TECHNICAL REPORT

on the

THREE GUARDSMEN CLAIM GROUP

59° 35' North Latitude

136° 26' West Longitude

NTS 114 P 9/W

Atlin Mining Division

Barry L. Whelan, P. Geol., F.G.A.C.

May, 1989

TABLE OF CONTENTS

TABLE OF FIGURES

PROSPECTORS COMMENTS

There is good evidence of a strong north - south fault potentially extending down the eastern boundary of the claim group. The best exposure of this fault occurs at the confluence of Clayton Creek and Clear Creek.

This fault is exposed over approximately 25 metres. Contained within, are zones which demonstrate strong carbonate alteration. Along this "linear", there is also an associated system of tan - weathered dykes. My best estimate is that they are tertiary. Since tertiary volcanics are sometimes associated with gold and along with a major fault system, I felt that it was essential to sample, the drainages following this linear.

Michael Renning
Prospector

SUMMARY

The property described herein is located in northwestern British Columbia in the St. Elias range, adjacent to the Alaska - British Columbia border (see Figure 1). The claims cover a tongue of Palaeozoic metasediments surrounded by Cretaceous/Tertiary quartz-diorite. Skarns resulting from the contact of limestone with the intrusive material is the host of a variey of poly-metallic sulphides with associated precious metals. Gold within the skarn and in samples from the surrounding area from both erratics and formational sequences indicate that the area has potential for mineralization.

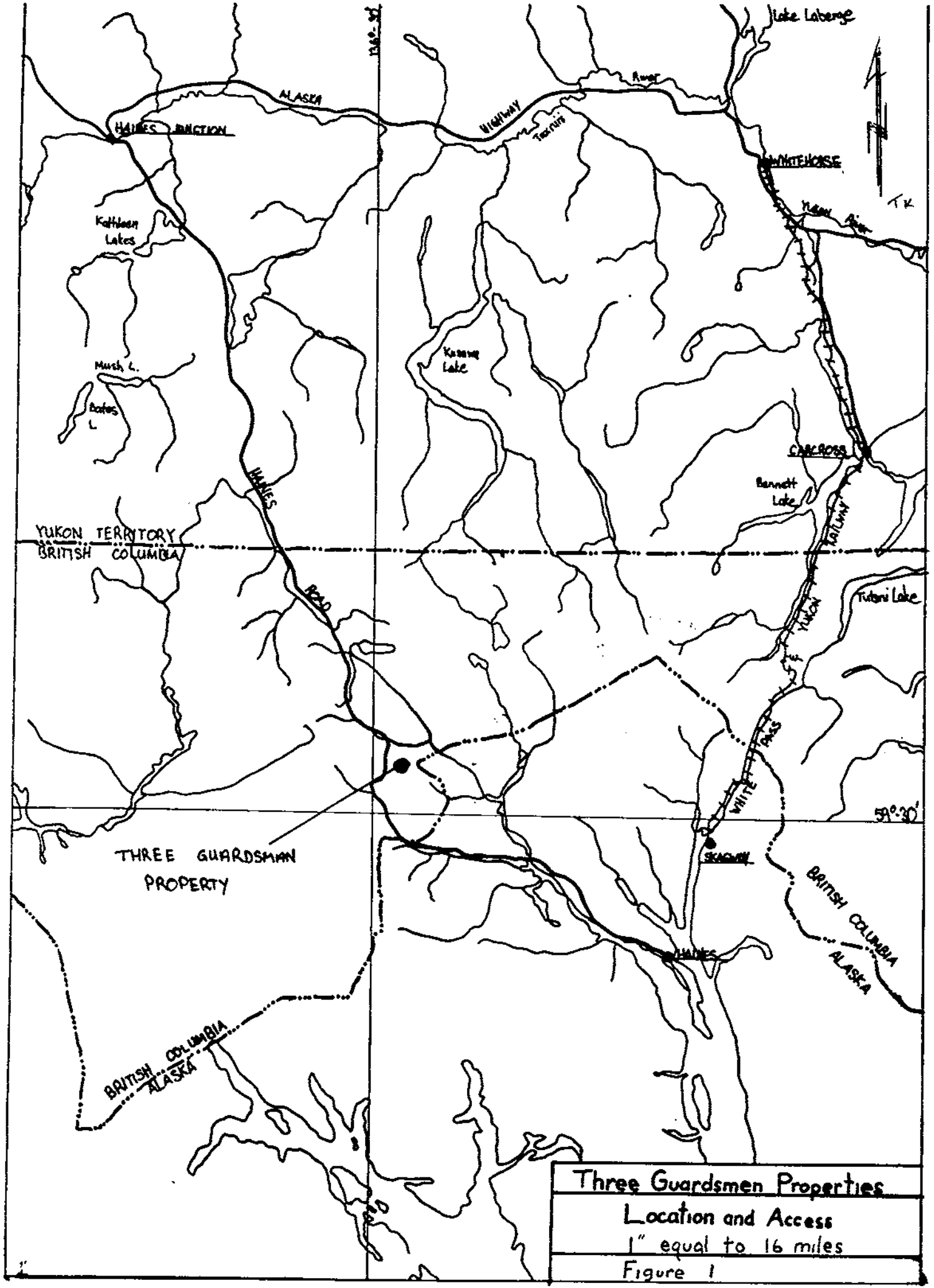
Additional areas for prospective mineralization lies within the surrounding fracture and fault zones which could have provided conduits and conditions for Carlin-type disseminated microscopic replacement by gold.

The most extensive work on the property was carried out in 1971 by Imperial Oil Enterprises Ltd. during the course of which several diamond drill holes were drilled in an effort to determine if a commercial deposit was present. Under the economic conditions present, Imperial decided not to pursue the prospect.

Subsequent investigation has revealed that mineralization is present over a larger area and that the area has potential for skarn type deposits associated with fracturing and faulting in the area.

RECOMMENDATIONS

It is recommended that additional prospecting and mapping of the area be undertaken during periods of minimal snow cover to extend the general knowledge of the mineralization. Because of the lack



Three Guardsmen Properties

Location and Access

1" equal to 16 miles

Figure 1

of soil in the area, geochemical soil sampling is not a feasible method. However, the excellent drainage within the area allows stream sampling and panning as exploration and prospecting methods.

LOCATION AND ACCESS

The Three Guardsmen Property lies in the northwestern corner of British Columbia, approximately 2 km southeast of Three Guardsmen Mountain, in the Rainy Hollow district. Elevation of the property is between 4,000 and 6,000 feet a.s.l., with the minerallized skarn at approximately 5600 feet a.s.l. All of the property is above tree line. The claims are within the Atlin Mining Division, B.C. on Claim Map # 7T294.

The property lies four to six kilometres east of the Haines Junction-Haines highway and 90 kilometres distant from Haines. The highway is an all-weather road, partially paved. Access to the property is via a four-wheel-drive trail which extends from Mile 58.5 of the Haines road to the center of the property. The distance from Whitehorse is approximately 200 miles by road.

PREVIOUS WORK

The discovery of a mineralized skarn with copper bearing magnetite was made in 1907, as a result of exploration efforts in precious metals. The property was sub-economic at that time. In 1945 the property was examined by K. deP. Watson of the B.C. Department of Mines and reported upon in Bulletin # 25.

In 1969, G.S. Zimmer of R.G. Hilker Ltd., Whitehorse, carried out geological mapping and a magnetometer survey of the property for Taneloy Mines Ltd. An access road was constructed in October, 1969 and in November a single diamond drill hole was located on the property to a depth of 428.5 feet.

In 1971, Eagle River Mines Ltd. drilled two diamond drill holes for a total footage of 1814 feet. Subsequent to these holes, an option was granted to Imperial Oil Enterprises Ltd. which carried out geological mapping, magnetometer and altitude surveys. Two additional diamond drill holes, totalling 1490 feet were completed in the field season. The drilling was caried out along the steeply dipping, north-south striling metasediment belt, principally upon the Mildred claim. Imperial Oil Enterprises Ltd. did not carry out further work and the option was not exercised.

In 1987, a summary report on the geology, mineralization and activity in the area was prepared by A.S. Fraser, B.Sc., for the claim area, in which suggestions were put forth to the claim owners for further exploratory work.

In 1988, additional sampling by the owners lead to staking the Red, Stone, Clayton, Clear, and Camp claims in the area.

CLAIM STATUS

The property consists of the claims listed below:

Claim Name	Record #	Units	Expiry date
Sunshine, Lot 379	2846	1	90/03/30
Mildred, Lot 213	2797	1	90/03/31
Eagle, Lot 384	2845	1	90/03/31
Me	2942	20	90/06/09
Climb	2943	20	90/06/09

No	2944	20	90/06/09
Fly	2945	20	90/06/09

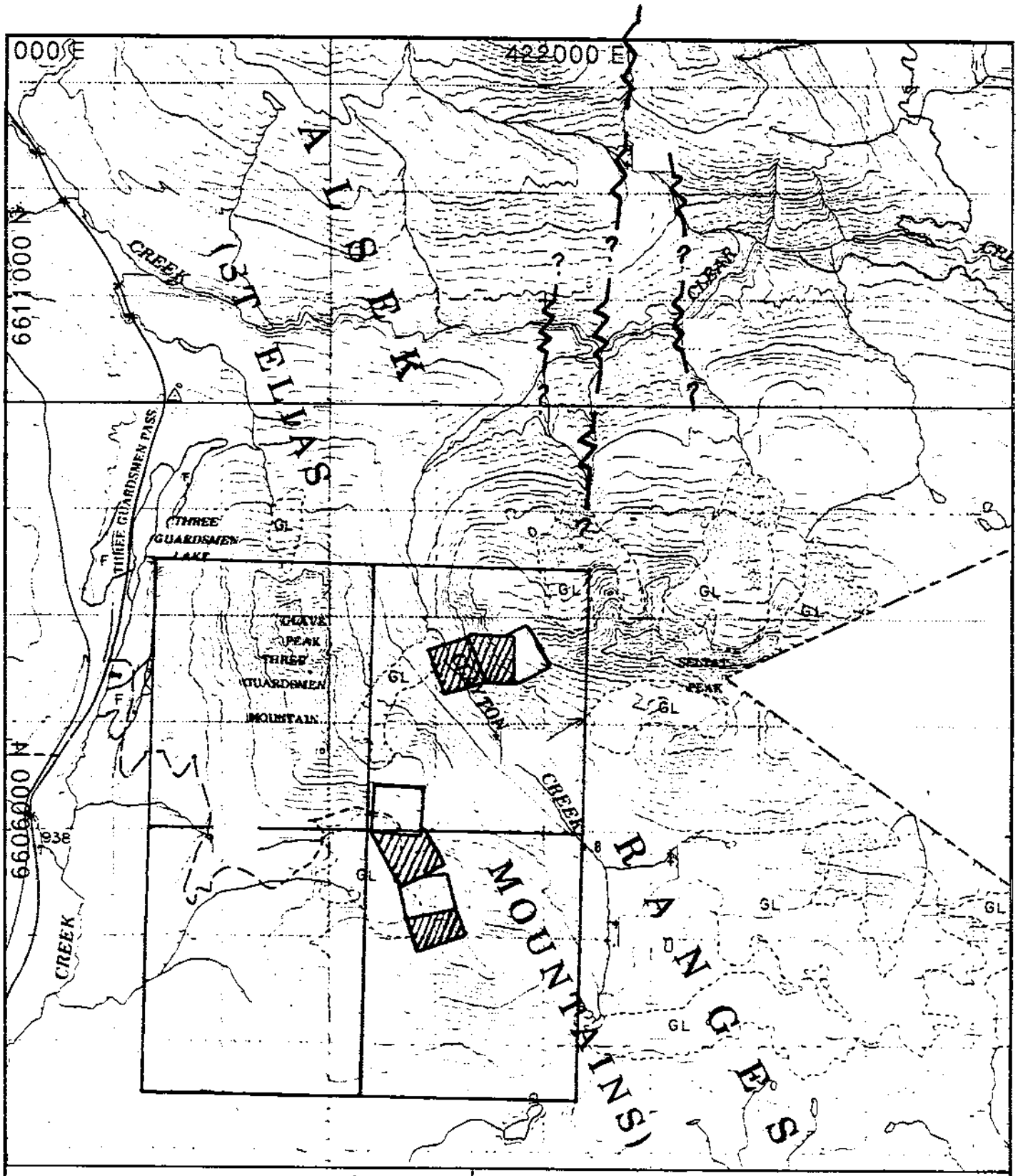
Four small crown grant claims within the property are held by outside (U.S.) interests.

