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ASSESSMENT REPORT
ON THE
NORTH FORK MINERAL CLAIMS
CLINTON M.D., BRITISH COLUMBIA
NTS 920/1E

FILMED

D.H. WOOD, P.GEO.
MAY 15, 1995

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

23,953

TABLE OF CONTENTS

INTRODUCTION	3
HISTORY	3
PROPERTY STATUS	4
GEOLOGY	4
MINERALIZATION AND ALTERATION	4
SOIL GEOCHEMISTRY	4
1994 FIELD WORK	5
CONCLUSIONS	5
RECOMMENDATIONS	7
BIBLIOGRAPHY	8
APPENDIX A - CERTIFICATE OF QUALIFICATIONS	9
APPENDIX B - STATEMENT OF COSTS	10
APPENDIX C - LABORATORY RESULTS	11

FIGURES

1. North Fork Claims Location Map	follows text
2. Sample Location Map	follows text
3. Idealized Section Through an Epithermal System	follows text
4. As in Soils from previous investigations	follows text
5. Au in Soils from previous investigations	follows text
6. Hg in Soils from previous investigations	follows text

INTRODUCTION

The North Fork Claims are located on Stirrup Creek, a tributary of Watson Bar Creek (figure 1). Stirrup Creek, which was originally named North Fork of Watson Bar Creek. The creek has been a placer gold producing stream since the early 1900's (Warren, 1982).

Gold mineralization is known to exist on the adjacent Astonisher and Chisholm crown granted claims at the headwaters of Stirrup Creek and the Mad claim group on Watson Bar Creek (Sadler-Brown, 1993)..

Exploration work on the area of the North Fork Claims by Cazador Explorations Ltd. in the late 1980's (Lammie, 1987; Chapman and Boyde, 1988) outlined gold, arsenic and mercury soil anomalies which are consistent with epithermal gold mineralization at shallow depths.

Rock sampling and mapping conducted during June and August, 1994 have confirmed that rocks in this area are also anomalous with respect to gold, arsenic and mercury geochemistry and that argillic and propylitic alteration of these areas is consistent with a suspected epithermal system. While gold results from rock samples were found to be subeconomic, mercury, arsenic and antimony, as well as lead and zinc levels indicate that economic mineralization may well exist in a deeper part of the system.

The availability of recent exploration data, in addition to the presence of good quality access roads to the claims and anomalous areas, will facilitate permitting and allow further exploration to commence with minimum delay.

A three phase program is recommended to explore the economic potential of epithermal mineralization on the North Fork Claims. The estimated cost of the program is \$260,000 (CDN).

HISTORY

Gold has been produced intermittently from placer deposits along Stirrup Creek since discovery during World War I. Although production figures are not available, estimates of between 3000 to 5000 ounces are suggested by Warren (1982) for the first 25 years after discovery. At least this amount has been subsequently produced, principally during the late 1970's to 1990. A conservative figure for total placer production would be on the order of 8000 to 10,000 troy ounces (25 to 30 kg).

Placer gold was traced in part to epithermal mineralization at the headwaters of Stirrup Creek during the 1930's. This was followed by underground exploration, but the properties were abandoned during the 1940's due to the cessation of gold mining and low gold prices.

The renewed interest in precious metals during the 1980's resulted in production from the Blackdome deposit, located some 30 km northwest of the North Fork claims, and in renewed exploration of the Watson Bar and Stirrup Creek areas. BHP-Utah Ltd. has trenched and drilled the Mad claims, located some 10 km southeast of the North Fork Claims and continues to perform assessment work. Gold occurrences at the Astonisher and Chisholm Crown Granted claims were tested by drilling, trenching and geochemical surveys by Chevron Minerals (this area, less the Crown Granted claims, constitutes the northern half of the North Fork Claims). Tonnage and grade estimates based on the drilling by BHP and Chevron are not available.

PROPERTY STATUS

The North Fork Claims comprise two nine (9) unit modified grid mining claim located in the Clinton Mining Division and registered to L.A. Atha of Vancouver, B.C.. The claims have the following particulars:

<u>Claim Name</u>	<u>Tenure Number</u>	<u>Expiry Date</u>
North Fork 1	326485	June 16, 1995
North Fork 2	326487	June 16, 1995

GEOLOGY

The North Fork Claims are underlain by clastic sedimentary rocks of the lower Cretaceous Jackass Mountain Group. Clastic rocks are intruded by Early Eocene felsic porphyry dikes, sills and plugs. Locally Miocene clastics overlie and basalt dikes cross-cut older lithologies.

Eocene intrusive and extrusive rocks are related to extensional tectonic activity, preserved as a northwest trending graben bounded on the east by the Yalokom Fault and on the west by the Hungry Valley Fault (Tipper, 1978).

Gold mineralization in the area is associated with subsidiary faults within the graben and is related to fossil hot springs associated with Eocene igneous activity which used these faults as conduits.

MINERALIZATION AND ALTERATION

Field examinations of the North Fork Claims and the Crown Grants conducted during spring and summer 1994 indicate that alteration of Cretaceous clastic sediments is consistent with that to be expected above epithermal gold mineralization (figure 3).

