ARIS SUMMARY SHEET

District Geologist, Smithers Off Confidential: 92.08.23

ASSESSMENT REPORT 21821 MINING DIVISION: Skeena

PROPERTY: Sulphurets
LOCATION: LAT 56 30 00 LONG 130 15 00
UTM 09 6262217 423049
NTS 104B09W

CAMP: 050 Stewart Camp

CLAIM(S): Xray 4,Xray 6
OPERATOR(S): Newhawk Gold Mines
AUTHOR(S): Visagie, D.A.
REPORT YEAR: 1991, 64 Pages
COMMODITIES
SEARCHED FOR: Copper,Gold,Silver
KEYWORDS: Jurassic,Andesites,Tuffs,Shear zones,Stockworks,Gold
WORK
DONE: Drilling,Geochemical
DIAD 647.3 m 4 hole(s);BQ
Map(s) - 1; Scale(s) - 1:5000
SAMP 255 sample(s) ;ME
RELATED
REPORTS: 19675
MINFILE: 104B 275,104B 176

DRILLING REPORT

SULPHSIDE 1 GROUP

Skeena Mining Division

Latitude: 56° 30'N
Longitude: 130° 15'W
NTS: 104B/9

OWNER: Newhawk Gold Mines Ltd.
Granduc Mines Limited

OPERATOR: Newhawk Gold Mines Ltd.

REPORT BY: Dave Visagie, B.Sc.
October 15, 1991

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APPENDICES

1.0 INTRODUCTION

The Sulphside 1 Group is located within the "Golden Triangle" area of northwestern British Columbia, 60 kilometres north of the village of Stewart. The Group is part of the larger Sulphurets property which is presently being evaluated by Newhawk Gold Mines Ltd. and Granduc Mines Limited under a joint venture agreement. The Sulphurets property hosts several bulk tonnage gold and/or copper deposits along with high grade gold/silver veins with the Sulphside 1 Group hosting several areas of bulk tonnage Cu-Au potential. It is underlain by Hazelton Group volcanics and volcani-clastics that have been intruded by plutons of sub-alkaline composition. Work on the property dates back to 1935 when copper-molybdenum mineralization was located in the vicinity of the Main Copper Zone. Since then it has had various exploration programs completed on it with the main development occurring in the vicinity of the West Zone, located at Brucejack Lake. As part of the 1991 work program, four BQTK sized drill holes totalling 647.3 metres in length were drilled on two zones; Mitchell, and Alder located on the Sulphside 1 Group. All of the core was split resulting in the taking of 255 core samples. The drilling was completed between July 9th and August 15th, 1991. The results indicate that the Mitchell Zone is highly anomalous in copper and gold. Drilling on the Alder Zone failed to locate any significant mineralized intersections.

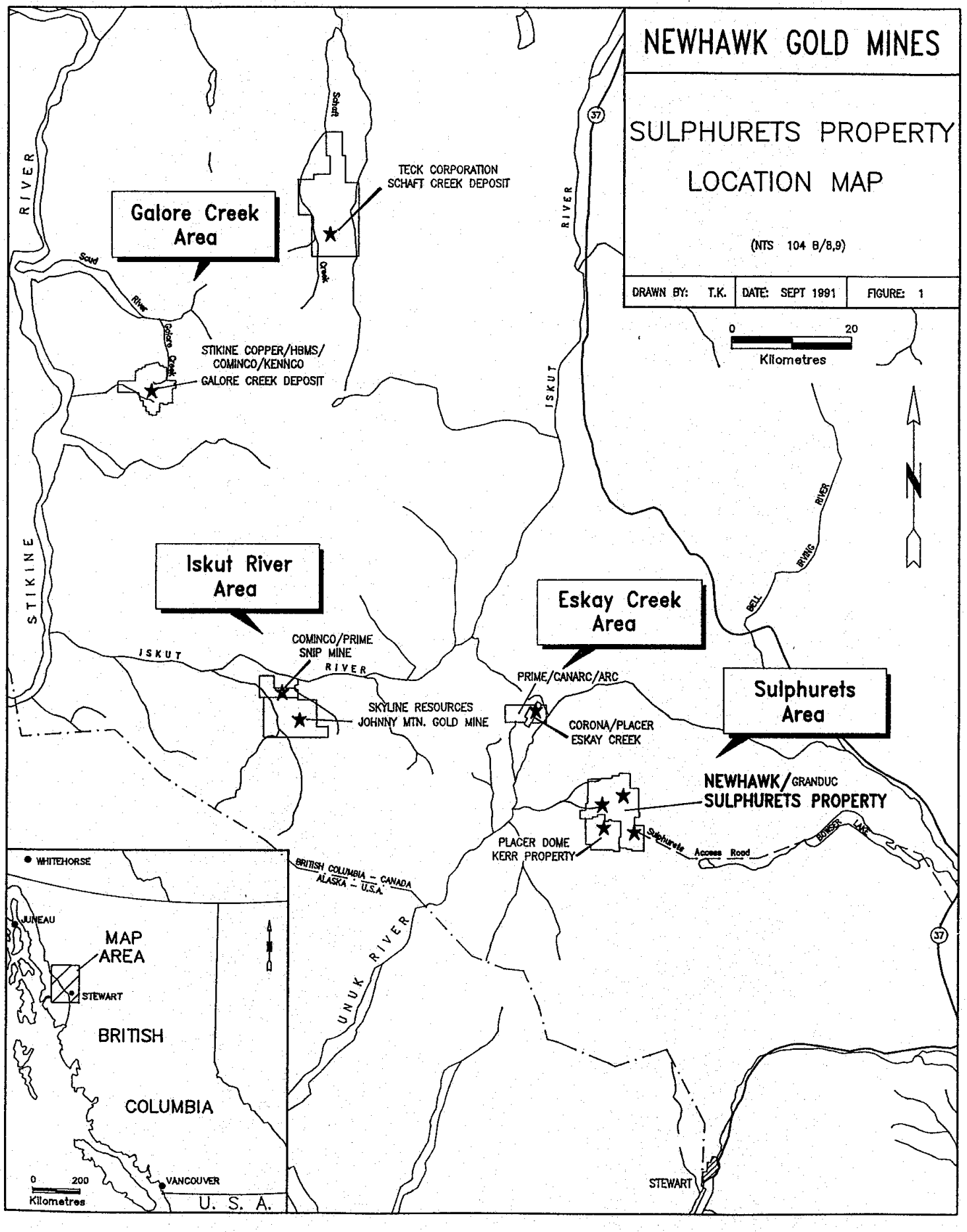
2.0 LOCATION AND ACCESS

The property is located within the Coast Range mountains of northwestern B.C., some 60 kilometres northwest of the village of Stewart approximately 920 kilometres northwest of Vancouver, B.C., being centred at 130° 15'W, 56° 30'N on NTS sheet 104B/9.

Access during the early summer is by helicopter from Stewart. During the later part of the summer, supplies were mobilized to the Tide Lake airstrip 35 kilometres south of the property or to Knipple airstrip 15 kilometres southwest of the property and flown in using a helicopter. During major summer programs, access is by barge along Bowser Lake, then by road along the Bowser River with the final access to the camp being by tracked vehicle 16 kilometres up the Knipple Glacier.

3.0 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 670 metres at the foot of Mitchell Glacier to in excess of 1830 metres on some of the mountain ranges. Extensive ice-fields are common throughout the property.


NEWHAWK GOLD MINES
SULPHURETS PROPERTY
LOCATION MAP
(NTS 104 B/8,9)
DRAWN BY: T.K.
DATE: SEPT 1991
FIGURE: 1
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/GRANDUC
SULPHURETS PROPERTY
PLACER DOME
KERR PROPERTY
Sulphurets Access Road
BOWSER LAKE
STIKINE RIVER
ISKUT RIVER
UNUK RIVER
BRUCE RIVER
IRVING RIVER
BELL
Schaft Creek
Galore Creek
STEWART
WHITEHORSE
JUNEAU
MAP AREA
STEWART
BRITISH COLUMBIA
VANCOUVER
0 200
Kilometres
U. S. A.
BRITISH COLUMBIA - CANADA
ALASKA - U.S.A.

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.

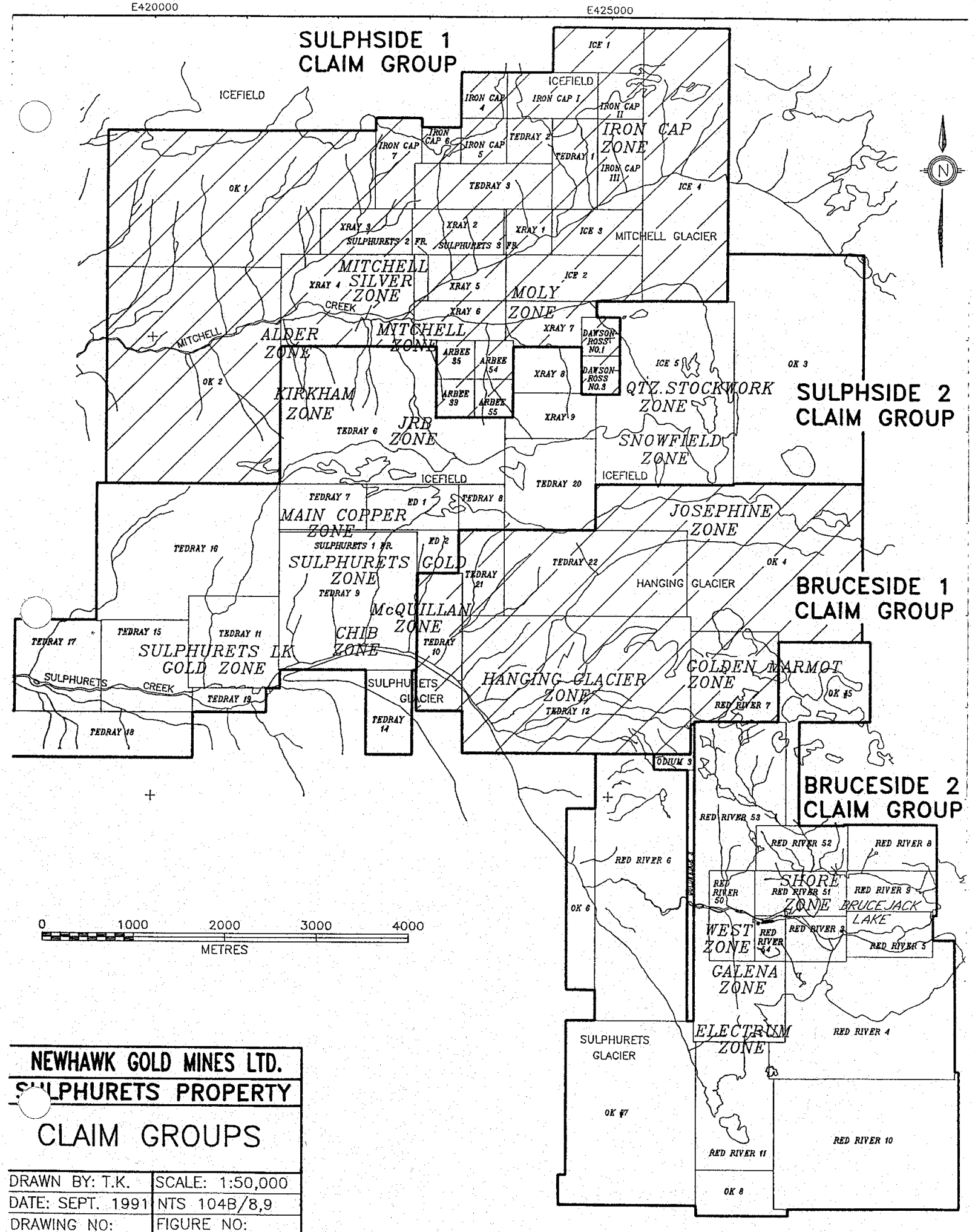
4.0 PROPERTY HISTORY

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 previous 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 with gold and silver values being 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. 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 an extensive program consisting of mapping, trenching, and geochemical sampling that resulted in the discovery of several showings including Snowfields, Shore, West and Galena zones. Esso surrendered its interest in 1985.

In 1985, Newhawk Gold Mines optioned the property from Granduc. Since then it has completed work on of the following zones; West, Shore, Snowfields, Mitchell, Golden Marmot, Sulphurets Gold, and Main Copper zones, and on other lesser known targets.



NEWHAWK GOLD MINES LTD.	
SULPHURETS PROPERTY	
CLAIM GROUPS	
DRAWN BY: T.K.	SCALE: 1:50,000
DATE: SEPT. 1991	NTS 104B/8,9
DRAWING NO:	FIGURE NO:

5.0 CLAIM STATUS

All claims comprising the Sulphurets property are in good standing and occur within the Skeena Mining Division. The property is held under a joint venture agreement between Granduc Mines Limited and Newhawk Gold Mines Ltd. with Newhawk acting as operator. For assessment purposes, the property has been divided into four groups as follows:

Sulphside 1, Sulphside 2, Bruceside 1 and Bruceside 2.

This report documents work done on the Sulphside 1 Group.

SULPHSIDE 1 GROUP

Name of Claim	Title Number	Number of Units
OK #1	5101	18
OK #2	5102	20
Xray 1	1861	1
Xray 2	1862	2
Xray 3	1863	2
Xray 4	1864	6
Xray 5	1865	2
Xray 6	1866	2
Xray 7	1867	2
Tedray No. 1	153	2
Tedray No. 2	154	1
Tedray No. 3	155	3
Iron Cap 1	315	2
Iron Cap II	316	1
Iron Cap III	317	2
Iron Cap 4	2409	1
Iron Cap 5	2410	1
Iron Cap 6	2584	2
Iron Cap 7	2585	2
Ice 1	2411	2
Ice 2	2412	3
Ice 3	2647	2
Ice 4	3111	12
Arbee #35	19124	1
Arbee #39	19128	1
Arbee #54	19143	1
Arbee #55	19144	1
Dawson-Ross No. 1	19887	1
Dawson-Ross No. 3	19889	1
Sulphurets 2 Fr.	2583	1
Sulphurets 3 Fr.	2648	1

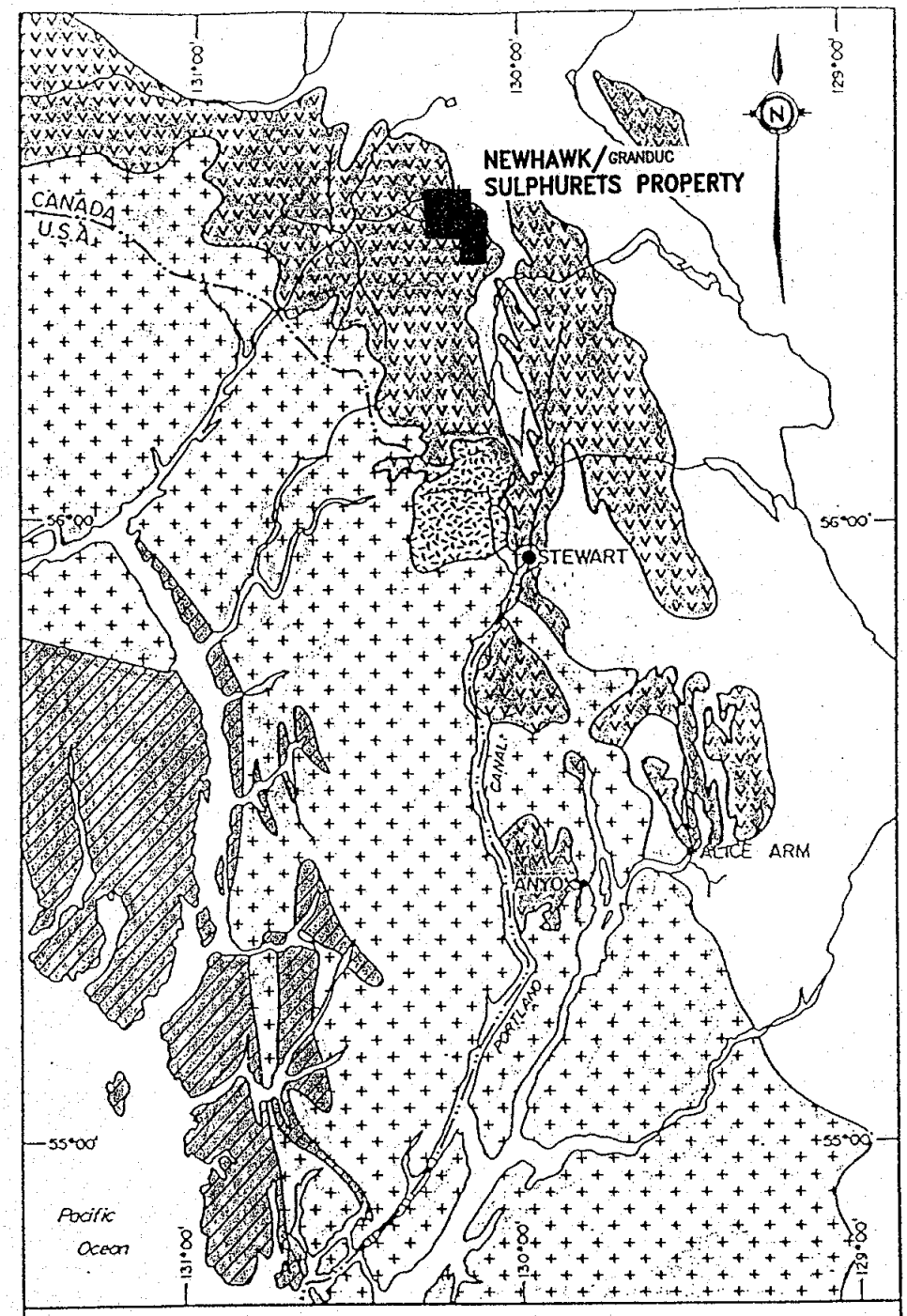
6.0 REGIONAL GEOLOGY

The Sulphurets property is 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 the 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. 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, sillicification 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.



