	<3	30	76	<3	0.35	<0.1	16	27	29	4.42	<0.01	0.81	974	7	0.03	45	0.11	<2	6	<2	25	<5	<3	145
KR-92-87	0.4	1.16	<3	15	73	13	0.33	<0.1	17	27	34	4.69	<0.01	0.81	992	7	0.01	49	0.11	5	3	<2	23	<5	<3	147
KR-92-88	0.2	1.08	<3	5	49	<3	0.28	<0.1	13	28	30	4.23	<0.01	0.79	799	6	0.03	52	0.11	<2	<2	<2	21	<5	<3	141
KR-92-89	0.2	1.06	<3	10	65	<3	0.41	<0.1	13	28	29	4.07	<0.01	0.80	1437	7	0.02	56	0.11	<2	2	<2	31	<5	<3	179
KR-92-90	0.2	1.05	<3	25	77	5	0.39	<0.1	14	29	32	4.15	<0.01	0.79	844	5	0.04	58	0.13	<2	<2	<2	35	<5	<3	190
KR-92-91	0.2	1.09	<3	30	82	<3	0.34	<0.1	15	26	31	4.15	<0.01	0.79	1134	7	0.01	63	0.12	<2	3	<2	27	<5	<3	162
KR-92-92	0.1	1.09	<3	15	63	<3	0.28	<0.1	13	26	27	4.15	<0.01	0.77	680	5	0.01	42	0.09	<2	<2	<2	21	<5	<3	125
KR-92-93	<0.1	1.06	<3	20	58	<3	0.40	<0.1	33	24	48	4.44	<0.01	0.64	2878	8	0.03	116	0.12	<2	<2	<2	35	<5	<3	306
KR-92-94	0.1	1.11	<3	15	89	<3	0.29	0.2	14	25	34	4.20	<0.01	0.77	980	8	0.02	55	0.11	<2	<2	<2	25	<5	<3	161
KR-92-95	0.2	1.08	<3	20	58	<3	0.25	<0.1	16	27	34	4.63	<0.01	0.79	963	7	0.01	56	0.11	<2	<2	<2	21	<5	<3	157
Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000

< - Less Than Minimum > - Greater Than Maximum is - Insufficient Sample ns - No Sample *Au Analysis Done By Aqua Regia Digestion / Solvent Extraction / AAS.



LEGEND

- 3 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 (QEP), 4H FELDSPAR-PORPHYRY (PFSP), 4I QUARTZ-FELDSPAR PORPHYRY (QFPF), 4J HORNBLende-FELDSPAR PORPHYRY (PHFB)
- 2 SEDIMENTS AND METASEDIMENTS**
 - 2A UNSUBDIVIDED, 2B ARENITE (ARNT), 2C ARKOSE (ARKS), 2D ARGILLITE (ARGT), 2E GREYWACKE (GRWK), 2F CONGLOMERATE (CONG), 2G CHERT (CERT), 2H LIMESTONE (LIME), 2I SILTSTONE (SILT)
- 1 VOLCANICS AND METAVOLCANICS**
 - 1A UNSUBDIVIDED, 1B MASSIVE ANHYDROUS ALKALIC FLWS (ANFL), 1C PORPHYRYC FLWS (ANFP), 1D PILLOWED FLWS/PILLOW BRECCIA (ANPL), 1E TUFF (ANFT), 1F LAPILLI TUFF (ANLT), 1G TUFF-BRECCIA (ANBX), 1H CRYSTAL TUFF (ANXT), 1I PORPHYRY (ANPP), 1J VOLCANICLASTIC-LAHAR (ANVL)

ALTERATION

- | | |
|------|----------------------------------|
| ANK | ANKERITE |
| CA | CARBONATE ALTERATION |
| CHL | CHLORITIZATION; CHLORITE |
| CL | CLAY |
| KSP | POTASSIC ALTERATION |
| PROP | PROPHYLYTIC ALTERATION |
| QP | QUARTZ-PYRITE (QSPAR) ALTERATION |
| SER | SERICITIZATION; SERICITE |
| SID | SIDERITE |
| 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
- MINOR FOLD WITH PLUNGE
- GEOLOGICAL CONTACT (OBSERVED, ASSUMED)
- FAULT (DEFINED, ASSUMED)
- SHEAR ZONE, LINEAMENT
- TRENCH, PIT (OLD)
- DRILL HOLE (VERTICAL, INCLINED)
- QUARTZ STRINGER/QUARTZ VEIN / QUARTZ CARBONATE
- ROCK SAMPLE
- ORE FILE