REGIONAL GEOLOGY

The regional geology of the Squaw Creek-Rainy Hollow area was described in B.C. Department of Mines Bulletin # 25, 1948, authored by K. deP. Watson. The area is underlain by Permo-Carboniferous and early Mesozoic sedimentary and volcanic rocks and by Mesozoic intrusions of the Coast Range belt. The Permo-Carboniferous units are principally sedimentary in nature and are comprised of limestones, argillites, quartzites, minor greenstone and skarn. The Mesozoic rocks are predominantly volcanic and include pillow lavas, greenstone, chloritic schists, gneiss, with minor argillite, limestone, chert and quartzite. The Mesozoic intrusives consist of quartz diorite, granodiorite, granite, feldspar porphyry, diorite, gabbro and peridotite. The strike of the sedimentary sequence is generally northwesterly with high angle dips.

Lode deposits found in the area include skarn deposits of copper-silver, copper-zinc, copper-iron, lead-zinc and gold bearing quartz veins. Several small high grade skarn deposits have been found in the Rainy Hollow district, although none were considered economic at the time.

The mineralization at Three Guardsmen Mountain tested by Imperial Oil Enterprises Ltd. is contained within an area measuring 1000 feet by 1500 feet and 2.5 miles long, and is considered to be an inclusion or roof pendant of metasediments enclosed by gneissic



Major Fault

Meters
500 250 0 500 1000

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No. ATL-TG-1	Fig. No. 1 A

New Horizon Software.

diorite or granodiorite (see Figure 3). Work carried out in 1987 led to further mineralized showings in regional fractures associated with marbles.

GOLD PROSPECTS

Gold occurs at four areas within the general vicinity of Three Guardsmen Mountain. These include:

1. Stone claim (Noranda Exploration Company Limited) two km to the northeast. This claim contains a pan concentrate gold anomaly with high grade copper-zinc-silver-gold boulders. No source of the gold was determined.

2. Maid of Erin claim (Falconbridge Nickel Limited) eleven km to the west-southwest in which gold is found within a skarn. The property has produced minor gold .

3. Gold Cord (Noranda Exploration Company Limited) at Mt. McDonell, seventeen km to the southwest contains vein gold in a diorite intruding limestone.

4. In the Mt. Henry Clay area on the international border, boulders contain high grade zinc-copper-silver-gold and barite and stratiform sulphide showings are present.

SAMPLE DESCRIPTIONS (see Figure 2 and Appendix)

Sample #	Description
TGG-1R	Vertically dipping, highly metamorphosed sediments within diorite. Chip sampled across 1 m.
TGG-2R	Massive lens of magnetite. Chip sampled across 1 m.

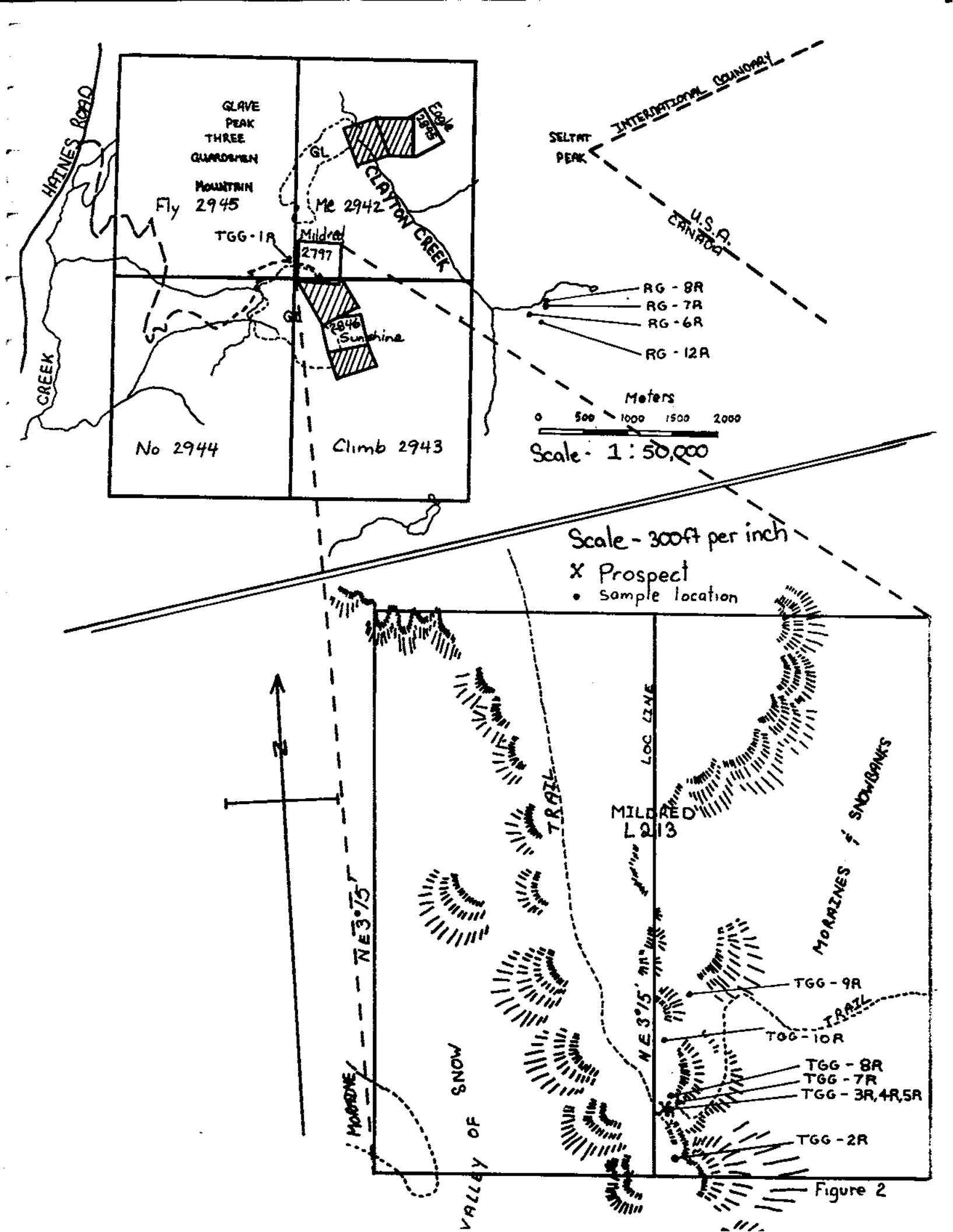
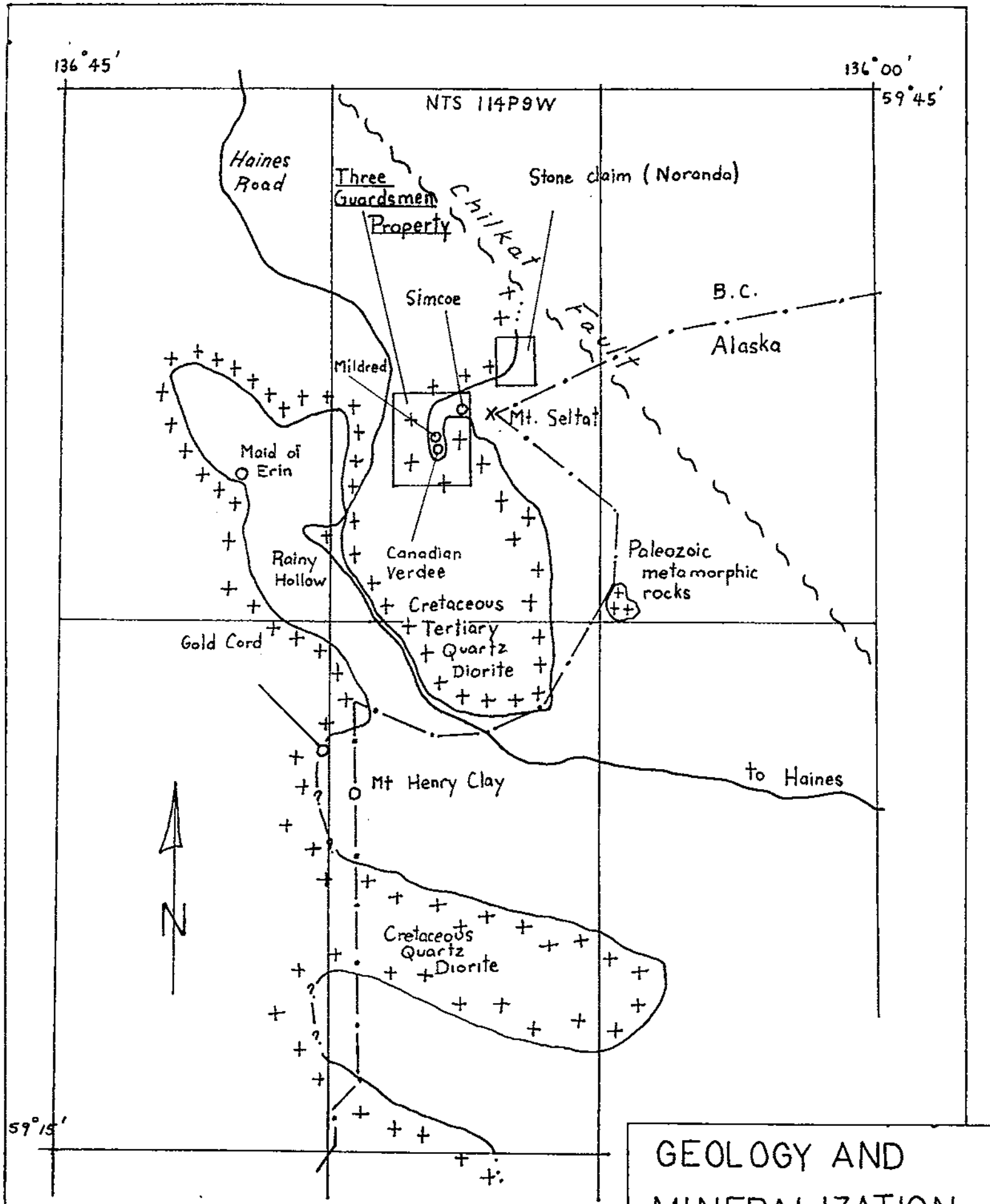

HAINES ROAD
GLAVE PEAK
THREE GUARDSMEN MOUNTAIN
Fly 2945
Me 2942
TGG-1R
Mildred 2797
GL
CLAYTON CREEK
2846 Sunshine
CREEK
No 2944
Climb 2943
SELTAT PEAK
INTERNATIONAL BOUNDARY
U.S.A.
CANADA
RG - 8R
RG - 7R
RG - 6R
RG - 12R
Meters
0 500 1000 1500 2000
Scale - 1 : 50,000
Scale - 300ft per inch
X Prospect
• Sample location
N
NE 3°15'
LOC LINE
TRAIL
MILDRED
L 213
MORAINES & SNOWBANKS
TGG - 9R
TGG - 10R
TGG - 8R
TGG - 7R
TGG - 3R, 4R, 5R
TGG - 2R
MOUNTAIN
VALLEY OF SNOW

Figure 2



GEOLOGY AND MINERALIZATION

Scale 1:250 000 MR

June 1987 FIGURE 3

TGG-3R	Sampled wall rock of old 15 foot adit, massive magnetite with scattered malachite staining. Chip sampled across 1 m.
TGG-4R	Massive magnetite lens sampled across 2 m.
TGG-5R	Epidote alteration zone next to massive magnetite. Epidote chip sampled across 2 m.
TGG-6R	Very siliceous sediments, highly metamorphosed. Chip sampled across 1 m.
TGG-7R	Taken below prospect adit. Magnetite healed breccia of epidote. Chip sampled across 3 m.
TGG-8R	Chip sample of chalcopyrite mineralization taken along contact between marble and magnetite. Chip sampled over 30 cm.
TGG-9R	Grab sample of magnetite found beneath cliff stained with malachite.
TGG-10R	Highly metamorphosed sediment, perhaps argillite. Chip sampled across 1 m.
RG-6R	Vuggy quartz, arsenopyrite? in iron rich metasediment. Angular grab.
RG-7R	Siliceous pyrite rich metasediment. Angular grab.
RG-8R	Large angular boulder containing vuggy quartz and disseminated pyrite in metasediment. 1 m chip on large angular boulder.