Sandstone and intermediate volcanic rocks in the area of soil anomalies exhibits propylitic and argillic alteration. Propylitic alteration is found in gossanous outcrops with minor pyrite and carbonate. Most rocks underlying the property are within a zones of propylitic alteration which strike roughly perpendicular to Stirrup Creek, a structurally related physiographic feature.

Within the propylitic alteration zones are zones of argillic alteration accompanied by chalcedonic quartz breccia veins. Very fine grained metacinnabar (?) and pyrite occur within chalcedonic quartz, giving it a dark gray to black color. Anhydrite occurs as an accessory mineral within and adjacent to zones of argillic alteration.

Quartz porphyry occurs throughout the property area. In the western portion of the North Fork claims argillic alteration was noted in both intrusive and sedimentary rocks. Elsewhere quartz porphyry occurs in numerous isolated outcrops, associated with areas of propylitic alteration.

SOIL GEOCHEMISTRY

Gold, arsenic and mercury soil anomalies from a program conducted by Cazador Explorations in 1987 and 1988 occur as two roughly southeast trending zones associated with areas of argillic alteration. The most significant of these is located western portion of the claims where broad arsenic (31 to 558 ppm) and mercury (60 to 350 ppb) anomalies are coincident with gold soil anomalies ranging from 27 to 250 ppb (figures 4, 5 and 6).

A trenching program was conducted within the last 10 years in an area 100 to 200 meters north of where these anomalies are located. The topography in this area and the lack of float traceable to the trenches indicates the trenches are not the likely source of the anomalies, assuming they

predate the soil survey. The rocks in the trenches are typical of propylitic altered sediments seen elsewhere on the claims. If these trenches were placed based on the soils survey, they were apparently put in the wrong place.

1994 FIELD WORK

Two visits were made to the North Fork Claims during the Spring and Summer of 1994. A four day visit between June 13 and June 16, 1994 was spent investigating the areas of soil anomalies and trenching performed by previous investigators. This visit resulted in the confirmation that the previously described exploration work had been accomplished and additionally allowed this author to conclude that anomalies are associated with zones of argillic and propylitic alteration. Several specimens were also collected for cursory analysis.

A second visit to the claims took place over five days between August 18 and 24, 1994. During this visit five rock samples were collected from areas identified as anomalous by previous investigators and confirmed by this author as being associated with hydrothermal alteration (see figure 2 for locations).

The results of assay and geochemical analyses of samples collected by the author are included as Appendix B. A summary of the the sample results is as follows;

Sample No.	Description	Au (opt)	Hg (ppm)	As (ppm)	Sb (ppm)	Pb (ppm)	Zn (ppm)
111601	Argillic alteration of Fs ppy. Rusty weathering due to pyrite	ND*	1580	129.8	7.8	11	21
111602	Quartz adularia vein material from float. Minor rusty weathering.	ND	20	2.5	0.5	2	6
111603	Propylitic alteration of quartz porphyry. Rusty weathering with gypsum/anhydrite and minor pyrite.	ND	630	42.2	2.0	160	192
111604	Silicified (chalcedonic) breccia with fragments of quartz-feldspar porphyry.	ND	100	83.3	1.2	13	41
111605	Blue quartz breccia with fragments of argillic altered volcanic in blue chalcedonic quartz matrix from zone of argillic alteration.	0.001	205	208.7	4.2	6	48

*=Not measurable by fire assay

Assuming an epithermal system, it is apparent from these results that economic mineralization exists at some depth from the present day surface. The currently accepted model of epithermal gold mineralization is in agreement with this supposition (figure 3). The probable depth to economic mineralization would be on the order of 200 to 400 meters.

CONCLUSIONS

The accumulated geological and geochemical evidence from the 1994 and earlier surveys of the North Fork 1 and 2 claims area are consistent with the presence low sulfide epithermal gold mineralization.

Coincident arsenic, gold and mercury soil anomalies (Lammle, 1987; Chapman and Boyde, 1988) associated with calcedonic quartz breccia, argillic alteration, and high level felsic volcanic rocks are typical of alteration mineralogy occurring in the portion of a hot springs related epithermal deposit above the level of boiling.

A synthesis of the data with current models of low sulfide epithermal mineralization (Buchanan, 1981; Panteleyev, 1988; Meinert, 1993) indicates that economic mineralization may exist at shallow depths (200 to 400 meters) below the present surface area of the soil anomalies in the central and southern portion of the North Fork claims.

RECOMMENDATIONS

A three stage program of detailed geological mapping and soil geochemistry surveys, followed by drill testing is recommended to determine the economic potential of the property. A sum of \$260,000 (CDN) is required to perform the recommended program.

Geophysics may provide limited data on structures, but not significantly more than geological mapping can. Geophysical surveys are therefore not considered a high priority.

Shallow trenching or even shallow drilling is unlikely to penetrate to the level of significant gold-silver mineralization, therefore any drilling program will require minimum 1000 meters to allow for at least one deep hole to test for the depth of the system.