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

20 10 0 20 40 60 kilometres

Figure 3 (after Dykes et al, 1988)

7.0 1991 WORK PROGRAM

As part of the evaluation of the Sulphside 1 group, four BQTK drill holes totalling 647.3 metres were drilled. The drilling was completed by F. Boisvenu Drilling, Delta, B.C. using a JKS 300 drill. Newhawk's camp at Brucejack Lake was used for housing the crew. The mobilization of the crew and drill to the sites of interest was completed using a chartered helicopter from Vancouver Island Helicopters. Climactic conditions resulted in additional drill moving and mobilization time. All assaying was completed by Eco-Tech Laboratories, Kamloops, B.C.

7.1 Drilling

Throughout the length of the drill program two ten hour shifts were employed daily to complete the holes. All sites were prepared by Boisvenu's crews. Upon completion of the drilling the collar was surveyed by Newhawk personnel.

The core was flown daily to the Brucejack campsite to be logged and split. In addition all samples were crushed and pulverized on site prior to being sent out for analysis. The drill core is presently stored at the Brucejack campsite. All drill logs are located in Appendix 1 while the sample results are listed in Appendix 2.

7.2 Assaying

All drill core was assayed for gold by fire assay using a one assay ton subsample. Selected core was either assayed or geochemed for copper. In addition, all of the core was sampled by Inductively Coupled Plasma (I.C.P.). The following is an outline of the procedure used for the preparation and analysis of the samples:

> Samples dried (if necessary), crushed or sieved to pulp size and pulverized to approximately -150 mesh, then rolled to ensure a homogenous sample.
>
> For the 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 ml with demineralized water and analyzed. The leach is partial for Al, B, Ba, Cr, Fe, K, Mg, Mn, Na, Sb, Ti, U, and W.
>
> For gold analysis a one assay ton is preconcentrated by conventional fire assay. The resulting Ag prill is digested in 3 ml 30% HNO_3, anything insoluble is dissolved using 3 ml concentrated HCl. The resulting solution is diluted to 10 ml and analyzed by atomic absorption. Each set of forty samples has one random duplicate and a certified assay standard.

Any samples with a greater than one gram per tonne are re-run automatically to verify the first set of results and to determine if a nugget effect exists.

Samples having gold values exceeding five grams per tonne are normally re-cut from the reject and screened for "metallics".

For copper geochemistry a 0.500 gram sample is digested in 20 ml HNO_3 for 20 minutes or until all NO_3 fumes have disappeared. The digestion is then cooled, 10 ml HCl are added and digested for 30 minutes The digestion is again cooled and another 50 ml HCl are added and further digested for one hour. When this digestion has cooled to room temperature it is bulked to 200 ml mixed, centrifuged and analyzed by atomic absorption.

8.0 DRILL RESULTS

Two zones of interest, the Mitchell and Alder, were drilled on the Sulphurets 1 Group during the 1991 field season.

8.1 Mitchell

Mapping and sampling showed an extensive zone of quartz-sericite-pyrite-chlorite altered andesitic tuffs to host an extensive gold-copper in rock anomaly. The anomaly, as defined by the 0.020 opt Au and 0.10% Cu contour, is at least 1.2 kilometre long x 300 metres wide, with a vertical extent of in excess of 200 metres. It is open along strike. The hosting andesitic tuffs have extensive quartz vein stockwork in which pyrite and minor chalcopyrite occur along with minor molybdenite.

Three holes totalling 498.5 metres were located so as to test the zone. Holes S91-386 and 387 were spotted to test the eastern portion of the zone, while hole S91-394 was designed to test an area of higher than average copper and gold.

All holes intersected extensive quartz vein stockwork within both chloritically altered andesitic tuffs and quartz-sericite-pyrite altered tuffs. The following is a summation of the drill results.

Hole	Length	From	To	Int (m)	Au opt	Cu%
S91-386	153.7	0.0	50.6	50.6	0.021	0.15
		50.6	123.4	72.8	0.024	0.18
		123.4	153.7	30.3	0.019	0.19
	or	0.0	153.7	153.7	0.022	0.17

S91-387	154.3	0.0	23.7	23.7	0.023	0.15
		23.7	53.7	30.0	0.031	0.19
		53.7	154.3	100.6	0.016	0.13
	or	0.0	154.3	154.3	0.020	0.15
S91-395	190.5	0.0	84.5	84.5	0.020	0.27
		84.5	128.5	44.5	0.026	0.25
		128.5	190.5	62.0	0.019	0.19
	or	0.0	128.5	128.5	0.024	0.26

The results show the zone to host a large volume of low grade copper-gold mineralization. The zone appears at this time to be steeply north dipping and tabular.

8.2 Alder

The Alder Zone is located in the western section of Mitchell Creek and appears to be on strike with the Mitchell Zone. Mapping and rock chip sampling have shown highly altered (K-spar, silica, pyrite) andesitic tuffs to contain highly anomalous gold values of up to 0.100 opt over a 500 x 100 metre area. Within this anomaly a breccia pipe some 30 metres in diameter was located that averaged 0.070 opt Au. One drill hole, 148.8 metres in length, tested the breccia pipe. The drill results are summarized on the following page.

Hole	Length	From	To	Int (m)	Au opt	Cu%
S91-396	148.8	0.0	148.8	148.8	0.015	<.01

The results show that in this portion of the Alder Zone there was little of interest intersected in drill core.

9.0 SUMMARY AND CONCLUSIONS

The Sulphurets property hosts several distinct deposits and types of mineralization, two of which were drilled on the Sulphside 1 group: Mitchell and Alder. Both zones are underlain by extensively altered (quartz, sericite and pyrite) andesitic tuffs.

On the Mitchell, mapping and rock chip sampling completed by Newhawk showed an extensive copper-gold anomaly to occur in an area of extensive quartz-vein stockwork. The zone appears to be shear related with extensive foliation occurring throughout the zone. As traced in outcrop it is 1.2 kilometre x 300 metres with a vertical extent of in excess of 200 metres. It is open along strike and appears to be tabular in shape. Three drill holes totalling 498.5 metres were drilled into the zone. All of the holes intersected extensive low-grade copper-gold mineralization with copper values averaging approximately 0.21% with gold averaging 0.020 opt Au.

Sampling and mapping completed on the Alder Zone shows an area of anomalous gold (>.020 opt) to occur in an area of intense K-spar and silicic alteration within andesitic tuffs. Within this zone, a pyritic breccia pipe was located that contained up to 0.100 opt Au. One drill hole, totalling 148.8 metres in length, was drilled, however, the results although anomalous for gold (0.015 opt over 148.8 metres) do not at this time justify further work.

10.0 RECOMMENDATIONS

It is recommended that additional drilling be completed on the Mitchell Zone. Drilling should be completed only after further surface work is completed on the Mitchell with the purpose of locating a higher grade core to the zone. At this time, no further drilling is recommended on the Alder Zone.

11.0 COST STATEMENT - SULPHSIDE 1 GROUP

1. Labour (49 Man-days) **Total: $ 10,141.00**

i) Mark Tindal (Corona, Senior Geologist - core logging)
July 9-16; August 7-12
15 days @ $300/day

ii) Adrian Markos (Core Splitting)
July 9-16; August 7-12
15 days @ $137/day

iii) Bernie Elliot (Sample Prep)
July 10,12,14,16,17; August 10,12,14,16
10 days @ $137/day

iv) Dave Visagie (Project Geologist)
July 9,11,16; August 9,16
5 days @ $295/day

v) Dave Kosmynka (Surveyor)
July 17; August 17
2 days @ $194/day

vi) Tim Kirby (Surveyor Assistant)
July 17; August 17
2 days @ $174/day

2. Transportation **Total: $ 74,851.20**

a) Drill from Stewart to Knipple airstrip
via T.P.A.'s Bristol $1,000.00

b) Moving drill from Knipple airstrip to
Brucejack campsite via 205 helicopter $8,633.75

c) Local Helicopter Usage
i) Bell 206

July 9	3.0 hrs	July 13	5.6 hrs
July 10	4.6 hrs	July 14	5.0 hrs
July 11	3.0 hrs	July 15	5.0 hrs
July 12	4.0 hrs		

30.2 hrs x $698/hr includes fuel $21,079.60

ii) Hughes 500

August 7	3.0 hrs	August 10	4.0 hrs
August 8	4.4 hrs	August 11	2.5 hrs
August 9	2.0 hrs	August 12	2.0 hrs

17.0 hrs x $750/hr includes fuel $44,137.85

3.	**Room & Board**	**Total:**	**$ 10,900.00**
i)	Labour: 49 man-days x $100/day	$4,900	
ii)	Drillers: 15 days x 4 men x $100/day	$6,000	
4.	**Consumables**	**Total:**	**$ 500.00**
	Office supplies, plastic bags, nylon bags etc.		
5.	**Communications**	**Total:**	**$ 2,000.00**
	Spacetel phone communications and call usage etc.		
6.	**Equipment Rental**	**Total:**	**$ 100.00**
	Surveying instruments 2 days x $50/day		
7.	**Sample shipping/freighting of goods**	**Total:**	**$ 500.00**
8.	**Drill cost**	**Total:**	**$ 48,186.25**
i)	Mobilization of drill from Vancouver	$ 2,750.00	
ii)	Standby on mobilization	$ 2,300.00	
iii)	1990 feet drilled @ $17/ft	$33,830.00	
iv)	135 ft drilled @ $18.75/ft	$ 2,531.25	
v)	198 hrs standby x $25/hr	$ 4,950.00	
vi)	55 hrs machine x $15/hr	$ 825.00	
vii)	Tropari rental 1/2 x $1000/mo.	$ 500.00	
viii)	Core boxes	$ 500.00	
9.	**Assaying**	**Total:**	**$ 2,958.00**
	255 samples x $7.75 - 1 assay ton Au $3.85 - 30 element I.C.P.		
10.	**Report**	**Total:**	**$ 3,000.00**
	Includes base map prep, xeroxing, drafting and typing etc.		
		SUB-TOTAL	$122,423.10
11.	**Management Fee 10%**		**$ 12,142.31**
		TOTAL	**$133,565.41**

12.0 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 have been steadily employed in the mining industry since then and have since January 1990 been employed by Northair Mines Ltd. as Senior Geologist.

3. The work undertaken on the Sulphside 1 Group was under my supervision.

Dated at Vancouver, British Columbia, this 15th day of October, 1991.

Dave Visagie

APPENDICES

Appendix 1 Drill Logs

	Au opt	Cu
0 - 50.6	.0214	.18
50.6 - 123.4	.0240	.18
123.4 153.7	.0191	.19
or 0 - 153.7m	.022	.17

NEWHAWK GOLD MINES LTD.

Diamond Drill Hole Record

Project: Sulphurets - Salmon side

DEPTH	BEARING	DIP	SURVEY TYPE	PROPERTY: Sulphurets	LENGTH: 153.7m / 504 ft	HOLE NO.: S91-386
COLLAR	189.22	-46.6	EDM	CLAIM: XRAY 6	CORE SIZE: B.Q.	SHEET NO. 1 of 8
187.2		-43	Acid	LATITUDE: 6265148.091N	RECOVERY: Excellent	LOGGED BY: M. Tindall
153.7		-43	Acid	DEPARTURE: 423560.385E	STARTED: July 11/91	SAMPLED BY: B. ELLIOT
153.7	204°	-43	Tropari	ELEVATION: 964.153	COMPLETED: July 13/91	PURPOSE: Test Mitchell Au Zone

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% Py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
0	21.25		Altered Andesite	0	3.0	W		S							10-1	05101	0	3.0	3.0	0.021				.1358					100
		ANDS	moderately - strongly foliated	3.0	6.0										8	05102	3.0	6.0	3.0	0.026				.1554					
			strongly altered fgr.	6.0	9.0										12	05103	6.0	9.0	3.0	0.028				.1333					
			equigranular mafic volc	9.0	12.0										9	104	9.0	12.0	3.0	0.022				.1551					
			w mdr - heavy qtz stockworks	12.0	14.0										7	105	12.0	14.0	2.0	0.024				.1532					
			veining // to fol @ 40° to C.A.	14.0	17.0										7-9	106	14.0	17.0	3.0	0.018				.1740					
			variable py as 1-2mm diss	17.0	20.0										5-7	107	17.0	20.0	3.0	0.028				.1664					
			xtals 9 1-3mm units adjacent	20.0	21.25										5-7	108	20.0	21.25	1.25	0.024				.1614					
			& // to qtz units minor	21.25	22.0										2-3	109	21.25	22.0	.75	0.011				.1840					
			sericite dusted along foliae																										
			Fine qtz veining is variable																										
			9 augs ~ 15-20% of core																										
			Traces v.f molys opy noted																										
14.0	17.2		Core more broken 9																										
			sericitic w 1-5mm bands					S																					
			of white sericite developed																										
			along fol @ 60° to C.A.																										
			Changes abruptly back to																										
			minor sericite in chloritic																										
			andesite @ 17.2m																										

NEWHAWK GOLD MINES LTD.