REFERENCES

Bostock, H.S., 1957, Yukon Teritory, Selected Field Reports of the Geological Survey of Canada, 1898-1933, Geological Survey of Canada, Memoir 284.

Boyle, R.W., 1979, The Geochemistry of Gold and Its Deposits, Geological Survey of Canada, Bulletin 280.

Morganti, J.M., 1981, Sedimentary-Type Stratiform Ore Deposits: Some Models and a New Classification, in Geoscience Canada v.8 Number 2, (June 1981).

Oddy, R.W., 1971, Three Guardsmen Mountain Property Report on Geology, Magnetic Survey and Drilling, July-October 1971, for Imperial Oil Enterprises Ltd.

Watson, K. deP, 1945, The Squaw Creek-Rainy Hollow Area, Northern British Columbia, British Columbia Department of Mines, Bulletin #25

Zimmer, G.S., 1969, Evaluation Report of the Premier Property, Three Guardsmen Area, B.C.

Zimmer, G.S., 1970, Summary Report of Diamond Drilling on the Premier Property, Three Guardmen Area, B.C.

CERTIFICATE

I, Barry L. Whelan, of the city of North Vancouver in the Province of British Columbia, do hereby certify:

1. I am a Consulting Geologist, resident at #1, 230 west 14th Street, North Vancouver, British Columbia.

2. I am a graduate of the University of Western Ontario (1961) with a Bachelor's degree in Geology.

3. I am a Fellow of the Geological Association of Canada.

4. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

5. I have been actively involved in exploration programs throughout North America, Africa and Europe for over twenty-five years.

6. This report is based on a review of public and private files. I have not visted the field location and have relied upon Mountainside Management Ltd. insofar as the validity of the claims is concerned.

7. I have no direct or indirect interest in the property herein described, nor do expect to receive any.

8. This report may be utilized by Mountainside Management Ltd.

Respectfully submitted at Vancouver, B.C.

Barry L. Whelan, F.G.A.C., P.Geol.
June 27, 1989

PROFESSIONAL GEOLOGIST BARRY L. WHELAN ALBERTA

APPENDIX

COMPANY: MOUNTAINSIDE MANAGEMENT LTD. MIN-EN LABS ICP REPORT (ACT:F31) PAGE 1 OF 3

PROJECT NO: ATIN 88 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 FILE NO: 8-1632/P1

ATTENTION: S.GIFFORD (604)980-5814 OR (604)988-4524 * TYPE ROCK GEOCHEM * DATE:OCTOBER 4, 1988

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE
ROCKVEIN	.8	9290	57	11	32	.3	28	1270	2.7	88	2313	304830
NIFLOAT	1.2	9380	71	13	31	3.0	14	1400	3.0	67	2982	367850
ATLINRUFFNER	106.3	1770	147	11	16	1.8	12	30590	87.1	20	260	184620
AR1	.6	9240	1	6	24	1.4	1	10730	12.7	7	15	44400
AR2	.5	10020	98	4	12	2.5	1	50900	27.6	8	8	51310
RG6R	1.7	8490	27	1	37	.5	4	4940	2.5	11	69	15890
RG7R	2.8	6650	11	6	12	.4	6	11180	.4	89	4635	163590
RG8R	2.1	11330	50	1	134	.4	9	3920	2.6	17	124	24850
RG12R	2.7	15770	20	2	123	.3	12	7900	2.6	22	205	34460
RG15R	.7	3850	3	16	6	.1	22	4520	2.0	20	2502	500530
TG61R	1.1	3220	90	17	6	4.9	1	6490	5.2	19	1160	474240
TG62R	.7	3610	1	17	4	4.5	19	4430	5.2	20	2674	519490
TG63R	1.0	3030	1	16	5	.8	10	6180	2.1	18	1132	455320
TG64R	14.1	5480	28	15	3	1.8	42	26290	2.8	36	11911	370760
TG65R	1.4	17720	10	3	22	.6	6	12940	.2	30	313	54920
TG66R	1.7	37740	1	3	7	.5	16	25500	1.2	51	723	60010
TG67R	.2	15900	38	14	41	.4	3	106070	.9	15	148	151320
TG68R	.5	15680	16	3	6	1.9	1	83370	1.7	10	8	59170
TG68RDUP	278.3	2220	1	15	3	2.7	739	13770	.2	76	38802	395570
TG69R	2.5	3440	51	13	17	2.9	4	2350	2.0	56	732	343280
TG61GR	4.3	57730	26	22	24	1.1	31	59150	1.0	19	385	22700

different property

(VALUES IN PPM)	K	LI	MG	MN	MO	NA	NI	P	PB	SB	SR	TH
ROCKVEIN	4950	32	6410	5	5	240	1	930	24	6	4	1
NIFLOAT	7240	26	9980	2	5	210	4	550	8	5	5	1
ATLINRUFFNER	600	5	16360	71627	6	80	102	460	5129	55	35	1
AR1	2430	12	4350	12782	116	90	18	610	269	1	30	1
AR2	1360	18	9090	22149	60	70	35	750	344	4	54	1
R66R	1350	6	2650	729	6	980	9	280	33	1	15	1
R67R	450	7	930	714	17	180	55	680	21	1	2	1
R68R	3010	16	6330	418	29	1030	21	530	26	1	15	1
R612R	4130	12	7630	278	12	2120	15	1050	19	1	29	1
R615R	630	6	2770	893	7	220	3	20	15	1	3	1
T661R	600	7	2630	1362	3	170	13	50	13	5	3	1
T662R	580	6	2720	905	7	180	4	190	9	1	4	1
T663R	570	7	2570	1310	6	160	11	10	15	5	3	1
T664R	600	8	3710	1866	1	120	3	330	14	12	8	1
T665R	630	7	1220	250	27	2430	136	970	21	1	29	1
T666R	920	7	670	223	2	4980	14	350	24	3	39	1
T667R	350	11	4790	2591	4	160	3	380	31	6	1	1
T668R	440	10	5160	4113	6	340	7	410	41	1	1	1
T668RDUP	410	6	1550	3123	7	100	2	740	77	15	4	1
T669R	1570	6	8660	6261	6	170	1	110	17	1	4	1
T6610R	1410	9	8590	750	17	3760	11	930	25	1	46	1

COMPANY: MOUNTAINSIDE MANAGEMENT LTD. MIN-EN LABS ICP REPORT (ACT:F31) PAGE 3 OF 3

PROJECT NO: ATIN 88 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 FILE NO: 8-1632/P1

ATTENTION: S.GIFFORD (604)980-5814 OR (604)988-4524 * TYPE ROCK GEOCHEM * DATE:OCTOBER 4, 1988

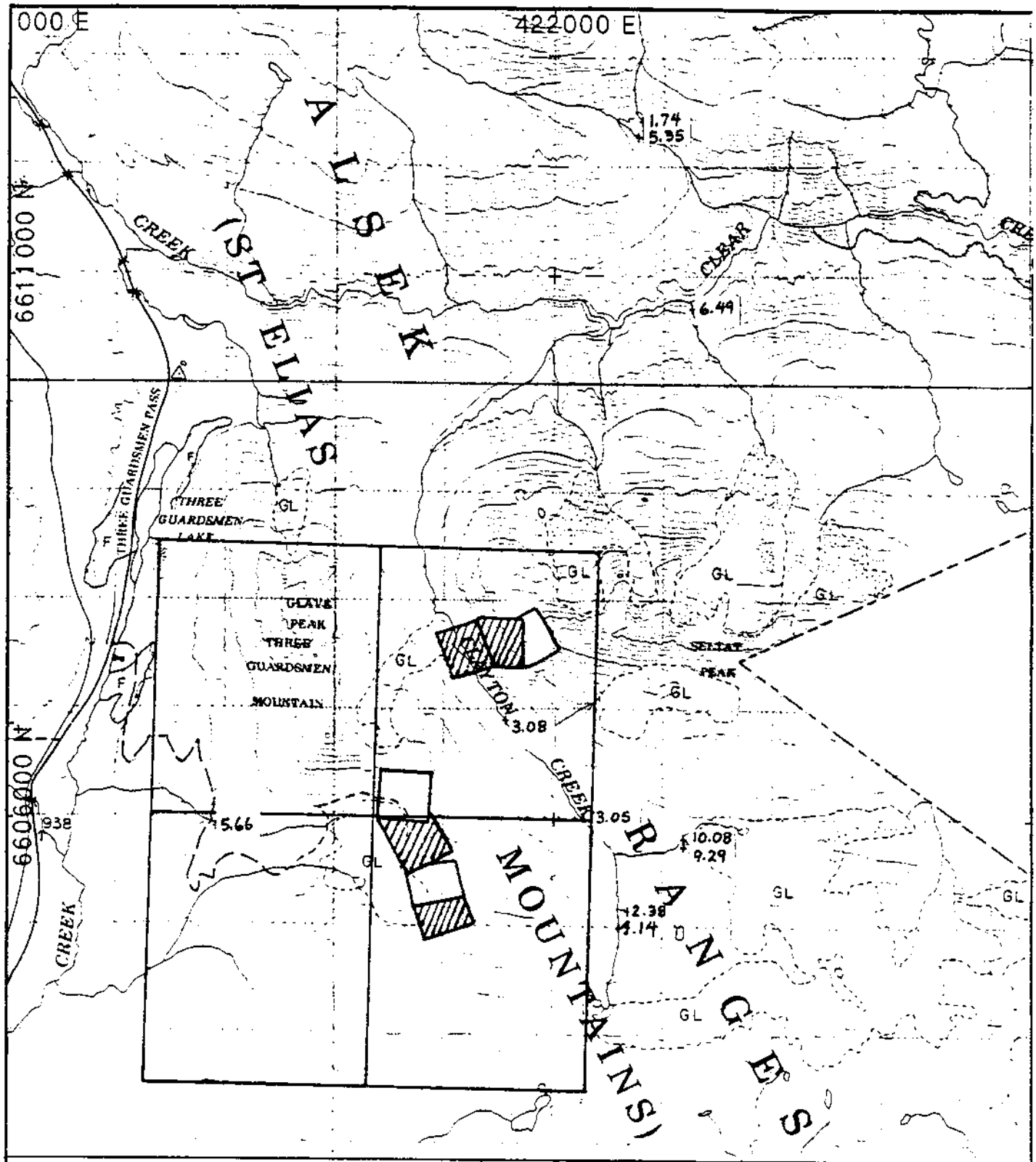
(VALUES IN PPM)	U	V	ZN	GA	SN	W	CR	AU-PPB	PT-PPB	PD-PPB
ROCKVEIN	1	29.1	130	1	1	1	29	57	2	2
NIFLOAT	1	20.9	11	1	1	1	21	31	8	4
ATLINRUFFNER	2	29.1	4969	6	2	3	100	118	9	4
AR1	1	19.3	815	1	1	4	118	4	1	3
AR2	1	14.6	1479	4	1	3	76	8	25	1
RG6R	1	30.6	61	1	1	7	173	1	14	2
RG7R	1	18.6	57	1	1	1	63	2	1	1
RG8R	1	66.9	49	3	1	5	118	246	1	4
RG12R	1	105.7	49	4	1	4	89	3	4	2
RG15R	1	8.8	165	1	1	2	10	4	10	1
TG61R	1	10.4	46	2	1	1	23	1	1	1
TG62R	1	7.5	166	1	1	2	8	14	6	1
TG63R	1	9.3	44	4	1	1	22	20	3	1
TG64R	1	19.2	564	4	2	2	21	56	1	2
TG65R	1	44.5	36	1	1	4	97	9	4	4
TG66R	1	37.1	33	1	2	3	59	2	6	7
TG67R	1	43.4	247	1	14	1	50	1	1	1
TG68R	1	36.8	312	1	7	3	45	3	6	2
TG68RDUP	1	23.7	1236	6	3	1	15	50	1	2
TG69R	1	26.4	2036	9	1	2	18	9	1	1
TG610R	1	114.0	100	1	2	3	51	2	2	3

COMPANY: MOUNTAINSIDE MANAGEMENT — MIN-EN LABS ICP REPORT — (ACT:F31) PAGE 1 OF 1

PROJECT NO: ATLIN 1988 — 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 — FILE NO: B-1632HM