A favorable outcome at each stage is required before the next stage should be started. The following table provides estimates of the costs associated with each stage of exploration:

Recommendation	Cost
Stage I	
Geological Mapping	\$5,000
Geochemical Sampling	\$6,000
Report Preparation	\$4,000
Total Stage I	\$15,000
Stage II	
Claims Expansion	\$10,000
Drilling (1,000 feet @ \$30/ft)	\$30,000
Supervision	\$10,000
Report Preparation	\$5,000
Total Stage II	\$55,000
Stage III	
Drilling (5,000 feet @ \$30/ft)	\$150,000
Supervision	\$30,000
Report Preparation	\$10,000
Total Stage III	\$190,000
Total I, II, and III	\$260,000

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- Warren, H.V., 1982, The Significance of a Discovery of Gold Crystals in Overburden; *in* Precious Metals in the Northern Cordillera, Association of Exploration Geochemists, pp 45-51.

APPENDIX A - CERTIFICATE OF QUALIFICATIONS

I Douglas H. Wood of the city of Pullman in the State of Washington do hereby certify as follows:

1. I am a consulting and contract geologist based in Pullman, Washington and have been active in mineral exploration and regional mapping since 1977 and that I was present on the North Fork 1 and 2 mineral claims during the periods June 13 to 16 and August 18 to 24, 1994 during which geological investigations of these claims were made.
2. I graduated from the University of British Columbia in 1981 with a Bachelor of Science degree in Geological Sciences and spent a further year at the post-graduate level at the University of B.C. I am currently enrolled as a Ph.D. candidate at Washington State University, where I am specialising in economic geology.
3. I am a fellow in good standing of the Geological Association of Canada (F4594).
4. I am a Professional Geoscientist registered with The Association of Professional Engineers and Geoscientists of the Province of British Columbia (#19529).

Dated at Pullman, State of Washington, this 15th day of May, 1995.

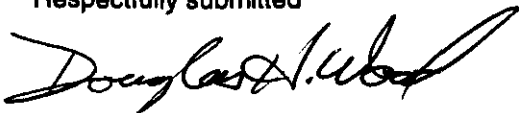


Douglas H. Wood, P.Geol.
Consulting Geologist

APPENDIX B - STATEMENT OF COSTS

Item			Cost
Assays			
	Acme Labs	(file 95-0008)	\$ 144.25
Accommodations			
June 1994	motel - Lillooet	2 nights @ \$39.10	78.20
August 1994	motel - Lillooet	1 night @ \$39.10	39.10
	motel - Seattle	1 night @ \$41.99	41.99
Transportation			
June 1994	4x4 Pick-up truck	1 week @ \$250.00	250.00
	Fuel		83.20
August 1994	4x4 Pick-up truck	1 week @ \$250.00	250.00
	Fuel		64.00
Meals			
June 1994			143.00
August 1994			114.00
Consulting Fees			
June 1994	D.H. Wood	4 days @ \$300.00	1,200.00
August 1994	D.H. Wood	3 days @ \$300.00	900.00
Report Preparation			1,000.00
Total			\$ 4,307.74

Respectfully submitted



Douglas H. Wood, P. Geo.

Consulting Geologist

APPENDIX C - LABORATORY RESULTS



GEOCHEMICAL ANALYSIS CERTIFICATE

D. H. Wood PROJECT NORTH FORK 94 File # 95-0008

43 McEachern Drive, Pullman WA U.S.A. 99163

SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	As*	Sb*	Bi*	Ge*	Se*	Te*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
B 111601	1	71	11	21	.2	5	9	404	2.32	157	<5	<2	3	9	<.2	8	<2	25	.23	.049	15	5	.03	95	<.01	4	.72	.01	.19	<1	1580	129.8	7.8	.3	.1	.5	.5
B 111602	3	9	2	6	<.1	11	<1	218	.39	<2	<5	<2	<2	11	<.2	<2	<2	2	.94	.003	<2	14	.03	10	<.01	3	.08	.01	.01	3	20	2.5	.5	<.1	<.1	.3	<.1
B 111603	1	12	160	192	.3	19	6	1214	3.52	44	<5	<2	2	176	.7	<2	<2	18	8.66	.035	8	7	4.66	138	<.01	<2	.49	.01	.15	<1	630	42.2	2.0	.1	.1	.4	.5
B 111604	2	18	13	41	.1	23	5	685	1.44	94	<5	<2	2	31	<.2	3	<2	10	.17	.029	11	8	.05	74	<.01	7	.48	.01	.13	<1	100	83.3	1.2	<.1	<.1	.3	<.1
B 111605	2	25	6	48	.1	44	12	600	3.27	211	<5	<2	<2	23	<.2	6	<2	59	.67	.042	7	42	.10	66	<.01	<2	.65	.01	.03	<1	205	208.7	4.2	.1	<.1	.2	<.1
RE B 111605	1	24	4	47	.2	46	12	589	3.25	204	<5	<2	2	23	<.2	2	<2	58	.68	.040	7	42	.10	64	<.01	3	.64	.01	.03	<1	215	209.5	4.1	.1	<.1	.1	<.1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
 - SAMPLE TYPE: ROCK HG ANALYSIS BY FLAMELESS AA. AS* SB* BI* GE* SE* TE* ANALYSIS BY HYDRIDE ICP.
 Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JAN 3 1995 DATE REPORT MAILED: *Jan 17/95* SIGNED BY: *C. Leong* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ASSAY CERTIFICATE