Project: _____ Drill Hole No. 591-386 Page 2 of 8

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
21.25	21.95	QSP	Qtz-Sericite-Chlor Schist																										
			Abrupt change @ 21.25																										
			to ~50% qtz-30% sericite																										
			15% fully chlrzd relict																										
			andesite & 3% py qtz is																										
			predominately veins & moss																										
			matrix surrounding angular																										
			andesite lenses																										
21.95	23.5		Intense Qtz STOCKWORK	22.0	23.5										A-5	05110	22.0	23.5	1.5	0.014 0.016				1670					
		STAK	Abrupt change @ 21.95m																										
			to intensely sicfd FK w																										
			30-70% qtz as 1mm -																										
			3 Cm veins w intensely																										
			sicfd & chlrzd dk green																										
			bands & lenses banding @																										
			50% to C.A. many 1-3mm																										
			py units @ 50% to C.A.																										
			To mod. Cpy & Gal																										
23.5	51.4		Highly Altered Andesite/STOCKWK	23.5	26.5										3-5	111	23.5	26.5	3.0	0.027 0.028				1767					
		QCLS	Strongly banded alternating	26.5	29.5										5	112	26.5	29.5	3.0	0.019				1433					
			5mm - 2 Cm qtz veins &	29.5	32.5										5	113	29.5	32.5	3.0	0.015 0.018				1286					
			intensely chlrzd andesite lenses	32.5	35.5										7-8	114	32.5	35.5	3.0	0.014				1278					
			Some short sections intense	35.5	38.5										5	115	35.5	38.5	3.0	0.012				1341					
			qtz veining & flooding to 85% qtz.																										

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. S91-386 Page 3 of 8

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	Mo % Gr	% Py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			avg qtz vein content varies	38.5	41.5									Tr	3-5	05116	38.5	41.5	3.0	0.019				1486					
			between 20 & 50%, variable	41.5	44.5									<1%	8	117	41.5	44.5	3.0	0.023				1873					
			amnts py as diss xtals,	44.5	47.5										2-3	118	44.5	47.5	3.0	0.016				1336					
			irregular 3-7mm clots & narrow	47.5	49.6										3-4	119	47.5	49.6	2.1	0.018				1576					
			units, minor sericite along																										
			foliation @ 50-60° to C.A.																										
			- Below 32 m degree of																										
			silicification increases slowly																										
			downhole by 36 m core																										
			is <50% qtz or avg																										
			- MoS_2 in narrow stringers																										
			@ 42.4m 45.0m																										
			- silic/alt decreasing downhole																										
			below 38m by 42m core																										
			is qtz-sericite schist w min																										
			chlor in relict mafic lenses																										
49.6	50.6	Q.V.	Quartz Vein	49.6	50.6						<1				4	120	49.6	50.6	1.0	0.016				1870					
		32m	Massive white qtz w																										
			~ 30% included wallrk of																										
			intensely chltzd & sericitized																										
			wallrk ~ 3% diss py in																										
			wallrk <1% py & cpy along																										
			healed fracts in qtz																										
			upper contact broken irreg.																										
			lower contact @ 55° to C.A																										

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. S91-386 Page 4 of 8

Interval (meters) From	Interval (meters) To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.				Mineralization % Pyh	% Cp	% Ga	% Sp	MO %	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
50.6	51.4		Qtz - chlor schist	50.6	51.4													10	05121	50.6	51.4	0.8	0.028				2835					
			Strongly fol @ 65° to C.A.																													
			4) alternating bands qtz																													
			units & intensely chl'zd																													
			mafic vlc ~ 25% of core is																													
			gu along fol.; 0.25 m mass																													
			which C.A. is sample; ~																													
			10% py as diss 1mm xtals &																													
			narrow units; 2-3% 1-3mm																													
			py xtals in Qtz Un																													
51.4	153.7		Intensely Sicfd Zone	51.4	54.4													7-8	122	51.4	54.4	3.0	0.022				1335					
			Intensely sicfd vlc w	54.4	57.4													10	123	54.4	57.4	3.0	0.028				2570					
			many 5mm - 2cm qtz	57.4	60.4													8-10	124	57.4	60.4	3.0	0.012				1560					
			units and larger areas of	60.4	63.4													Tr 8-10	125	60.4	63.4	3.0	0.013				1596					
			total silification many	63.4	66.4														126	63.4	66.4	3.0	0.024				1794					
			1mm - 10mm relict lenses																													
			of extremely chl'zd vlc																													
			variable py predom as																													
			1 - 10 mm units same diss																													
			Avg qtz content 70-80% of																													
			Core																													
			- 56.75 - 56.85 Semi mass.																													
			py ~ 30% py as mass																													
			crots & lenses.																													

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. 591-386 Page 5 of 8

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	MO % ~~Gr~~	% Py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			- 57.1 fol @ 50° to C.A.																										100
			- 60.7 - 61.05 ~ 40% of																										
			Core is irregular mass white																										
			qtz veins & voles w 60%																										
			included wallrock.																										
			- 69m many hairlike py healed																										
			fractures in qtz @ all angles	66.4	69.4										7-8	05127	66.4	69.4	3.0	0.028				1763					
				69.4	72.4										5	128	69.4	72.4	3.0	0.048				1791					
			- 72.2m fol @ 55° to C.A.	72.4	75.4										7-8	129	72.4	75.4	3.0	0.023				1625					
				75.4	78.4										5-7	130	75.4	78.4	3.0	0.027				1553					
				78.4	81.4										3-5	131	78.4	81.4	3.0	0.032				1643					
			- 82.5m foliation @ 98° to C.A.	81.4	84.4						Tr			Ti	7-8	132	81.4	84.4	3.0	0.020				1886					
			- minor $CuFeS_2$ @ 81.35 as small																										
			irregular blebs in qtz																										
			- 88.6 - 89.2 Core wkly stefd	84.4	87.4										4-6	133	84.4	87.4	3.0	0.016				1812					
			strongly sericitic strong	87.4	90.4										3-5	134	87.4	90.4	3.0	0.024				1560					
			qtz stkwrk still present												-									1704					
			- 94.4 to 96.1 abrupt change	90.4	93.4										5-7	135	90.4	93.4	3.0	0.019				1777					95
			to extreme Sericite alt'n between	93.4	96.4										3-5	136	93.4	96.4	3.0	0.014				1446					
			qtz vules much sericite - clay	96.4	99.4										7-9	137	96.4	99.4	3.0	0018				1300					
			mud Core badly broken poss.																										
			Shear angle unknown @																										
			93.1 abrupt change back to																										
			Intense Sil/Alth.																										

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. S91-386 Page 6 of 8

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Mo	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			-99.5 fol @ 65° to C.A.	99.4	102.4										12	05138	99.4	102.4	3.0	0.019				1300					
			-96.5 - 99.3 many v. fine py veins x cutting qtz veins as well as same generation py veins // to qtz veins																										
			-101.4 3 cm mass white qtz vein minor py sharp contacts @ 85° to C.A.																										
			-99.7 - 99.85 & 100.20 to 100.30 semimass py as 1-5mm xtals & irreg. clots																										
				102.9	105.4										7-10	05139	102.4	105.4	3.0	0.020				1500					
				105.4	108.4										7-10	140	105.4	108.4	3.0	0.027				1697					
			-108.5 -108.6 10 cm mass	108.4	111.4						Tr				5	141	108.4	111.4	3.0	0.048				1602					
			white qtz vn sharp contacts	111.4	114.4										3-5	142	111.4	114.4	3.0	0.020				2031					
			@ 87° to C.A. minor py	114.4	117.4						Tr			Tr	3-5	143	114.4	117.4	3.0	0.026				1965					
				117.4	120.4										3-4	144	117.4	120.4	3.0	0.022				1834					
			-125.5 fol @ 60° to C.A	120.4	123.4									Tr	5-6	145	120.4	123.4	3.0	0.024				2071					
															3-5	146	123.4	126.4	3.0	0.015				1731					
															5	147	126.4	127.8	1.4	0.008				1596					
			-127.8 to 128.3 Quartz vein mass white qtz w minor included sericitized & chloritized wall rock ~ 5% diss 1mm py xtals sharp lower contact @ 30° to C.A.												5	148	127.8	128.3	0.5	0.009				1668					

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. S91-386 Page 7 of 8

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	Mo % Gf	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
				128.3	131.3										5-7	05149	128.3	131.3	3.0	0.020				1790					
				131.3	133.9										5-7	150	131.3	133.9	2.6	0.014				2093					
			133.9 - 135.0 Lapilli Tuff	133.9	135.0										7-8	151	133.9	135.0	1.1	0.024				1356					
			Strongly chloritic f. gr dk grey mafic tuff w variable to (25%) 3-8mm white feldspathic v.f gr frags in a tuff matrix many frags elongate along a weak fol @ 55° to C.A. w ~ 7-8% v.f py diss py along fol. no silicification gtz veining strongly sericitized upper & lower contacts basically mud,																										
			- Below 135.0 core is	135.0	136.4											152	135.0	136.4	1.9	0.016				2204					
			strongly sicfd w many gtz veinlets & sections w strongly chltzd wallrock banded w gtz veins as described above																										
			- 136.9 - 137.8 Two mass	136.9	137.8										3-5	5153	136.9	137.8	0.9	0.008				1078					
			white gtz veins w minor py	137.8	140.8										5-7	5154	137.8	140.8	3.0	0.018				1546					
			separated by 0.3 m of	140.8	143.8									Tr	3-5	5155	140.8	143.8	3.0	0.019				1748					
			heavily sicfd & gtz veined wallrock																										
			all contacts very irregular																										

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. S91-386 Page 8 of 8

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% Py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			151.0 - 151.15 mass white qtz vn w minor angular extremely chlrzd frags wall rk	143.8	146.8										3-5	05156	143.8	146.8	3.0	0.014				1918					100%
				146.8	149.8										3-5	157	146.8	149.8	3.0	0.013				2016					
				149.8	152.8										2-3	158	149.8	152.8	3.0	0.021				2005					
			2-3% py sharp upper contact	152.8	153.7										5-7	159	152.8	153.7	0.9	0.013				1852					
			@ 45° to C.A. lower contact																										
			@ 70° to C.A.																										
			-153.2 fol @ 67° to C.A																										
			153.7 EOH																										
																wtd Avg	0	153.7	153.7	.0213									
																	89.4	153.7	69.3					.1739					

wtd Avg Au 3.26175/153.2 = 0.0213 g/tonne

89.4-EOH Cu 120528.4 /69.3 = .1740

Completed

NEWHAWK GOLD MINES LTD.

Diamond Drill Hole Record

Project: Sulfside

DEPTH '	BEARING	DIP	SURVEY TYPE
COLLAR	193.53	-46.66°	E.D.M.
154.3		-43	Acid
154.3	198	-43	Tropari

PROPERTY: Sulphurets | LENGTH: 154.3m 506' | HOLE NO.: 91-387
CLAIM: X-Ray 6 | CORE SIZE: B.Q | SHEET NO. 1 of 7
LATITUDE: 6265063.225 N | RECOVERY: Good >95% | LOGGED BY: M. Tindall
DEPARTURE: 423524.070 E | STARTED: 7/13/91 | SAMPLED BY: B. Elliot
ELEVATION: 1020.032 m | COMPLETED: 7/17/91 | PURPOSE: Test Mitchell Au Zo

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR	CARB.	Sericite	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
0	19.1		Altered Mafic Volcanics																										
			Variably chlrzd, sericitized																										
			gsicfd fgr mafic																										
			volcanic rk ; lt -																										
			med green or grey																										
			wkly - mdly foliated																										
			minor 3mm - 3cm qtz																										
			veinlets																										
			- variable py content																										
			as fine disems & narrow																										
			veinlets																										
			- 3.0 - 4.0 badly broken	3.0	4.0																								100
			Some strongly sericitized	4.6	7.9																								88
			- Below 16.4m core	0	3.0	w		m		w						2-3	05160	0	3.0	3.0	.019			.134				100
			becomes progressively	3.0	6.0	w		w		m						5-6	161	3.0	6.0	3.0	.021			.137				
			more foliated & sericitized	6.0	9.0	w		w		m						10	162	6.0	9.0	3.0	.025			.161				
			down core to 19.1m where	9.0	12.0	m		m		m						7-10	163	9.0	12.0	3.0	.035			.224				
			it abruptly becomes	12.0	15.0	w		m		w						4-5	164	12.0	15.0	3.0	.026			.203				
			intensely silcfd.	15.0	18.0	w		s		w						7-10	165	15.0	18.0	3.0	.020			.180				
			- 18.2m strongly fol	18.0	19.1											3-5	166	18.0	19.1	1.1	.035			.182				
			Sericite fol @ 65° to CA.																										

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NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. S91-387 Page 2 of 7

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Sericite	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
19.1	23.7		Intensely slcfd Zone																											
			- Intensely slcfd w	19.1	22.1	I						Tr				7-10	05167	19.1	22.1	3.0	.012		.015		.148					100
			minor, relict extremely	22.1	23.7	I										10	168	22.1	23.7	1.6	.018				.1522					100
			Sericitized wkly chloritic																											
			Small lenses wallrock.																											
			Core is ~80% lt grey																											
			qtz qtz veining is																											
			indistinct foliation is																											
			destroyed. Sharp lower																											
			contact w schist @ 85°																											
			to C.A. Variable py				-																							
			as 3mm - 1.5cm veins @																											
			all angles to C.A.																											
23.7	44.7		Qtz-Sericite Schist	23.7	26.7	W		W		I						5	05169	23.7	26.7	3.0	.036				.232					100
			Heavily sericitized, wkly-	26.7	29.7	W		W		I						10	170	26.7	29.7	3.0	.043				.278					95
			mdly slcfd, wkly chloritic																											
			lt-med grey schist w																											
			variable 3mm-6cm lt																											
			grey qtz veinlets. Most																											
			w mdt-heavy qtz stockwork																											
			Variable py as fine diss																											
			seals & veinlets. Most																											
			Core broken along sericitic																											
			partings																											

NEWHAWK GOLD MINES LTD.

Project: _____ Drill Hole No. 591-387 Page 3 of 7

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	SER			Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			qtz veinlets @ all	29.7	32.7	W				I								7-8	05171	29.7	32.7	3.0	.022				.2029					~90
			angles to core axis, often contorted	32.7	35.7	W				I								8-10	172	32.7	35.7	3.0	.041				.2885					97
			- 30.3 - 41.1 Core is	35.7	38.7	W				I								6-12	173	35.7	38.7	3.0	.024				.1588					92
			intensely sericitic & very	38.7	41.7	W				I								12-15	174	38.7	41.7	3.0	.045				.1628					100
			badly broken most @	41.7	44.7	H				m								5	175	41.7	44.7	3.0	.029				.1381					100
			60 - 70° to C.A.																													
			- 32.8m fol @ 50° to C.A.																													
44.7	60.3		Qtz Stockwork	44.7	47.7	I				H								7-8	176	44.7	47.7	3.0	.021				.1475					100
			Intense qtz stockwork	47.7	50.7	I				H								8-10	177	47.7	50.7	3.0	.025				.1316					100
			w relict lenses of intensely	50.7	53.7	I				H								7-8	178	50.7	53.7	3.0	.026				.1250					100
			sericitized wallrock giving	53.7	56.7	I				H								10	179	53.7	56.7	3.0	.019				.1411					100
			core strong foliation most	56.7	59.7	I				H								5-7	180	56.7	59.7	3.0	.012				.1161					100
			qtz veinlets 2mm - 3cm	59.7	60.3	I				H								5	181	59.7	60.3	0.6	.034				.1277					100
			& along fol some X cutting																													
			fol Most core 7 50%																													
			qtz. Variable py most																													
			as narrow units // to fol																													
			some X cutting qtz veins																													
			@ all angles. Core far less																													
			broken than in schist																													
			- Intense stockwork veining																													
			begins abruptly @ 44.7m																													
			w a tight, irregular																													
			contact @ ~ 65° to C.A.																													