ATTENTION: S.GIFFORD/M.RENNING — (604)980-5814 OR (604)988-4524 — * TYPE HEAVY MINERAL * — DATE:OCT 25, 1988

(PPM)	SS1B-80H M	MR1B-80H M	T66118-8 OHM	RG1B-80H M	RG2B-80H M	RG3B-80H M	RG9B-80H M	RG13B-80 HM	RG14B-80 HM	RG16B-80 HM	RG17B-80 HM	RG18B-80 HM
AG	.8	1.1	1.0	.7	1.4	.8	.9	.8	1.4	1.1	1.1	1.3
AL	3910	7990	6670	5810	11330	9500	10400	8440	11680	5930	11560	11400
AS	22	136	11	25	10	19	25	6	31	610	23	17
B	1	3	1	2	1	1	1	1	1	1	1	3
BA	144	204	39	28	67	74	137	38	63	118	55	268
BE	.7	2.1	.7	2.3	1.3	.5	.8	.1	1.5	.7	.9	1.2
BI	6	21	12	7	24	7	9	10	20	9	12	12
CA	6140	2170	9710	9040	12610	11910	12070	9630	14330	18150	14890	24590
CD	4.0	.1	3.6	1.4	2.5	3.2	2.8	.2	2.1	5.7	3.1	1.0
CO	12	22	14	5	20	19	22	5	20	31	19	31
CU	15	424	138	11	11	50	111	6	15	165	8	38
FE	16420	217290	34630	323100	73390	32810	34010	204600	51870	107380	46780	97020
K	630	1670	950	820	1200	2240	3960	980	1480	1340	1010	940
LI	9	7	13	21	32	14	16	25	29	12	15	13
MG	5100	3110	6540	2910	5900	6970	8050	4880	7330	9290	9630	9360
MN	387	624	181	706	940	614	460	756	852	723	646	891
MO	6	84	16	5	59	26	19	6	30	13	4	4
NA	170	300	230	120	220	240	330	160	260	230	310	210
NI	28	43	22	5	17	25	25	5	15	94	13	13
P	2110	2430	2040	3020	3860	3580	4300	3590	4460	4010	7250	8150
PB	38	153	36	13	71	22	29	15	45	43	39	87
SB	9	2	4	2	3	5	6	1	7	2	6	3
SR	9	20	8	1	7	6	11	1	9	18	25	39
TH	1	1	5	15	11	1	1	10	12	1	1	4
U	2	1	3	3	5	1	1	2	8	1	1	1
V	30.6	102.7	50.0	575.5	80.6	69.0	77.4	352.2	58.4	90.1	136.1	196.0
ZN	65	410	51	76	141	39	63	79	105	153	64	161
GA	1	3	3	1	4	1	2	1	9	1	4	1
SN	1	1	2	1	2	1	1	21	1	1	5	53
W	1	1	1	1	6	1	1	1	2	1	1	1
CA	29	79	32	62	36	44	58	61	35	44	41	85
AU-PPB	.6	70	5	.	1	11	5	32	5	3	1	1350
PT-PPB	1	1	3	25	1	8	1	32	59	9	32	60
PD-PPB	2	30	1	1	1	2	2	4	2	2	1	30
AM%	10.29	4.32	5.86	4.14	2.02	9.29	10.08	3.05	3.08	6.49	5.35	1.74



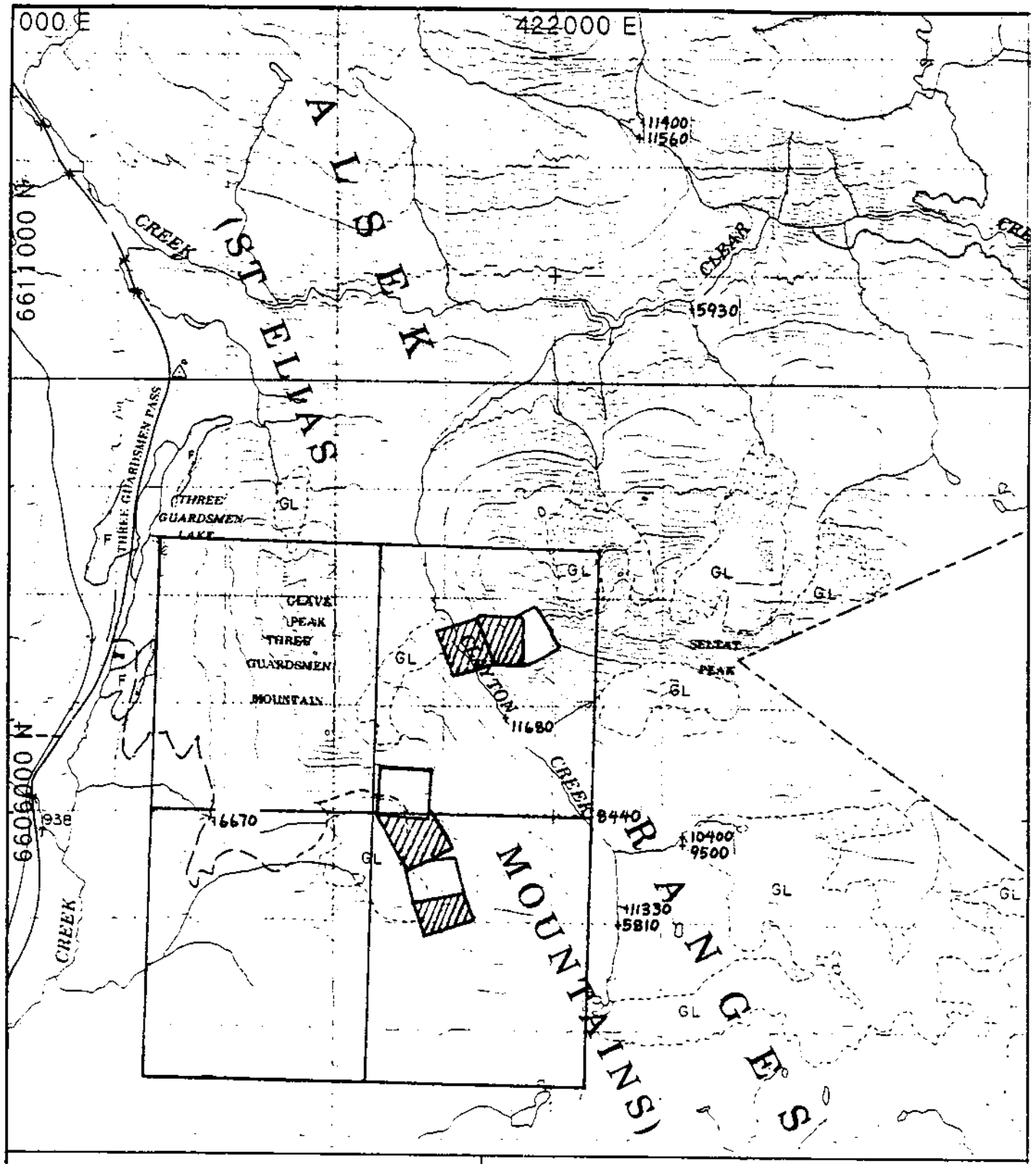
Meters
500 250 0 500 1000

Heavy Mineral (%)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No. ATL-88-TG	NTS 114P/9	Scale 1:50000
Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED

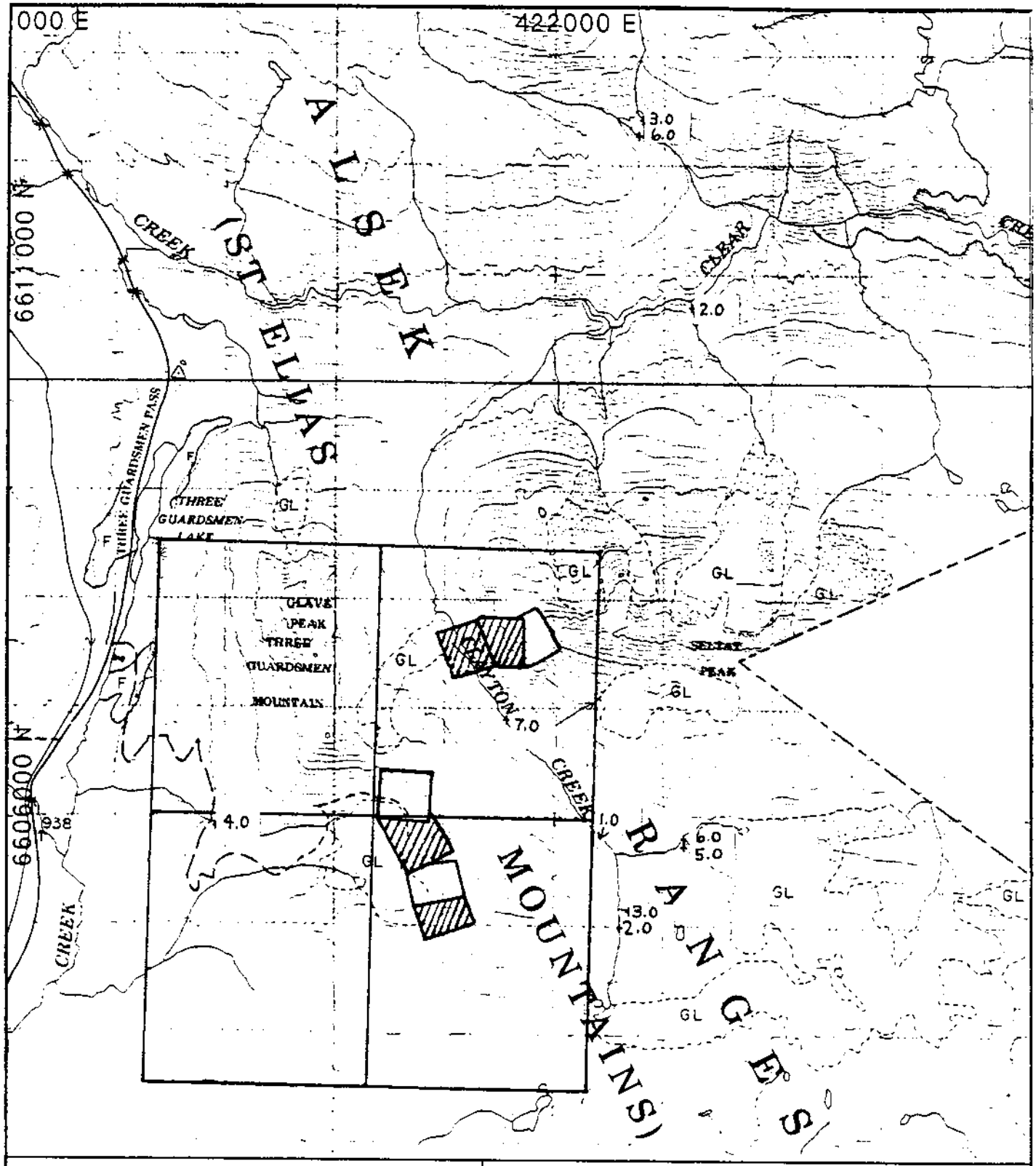


Aluminum (ppm)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED



Antimony (ppm)