D. H. Wood PROJECT NORTH FORK 94 File # 95-0008

43 McEachern Drive, Pullman WA U.S.A. 99163

SAMPLE#	-100	+100	-100Au	+100Au	TotAu	DupAu
	gm	gm	opt	opt	opt	opt
B 111601	1945	18.8	<.001	<.001	<.001	-
B 111602	1484	28.1	<.001	<.001	<.001	-
B 111603	797	26.4	<.001	.001	<.001	-
B 111604	592	24.6	<.001	<.001	<.001	-
B 111605	487	30.2	.003	<.001	.003	.001

-100 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -100 MESH. +100 AU - TOTAL SAMPLE FIRE ASSAY.
- SAMPLE TYPE: ROCK

DATE RECEIVED: JAN 3 1995 DATE REPORT MAILED: *Jan 17/95* SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

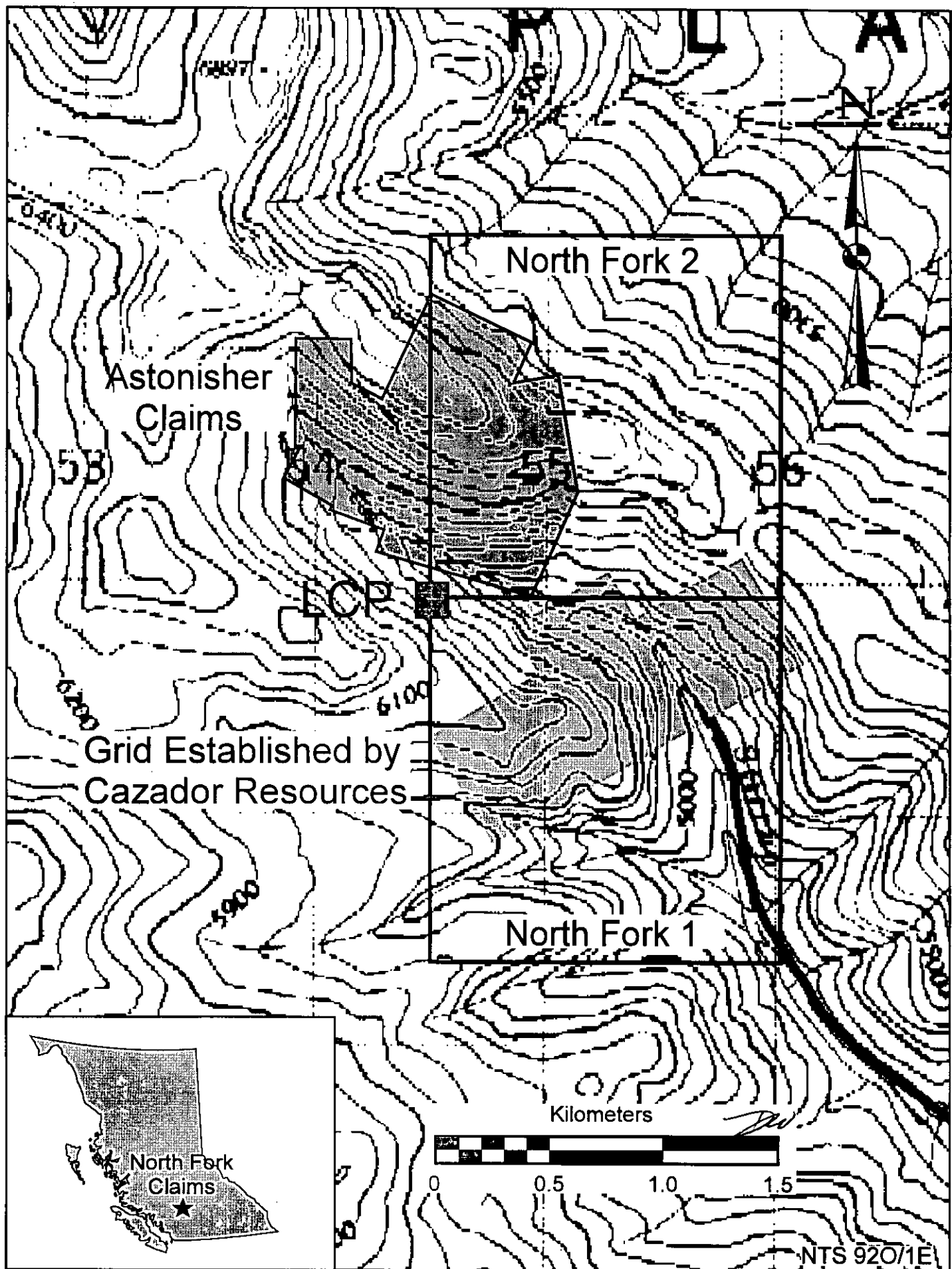


Figure 1: North Fork Claims Location Map

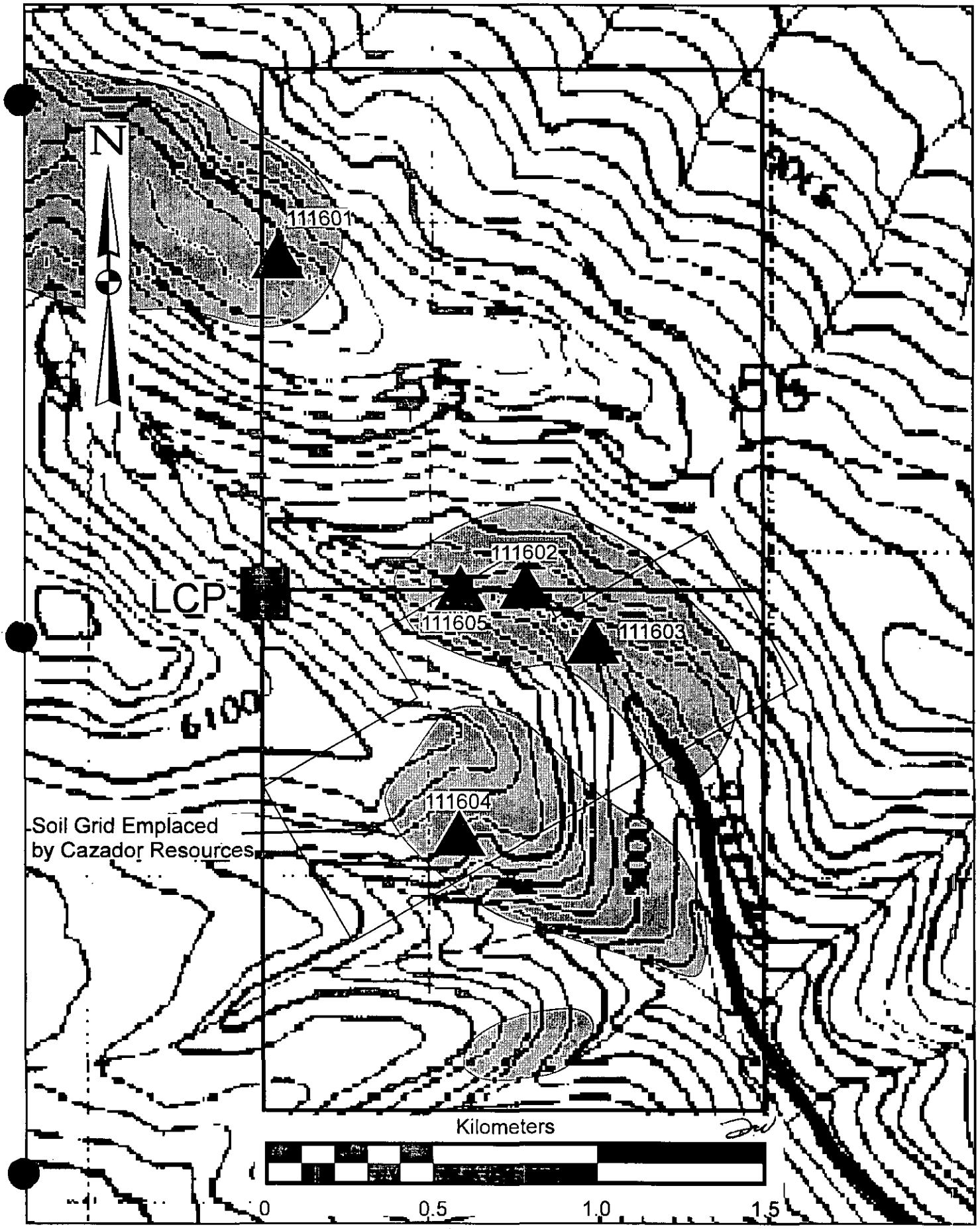
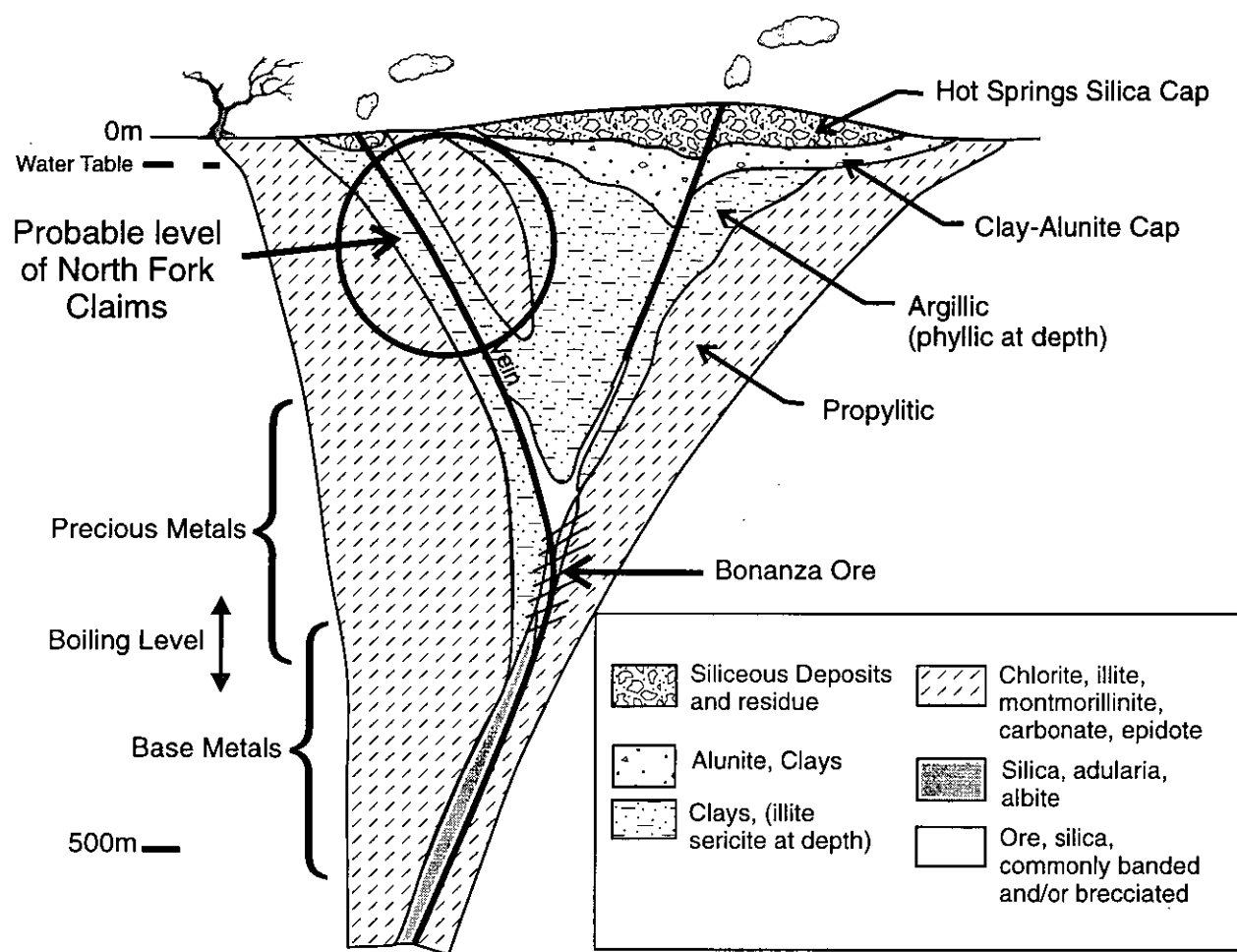