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. 591-387 Page 4 of 7

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			- 49.0 m strong fol @ 65° to C.A.																										
			- 54.6 strong fol @ 60° to C.A.																										
			- 59.3 - 60.1 Core has more sections of intense sericite & is more broken qtz stockwork still > 50% of core																										
60.3	61.4		Mafic Tuff	60.3	61.4	W		-							1%	05182	60.3	61.4	1.1	.013				.008					100
			- f gr. equigranular dk grey-green mafic tuff																										
			sharp, siliceous, lt grey bleached upper contact w STOCKWORK @ 70° to C.A. Sharp fresh lower																										
			Contact @ 60° to C.A.																										
			- Section contains 0.25 m white massive late qtz vein & minor narrow late, white qtz veins, -minor py as very narrow veinlets																										
			- intense qtz stockwork below 61.4																										

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. S91-382 Page 5 of 7

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	Mo % GK	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			- 61.9 fol @ 65° to C.A.	61.4	64.0	I					-				10-15	05183	61.4	64.0	2.6	.022				.1283					
			64.0-65.7 Quartz Vein Mass. white grz vein w. minor lenses of angular frags intensely silicified wall rk ~5% py as narrow irregular veins & 1% cpy as 2-5mm diss blebs, Tr MoS, - sharp upper contact @ 60° to C.A. Broken lower contact w angular frags grey grz stockwork in white grz vein matrix	64.0	65.7						<1			Tr	5	184	64.0	65.7	1.7	.021				.099					100
			- below 65? strong grz stockwork w intense silicn as before.	65.7	68.7	I									8-10	185	65.7	68.7	3.0	.028				1506					100
															7-9	186	68.7	71.7	3.0	.007				1113					100
			- 69.9-71.1 moss white grz vnlt w 2-3% f. diss py to cpy sharp upper contact @ 85° to C.A.																										

NEWHAWK GOLD MINES LTD. Project: _____ Drill Hole No. 591-387 Page 6 of 7

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% Py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			- 73.5 fol @ 65° to C.A.	71.7	74.7	I									5-7	05187	71.7	74.7	3.0	.012				144					100
			- 71.7 to 76.4 ~ 10-15%	74.7	77.7	I									5	188	74.7	77.7	3.0	.013				1182					100
			of core is irregular, widely																										
			spaced gash veinlets of																										
			late white qtz ± cutting																										
			fair qtz stockwork																										
				77.7	80.7	I									6-8	189	77.7	80.7	3.0	.017		-		1088					100
			- 81.6 - 84.7 several large	80.7	83.7	I									12-15	190	80.7	83.7	3.0	.021				1198					100
			(to 3cm) irregular clots of	83.7	86.7	I									7-9	191	83.7	86.7	3.0	.013				1304					73
			py	86.7	89.7	I									5-6	192	86.7	89.7	3.0	.011				1516					100
			- 85.0 - 89.7 Core broken												3-5	193	89.7	92.7	3.0	.024				1455					100
			@ all angles to C.A. No apparent												3-5	194	92.7	95.0	2.3	.017				1630					
			reason for core loss																										
			- 86.9 fol @ 45° to C.A.																										
			- 90.0 fol @ 55° to C.A.																										
			- 95.0 - 99.9 Core extremely	95.0	96.3	I									3-5	195	95.0	96.3	1.3	.014				1558				~61	
			broken most basically ground	96.3	99.4	I									3-5	196	96.3	99.4	3.1	.014				1007				~58	
			core																										
			in mica gouge, minor	99.4	99.9	I									3-5	197	99.4	99.9	0.5	.018				1370				~95	
			short sections sericite																										
			and. No apparent shearing	99.9	102.9	I									3-5	198	99.9	102.9	3.0	.022				1243				~95	
			- 99.9 - 105.5 Core	102.9	105.9	I					Tr				3-5	199	102.9	105.9	3.0	.009				1028					73
			mostly broken as gravel																										
			or mud many intact sections																										
			intensely silicified stockwork																										

NEWHAWK GOLD MINES LTD.

Project: _____ Drill Hole No. S91-387 Page 7 of 7

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
				105.9	108.9	I					Tr				2-3	05200	105.9	108.9	3.0	.012				.152					100
			-102.8-108.6 ~ 10-15%	108.9	111.9	I					Tr				5-7	201	108.9	111.9	3.0	.010				.126					100
			late white qtz veins widely	111.9	114.9	I									8-10	202	111.9	114.9	3.0	.009				.118					100
			spaced in grey qtz stockwork	114.9	117.9	I					Tr				9-10	203	114.9	117.9	3.0	.010				.1118					100
			Some w. Sharp contacts	117.9	120.9	I					<1				10	204	117.9	120.9	3.0	.009				.135					100
			@ Variable angles to C.A.																										
			Some w. minor cpy as 3mm																										
			angular blebs diss in qtz																										
			Tr very fine silver sulphide																										
			poss. argy or sericite noted																										
			-111.8-114.9 many hair like																										
			py veins crosscutting qtz																										
			stockwork @ all angles																										
			-Below 142 more sericitic																										
			leuces some sections foliated	120.9	123.9	I									5-7	205	120.9	123.9	3.0	.013				.1119					100
			most stk intensely sricfd	123.9	126.9	I									5	206	123.9	126.9	3.0	.006				.097					100
			- 144.2 fol @ 55° to C.A.	126.9	129.9	I									7-8	207	126.9	129.9	3.0	.015				.1233					100
			- 149.9 fol @ 50° to C.A	129.9	132.9	I									8-9	208	129.9	132.9	3.0	.015				.1360					100
				132.9	135.9	I									5	209	132.9	135.9	3.0	.017				.1297					100
			- Hole ends in strong	135.9	138.9	I									3-5	210	135.9	138.9	3.0	.029				.1973					100
			qtz stockwork w.	138.9	141.9	I					Tr				5-7	211	138.9	141.9	3.0	.016				.1138					"
			intense silicification &	141.9	144.9	I					Tr				3-5	212	141.9	144.9	3.0	.013				.1015					"
			diss py & py veinlets @	144.9	147.9	I									5-7	213	144.9	147.9	3.0	.011				.0847					"
			154.3 m.	147.9	150.9	I									5-7	214	147.9	150.9	3.0	.023				.200					"
				150.9	152.9	I									5	215	150.9	152.9	2.0	.026				.1880					"
				152.9	154.3	I									5	216	152.9	154.3	1.4	.029				.1760					108

W = weak M = Moderate H = Heavy I = Intense Tr = Trace

Weighted Avgs Au
0 - 154.3 m 3.0552/154.3 = 0.0198 g/t over 154.3 m
0 - 68.7 m 1.7819/68.7 = 0.0259 g/t over 68.7 m
68.7 - 154.3 m 1.2733/85.6 = 0.0148 g/t over 85.6 m
23.7 - 44.7 m 0.7200/21.0 = 0.0343 g/t over 21.0 m

NORTHAIR MINES LTD.

Diamond Drill Hole Record

Project:

DEPTH	BEARING	DIP	SURVEY TYPE	PROPERTY: Sulphurets	LENGTH: 190.5m 625'	HOLE NO.: 591-395
COLLAR	180°	-41°	Compass	CLAIM: X RAY 6	CORE SIZE: BWTW	SHEET NO. 1 of 5
111.3m	-	-36°	corrected ACID	LATITUDE: 6265731.534	RECOVERY: ~100 %	LOGGED BY: M. Tindall
187.5m	192	-36°	Tropari	DEPARTURE: 423309.523	STARTED: Aug 8/91	SAMPLED BY: B. Kinney A.
→ COLLAR	176°59'	-41°35'	E.D.M. Survey	ELEVATION: 975.648	COMPLETED: Aug 10/91	PURPOSE: Test W. Mitchell Au Zone

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
				0.0	3.0	W		M							5-7	05370	0.0	3.0	3.0	.011				0003					100
0.0	29.0		Andesite	3.0	6.0	W		M							7-10	371	3.0	6.0	3.0										
			med green, f-med gr.	6.0	9.0	W		M							3-5	372	6.0	9.0	3.0										
			equigranular mixture of	9.0	11.9	W		M							~5	373	9.0	11.9	2.9										
			chloritized mafic minerals																										
			& plag (stained for K-spar &																										
			stain) minor calcite in																										
			matrix. Variable qtz veins																										
			Variable py as diss xtals																										
			& narrow veins. Wkly																										
			foliated @ 60° to C.A.																										
			- Some sections w more																										
			qtz veins wkly-mdtly crckd.																										
			11.9 to 14.0 Core bleached to	11.9	14.0	S		W							8-10	374	11.9	14.0	2.1										
			lt grey, strongly sicfd w	14.0	17.0	W-S		M			Tr				3-5	375	14.0	17.0	3.0										
			many qtz veins @ all angles	17.0	20.0	M		W							8-10	376	17.0	20.0	3.0										
			to C.A. Alts appears &	20.0	23.0										3-5	377	20.0	23.0	3.0										
			disappears over ~ 30cm	23.0	26.0										3-5	378	23.0	26.0	3.0										100
			- below 14.0 qtz veins avg																										
			~ 5-10% of core, avg																										
			degree of silicification increases																										
			w No. of qtz veins.																										
			minor cpy adjacent to qtz																										
			veins																										

0 - 84.5 = 84.5 .27% Cu .0204 opt Au
84.5 - 128.5 = 44m .25% Cu .0263 opt Au
128.5 - 190.5 = 111.5m .19% Cu .0189 opt Au

NORTHAIR MINES LTD. Project: _____ Drill Hole No. S91-395 Page 2 of 5

Interval (meters) From	Interval (meters) To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% Py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
29.0			Qtz Stockwork	26.0	29.0	W		M							8-10	05379	26.0	29.0	3.0	.024				2161	.167				100
			- Abrupt change @ 29.0 from ch/tzd andesite w <10% qtz veinlets to intensely	29.0	32.0	I					Tr				12-15	380	29.0	32.0	3.0	.017				1335	.262				
			silcfd & qtz veined rock w	32.0	35.0	I					Tr				12-15	381	32.0	35.0	3.0	.010				2241	.208				
			10-20% highly contorted relict frags & bands of intensely ch/tzd, (sericitized) wallrock. Qtz (sericitized in qtz) veinlets are contorted & barely	35.0	37.7										7-9	382	35.0	37.7	2.7	.011				3870	.2970				
			discernable in a matrix of qtz flood. Many narrow py veinlets & fracture filling cross cutting the qtz veinlets. - broken upper contact stockwork & andesite @ ~ 70-75° to C.A.																										
			- @ 37.7 intensity of qtz flooding decreases abruptly	37.7	40.7	M		M-S			Tr				7-9	383	37.7	40.7	3.0	.019				2544	.203				
				40.7	43.7	M		M-S							5-7	384	40.7	43.7	3.0	.021				2705	.233				
			Strong qtz stockwork veining	43.7	46.7	M		M-S							5-7	385	43.7	46.7	3.0	.019				2025	.267				
			in a matrix of intensely ch/tzd & sericitized wallrock	46.7	49.7	M		M-S							7-10	386	46.7	49.7	3.0	.625				2826	.248				100
			qtz veinlets are highly contorted relict andesitic textures																										
			observed over very short (<1m) sections																										

NORTHAIR MINES LTD. Project: _____ Drill Hole No. S9-395 Page 3 of 5

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	SER		Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% Ag	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			- @ 46.5 mdt fol @ 40-	49.7	52.7	S		S		S							7-10	05387	49.7	52.7	3.0	.021									100
			45° to C.A.	52.7	55.8	S		S		S			Tr				10-13	388	52.7	55.8	3.1	N/S									
			-55.8 - 60.5 mdt amount	55.8	58.8	W		M									7-9	389	55.8	58.8	3.0	.028									
			qtz veining, qtz veins 10-	58.8	60.5	W		M									5-7	390	58.8	60.5	1.7	.020									
			30% of core, andesite only																												
			very sl fol'd & mdly chl'zd																												
			almost no sericite. No fol.																												
			- below 60.5 amt qtz	60.5	63.5	S		S		S			Tr				10-12	391	60.5	63.5	3.0	.01									
			veining is strong to intense	63.5	69.5	S		S		S							12-15	392	63.5	66.5	3.0	.018									
			qtz veins 30-80% of core,	66.5	69.5	W-M		M		W-M							7-10	393	66.5	69.5	3.0	.02									
			w strongly fol'd, chl'zd &	69.5	72.5	S		S		S							7-10	394	69.5	72.5	3.0	.01									
			Sericitized wallrock frags.	72.5	75.5	S		S		S							10-12	395	72.5	75.5	3.0	.01									
				75.5	78.5	S		S		S			<.5				12-15	396	75.5	78.5	3.0	.01									
			74.7 - 79.1 core very strongly	78.5	80.5	S		S		S			<.5				7-10	397	78.5	81.5	3.0	.01									
			fol. w strong sericite-qtz																												
			vein - py vein banding @ 60°to																												
			C.A. poss. ductile shear.																												
			- 80.8 qtz flooding abruptly	81.5	84.5	S		S		S			<.5				15	398	81.5	84.5	3.0	.01									
			becomes intense almost all	84.5	87.5	S		S		S			<.5				10-12	399	84.5	87.5	3.0	.056				.23					
			original textures are destroyed	87.5	90.5	S		S		S			Tr				7-10	400	87.5	90.5	3.0	.025				.28					
			only minor frags. Intensely	90.5	93.5	S		S		S							5-7	401	90.5	93.5	3.0	.018				.24					
			chl'zd & Sericitized wallrock	93.5	96.5	S		S		S			Tr				5-7	402	93.5	96.5	3.0	.020				.20					
			py veins clearly crosscut	96.5	99.5	S		S		S			Tr				5-7	403	96.5	99.5	3.0	.022				.21					
			qtz veins			S		S		S							5-7	404	99.5	102.5	3.0	.029				.21					100

NORTHAIR MINES LTD. Project: _____ Drill Hole No. 591-395 Page 4 of 5

Interval (meters) From	Interval (meters) To	Rock Type	Geologic Description	From	To	Alteration SIL.	Alteration ILLITE	Alteration CHLOR.	Alteration CARB.	Alteration SER	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
				102.5	105.5	S		S		S						7-10	0545	102.5	105.5	3.0	.018				.23					100
				105.5	108.5	S		S		S		Tr				5-7	406	105.5	108.5	3.0	.022				.24					
				108.5	111.5	S		S		S		Tr				7-10	407	108.5	111.5	3.0	.018				.27					
114.1	116.5		Mafic Dyke	111.5	114.1	S		S		S		Tr				10-12	408	111.5	114.1	2.6	.031				.27					
			med green fgr equigran.	114.1	116.5							0				0	409	114.1	116.5	2.4	.006				<.01					
			unaltered non-magnetic w																											
			sericitic upper contact @																											
			~60° to C.A. lower contact																											
			@ 65° to C.A.																											
116.5	190.5		Qtz STOCKWORK	116.5	119.5	S		S		S		Tr					410	116.5	119.5	3.0	.030				.26					
			intense qtz stockwork																											
			as described above																											
			- between 119.5 & 122.5 are	119.5	122.5	S		S		S		2-3				2.0	411	119.5	122.5	3.0	.035				.43					
			several large clasts &	122.5	125.5	S		S		S		Tr				7-10	412	122.5	125.5	3.0	.027				.29					100
			units of semi massive py mixed																											
			w qpy																											
			126.9 - 127.9 Shear	125.5	128.5	S		S		S						5-7	413	125.5	128.5	3.0	.035				.28					~90
			- core very broken w	128.5	131.5	S		S		S						7-10	414	128.5	131.5	3.0	.022				.24					100
			strong sericite clay gouge	131.5	134.5	S		S		S						~5	415	131.5	134.5	3.0	.017				.19					
			@ 30 - 35° to C.A.	134.5	137.5	S		S		S		Tr				3-5	416	134.5	137.5	3.0	.022				.18					
				137.5	140.5	S		S		S						5-7	417	137.5	140.5	3.0	.017				.23					
				140.5	143.5	S		S		S							418	140.5	143.5	3.0	.020				.21					100

NORTHAIR MINES LTD. Project: _____ Drill Hole No. 591-395 Page 5 of 5

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	SER		Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
				142.5	146.5	S		S		S			Tr				3-5	05419	143.5	146.5	3.0	.013				.20					100
				146.5	149.5	S		S		S							3-5	420	146.5	149.5	3.0	.018				.23					
				149.5	152.5	S		S		S							5-7	421	149.5	152.5	3.0	.012				.19					
				152.5	155.5	S		S		S							3-5	422	152.5	155.5	3.0	.013				.20					
			160.1 - 161.8 Shear	155.	158.5	S		S		S							3-5	423	155.5	158.5	3.0	.010				.15					
			- core badly broken w sericite	158.5	161.5	S		S		S			Tr				5-7	424	158.5	161.5	3.0	.014				.19					
			clay gouge core too broken	161.5	164.5	S		S		S			Tr				7-10	425	161.5	164.5	3.0	.016				.19					
			to measure angles																												
			163.4 sericitic fol between	164.5	167.5	S		S		S							5-7	426	164.5	167.5	3.0	.015				.19					
			qtz units @ 80° to C.A.	167.5	170.5	S		S		S							7-10	427	167.5	170.5	3.0	.015				.19					
				170.5	173.5	S		S		S			Tr				7-10	428	170.5	173.5	3.0	.008				.15					
				173.5	176.5	S		S		S			Tr				5-7	429	173.5	176.5	3.0	.015				.19					
				176.5	179.5	S		S		S			Tr				7-10	430	176.5	179.5	3.0	.013				.17					
				179.5	182.5	S		S		S							5-7	431	179.5	182.5	3.0	.010				.18					
				182.5	185.5	S		S		S							5-7	432	182.5	185.5	3.0	.016				.17					
			-187.1 Strong qtz unit &	185.5	188.5	S		S		S							5-7	433	185.5	188.5	3.0	.011				.16					;
			Sericitic wallrock banding w	188.5	190.5	S		S		S							5-7	434	188.5	190.5	2.0	.003				.11					100
			fol @ 65° to C.A. qtz																												
			units parallel to fol.																												
			- Hole still in very strong																												
			qtz stockwork @ 190.5																												
			190.5 EOH																												

NORTHAIR MINES LTD.