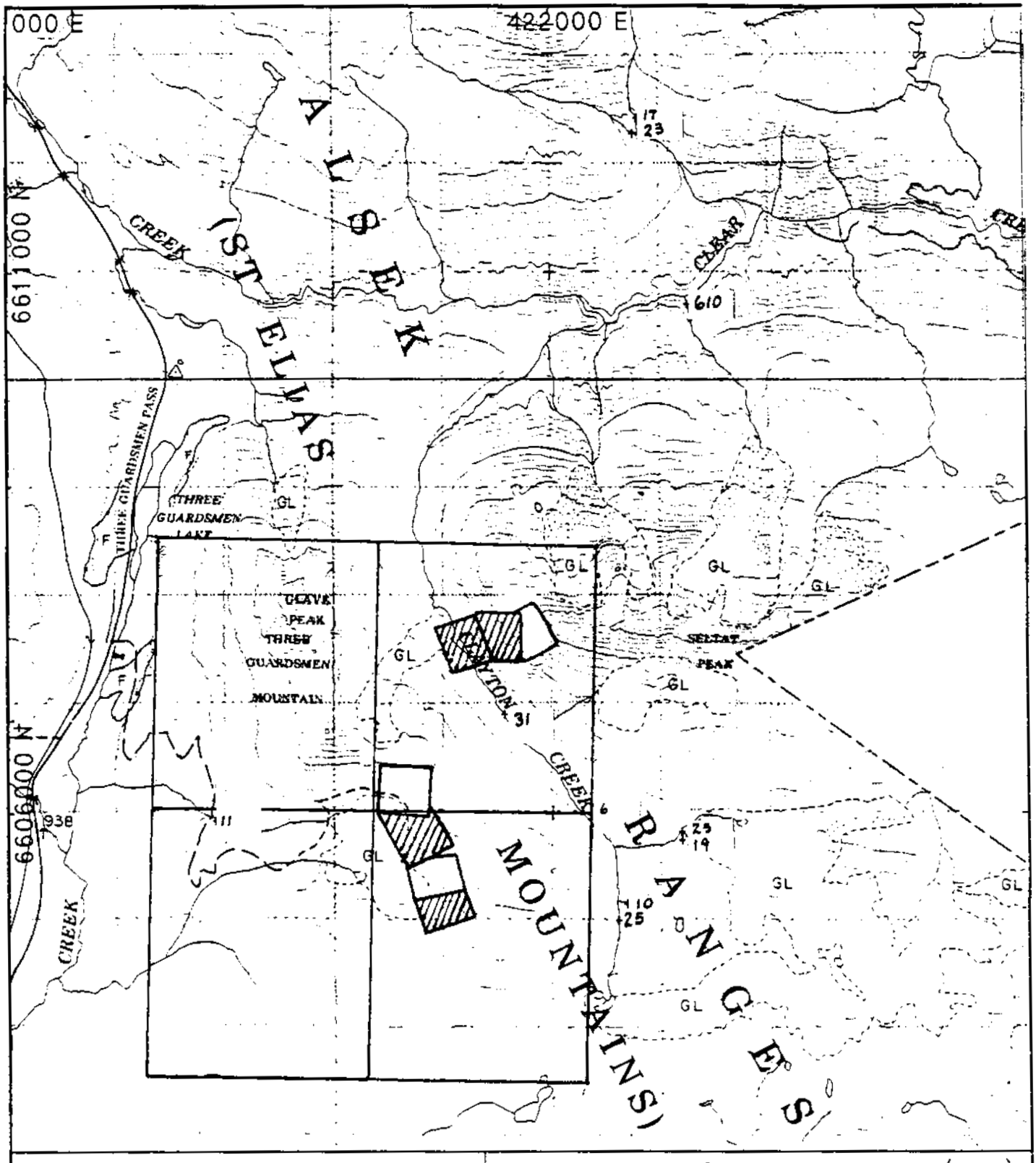
ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



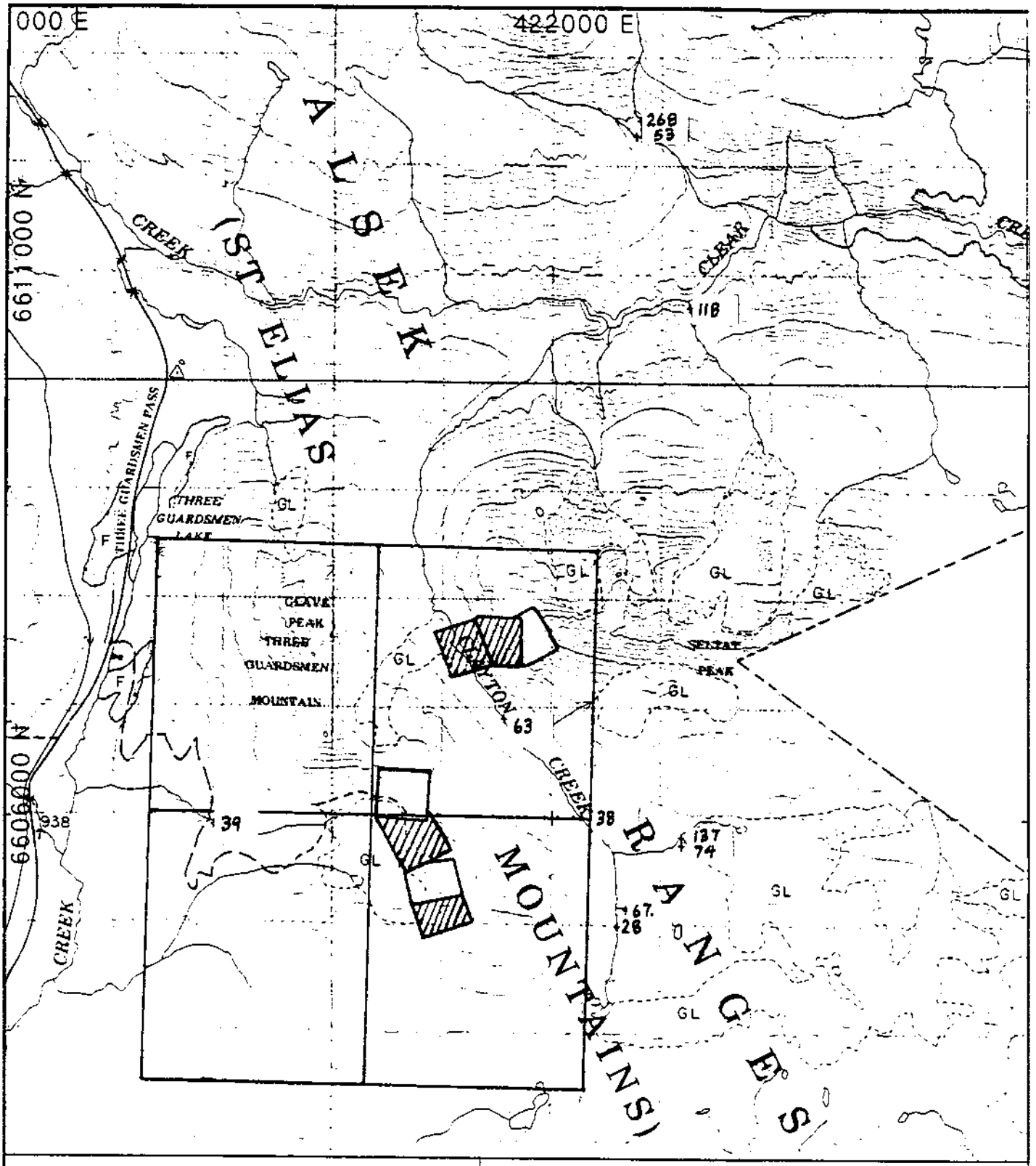
Meters
500 250 0 500 1000

Arsenic (ppm)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	**Date** OCTOBER 1988	**Report No.** ATL-TG-1	**Fig. No.**

New Horizon Software.



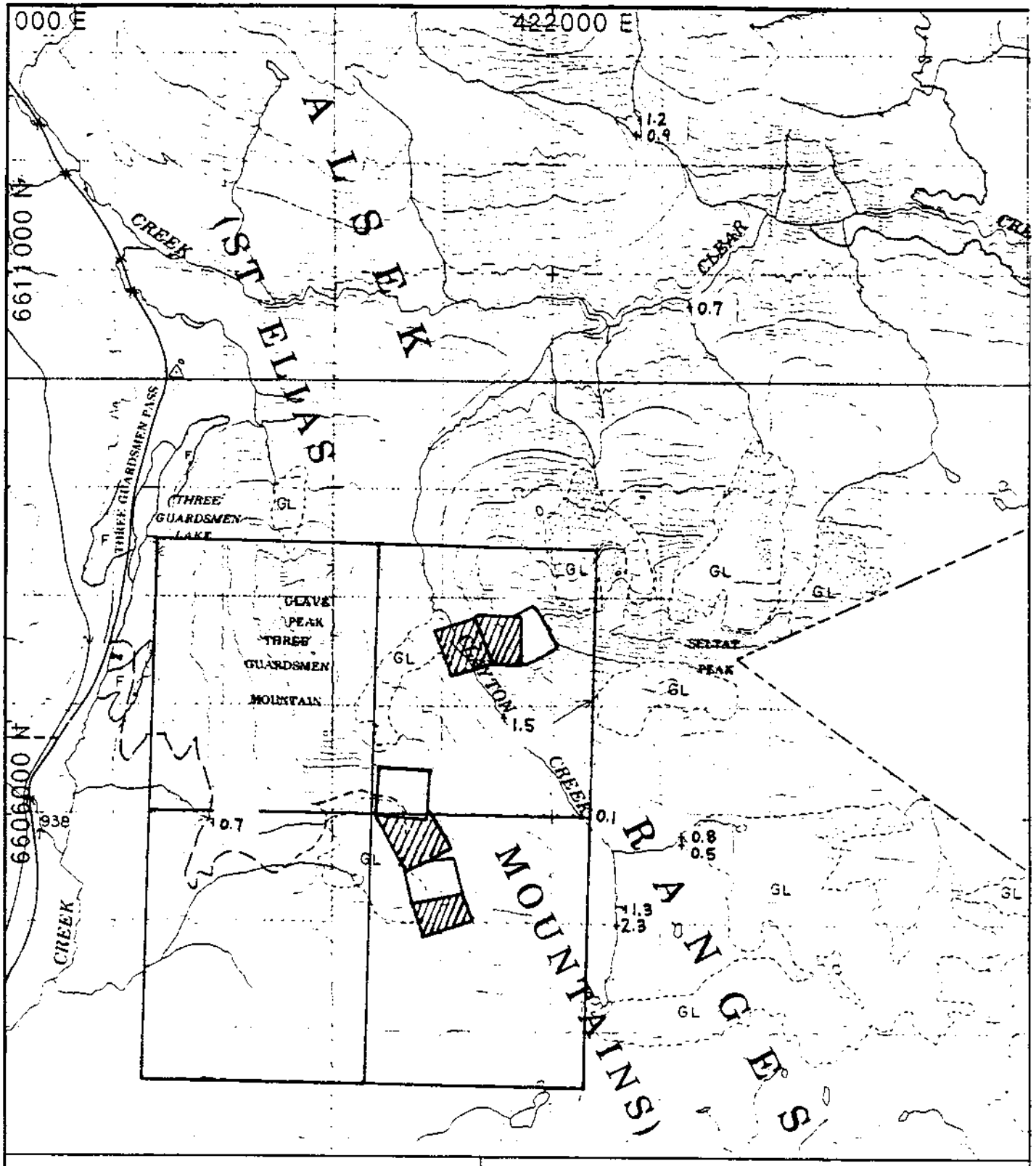
Barium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

New Horizon Software.