Figure 2: Sample Location Map (Shaded areas are propylitic alteration zones)



Gangue

Voids, clay
chalcedony, opal
christobalite

Calcite, zeolites
(chalcedony)

Quartz, calcite, pyrite
(barite, fluorite)

Quartz, adularia
sericite, pyrite
(calcite, chlorite,
fluorite, rhodochrosite)

Quartz, pyrite
(chlorite, hematite,
fluorite)

Quartz, siderite, pyrite,
pyrrhotite, arsenopyrite

Ore

Rare Au and Pyrite
Hg, Sb, Ag

Au in pyrite
Ag sulphosalts

Argentite
Electrum

Sulfides

Figure 3: Idealized section through an epithermal system (after Buchanan, 1981; Panteleyev, 1988)

DW



Anomalous
(≥ 30 ppm)

LCP

North Fork 2
North Fork 1

5900NW

5800NW

5700NW

5600NW

5500NW

5400NW

5300NW

5200NW

5100NW

5000NW



0 100 200 300
meters

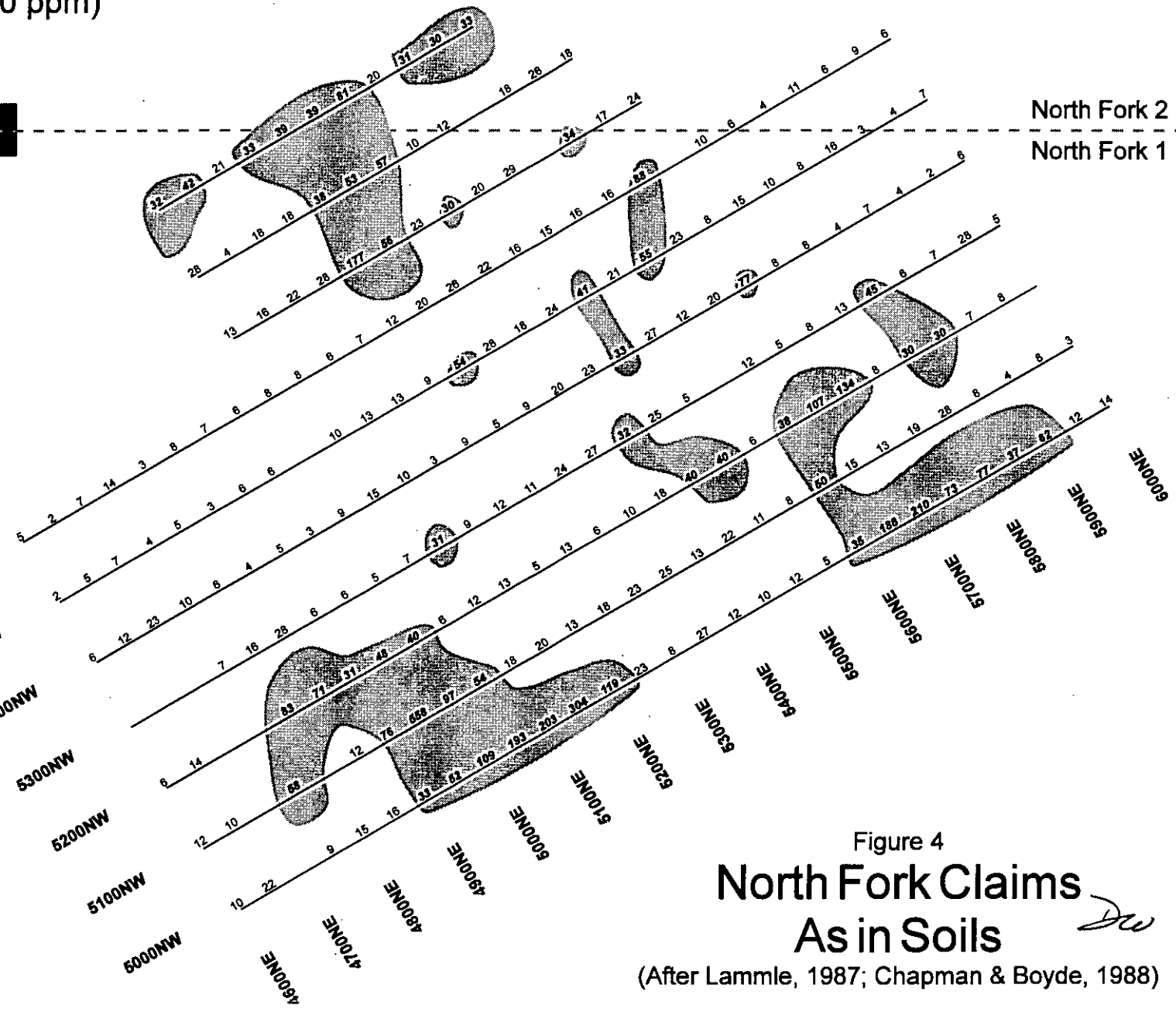


Figure 4
North Fork Claims
As in Soils

(After Lammle, 1987; Chapman & Boyde, 1988)

DW



Anomalous
(≥ 25 ppm)