ABBREVIATIONS

- AU - NATIVE GOLD
- AG - NATIVE SILVER
- ANK - ANKERITE
- ARG - ARGENTITE
- BX - BRECCIA
- CPY - CHALCOPYRITE
- CS/QU - CARBONATE STRINGER/VEIN
- CU - NATIVE COPPER
- DSS - DISSMINATED
- FE - IRON STAIN
- GN - GALENA
- GOSS - GOSSANOUS
- HEM - HEMATITE
- LM - LIMONITE
- MAL - MALACHITE
- MOLY - MOLYBDENITE
- PY - PYRITE
- PO - PYROPHYLITE
- QCS/QUV - QUARTZ-CARBONATE STRINGER/VEIN
- QUV - QUARTZ STRINGER/VEIN
- QVBX - QUARTZ VEIN BRECCIA
- QCVBX - QUARTZ CARBONATE VEIN BRECCIA
- SID - SIDERITE
- SH - SHEARED
- SP - SPHALERITE
- TET - TETRACEDRITE
- TR - TRACE

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

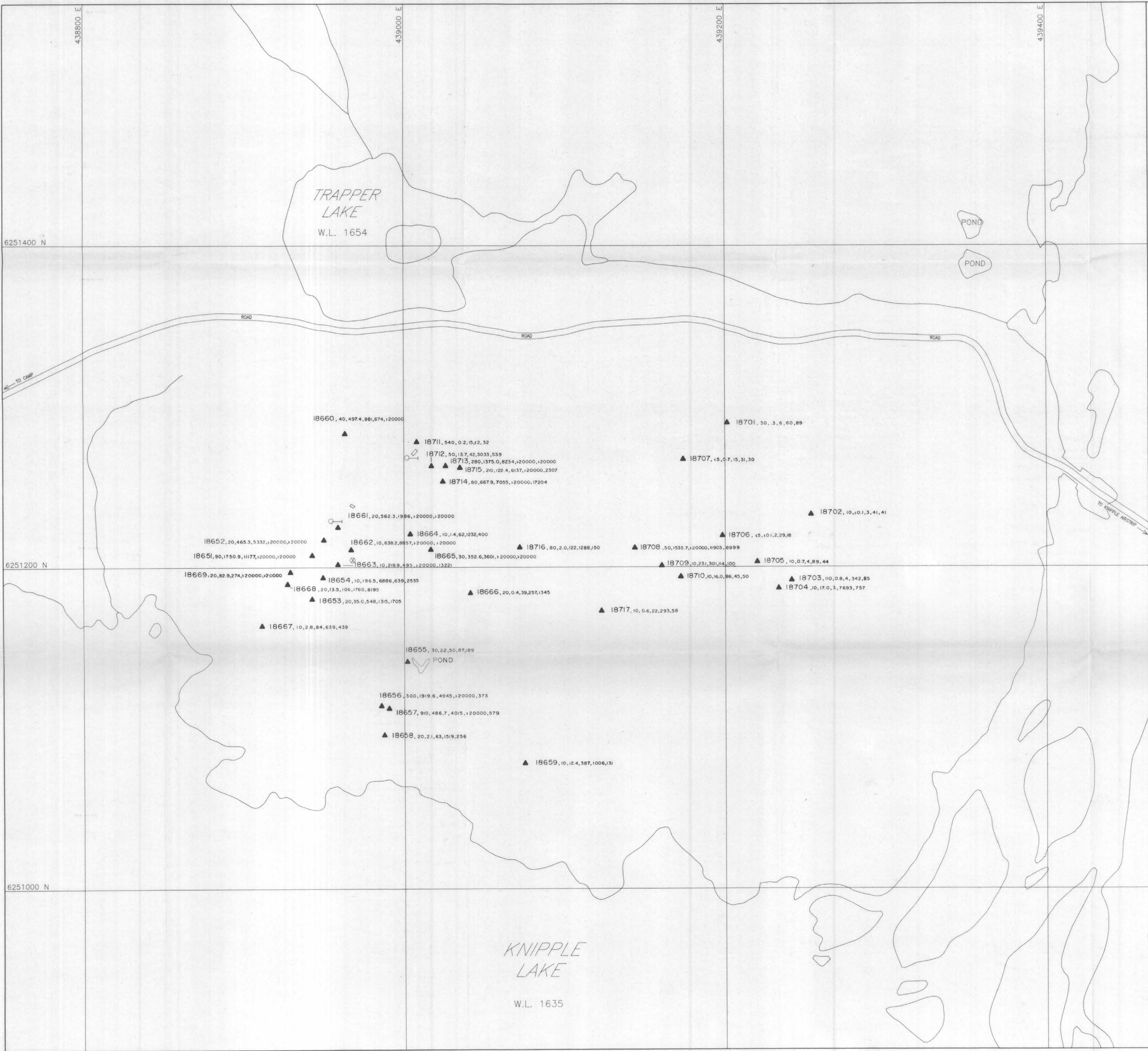
22,832

0 20 40 60 80 100
METRES

NEWHAWK GOLD MINES LTD.
KNIPPLE PROPERTY

GEOLOGY
MINERAL HILL AREA

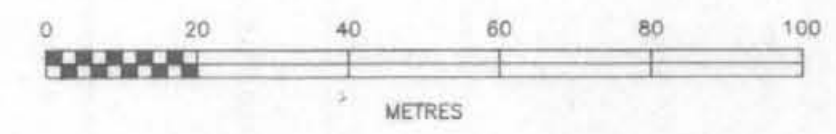
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DATE: OCT 2/1992 NTS 104A/5W
MAP NO: FIGURE NO: 6



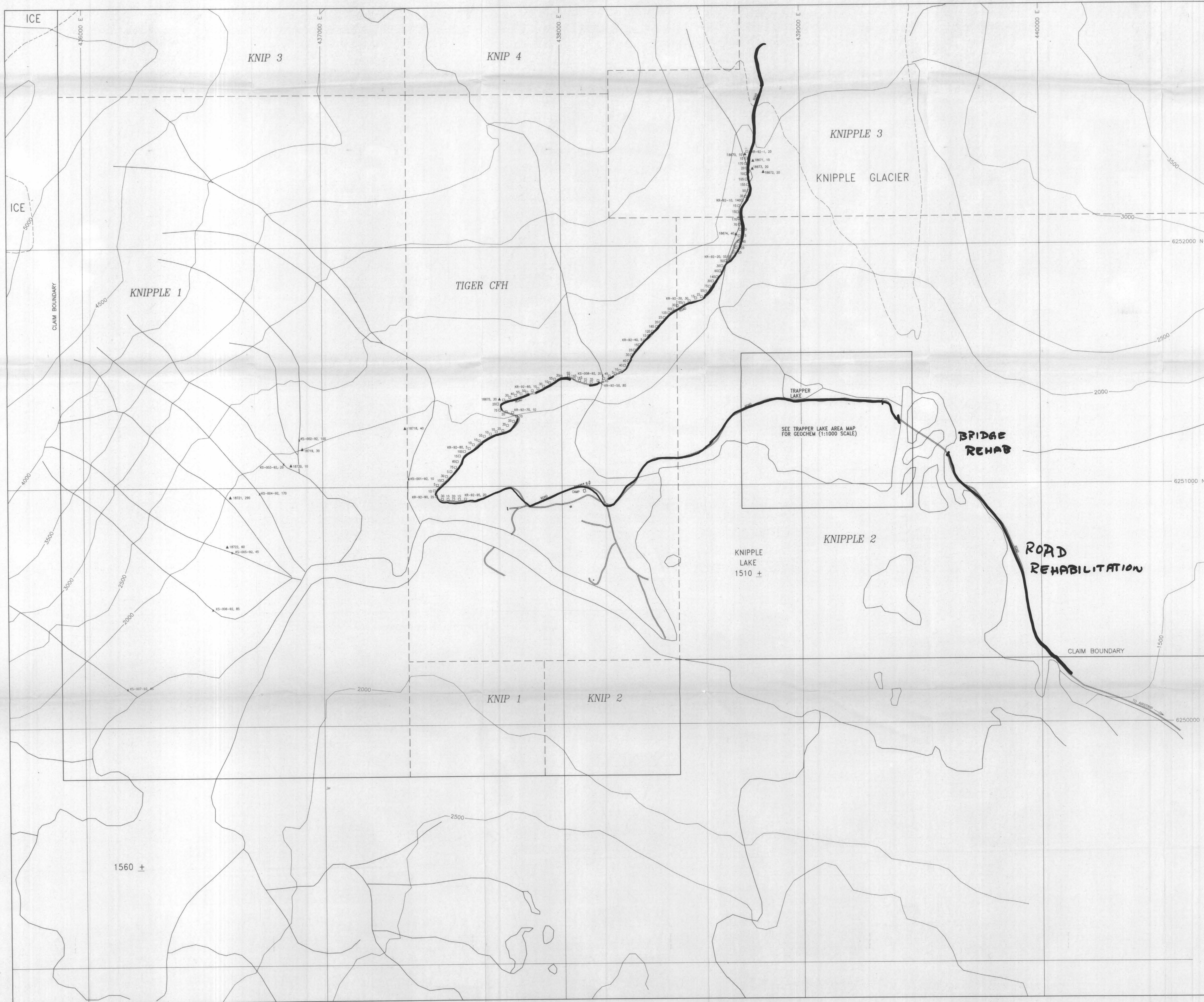
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,832