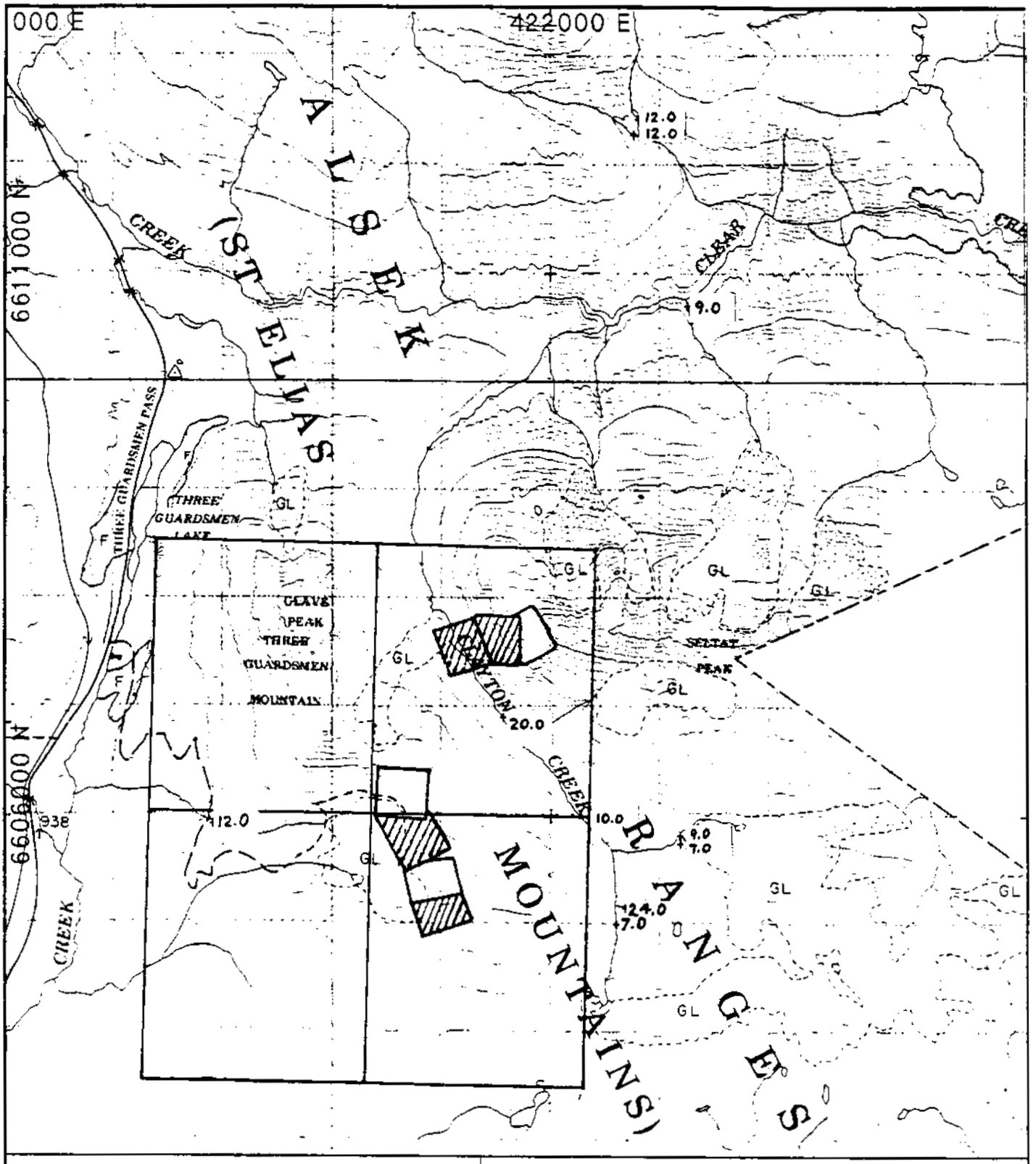
Meters
500 250 0 500 1000

Beryllium (ppm)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED



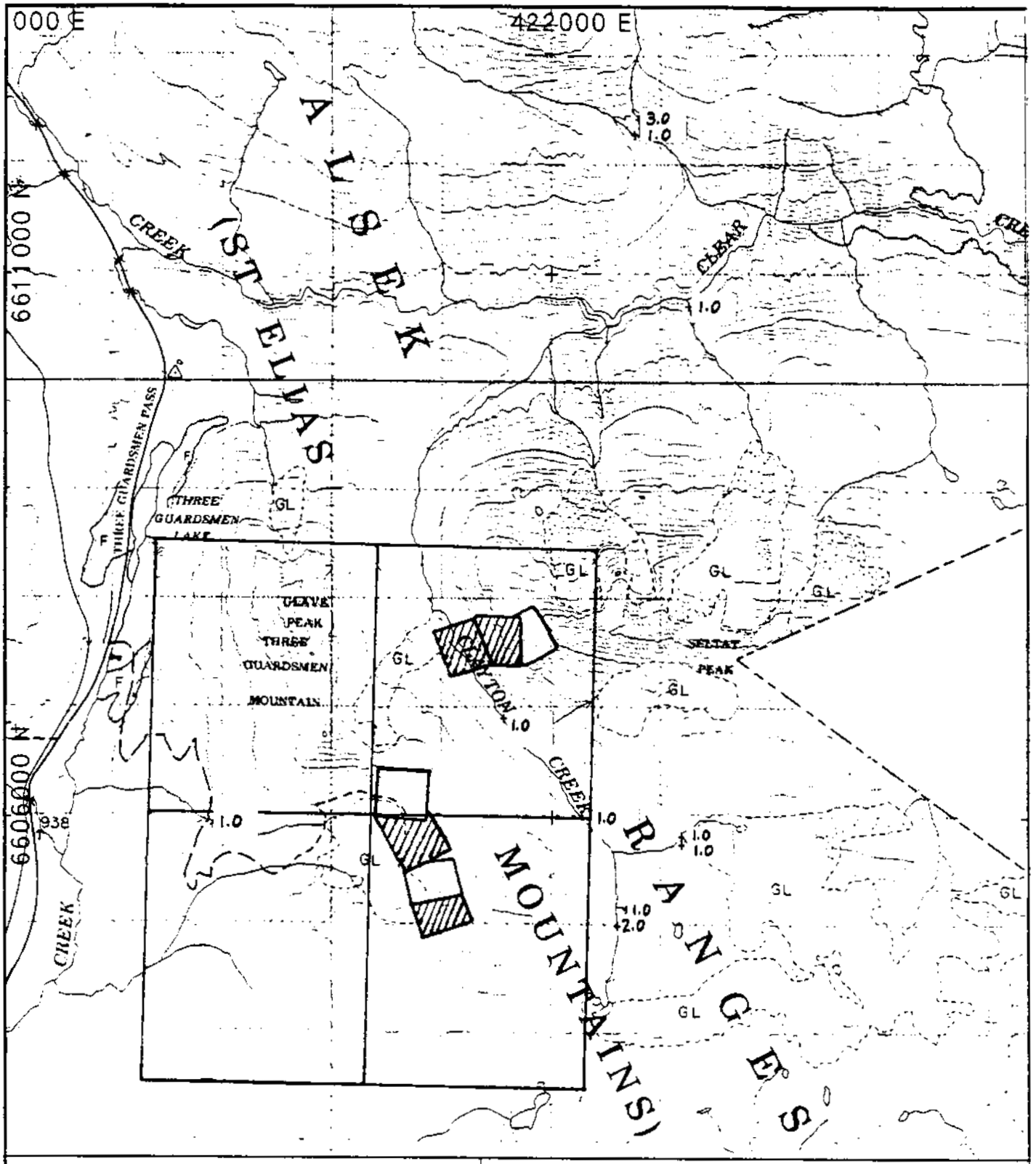
Meters
500 250 0 500 1000

Bismuth (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No.: ATL-TG-1	Fig. No.

New Horizon Software.

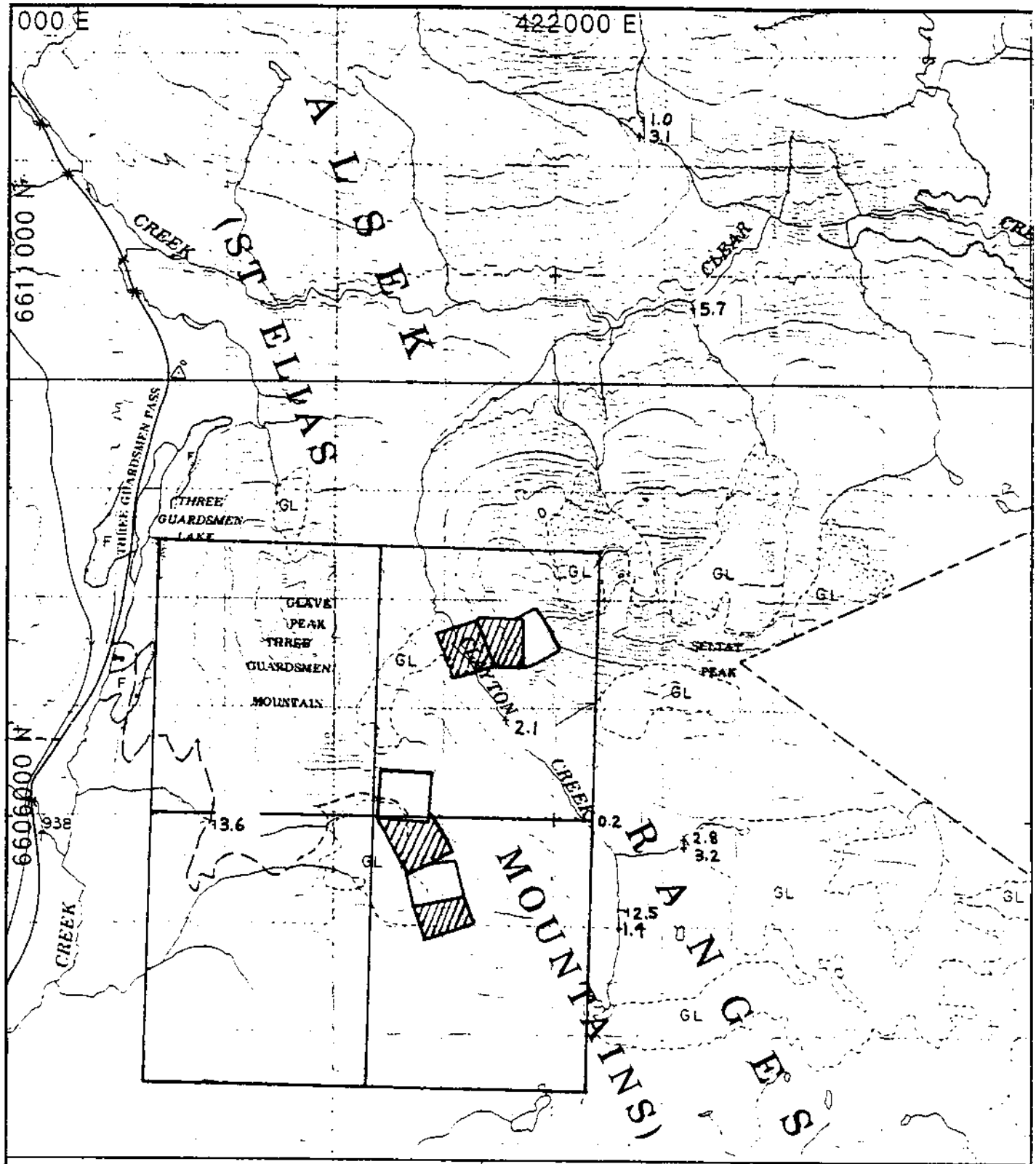


Meters
500 250 0 500 1000

Boron (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	**Date** OCTOBER 1988	**Report No.** ATL-TG-1	**Fig. No.**



Meters
500 250 0 500 1000

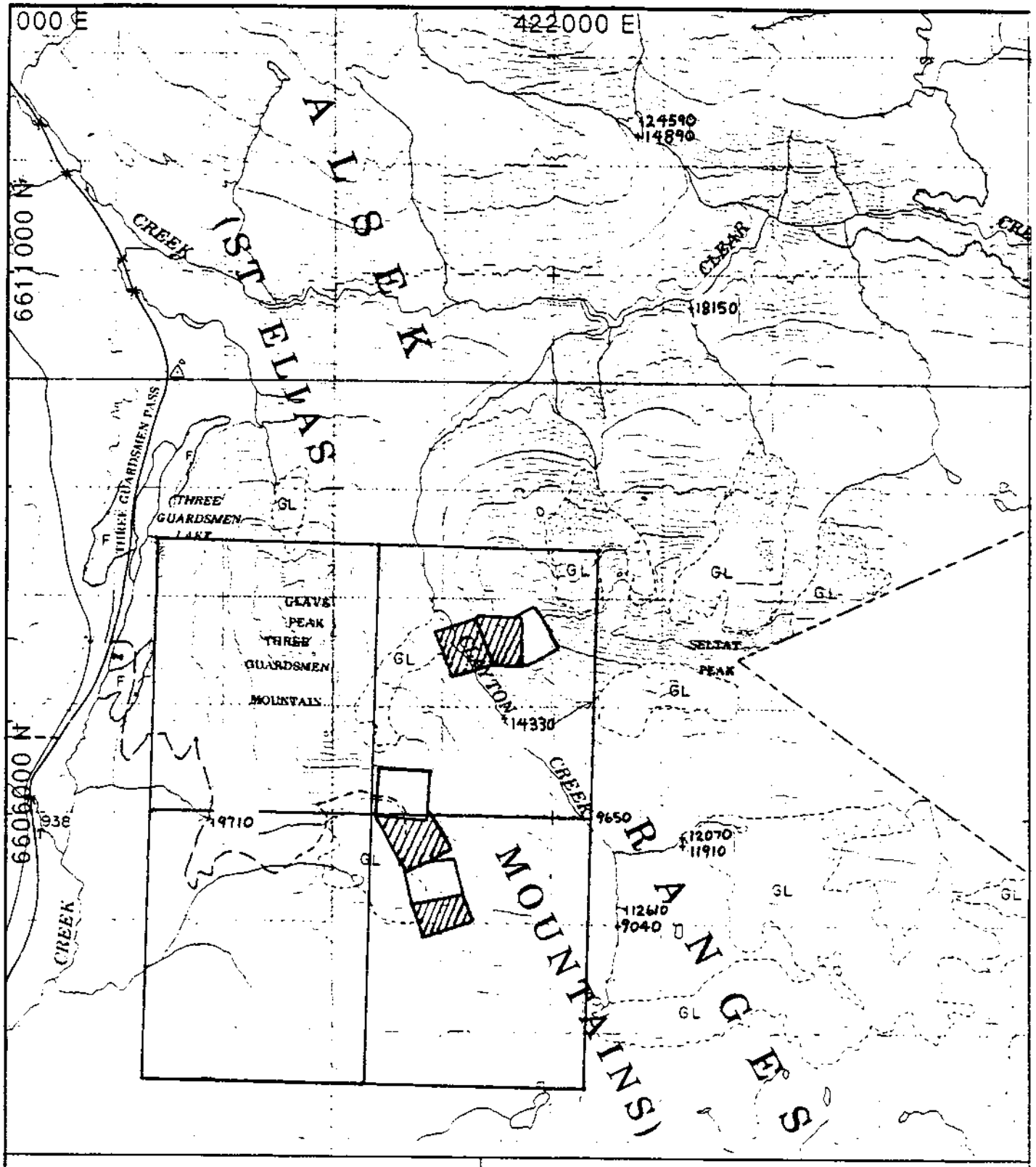
Cadmium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date: OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