LCP



North Fork 2
North Fork 1

5900NW

5800NW

5700NW

5600NW

5500NW

5400NW

5300NW

5200NW

5100NW

5000NW

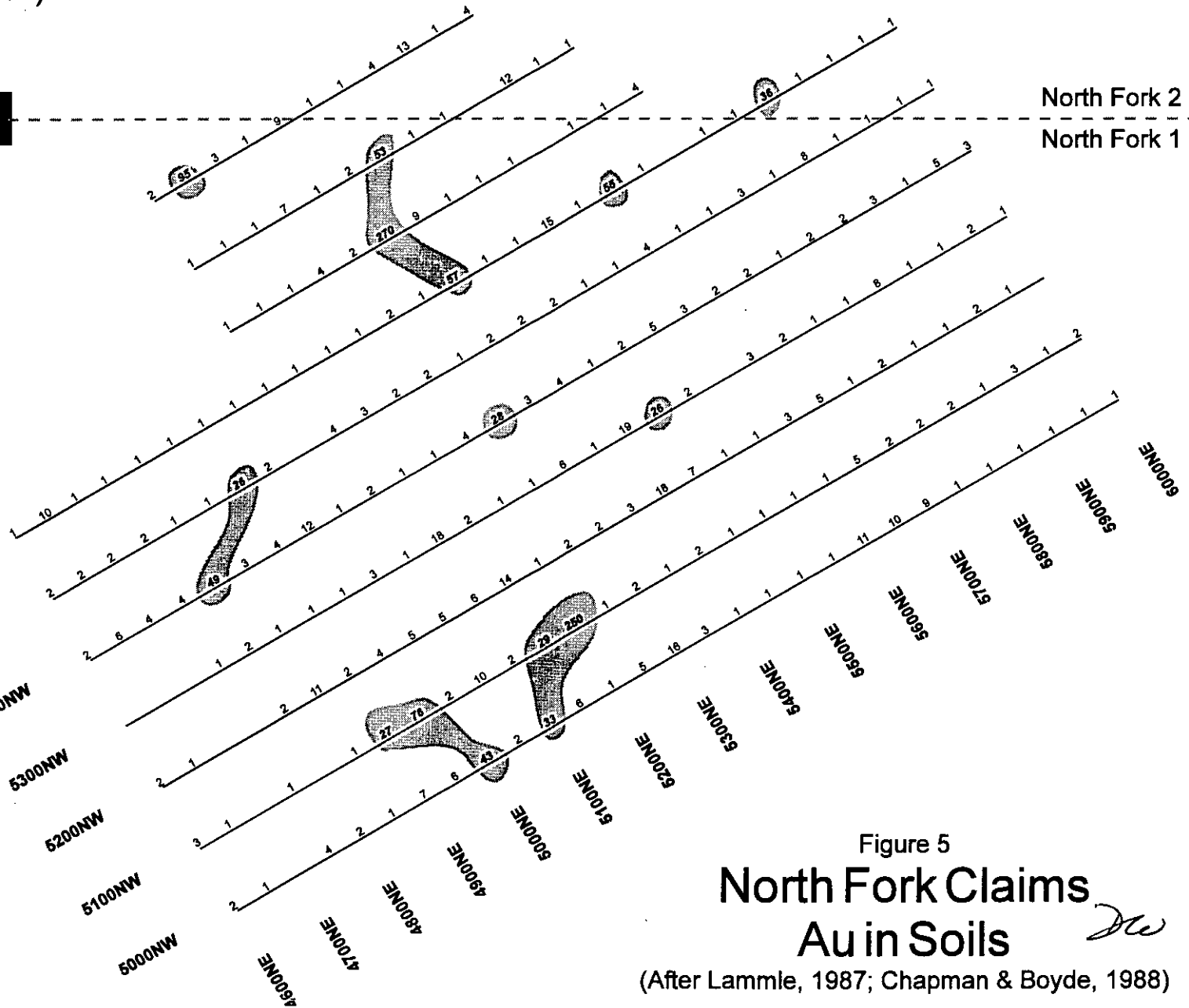


Figure 5
North Fork Claims
Au in Soils

(After Lamble, 1987; Chapman & Boyde, 1988)



Anomalous
(≥ 60 ppm)

LCP