Diamond Drill Hole Record

Project:

DEPTH	BEARING	DIP	SURVEY TYPE			
COLLAR	337°	-55	Compass	PROPERTY: Sulphurets	LENGTH: 198.8m 488'	HOLE NO.: SU91-396
COLLAR	329°55'	-51°41'	E.D.M. SURVEY	CLAIM: XRAY 4	CORE SIZE: BW TW	SHEET NO. 1 of 5
148.8	339°	-52	Tropari	LATITUDE: 6264949.493	RECOVERY: ~100%	LOGGED BY: M. Tindall
				DEPARTURE: 422102.171	STARTED: Aug 11/91	SAMPLED BY: B. Kinney
				ELEVATION: 937.785	COMPLETED: Aug 12/91	PURPOSE: Test Alter Zone By

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
0	1.5		OVERBURDEN																										
1.5	90.0		Intense K spar Altered Rock	1.5	4.5										5	05435	1.5	4.5	3.0	.007				.02					85
				4.5	7.5						Tr				5-7	436	4.5	7.5	3.0	.013				.06					100
			med-dk green/grey,	7.5	10.5						Tr				7-10	437	7.5	10.5	3.0	.017				.18					100
			f gr equigranular -	10.5	13.5										5	438	10.5	13.5	3.0	.016				.08					100
			aphanitic, intensely K	13.5	16.5										3-5	439	13.5	16.5	3.0	.007				.06					
			feldspathesized & silicified	16.5	19.5										3-5	440	16.5	19.5	3.0	.012				.05					
			rock. K sp determined by	19.5	22.5										5	441	19.5	22.5	3.0	.024				.03					
			stain >50% of total	22.5	25.5										5-7	442	22.5	25.5	3.0	.010				.02					
			- many narrow qtz-carb	25.5	28.5										5-7	443	25.5	28.5	3.0	.012				.02					100
			veinlets @ all angles to																										
			C.A.																										
			- Some sections w relict																										
			f gr equigranular or																										
			fragmental cuttings																										
			textures.																										
			- Variable py as very																										
			fine diss xtals and veins																										
			- Visible cpy as diss																										
			xtals & veins.																										
			- Some short sections w																										
			1-4mm chlorite vuggy																										

1.5 - 148.8 m = 147.3m

NORTHAIR MINES LTD. Project: _____ Drill Hole No. 591-396 Page 2 of 5

Interval (meters) From	Interval (meters) To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			to be replacing biotite	28.5	31.5										2-3	05444	28.5	31.5	3.0	.011				.04					100
			xtals	31.5	34.5										1-2	445	31.5	34.5	3.0	.010				.06					
			- from Approx 23.8 - 29.5																										
			poss intrusive most red																										
			grey Kspar w relict white																										
			subhedral plag phenos (2-4mm)																										
			Some relict hbld + pink																										
			Kspar, poss. Syenite/monz																										
			dyke. No contacts visible																										
			in Kspar flooding																										
				34.5	37.5										3-5	446	34.5	37.5	3.0	.009				.04					100
				37.5	40.5										3-5	447	37.5	40.5	3.0	.013				.01					
				40.5	43.5										1-2	448	40.5	43.5	3.0	.012				.02					
				43.5	46.5										2-3	449	43.5	46.5	3.0	.013				.03					
				46.5	49.5										5	450	46.5	49.5	3.0	.016				.01					
			49.5 - 52.5 2 0.5-1 cm	49.5	52.5						<1				3-5	451	49.5	52.5	3.0	.032				.35					
			cpy veins	52.5	55.5										1-2	452	52.5	55.5	3.0	.012				.03					100
				55.5	58.5										1	453	55.5	58.5	3.0	.006				<.01					
			- from approx 66.3 - 90.0	58.5	61.5										2-3	454	58.5	61.5	3.0	.009				"					
			poss. brecciated intrusive	61.5	64.5										3-5	455	61.5	64.5	3.0	.007				"					
			relict white subhedral 2-3	64.5	67.5										7-10	456	64.5	67.5	3.0	.017				"					
			mm plag phenos in sub aphan/fg	67.5	70.5										5-7	457	67.5	70.5	3.0	.016				"					
			- subrounded intensely K (1-3cm)	70.5	73.5										9-10	458	70.5	73.5	3.0	.013				"					100
			feldspathized frags in a																										
			matrix of aphanitic, grey																										

NORTHAIR MINES LTD. Project: _____ Drill Hole No. 591-396 Page 3 of 5

Interval (meters) From	To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.				Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			Kspar and very f gr py.	73.5	76.5													7-9	05459	73.5	76.5	3.0	.016				.401					100
			- any poss. contacts obscured	76.5	79.5													7-10	460	76.5	79.5	3.0	.018				"					
			by Kspar flood.	79.5	82.5													3-5	461	79.5	82.5	3.0	.023				"					
			- Textures become somewhat	82.5	88.5													5-7	462	82.5	85.5	3.0	.015				"					
			more intact downhole	85.5	88.5													7-10	463	85.5	88.5	3.0	.018				"					
				88.5	90.0													5-7	464	88.5	90.0	1.5	.027				.05					100
90.0	100.0		Trachy Andesite	90.0	93.0									<.5				2-3	465	90.0	93.0	3.0	.011				.21					
			med grey-green porphyritic	93.0	96.0													3-5	466	93.0	96.0	3.0	.008				.02					
			w 2-3 mm subhedral-euhedral	96.0	99.0													2-3	467	96.0	99.0	3.0	.006				.01					
			hbld phenos in a f gr	99.0	100.0													1-2	468	99.0	100.0	1.0	.008				.01					100
			equigranular groundmass of																												
			mafics & white Kspar																												
			- sharp, broken contact w																												
			intensely altered rocks up																												
			hole @ ~ 35° to C.A.																												
			- very little alteration present																												
			in andesites except many																												
			hbld phenos replaced by epidote																												
			- 2 mm unit & large irregular																												
			clot cpy @ 91.9m																												
			- K feldspar flooding increases																												
			downhole below 92 m to																												
			94m where most original																												
			textures are destroyed epidote																												
			is still present in phenos.																												

NORTHAIR MINES LTD. Project: _____ Drill Hole No. 591-396 Page 4 of 5

Interval (meters) From	Interval (meters) To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.	Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
				100.0	103.0										~10	05469	100.0	100.9	0.9	.019				<.01					100
			100.0 - 100.9 Breccia @ 100.0 rock goes from fully K spar fines and/or wk recognizable textures to intensely K feldspathized rock w/ vaguely recognizable subrounded - sub angular bx frags in a grey k spar matrix py as very fine diss xtals in matrix upper contact of Bx is 5 cm qtz vein @ 55° to C.A.																									
100.9	148.8		Intensely K spar Altered Rock	100.9	103.9										5-7	05470	100.9	103.9	3.0	.024				<.01					
			med grey most aphanitic	103.9	106.9										3-5	471	103.9	106.9	2.0	.013				<.01					
			Intensely K feldspathized	106.9	109.9										5-7	472	106.9	109.9	3.0	.011				.06					
			rock. Almost all original	109.9	112.9										5-7	473	109.9	112.9	3.0	.007				.03					
			textures destroyed, variable	112.9	115.9										5-7	474	112.9	115.9	3.0	.011				.02					
			py most as very fine	115.9	118.9										5	475	115.9	118.9	3.0	.012				.04					
			diss xtals	118.9	121.9										3-5	476	118.9	121.9	3.0	.012				.06					
			- occasional short sections w 2-3mm patches epidote which may be altd frags																										

NORTHAIR MINES LTD. Project: _____ Drill Hole No. S91-396 Page 5 of 5

Interval (meters) From	Interval (meters) To	Rock Type	Geologic Description	From	To	Alteration SIL.	ILLITE	CHLOR.	CARB.				Mineralization % Pyh	% Cp	% Ga	% Sp	% Gr	% py	Assay Data Sample No.	From	To	Int	Au opt	Ag opt	Au check	Ag check	Cu %	Pb %	Zn %	Core Data RQD %	Run	Recovery %
			122.5 - 127.8 Fracture Zone	121.9	124.0													3-5	05977	121.9	124.9	3.0	.012				.05					95
			core very badly broken into	124.9	127.9													3-5	478	124.9	127.9	3.0	.017				.05					90
			sharp angular shards fracys	127.9	130.9													5-7	479	127.9	130.9	3.0	.006				.03					100
			@ 5° to 30° to c.a	130.9	133.9													7-10	480	130.9	133.9	3.0	.011				.21					
			- minor diss cpy over ~	133.9	136.9									Tr				10	481	133.9	136.9	3.0	.022				.14					
			20cm @ 135m	136.9	139.9													1-2	482	136.9	139.9	3.0	.010				.03					
				139.9	142.9													5	482	139.9	142.9	3.0	.013				.01					
			148.8 EOH															5-7	484	142.9	145.9	3.0	.010				.03					
																		3-5	485	145.9	148.8	2.9	.017				<.01					100
			Alder Zone Breccia																													
			intersected from 66.3 -																													
			90.0 m.																													

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 26, 1991

CERTIFICATE OF ASSAY ETK 91-479

NEWHAWK GOLDMINES LTD.
860, 625 HOWE ST.
VANCOUVER, B.C.
V6C 2T6

ATTENTION: DAVID VISAGIE

SAMPLE IDENTIFICATION: 35 PULPS samples received JULY 18, 1991
PROJECT: SULPHSIDE
SHIPMENT NUMBER: 16

ET#	Description	AU (g/t)	AU (oz/t)
1	- 0 5101	.72	.021
2	- 0 5102	.88	.026
3	- 0 5103	.95	.028
4	- 0 5104	.75	.022
5	- 0 5105	.83	.024
6	- 0 5106	.62	.018
7	- 0 5107	.95	.028
8	- 0 5108	.82	.024
9	- 0 5109	.39	.011
10	- 0 5110A	.49	.014
11	- 0 5110B	.56	.016
12	- 0 5111A	.92	.027
13	- 0 5111B	.96	.028
14	- 0 5112	.64	.019
15	- 0 5113A	.53	.015
16	- 0 5113B	.61	.018
17	- 0 5114	.48	.014
18	- 0 5115	.41	.012
19	- 0 5116	.66	.019
20	- 0 5117	.79	.023
21	- 0 5118	.54	.016
22	- 0 5119	.61	.018
23	- 0 5120	.56	.016
24	- 0 5121	.97	.028
25	- 0 5122	.76	.022
26	- 0 5123	.95	.028
27	- 0 5124	.41	.012
28	- 0 5125	.43	.013
29	- 0 5126	.83	.024
30	- 0 5127	.96	.028

FRANK J. PEZZOTTI, Certified Assayer

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

NEWHAWK GOLDMINES LTD. ETK 91-479 JULY 26, 1991

ET#	Description	AU (g/t)	AU (oz/t)
31 -0	5128	1.63	.048
32 -0	5129	.79	.023
33 -0	5130	.94	.027
34 -0	5131	1.08	.031
35 -0	5132	.69	.020

NOTE: < = less than

ECO-TECH LABORATORIES LTD.
Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

ECO-TECH LABORATORIES LTD.

NEWHAWK GOLD MINES LTD. - 91-479

PAGE 2

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
27 - 0	5124	-	1.0	.41	40	8	10	<5	.64	3	12	84	1588	3.60	.12	<10	.15	157	89	<0.01	6	2630	44	25	<20	114	<0.01	<10	3	<10	<1	301
28 - 0	5125	-	1.2	.33	85	8	5	<5	.95	4	9	62	1598	2.77	.05	<10	.14	135	58	<0.01	6	4100	44	65	<20	119	<0.01	<10	3	<10	<1	305
29 - 0	5126	-	1.2	.29	35	6	10	<5	.27	2	15	57	1724	4.46	.08	<10	.15	141	56	<0.01	5	1070	48	10	<20	34	<0.01	<10	2	<10	<1	244
30 - 0	5127	-	1.4	.27	35	6	10	<5	.26	2	15	95	1763	4.55	.08	<10	.14	189	63	.01	7	950	50	5	<20	38	<0.01	<10	2	<10	<1	210
31 - 0	5128	-	1.4	.31	30	6	10	<5	.23	1	11	69	1797	4.35	.08	<10	.17	217	74	<0.01	4	800	32	5	<20	44	<0.01	<10	2	<10	<1	141
32 - 0	5129	-	1.4	.37	25	6	10	<5	.28	6	13	89	1825	3.93	.11	<10	.19	215	72	<0.01	6	950	74	5	<20	71	<0.01	<10	3	<10	<1	457
33 - 0	5130	-	1.0	.40	25	6	10	<5	.34	2	13	103	1588	4.36	.11	<10	.21	239	55	<0.01	6	1200	76	10	<20	76	<0.01	<10	5	<10	<1	209
34 - 0	5131	-	1.0	.38	25	8	10	<5	.25	1	13	129	1643	4.17	.10	<10	.19	226	94	.01	8	870	50	5	<20	70	<0.01	<10	4	<10	<1	136
35 - 0	5132	-	1.2	.32	25	8	10	<5	.22	1	14	96	1806	4.06	.08	<10	.16	158	101	.01	5	770	38	<5	<20	62	<0.01	<10	3	<10	<1	154

NOTE: < = LESS THAN
> = GREATER THAN

CC:NEWHAWK
BOX 949
STEWART, BC
V0T 1W0

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Asayer

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

NEWHAWK GOLD MINES LTD. - 91-479

860-625 HOWE STREET
VANCOUVER, BC
V6C 2T6

JULY 28 , 1991

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT: SULPHSIDE SHIPMENT NUMBER: 16
35 PULP SAMPLES RECEIVED JULY 18, 1991