- LEGEND**
- ▲ ROCK SAMPLE FROM OUTCROP
 - ▲ 18651, 210, 12.2, 325, 60, 55 SAMPLE NO., Au(ppb), Ag(ppm), Cu(ppm), Pb(ppm), Zn(ppm)
 - CORE BOXES
 - ⊗ ORE PILE
 - DRILL HOLE (INCLINED)



NEWHAWK GOLD MINES LTD.	
KNIPPLE PROPERTY	
MINERAL HILL AREA	
ROCK GEOCHEM	
SAMPLE NO's, VALUES FOR Au,Ag,Cu,Pb,Zn	
DRAWN BY: B.M., T.K.	SCALE: 1:1000
DATE: OCT 2/1992	NTS 104A/5W
MAP NO:	FIGURE NO: 7

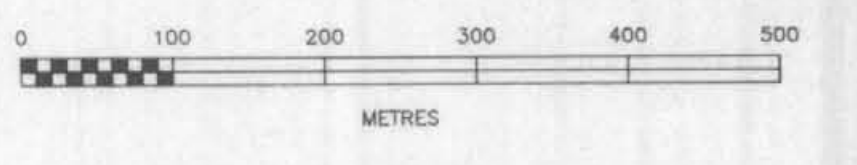


- LEGEND**
- ▲ ROCK CHIP SAMPLE
 - SOIL SAMPLE
 - × SILT SAMPLE
 - ▲ 18771, 290 ▲ ROCK SAMPLE NO., Au (ppb)
 - KR-92-1, 20 □ SOIL SAMPLE NO., Au (ppb)
 - × KR-01-92, 10 × SILT SAMPLE NO., Au (ppb)
 - CLAIM BORDER

ELEVATIONS IN FEET

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,832



NEWHAWK GOLD MINES LTD.
KNIPPLE PROPERTY

SOIL/SILT/ROCK GEOCHEM - Au(ppb)

DRAWN BY: B.M., T.K. SCALE: 1:5000
DATE: MARCH 1993 NTS 104 B/8 & A/5
MAP NO: FIGURE NO: 8



LEGEND

- ▲ ROCK CHIP SAMPLE
- SOIL SAMPLE
- × SILT SAMPLE
- ▲ 18721, 290 ROCK SAMPLE NO. Au (ppb)
- 18721, 290 SOIL SAMPLE NO. Au (ppb)
- × 18721, 290 SILT SAMPLE NO. Au (ppb)
- CLAIM BOUNDARY

ELEVATIONS IN FEET

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,832

NEWHAWK GOLD MINES LTD.
KNIPPLE PROPERTY

SOIL/SILT/ROCK GEOCHEM - Au(ppb)

DRAWN BY: B.M., T.K. SCALE: 1:5000
DATE: MARCH 1993 NTS 104 B/8 & A/5
MAP NO: FIGURE NO: 9