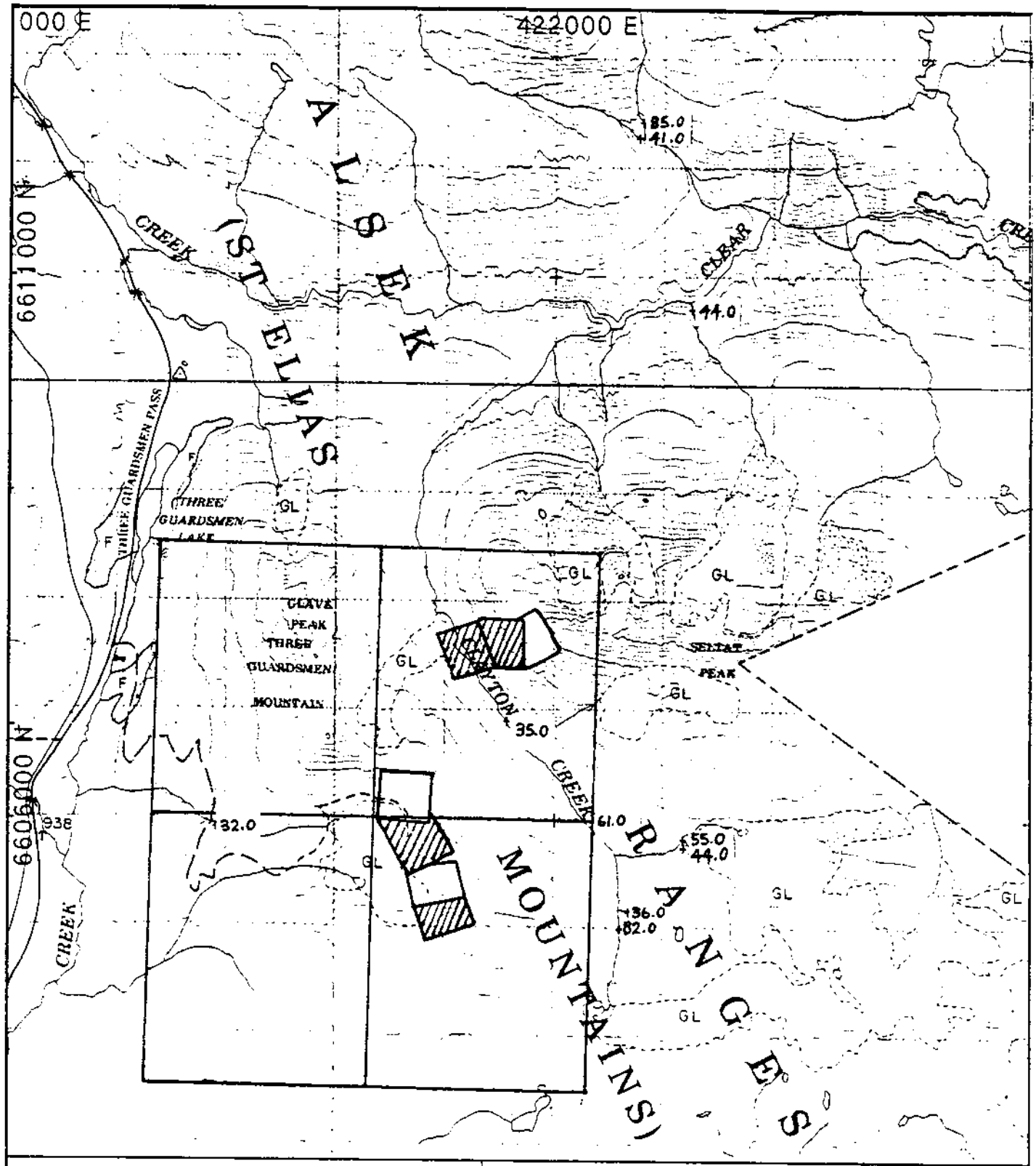
Meters
500 250 0 500 1000

Calcium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED



Meters
500 250 0 500 1000

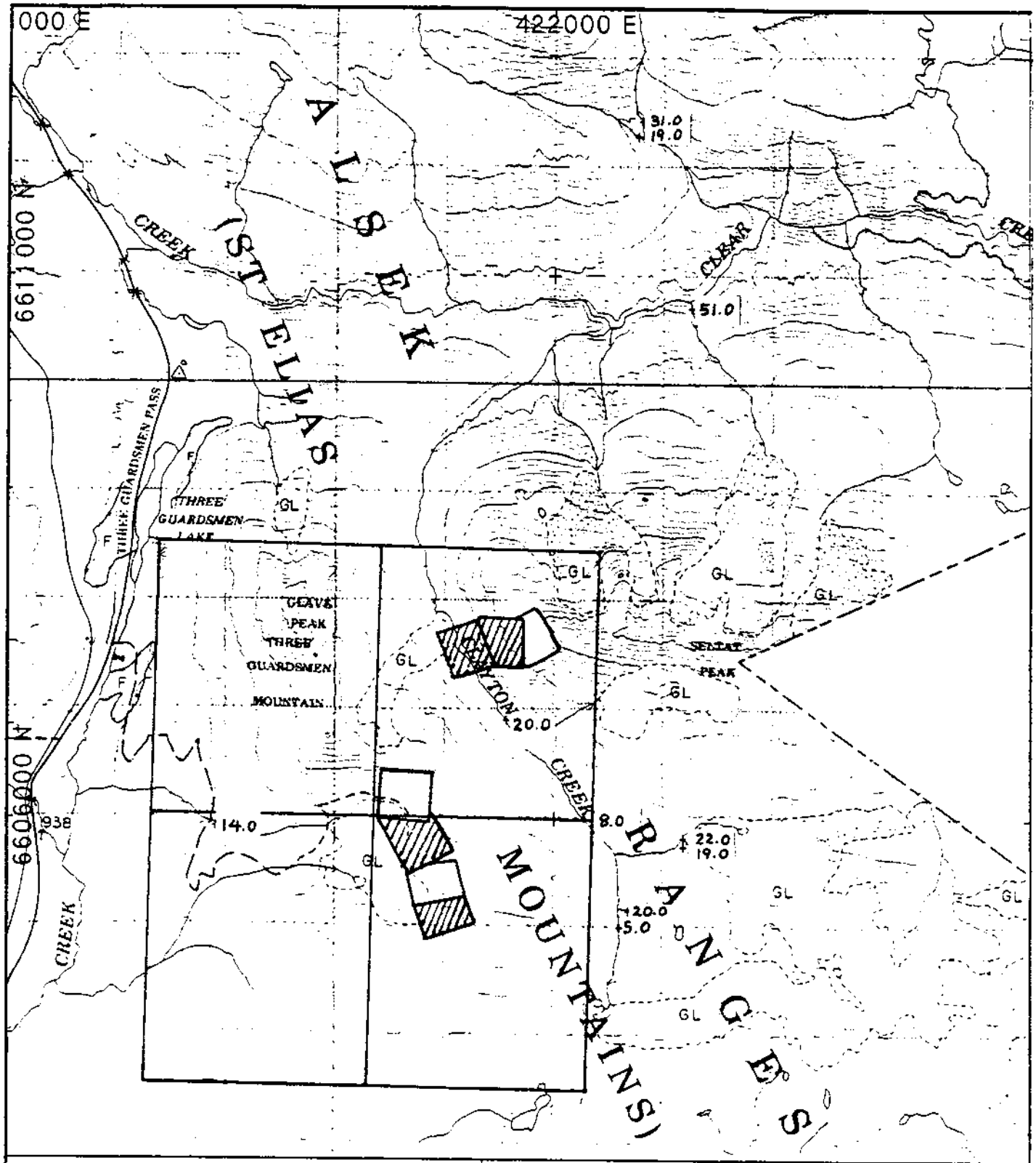
Chromium (ppm)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date: OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



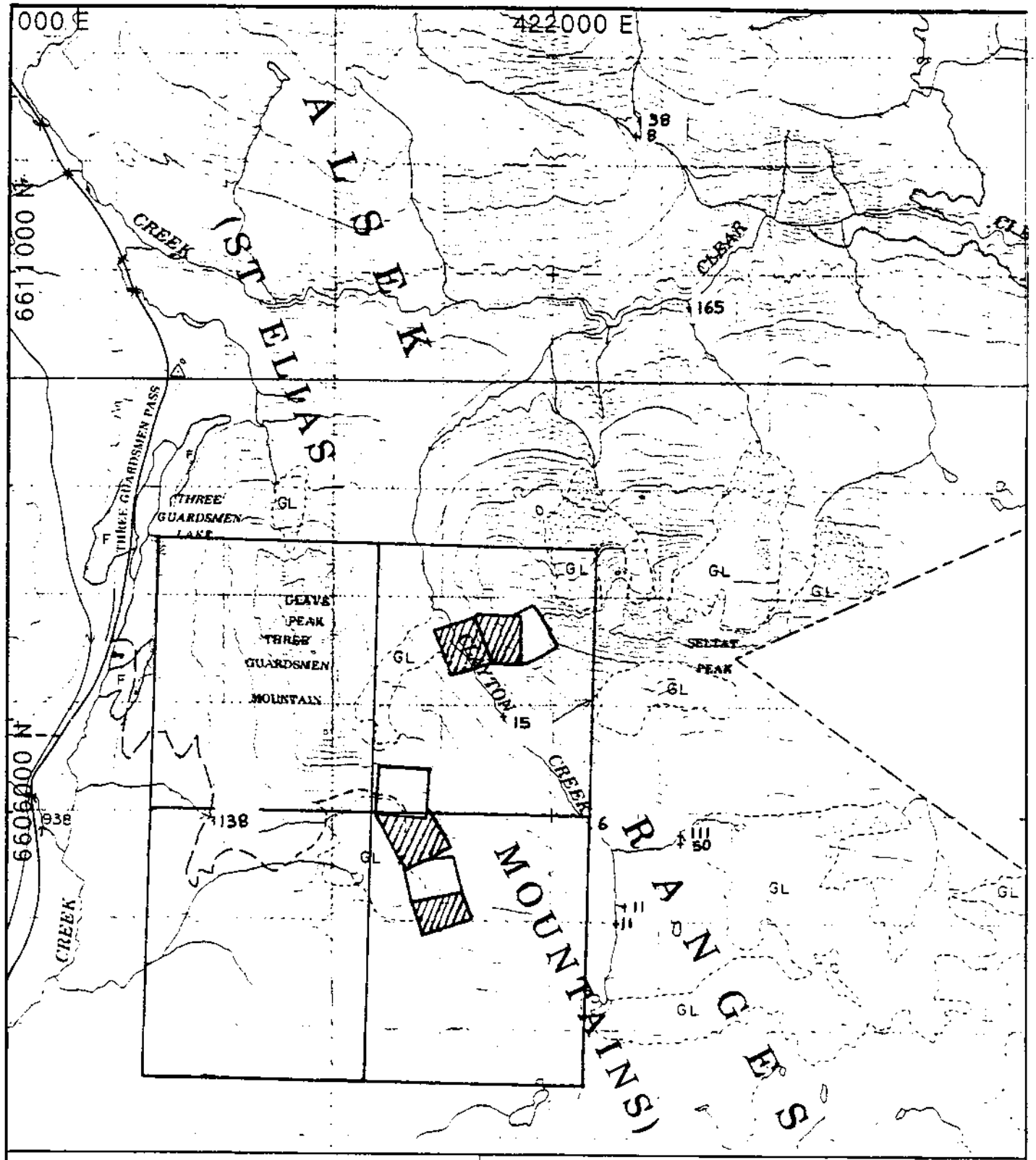
Meters
500 250 0 500 1000

Cobalt (ppm)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED



Copper (ppm)