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1 - 0	5101	-	3.4	.40	65	8	10	<5	.46	<1	22	68	1350	7.81	.06	<10	.18	193	76	.01	5	1990	88	10	<20	17	<0.01	<10	16	<10	<1	180
2 - 0	5102	-	2.8	.31	50	8	10	<5	.35	2	24	55	1554	7.12	.03	<10	.16	133	96	.01	5	1480	94	10	<20	23	<0.01	<10	12	<10	<1	301
3 - 0	5103	-	3.0	.26	50	8	15	<5	.33	2	23	61	1792	6.43	.04	<10	.13	137	72	.01	4	1360	52	5	<20	33	<0.01	<10	8	<10	<1	252
4 - 0	5104	-	3.2	.28	40	10	10	<5	.33	3	20	66	1557	6.35	.05	<10	.14	134	97	.01	4	1320	82	10	<20	38	<0.01	<10	11	<10	<1	465
5 - 0	5105	-	3.0	.27	45	8	10	<5	.31	2	22	51	1532	6.42	.05	<10	.13	137	57	<0.01	4	1290	42	10	<20	41	<0.01	<10	9	<10	<1	227
6 - 0	5106	-	3.2	.36	75	10	10	<5	.27	2	18	62	1191	6.24	.05	<10	.15	84	76	.02	5	1130	118	15	<20	23	<0.01	<10	6	<10	<1	378
7 - 0	5107	-	1.8	.42	50	8	10	<5	.36	2	18	62	1661	4.81	.08	<10	.14	333	68	.02	5	1500	72	5	<20	21	<0.01	<10	9	<10	<1	188
8 - 0	5108	-	2.6	.41	40	8	10	<5	.42	2	17	69	1680	4.37	.10	<10	.12	180	89	.02	6	1710	90	10	<20	25	<0.01	<10	8	<10	<1	214
9 - 0	5109	-	2.0	.56	30	10	10	<5	.72	2	15	86	1040	4.04	.15	<10	.14	187	98	.02	4	3100	192	5	<20	27	<0.01	<10	11	<10	<1	281
10 - 0	5110 A	-	2.6	.54	35	10	10	<5	.51	3	17	97	1637	3.81	.12	<10	.16	286	113	.01	6	2170	160	10	<20	20	<0.01	<10	10	<10	<1	330
11 - 0	5110 B	-	2.6	.57	45	10	10	<5	.53	2	18	96	1691	4.16	.12	<10	.17	278	113	.01	6	2270	154	5	<20	20	<0.01	<10	11	<10	<1	326
12 - 0	5111 A	-	2.0	.37	40	8	10	<5	.58	3	15	45	1207	5.42	.08	<10	.13	93	65	.02	6	2430	94	<5	<20	27	<0.01	<10	7	<10	<1	311
13 - 0	5111 B	-	2.0	.37	40	6	10	<5	.60	3	15	33	1203	5.28	.08	<10	.13	91	61	.01	5	2520	94	5	<20	28	<0.01	<10	7	<10	<1	301
14 - 0	5112	-	2.8	.53	115	8	10	<5	.48	3	19	98	1437	5.46	.08	<10	.19	179	78	.02	6	2030	110	25	<20	18	<0.01	<10	12	<10	<1	384
15 - 0	5113 A	-	1.6	.41	45	8	10	<5	.40	3	18	64	1206	5.60	.08	<10	.18	253	62	.01	4	1710	56	10	<20	12	<0.01	<10	10	<10	<1	308
16 - 0	5113 B	-	1.4	.45	40	8	10	<5	.41	3	19	76	1186	5.88	.10	<10	.18	237	61	.02	6	1780	54	10	<20	13	<0.01	<10	11	<10	<1	287
17 - 0	5114	-	2.6	.35	95	10	10	<5	.41	1	19	50	1270	5.42	.07	<10	.14	92	84	.01	4	1820	46	25	<20	10	<0.01	<10	6	<10	<1	124
18 - 0	5115	-	1.8	.47	30	10	5	<5	.31	<1	18	104	1314	4.72	.13	<10	.20	170	109	<0.01	8	1330	48	5	<20	24	<0.01	<10	8	<10	<1	104
19 - 0	5116	-	1.6	.44	30	10	<5	<5	.38	3	13	66	1486	4.35	.11	<10	.23	274	90	<0.01	5	1540	88	5	<20	20	<0.01	<10	5	<10	<1	335
20 - 0	5117	-	1.8	.42	30	8	10	<5	.33	1	13	77	1897	4.37	.13	<10	.20	236	101	<0.01	8	1330	66	5	<20	20	<0.01	<10	4	<10	<1	138
21 - 0	5118	-	1.2	.32	25	6	10	<5	.21	1	14	93	1336	3.85	.09	<10	.16	159	67	<0.01	10	850	38	<5	<20	11	<0.01	<10	2	<10	<1	153
22 - 0	5119	-	1.6	.33	30	6	10	<5	.23	4	13	106	1570	4.42	.11	<10	.14	120	81	.01	11	970	30	5	<20	13	<0.01	<10	2	<10	<1	398
23 - 0	5120	-	1.2	.48	30	6	10	<5	.25	1	13	142	1070	4.17	.07	<10	.24	141	74	<0.01	8	970	114	10	<20	20	<0.01	<10	4	<10	<1	133
24 - 0	5121	-	2.8	.42	35	6	10	<5	.39	1	17	91	2035	5.95	.11	<10	.21	195	54	<0.01	9	1590	74	10	<20	19	<0.01	<10	3	<10	<1	167
25 - 0	5122	-	2.0	.33	30	6	5	<5	.25	<1	13	63	1375	4.80	.08	<10	.20	217	56	<0.01	5	950	42	<5	<20	24	<0.01	<10	2	<10	<1	146
26 - 0	5123	-	2.4	.35	45	6	10	<5	.34	6	15	87	1570	6.08	.10	<10	.18	161	49	<0.01	7	1380	102	15	<20	26	<0.01	<10	2	<10	<1	628

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 26, 1991

CERTIFICATE OF ASSAY ETK 91-480

NEWHAWK GOLDMINES LTD.
860, 625 HOWE ST.
VANCOUVER, B.C.
V6C 2T6

ATTENTION: DAVID VISAGIE

SAMPLE IDENTIFICATION: 27 PULPS samples received JULY 18, 1991
PROJECT: SULPHSIDE
SHIPMENT NUMBER: 18

ET#	Description	AU (g/t)	AU (oz/t)
1 - 0	5133	.56	.016
2 - 0	5134	.82	.024
3 - 0	5135	.65	.019
4 - 0	5136	.49	.014
5 - 0	5137	.61	.018
6 - 0	5138	.66	.019
7 - 0	5139	.70	.020
8 - 0	5140	.92	.027
9 - 0	5141	1.64	.048
10 - 0	5142	.67	.020
11 - 0	5143	.89	.026
12 - 0	5144	.77	.022
13 - 0	5145	.81	.024
14 - 0	5146	.53	.015
15 - 0	5147	.26	.008
16 - 0	5148	.31	.009
17 - 0	5149	.69	.020
18 - 0	5150	.49	.014
19 - 0	5151	.82	.024
20 - 0	5152	.54	.016
21 - 0	5153	.26	.008
22 - 0	5154	.61	.018
23 - 0	5155	.64	.019
24 - 0	5156	.49	.014
25 - 0	5157	.46	.013
26 - 0	5158	.71	.021
27 - 0	5159	.46	.013

NOTE: < = less than

ECO-TECH LABORATORIES LTD.
Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

JULY 26, 1991

NEWHAWK GOLD MINES LTD. - 91-480

860-625 HOWE STREET
VANCOUVER, BC
V6C 2T6

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT: SULPHSIDE SHIPMENT NUMBER: 16
35 PULP SAMPLES RECEIVED JULY 18, 1991

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1 - 0	5133	-	.8	.32	30	8	20	<5	.27	<1	14	142	1812	4.83	.10	<10	.11	73	86	.01	4	1020	20	10	<20	68	<0.01	<10	3	<10	<1	124
2 - 0	5134	-	1.0	.33	25	6	20	<5	.33	<1	12	113	1860	4.71	.08	<10	.13	108	88	<0.01	4	1250	22	<5	<20	24	<0.01	10	4	<10	<1	80
3 - 0	5135	-	1.0	.31	40	8	20	<5	.28	<1	13	92	1704	4.75	.08	<10	.13	133	74	<0.01	2	1020	24	5	<20	13	<0.01	10	3	<10	<1	112
4 - 0	5136	-	1.0	.24	75	8	25	<5	.15	<1	14	153	1777	5.29	.05	<10	.10	49	93	.02	6	480	32	20	<20	15	<0.01	10	3	<10	<1	70
5 - 0	5137	-	.6	.22	85	6	30	<5	.12	<1	14	128	1446	5.35	.04	<10	.09	39	77	.01	4	390	22	25	<20	15	<0.01	10	3	<10	<1	48
6 - 0	5138	-	.6	.24	55	6	25	<5	.18	<1	15	117	1300	6.09	.06	<10	.10	61	55	<0.01	5	640	18	10	<20	17	<0.01	10	3	<10	<1	18
7 - 0	5139	-	.4	.20	60	8	25	<5	.10	<1	14	115	1508	5.68	.05	<10	.10	112	133	.01	3	250	16	10	<20	16	<0.01	10	3	<10	<1	26
8 - 0	5140	-	.8	.18	35	8	25	<5	.07	<1	15	152	1697	6.26	.05	<10	.09	75	60	<0.01	5	160	18	5	<20	12	<0.01	10	3	<10	<1	30
9 - 0	5141	-	4.0	.23	55	4	20	<5	.18	<1	13	85	1602	5.79	.05	<10	.12	137	67	<0.01	4	620	28	5	<20	14	<0.01	10	2	<10	<1	96
10 - 0	5142	-	3.8	.21	95	10	30	<5	.09	<1	14	163	2031	5.30	.04	10	.09	69	106	<0.01	12	220	10	25	<20	10	<0.01	<10	<1	<10	<1	84
11 - 0	5143	-	3.4	.20	40	8	20	<5	.13	<1	10	118	1965	4.43	.06	<10	.10	97	137	<0.01	7	400	16	10	<20	8	<0.01	<10	2	<10	<1	144
12 - 0	5144	-	4.2	.28	45	10	25	<5	.19	<1	15	162	1834	5.53	.08	<10	.15	143	194	<0.01	12	610	34	<5	<20	11	<0.01	<10	4	<10	<1	80
13 - 0	5145	-	3.2	.35	60	10	30	<5	.30	<1	16	171	2071	6.42	.10	10	.17	119	136	<0.01	10	1080	60	10	<20	17	<0.01	10	4	<10	<1	138
14 - 0	5146	-	2.0	.30	50	8	20	<5	.16	<1	13	203	1731	5.02	.08	<10	.15	115	86	<0.01	11	460	62	10	<20	10	<0.01	<10	3	<10	<1	121
15 - 0	5147	-	1.6	.26	45	6	25	<5	.13	<1	9	138	1596	3.60	.06	<10	.15	86	70	<0.01	5	400	38	5	<20	11	<0.01	<10	2	<10	<1	96
16 - 0	5148	-	1.4	.55	30	8	25	<5	.21	<1	12	278	1668	5.02	.09	10	.31	233	88	<0.01	13	580	54	10	<20	16	<0.01	<10	5	<10	<1	95
17 - 0	5149	-	1.4	.34	50	8	25	<5	.22	<1	13	146	1790	5.31	.09	10	.19	110	117	<0.01	9	770	36	10	<20	12	<0.01	<10	3	<10	<1	95
18 - 0	5150	-	1.6	.36	80	8	30	<5	.17	1	16	207	2093	5.43	.07	10	.17	81	91	<0.01	14	630	44	10	<20	7	<0.01	10	4	<10	<1	156
19 - 0	5151	-	.8	.24	90	8	35	<5	.40	<1	48	36	356	9.15	.05	20	.12	21	24	<0.01	4	1600	26	<5	<20	10	<0.01	20	8	<10	<1	127
20 - 0	5152	-	2.0	.46	65	8	30	<5	.22	<1	18	172	2204	6.31	.10	10	.25	115	91	.01	15	650	28	10	<20	8	<0.01	<10	5	<10	<1	73
21 - 0	5153	-	1.0	.44	85	6	30	<5	.26	<1	9	190	1028	4.07	.08	10	.18	75	57	<0.01	8	820	38	20	<20	5	<0.01	<10	4	<10	<1	52
22 - 0	5154	-	1.0	.35	70	8	25	<5	.25	<1	13	165	1546	4.88	.08	10	.20	111	77	<0.01	14	900	44	10	<20	7	<0.01	<10	4	<10	<1	76
23 - 0	5155	-	1.2	.41	45	10	25	<5	.18	<1	15	175	1748	5.19	.11	10	.22	123	81	<0.01	11	520	26	<5	<20	10	<0.01	10	4	<10	<1	99
24 - 0	5156	-	1.4	.48	50	8	30	<5	.22	<1	16	171	1918	6.01	.13	10	.26	126	79	<0.01	16	680	28	10	<20	9	<0.01	10	5	<10	<1	77
25 - 0	5157	-	1.8	.48	55	10	30	<5	.31	<1	19	185	2016	6.38	.14	10	.24	133	71	<0.01	13	970	40	5	<20	11	<0.01	10	7	<10	<1	142
26 - 0	5158	-	1.4	.49	40	10	25	<5	.28	<1	17	95	2005	5.45	.11	10	.29	142	82	<0.01	14	780	50	5	<20	10	<0.01	<10	5	<10	<1	109
27 - 0	5159	-	1.6	.44	55	10	30	<5	.22	<1	18	152	1852	5.58	.12	10	.23	103	186	<0.01	14	800	48	10	<20	6	<0.01	10	4	<10	<1	71

NOTE: < = LESS THAN

CC:NEWHAWK
BOX 949
STEWART, BC
V0T 1W0

ECO-TECH LABORATORIES LTD.
CLINTON AYERS
LABORATORY MANAGER

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 1 , 1991

CERTIFICATE OF ASSAY ETK 91-485

NEWHAWK GOLDMINES LTD.
860-625 HOWE STREET
VANCOUVER, B.C.
V6C 2T6

SAMPLE IDENTIFICATION: 48 PULP samples received JULY 22, 1991
----------PROJECT: SULPHSIDE
SHIPMENT NO.: 20

ET#	Description	Au (g/t)	Au (oz/t)
1 -	5160	.64	.019
2 -	5161	.72	.021
3 -	5162	.86	.025
4 -	5163	1.21	.035
5 -	5164	.88	.026
6 -	5165	.70	.020
7 -	5166	1.20	.035
8 -	5167 A	.40	.012
9 -	5167 B	.52	.015
10 -	5168	.62	.018
11 -	5169	1.22	.036
12 -	5170	1.46	.043
13 -	5171	.76	.022
14 -	5172	1.42	.041
15 -	5173	.84	.024
16 -	5174	1.59	.046
17 -	5175	.98	.029
18 -	5176	.73	.021
19 -	5177	.87	.025
20 -	5178	.88	.026
21 -	5179	.64	.019
22 -	5180	.41	.012
23 -	5181	1.15	.034
24 -	5182	.45	.013
25 -	5183	.77	.022
26 -	5184	.73	.021
27 -	5185	.96	.028
28 -	5186	.23	.007
29 -	5187	.41	.012
30 -	5188	.45	.013

Frank J. Pezzotti, Certified Assayer

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

NEWHAWK GOLDMINES LTD. ETK 91-485 AUGUST 1 , 1991

ET#	Description	Au (g/t)	Au (oz/t)
31 -	5189	.57	.017
32 -	5190	.72	.021
33 -	5191	.45	.013
34 -	5192	.37	.011
35 -	5193	.81	.024
36 -	5194	.58	.017
37 -	5195	.49	.014
38 -	5196	.48	.014
39 -	5197	.63	.018
40 -	5198	.77	.022
41 -	5199	.32	.009
42 -	5200	.41	.012
43 -	5201	.33	.010
44 -	5202	.32	.009
45 -	5203	.34	.010
46 -	5204	.31	.009
47 -	5205	.44	.013
48 -	5206	.22	.006