North Fork 2
North Fork 1

5900NW

5800NW

5700NW

5600NW

5500NW

5400NW

5300NW

5200NW

5100NW

5000NW

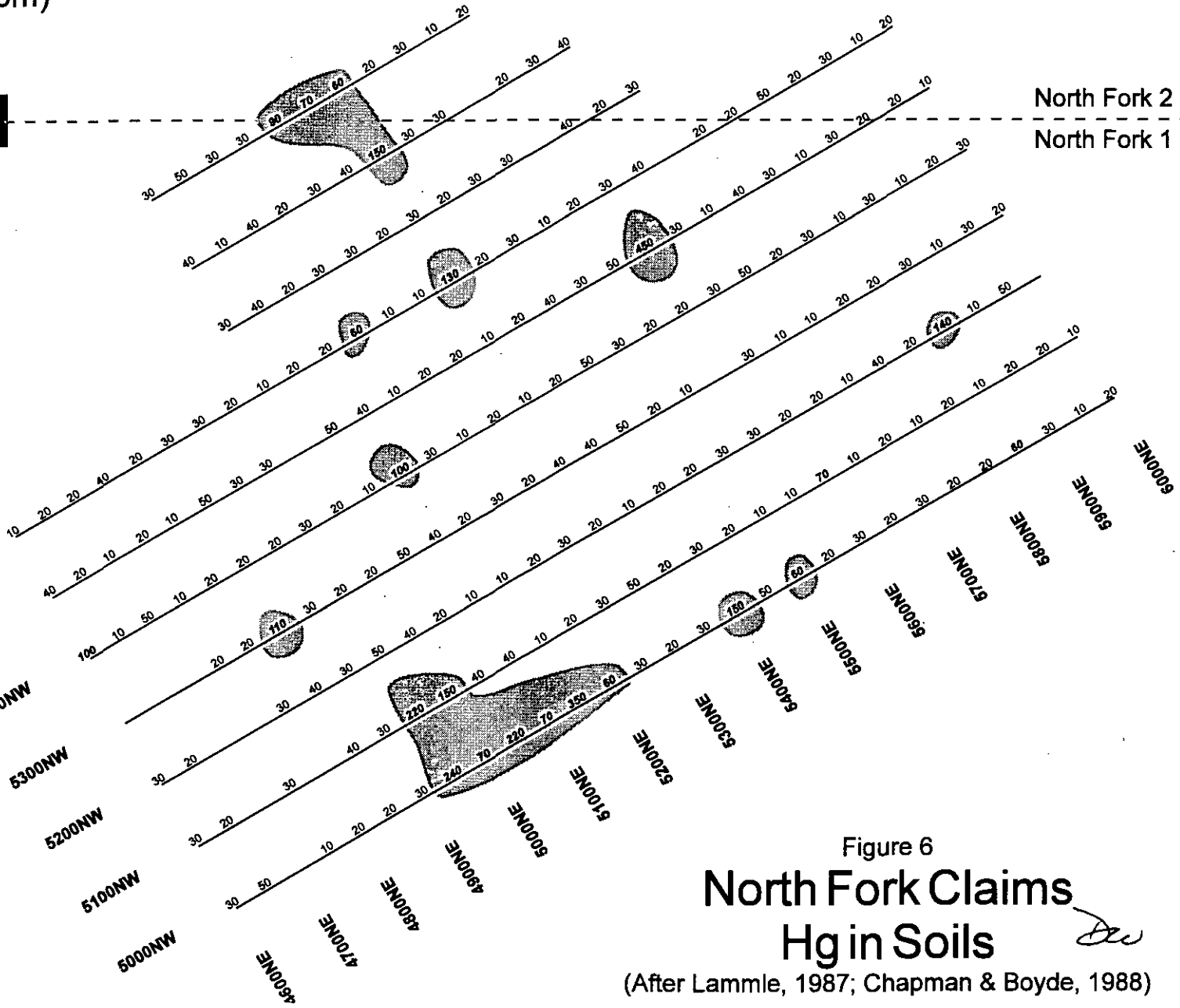
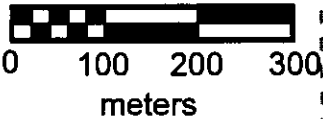


Figure 6
North Fork Claims
Hg in Soils

(After Lammler, 1987; Chapman & Boyde, 1988)