NOTE: < = less than

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

PAGE 2

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
27 - 0	5185	-	2.0	.14	135	8	5	<5	.15	<1	11	132	1506	3.58	<.01	<10	.05	50	131	<.01	7	540	50	35	<20	8	<.01	<10	1	<10	<1	51
28 - 0	5186	-	1.8	.11	95	10	5	<5	.10	<1	8	202	1113	3.10	<.01	<10	.05	65	77	<.01	9	370	26	20	<20	6	<.01	<10	<1	<10	<1	47
29 - 0	5187	-	2.4	.12	65	8	5	<5	.09	<1	9	139	1442	3.95	.01	<10	.06	45	57	<.01	6	310	24	25	<20	6	<.01	<10	1	<10	<1	58
30 - 0	5188	-	1.0	.12	20	8	5	<5	.08	<1	8	131	1182	3.18	.02	<10	.08	76	78	<.01	8	200	22	<5	<20	7	<.01	<10	1	<10	<1	28
31 - 0	5189	-	1.0	.79	25	10	5	<5	.09	<1	12	322	1088	3.80	.12	<10	.47	304	84	.01	17	270	18	10	<20	10	<.01	<10	16	<10	<1	59
32 - 0	5190	-	1.4	.14	35	10	5	<5	.07	<1	14	150	1190	5.80	.02	<10	.13	83	63	<.01	11	200	50	<5	<20	8	<.01	<10	<1	<10	<1	29
33 - 0	5191	-	1.0	.27	25	12	5	<5	.09	<1	11	185	1304	3.93	.09	<10	.11	83	107	<.01	9	340	38	5	<20	5	<.01	<10	3	<10	<1	21
34 - 0	5192	-	1.2	.18	25	8	5	<5	.09	<1	11	155	1516	4.47	.05	<10	.11	67	76	<.01	8	340	16	<5	<20	4	<.01	<10	1	<10	<1	19
35 - 0	5193	-	1.2	.20	20	8	5	<5	.10	<1	11	150	1455	3.66	.06	<10	.10	88	68	<.01	7	350	10	5	<20	7	<.01	<10	2	<10	<1	21
36 - 0	5194	-	1.2	.22	20	8	5	<5	.12	<1	11	133	1630	3.70	.03	<10	.17	148	77	<.01	8	400	12	<5	<20	9	<.01	<10	1	<10	<1	34
37 - 0	5195	-	1.2	.23	25	8	5	<5	.05	<1	11	198	1556	4.04	.06	<10	.12	84	91	<.01	8	130	16	5	<20	4	<.01	<10	2	<10	<1	33
38 - 0	5196	-	.8	.22	15	10	5	<5	.06	<1	8	286	1009	3.05	.08	<10	.08	74	91	<.01	8	200	10	5	<20	4	<.01	<10	3	<10	<1	17
39 - 0	5197	-	1.2	.17	20	10	5	<5	.07	<1	9	193	1310	3.40	.04	<10	.09	84	90	<.01	7	240	18	5	<20	5	<.01	<10	2	<10	<1	23
40 - 0	5198	-	1.8	.16	50	10	10	<5	.11	<1	9	202	1243	3.42	.05	<10	.06	46	113	<.01	8	410	20	30	<20	3	<.01	<10	1	<10	<1	33
41 - 0	5199	-	1.0	.15	35	10	10	<5	.05	<1	7	254	1028	2.41	.04	<10	.05	58	101	<.01	7	210	20	20	<20	2	<.01	<10	2	<10	<1	43
42 - 0	5200	-	1.2	.07	45	8	5	<5	.10	<1	8	129	1522	2.84	.01	<10	.05	39	96	<.01	5	390	42	25	<20	2	<.01	<10	<1	<10	<1	25
43 - 0	5201	-	1.2	.06	30	8	5	<5	.04	<1	6	152	1263	2.64	<.01	<10	.05	59	85	<.01	5	100	16	15	<20	7	<.01	<10	<1	<10	<1	22
44 - 0	5202	-	1.2	.09	40	10	5	<5	.07	1	8	137	1181	3.47	.01	<10	.06	63	108	<.01	5	230	32	15	<20	7	<.01	<10	<1	<10	<1	198
45 - 0	5203	-	.6	.16	40	8	5	<5	.07	1	8	184	1118	3.44	.05	<10	.07	65	142	<.01	6	260	60	15	<20	4	<.01	<10	2	<10	<1	186
46 - 0	5204	-	1.0	.09	40	10	10	<5	.10	<1	7	159	1303	2.85	.02	<10	.05	47	123	<.01	6	390	24	20	<20	4	<.01	<10	<1	<10	<1	82
47 - 0	5205	-	1.0	.11	25	8	5	<5	.04	<1	7	162	1119	3.03	.03	<10	.06	60	76	<.01	5	130	40	10	<20	7	<.01	<10	1	<10	<1	42
48 - 0	5206	-	.8	.08	25	10	5	<5	.13	<1	7	150	915	2.52	.01	<10	.05	67	88	<.01	8	520	42	5	<20	13	<.01	<10	1	<10	<1	75

NOTE: < = LESS THAN
> = GREATER THAN

CC: NEWHAWK GOLD MINES
STEWART, B.C.
V0T 1W0

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI
B.C. CERTIFIED ASSAYER

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

AUGUST 1,1991

NEWHAWK GOLD MINES LTD. - 91-485

860-625 HOWE STREET
VANCOUVER, BC
V6C 2T6

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT: SULPHSIDE
48 PULP SAMPLES RECEIVED JULY 22, 1991

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1 - 0	5160	-	1.4	.81	25	10	5	<5	.27	<1	11	94	1346	4.24	.21	<10	.41	192	79	<.01	3	1140	38	5	<20	6	<.01	<10	8	<10	<1	91
2 - 0	5161	-	1.4	1.30	20	12	10	<5	.20	<1	10	75	1370	4.16	.16	<10	.95	400	89	<.01	2	1080	16	5	<20	6	<.01	<10	10	<10	<1	150
3 - 0	5162	-	1.6	.96	25	10	5	<5	.19	1	12	80	1611	4.54	.13	<10	.62	339	53	<.01	2	950	36	5	<20	4	<.01	<10	6	<10	<1	161
4 - 0	5163	-	1.8	.66	25	8	5	<5	.22	2	13	113	2243	5.20	.14	<10	.35	182	74	<.01	3	940	30	5	<20	7	<.01	<10	3	<10	<1	158
5 - 0	5164	-	1.8	.56	30	8	5	<5	.28	2	13	137	2820	4.78	.21	<10	.15	92	91	.01	4	1310	30	5	<20	8	<.01	<10	5	<10	<1	214
6 - 0	5165	-	1.6	1.25	20	8	10	<5	.27	1	12	62	1803	4.42	.13	<10	.79	430	99	<.01	1	1180	18	5	<20	8	<.01	<10	7	<10	<1	176
7 - 0	5166	-	1.4	.79	25	10	10	<5	.24	1	12	76	1828	4.98	.13	<10	.42	261	86	<.01	2	1070	30	5	<20	5	<.01	<10	4	<10	<1	188
8 - 0	5167 A	-	1.2	.31	40	12	5	<5	.35	1	8	312	1477	4.87	.08	<10	.13	125	39	<.01	6	1510	20	10	<20	24	<.01	<10	6	<10	<1	123
9 - 0	5167 B	-	1.0	.30	40	12	5	<5	.35	1	8	240	1490	4.89	.08	<10	.13	129	42	<.01	4	1530	22	5	<20	23	<.01	<10	5	<10	<1	124
10 - 0	5168	-	1.0	.20	30	8	5	<5	.10	<1	8	188	1522	4.35	.04	<10	.11	88	28	<.01	4	460	18	5	<20	15	<.01	<10	3	<10	<1	60
11 - 0	5169	-	1.6	.42	35	10	5	<5	.27	4	13	101	2321	5.49	.15	<10	.13	83	55	.01	2	1200	36	5	<20	7	<.01	<10	3	<10	<1	340
12 - 0	5170	-	1.4	.39	40	10	10	<5	.27	<1	13	146	2781	6.24	.12	<10	.15	97	43	<.01	4	1130	28	5	<20	5	<.01	<10	3	<10	<1	113
13 - 0	5171	-	1.0	.53	30	10	5	<5	.30	<1	11	156	2029	4.88	.15	<10	.20	165	78	.01	4	1290	22	5	<20	9	<.01	<10	4	<10	<1	96
14 - 0	5172	-	1.2	.44	75	10	5	<5	.21	1	13	234	2005	5.42	.09	<10	.14	112	87	.01	6	830	32	10	<20	9	<.01	<10	4	<10	<1	174
15 - 0	5173	-	1.6	.35	135	6	5	<5	.11	<1	15	195	1588	5.54	.04	<10	.10	48	97	.02	4	320	50	20	<20	11	<.01	<10	2	<10	<1	161
16 - 0	5174	-	2.0	.19	390	6	10	<5	.08	5	14	77	1628	7.01	<.01	<10	.12	40	114	.01	4	220	88	10	<20	20	<.01	<10	<1	<10	<1	1068
17 - 0	5175	-	.8	.18	80	6	5	<5	.15	1	11	94	1381	5.35	.01	<10	.09	43	71	.01	4	460	76	10	<20	14	<.01	<10	<1	<10	<1	273
18 - 0	5176	-	1.8	.19	80	6	5	<5	.11	1	12	144	1475	5.08	.01	<10	.08	48	99	.02	5	340	92	10	<20	15	<.01	<10	1	<10	<1	281
19 - 0	5177	-	1.2	.10	35	6	10	<5	.13	6	12	103	1316	5.04	<.01	<10	.07	42	115	.01	5	450	100	5	<20	10	<.01	<10	<1	<10	<1	785
20 - 0	5178	-	1.4	.07	50	8	5	<5	.12	1	11	127	1250	3.98	<.01	<10	.05	37	57	<.01	5	450	56	5	<20	8	<.01	<10	<1	<10	<1	239
21 - 0	5179	-	1.6	.15	65	6	5	<5	.16	<1	10	193	1411	3.95	<.01	<10	.06	45	109	.01	8	570	56	10	<20	13	<.01	<10	1	<10	<1	196
22 - 0	5180	-	1.2	.21	155	6	5	<5	.16	<1	10	219	1161	3.89	<.01	<10	.06	41	90	.02	5	540	54	20	<20	13	<.01	<10	1	<10	<1	151
23 - 0	5181	-	1.6	.48	55	6	5	<5	.22	<1	13	227	1277	4.34	.08	<10	.12	69	97	.03	8	800	58	5	<20	15	<.01	<10	6	<10	<1	110
24 - 0	5182	-	<.2	3.41	50	6	25	<5	.25	<1	32	61	89	6.47	.02	<10	1.84	1178	8	.01	1	1120	16	5	<20	9	<.01	<10	123	<10	<1	207
25 - 0	5183	-	1.8	.40	55	6	5	<5	.14	1	14	216	1283	5.28	.08	<10	.12	74	117	.02	6	440	44	10	<20	15	<.01	<10	4	<10	<1	180
26 - 0	5184	-	1.6	.58	30	8	10	<5	.12	<1	11	123	993	3.55	<.01	<10	.39	245	115	<.01	7	490	80	10	<20	5	<.01	<10	15	<10	<1	132

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

NEWHAWK GOLD MINES LTD. - 91-494

860-625 HOWE STREET
VANCOUVER, BC
V6C 2T6

AUGUST 1, 1991

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT: SULPHSIDE
38 PULP SAMPLES RECEIVED JULY 23, 1991

ET#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1	- 0 5207	1.6	.15	35	6	10	<5	.22	<1	12	183	1233	4.08	.04	<10	.06	95	81	<.01	9	930	28	15	<20	5	<.01	<10	2	<10	<1	21
2	- 0 5208	2.4	.17	65	8	10	<5	.26	<1	14	153	1380	5.00	.04	<10	.07	91	90	<.01	10	1080	26	20	<20	4	<.01	<10	2	<10	<1	43
3	- 0 5209	2.0	.20	60	8	10	<5	.20	<1	15	156	1297	5.58	.06	<10	.08	83	120	<.01	13	840	30	15	<20	6	<.01	<10	2	<10	<1	33
4	- 0 5210	1.4	.21	25	6	10	<5	.14	<1	15	162	1973	5.67	.07	<10	.10	87	96	<.01	12	590	22	5	<20	2	<.01	<10	2	<10	<1	38
5	- 0 5211	1.8	.20	85	6	10	<5	.25	<1	16	141	1133	4.68	.05	<10	.07	65	101	<.01	12	1030	26	20	<20	1	<.01	<10	<1	<10	<1	58
6	- 0 5212	2.0	.17	150	6	10	<5	.28	<1	15	148	1015	4.70	.01	<10	.07	76	74	<.01	12	1190	26	30	<20	16	<.01	<10	1	<10	<1	61
7	- 0 5213	1.4	.19	75	6	10	<5	.23	<1	16	139	847	5.56	.05	<10	.08	66	76	<.01	10	920	28	15	<20	21	<.01	<10	<1	<10	<1	53
8	- 0 5214	1.4	.24	20	6	10	<5	.15	<1	14	215	2000	5.29	.08	<10	.12	106	72	<.01	10	580	20	5	<20	4	<.01	<10	3	<10	<1	39
9	- 0 5215	1.6	.29	<5	8	10	<5	.13	<1	13	188	1880	5.63	.10	<10	.14	110	143	<.01	10	480	22	5	<20	6	<.01	<10	4	<10	<1	35
10	- 0 5216	1.6	.22	15	10	10	<5	.09	2	11	204	1760	4.76	.07	<10	.11	87	192	<.01	8	340	76	5	<20	4	<.01	<10	3	<10	<1	179

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 1, 1991

CERTIFICATE OF ASSAY ETK 91-494

NEWHAWK GOLDMINES LTD.
860-625 HOWE STREET
VANCOUVER, B.C.
V6C 2T6

SAMPLE IDENTIFICATION: 38 PULP samples received JULY 23, 1991
PROJECT: SULPHSIDE
SHIPMENT NO.: 22

ET#	Description	Au (g/t)	Au (oz/t)
1	0 5207	.51	.015
2	0 5208	.51	.015
3	0 5209	.57	.017
4	0 5210	.98	.029
5	0 5211	.55	.016
6	0 5212	.43	.013
7	0 5213	.37	.011
8	0 5214	.80	.023
9	0 5215	.89	.026
10	0 5216	.98	.029

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ASSAYING - ENVIRONMENTAL TESTING
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SEPTEMBER 5,1991

CERTIFICATE OF ANALYSIS ETK 91-660A

NEWHAWK GOLDMINES LTD.
360, 625 HOWE ST.
VANCOUVER, B.C.
V6C 2T6

ATTENTION: DAVID VISAGIE

SAMPLE IDENTIFICATION: 49 CORE samples received AUGUST 20, 1991
PROJECT: SULPHSIDE
SHIPMENT NUMBER: 37

ET#	Description	CU (ppm)
1	5350	-
2	5351	-
3	5352	-
4	5353	-
5	5354	-
[illegible]	5355	-
[illegible]	5356	-
8	5357	-
9	5358	-
10	5359	-
11	5360	-
12	5361	-
13	5362	-
14	5363	-
15	5364	-
16	5365	-
17	5366	-
18	5367	-
19	5368	-
20	5369	-
21	5370	1942
22	5371	2680
23	5372	2568
24	5373	2128
25	5374	2396
26	5375	2218
27	5376	2197
28	5377	1987
29	5378	2034
30	5379	1657

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Frank J. Pezzotti, Certified Assayer

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ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

NEWHAWK GOLDMINES LTD.
ETK 91-660

SEPTEMBER 5, 1991

ET#	Description	
31 -	5380	3627
32 -	5381	2081
33 -	5382	3984
34 -	5383	2031
35 -	5384	2930
36 -	5385	2677
37 -	5386	2480
38 -	5387	2766
39 -	5388	2234
40 -	5389	2046
41 -	5390	2217
42 -	5391	3146
43 -	5392	2459
44 -	5393	1838
45 -	5394	2063
46 -	5395	3164
47 -	5396	2211
48 -	5397	2248
[illegible] -	5398	2077

ECO-TECH LABORATORIES LTD.
Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

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ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 28, 1991

CERTIFICATE OF ASSAY ETK 91-660

NEWHAWK GOLDMINES LTD.
860, 625 HOWE ST.
VANCOUVER, B.C.
V6C 2T6

ATTENTION: DAVID VISAGIE

SAMPLE IDENTIFICATION: 49 CORE samples received AUGUST 20, 1991
PROJECT: SULPHSIDE
SHIPMENT NUMBER: 37

ET#	Description	AU (g/t)	AU (oz/t)
21 -	5370	.72	.021
22 -	5371	1.08	.031
23 -	5372	.75	.022
24 -	5373	.76	.022
25 -	5374	.48	.014
26 -	5375	.64	.019
27 -	5376	.81	.024
28 -	5377	.54	.016
29 -	5378	.62	.018
30 -	5379	.83	.024

Per Frank J. Pezzotti, Certified Assayer

ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

IEWHAWK GOLDMINES LTD. AUGUST 28, 1991

:TK 91-660

:T#	Description	AU (g/t)	AU (oz/t)
31 -	5380	.59	.017
32 -	5381	.34	.010
33 -	5382	.39	.011
34 -	5383	.66	.019
35 -	5384	.71	.021
36 -	5385	.78	.023
37 -	5386	.85	.025
38 -	5387	.72	.021
39 -	5388	.66	.019
40 -	5389	.97	.028
41 -	5390	.67	.020
42 -	5391	.39	.011
43 -	5392	.62	.018
44 -	5393	.67	.020
45 -	5394	.62	.018
46 -	5395	.81	.024
47 -	5396	.76	.022
48 -	5397	.83	.024
49 -	5398	.69	.020

Per

ECO-TECH LABORATORIES LTD.
Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

ECO-TECH LABORATORIES LTD.
10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

EWHAWK GOLDMINES LTD.-ETK 91-660
60, 625 HOWE ST.
V6C 2T6

GUST 28, 1991

ATTENTION: DAVID VISAGIE

LUES IN PPM UNLESS OTHERWISE REPORTED

GE 1

PROJECT: SULPHSIDE
49 ROCK PULP SAMPLES RECEIVED AUGUST 20, 1991

#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
0	- 5369	3.4	.45	40	10	10	<5	1.15	3	17	39	696	4.18	.12	<10	.43	1198	141	<.01	8	810	62	5	<20	14	<.01	<10	10	<10	<1	116
1	- 5370	2.4	1.61	40	6	35	<5	1.84	<1	10	37	2093	4.21	.18	<10	1.35	1404	20	<.01	3	1110	24	10	<20	36	<.01	<10	10	<10	<1	116
2	- 5371	2.6	.43	100	4	5	<5	.40	1	11	46	2570	3.88	.07	<10	.31	326	13	<.01	3	740	44	10	<20	8	<.01	<10	3	<10	<1	70
3	- 5372	2.6	1.04	50	4	20	<5	.30	<1	10	45	2868	3.77	.12	<10	.63	364	14	<.01	2	960	38	5	<20	10	<.01	<10	6	<10	<1	99
4	- 5373	2.2	1.42	45	6	30	<5	.52	<1	11	43	2598	4.05	.16	<10	1.02	492	12	<.01	4	1170	30	10	<20	13	<.01	<10	11	<10	<1	133
5	- 5374	4.8	.28	125	4	5	<5	.27	2	10	72	3045	4.31	.09	<10	.17	179	11	<.01	5	800	80	20	<20	9	<.01	<10	2	<10	<1	164
6	- 5375	2.2	1.29	40	6	15	<5	1.76	<1	12	50	2952	4.63	.16	<10	1.07	1398	10	<.01	3	1020	30	10	<20	27	<.01	<10	7	<10	<1	96

AUGUST 28, 1991

ET#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
27 -	5376	2.6	.52	60	4	10	<5	.59	<1	11	36	2683	4.36	.12	<10	.46	471	9	<.01	1	1070	30	5	<20	7	<.01	<10	3	<10	<1	81
28 -	5377	2.6	.94	40	6	15	<5	.49	<1	11	45	2439	4.12	.13	<10	.60	286	14	<.01	3	1060	20	5	<20	12	<.01	<10	6	<10	<1	96
29 -	5378	1.8	1.33	10	4	15	<5	.53	<1	10	40	2129	4.12	.12	<10	.97	400	8	<.01	1	870	28	5	<20	13	<.01	<10	8	<10	<1	75
30 -	5379	1.8	1.36	10	4	15	<5	.35	<1	10	37	2161	4.38	.12	<10	.90	359	12	<.01	1	970	16	5	<20	8	<.01	<10	6	<10	<1	77
31 -	5380	3.2	.18	45	4	5	10	.13	1	10	73	4334	4.41	.06	<10	.12	62	12	<.01	4	540	24	5	<20	15	<.01	<10	<1	<10	<1	52
32 -	5381	2.0	.08	45	4	5	<5	.09	<1	9	55	2241	4.63	.01	<10	.10	53	7	<.01	3	360	22	5	<20	9	<.01	<10	<1	<10	<1	43
33 -	5382	3.4	.07	210	6	<5	10	.06	<1	8	102	3870	3.81	<.01	<10	.08	37	10	<.01	5	290	150	25	<20	4	<.01	<10	<1	<10	<1	70
34 -	5383	1.0	.59	30	6	10	<5	.18	<1	8	64	2214	4.28	.07	<10	.41	239	12	<.01	3	770	12	5	<20	4	<.01	<10	2	<10	<1	82
35 -	5384	2.0	.44	15	4	10	<5	.16	1	7	39	2704	3.68	.05	<10	.35	166	8	<.01	2	690	46	5	<20	5	<.01	<10	1	<10	<1	91
36 -	5385	1.6	.77	15	4	5	<5	.21	<1	11	68	2759	4.67	.12	<10	.56	276	13	<.01	3	850	24	5	<20	7	<.01	<10	5	<10	<1	70
37 -	5386	1.8	.33	30	4	5	<5	.17	<1	10	62	2820	4.50	.08	<10	.23	108	12	<.01	3	730	48	5	<20	3	<.01	<10	<1	<10	<1	63
38 -	5387	1.6	.42	20	6	5	<5	.17	<1	10	70	2846	4.22	.09	<10	.30	147	14	<.01	2	760	32	<5	<20	7	<.01	<10	2	<10	<1	65
39 -	5388	2.2	.28	35	4	10	<5	.21	1	13	73	2478	5.61	.11	<10	.17	86	10	<.01	4	840	32	5	<20	7	<.01	<10	1	<10	<1	73
40 -	5389	1.4	1.27	10	6	10	<5	.47	<1	10	35	2406	4.79	.10	<10	.94	482	10	<.01	1	880	10	5	<20	18	<.01	<10	7	<10	<1	54
41 -	5390	2.0	1.23	15	2	15	5	.30	<1	11	58	3271	4.94	.10	<10	.85	383	10	<.01	2	820	6	5	<20	9	<.01	<10	7	<10	<1	72
42 -	5391	1.8	.30	25	6	5	5	.20	<1	10	61	3178	5.23	.08	<10	.22	99	22	<.01	4	740	28	5	<20	7	<.01	<10	<1	<10	<1	48
43 -	5392	1.6	.26	50	4	5	5	.22	1	8	35	2706	4.16	.05	<10	.20	94	10	<.01	3	960	30	10	<20	4	<.01	<10	<1	<10	<1	82
44 -	5393	1.6	1.38	20	4	20	<5	.69	<1	9	49	1969	4.46	.13	<10	1.03	731	13	<.01	1	950	26	5	<20	9	<.01	<10	7	<10	<1	90
45 -	5394	1.6	.65	20	2	10	<5	.24	1	9	47	2072	4.42	.09	<10	.52	206	13	.01	2	1000	32	5	<20	5	<.01	<10	1	<10	<1	81
46 -	5395	2.2	.26	90	2	5	<5	.29	<1	10	64	3512	4.98	.09	<10	.15	78	11	<.01	2	1200	24	15	<20	5	<.01	<10	<1	<10	<1	60
47 -	5396	2.0	.22	30	4	5	<5	.31	<1	10	33	2588	5.06	.08	<10	.15	103	11	<.01	1	1120	24	5	<20	5	<.01	<10	<1	<10	<1	36
48 -	5397	2.0	.45	30	6	<5	<5	.27	<1	11	51	2285	5.13	.08	<10	.26	185	15	<.01	3	1150	26	5	<20	6	<.01	<10	<1	<10	<1	44
49 -	5398	1.4	.11	55	4	<5	<5	.28	4	7	72	1968	4.85	.03	<10	.10	64	9	<.01	4	1220	22	5	<20	5	<.01	<10	<1	<10	<1	763

NOTE: < = LESS THAN

ECO-TECH LABORATORIES LTD.
CLINTON S. AYERS
LABORATORY MANAGER

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 26, 1991

CERTIFICATE OF ASSAY ETK 91-657

EWHAWK GOLDMINES LTD.
60, 625 HOWE ST.
ANCOUVER, B.C.
6C 2T6

TTENTION: DAVID VISAGIE

AMPLE IDENTIFICATION: 87 ROCK PULPS samples received AUGUST 19, 1991
PROJECT: SULPHSIDE
SHIPMENT NUMBER: 39

ET#	Description	AU (g/t)	AU (oz/t)	CU (%)
1 -	5399	1.92	.056	.23
2 -	5400	.86	.025	.28
3 -	5401	.61	.018	.24
4 -	5402	.68	.020	.20
5 -	5403	.74	.022	.21
6 -	5404	.99	.029	.21
-	5405	.61	.018	.23
-	5406	.74	.022	.24
9 -	5407	.63	.018	.27
10 -	5408	1.07	.031	.27
11 -	5409	.19	.006	< .01
12 -	5410	1.02	.030	.26
13 -	5411	1.20	.035	.43
14 -	5412	.93	.027	.29
15 -	5413	1.21	.035	.28
16 -	5414	.76	.022	.24
17 -	5415	.59	.017	.19
18 -	5416	.76	.022	.18
19 -	5417	.58	.017	.23
20 -	5418	.68	.020	.21
21 -	5419	.43	.013	.20
22 -	5420	.63	.018	.23
23 -	5421	.42	.012	.19
24 -	5422	.44	.013	.20
25 -	5423	.36	.010	.15
26 -	5424	.49	.014	.19
27 -	5425	.55	.016	.19
28 -	5426	.50	.015	.19
29 -	5427	.52	.015	.19
30 -	5428	.27	.008	.15

FRANK J. PEZZOTTI, Certified Assayer

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

HAWK GOLDMINES LTD.

AUGUST 26, 1991

T#	Description	AU (g/t)	AU (oz/t)	CU (%)
31 -	5429	.51	.015	.19
32 -	5430	.46	.013	.17
33 -	5431	.35	.010	.18
34 -	5432	.56	.016	.17
35 -	5433	.38	.011	.16
36 -	5434	.31	.009	.11
37 -	5435	.25	.007	.02
38 -	5436	.45	.013	.06
39 -	5437	.57	.017	.18
40 -	5438	.56	.016	.08
41 -	5439	.23	.007	.06
42 -	5440	.41	.012	.05
43 -	5441	.84	.024	.03
44 -	5442	.34	.010	.02
45 -	5443	.40	.012	.02
46 -	5444	.38	.011	.04
47 -	5445	.36	.010	.06
48 -	5446	.30	.009	.04
49 -	5447	.43	.013	.01
50 -	5448	.40	.012	.02
[illegible] -	5449	.46	.013	.03
[illegible] -	5450	.56	.016	.01
53 -	5451	1.09	.032	.35
54 -	5452	.40	.012	.03
55 -	5453	.27	.008	< .01
56 -	5454	.30	.009	< .01
57 -	5455	.23	.007	< .01
58 -	5456	.60	.017	< .01
59 -	5457	.55	.016	< .01
60 -	5458	.44	.013	< .01
61 -	5459	.55	.016	< .01
62 -	5460	.61	.018	< .01
63 -	5461	.78	.023	< .01
64 -	5462	.51	.015	< .01
65 -	5463	.61	.018	< .01
66 -	5464	.93	.027	.05
67 -	5465	.37	.011	.21
68 -	5466	.29	.008	.02
69 -	5467	.19	.006	.01
70 -	5468	.28	.008	.01
71 -	5469	.65	.019	< .01
72 -	5470	.81	.024	< .01
73 -	5471	.46	.013	< .01
74 -	5472	.39	.011	.06
75 -	5473	.24	.007	.03

Per FRANK J. PEZZOTTI, Certified Assayer

ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

...HAWK GOLDMINES LTD. ETK91-657 AUGUST 26, 1991

T#	Description	AU (g/t)	AU (oz/t)	CU (%)
76 -	5474	.38	.011	.02
77 -	5475	.40	.012	.04
78 -	5476	.42	.012	.06
79 -	5477	.40	.012	.05
80 -	5478	.58	.017	.05
81 -	5479	.22	.006	.03
82 -	5480	.38	.011	.21
83 -	5481	.76	.022	.14
84 -	5482	.35	.010	.03
85 -	5483	.43	.013	.01
86 -	5484	.33	.010	.03
87 -	5485	.57	.017	-

)TE: < = less than

ECO-TECH LABORATORIES LTD.
Per Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

ECO-TECH LABORATORIES LTD.
10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

NEWHAWK - ETK 91-657
860, 625 HOWE ST.
VANCOUVER, B.C.
V6C 2T6

ATTENTION: DAVID VISAGIE

AUGUST 28, 1991

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT: SULPHSIDE
87 ROCK/PULP SAMPLES RECEIVED AUGUST 19, 1991

T#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
87 -	5485	8.4	.49	40	<2	25	<5	2.87	46	11	33	595	3.74	.22	10	.31	4625	2	<.01	3	1280	2594	5	<20	100	.05	<10	13	<10	2	3334

NOTE: < = LESS THAN

ECO-TECH LABORATORIES LTD.
CLINTON AYERS
LAB MANAGER

SULPHSIDE 1 CLAIM GROUP

SULPHSIDE 2 CLAIM GROUP

BRUCESIDE 1 CLAIM GROUP

SULPHURETS 2 FR.

XRAY 5

XRAY 4

XRAY 6

XRAY 7

XRAY 8

XRAY 9

MITCHELL GLACIER

ICE 2

ICE 5

ICEFIELD

MITCHELL

CREEK

MITCHELL SILVER ZONE

ALDER ZONE

MITCHELL GOLD ZONE

MOLY ZONE

QTZ.STOCKWORK ZONE

SNOWFIELD ZONE

JOSEPHINE ZONE

KIRKHAM ZONE

MAIN COPPER ZONE

SULPHURETS GOLD ZONE

ED 1

ED 2

TEDRAY 6

TEDRAY 7

TEDRAY 8

TEDRAY 20

TEDRAY 21

TEDRAY 22

ARBEE 35

ARBEE 54

ARBEE 39

ARBEE 55

LOCATION LINE

DAWSON-ROSS NO.1

DAWSON-ROSS NO.3

LOCATION LINE

425000 E

6265000 N

S91-396

S91-395

S91-387

S91-386

S91-394

S91-393

S91-398

S91-397

S91-392

S91-388

S91-389

S91-390

S91-391

9, 1 FR.

0 200 400 600 800 1000

METRES

NEWHAWK GOLD MINES LTD.

SULPHURETS PROPERTY

SULPHSIDE 1 GROUP 1991 DRILLING

DRAWN BY: T. KIRBY	SCALE: 1:5000
DATE: SEPT 1991	NTS 104B/8,9
DRAWING NO:	FIGURE NO:

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,821