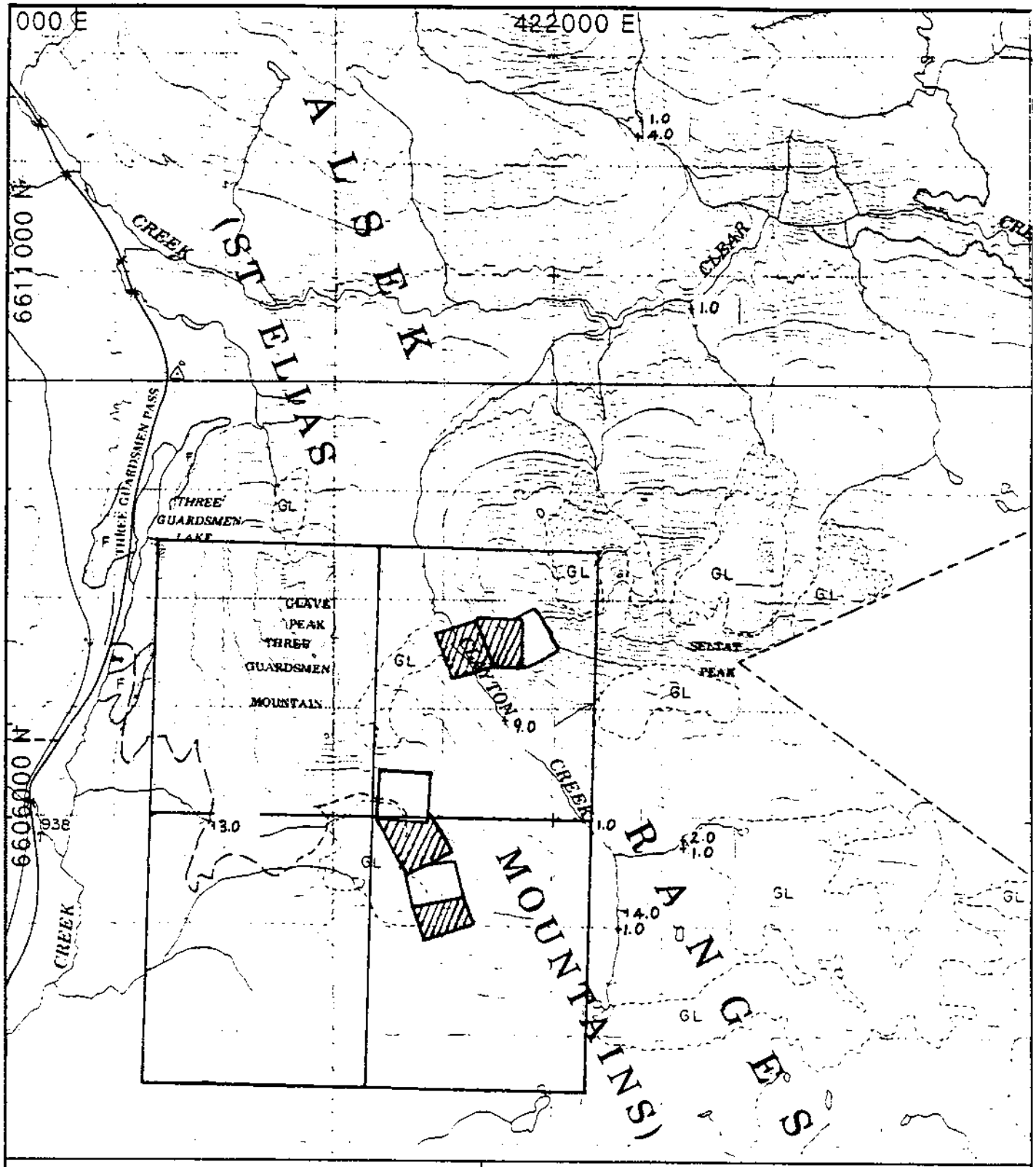
ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



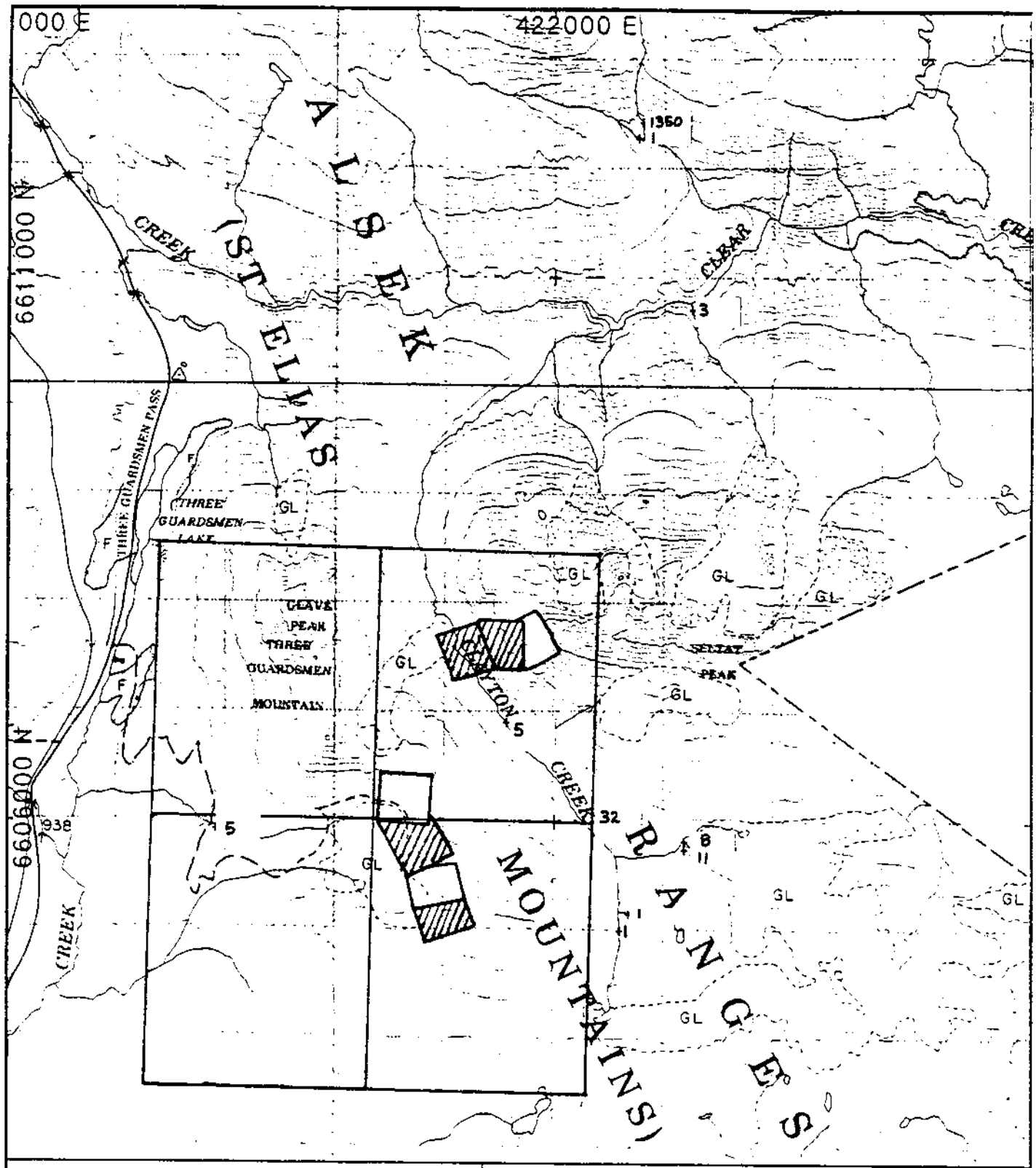
Meters
500 250 0 500 1000

Gallium (ppm)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

New Horizon Software.



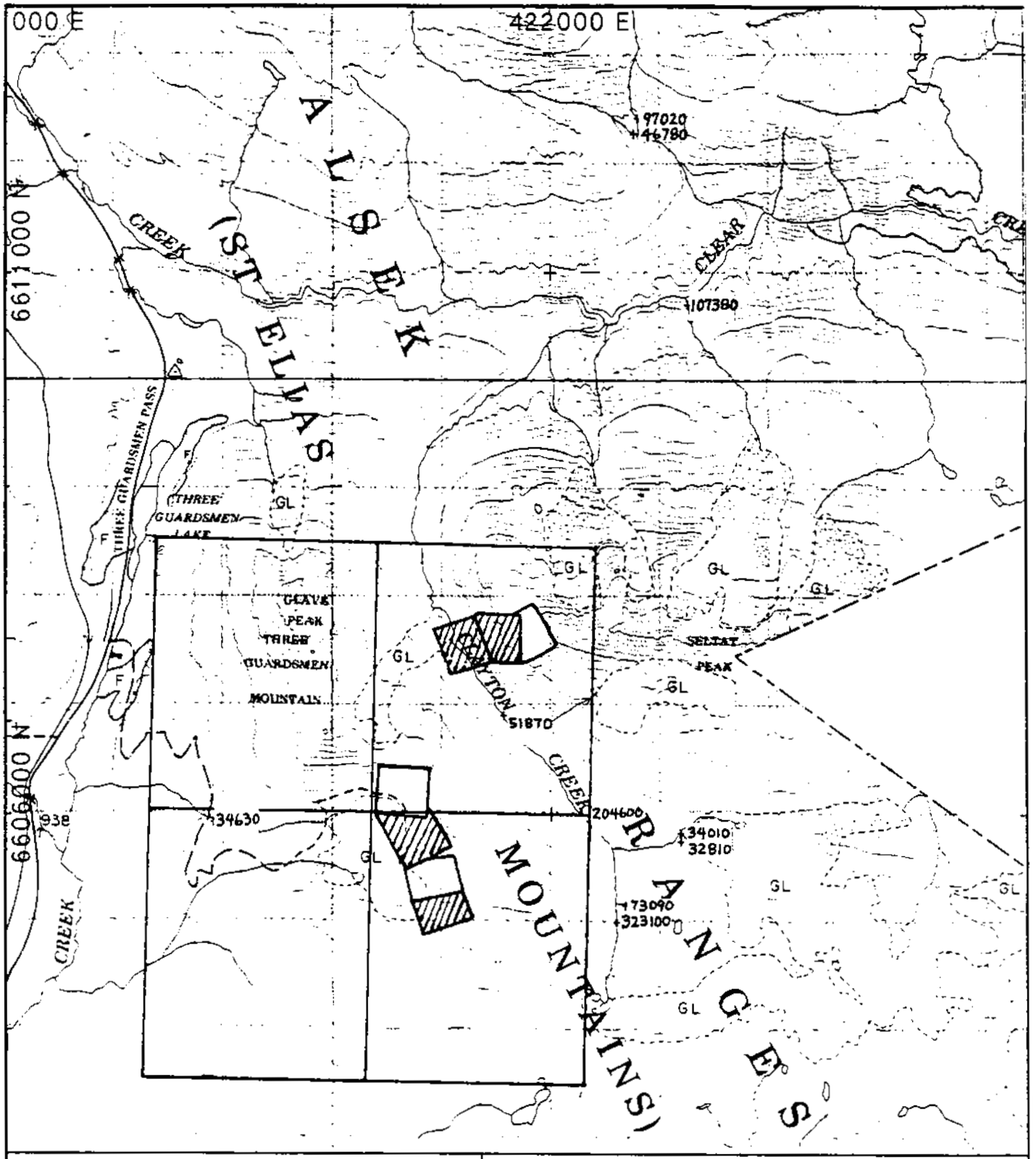
Gold (ppb)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED



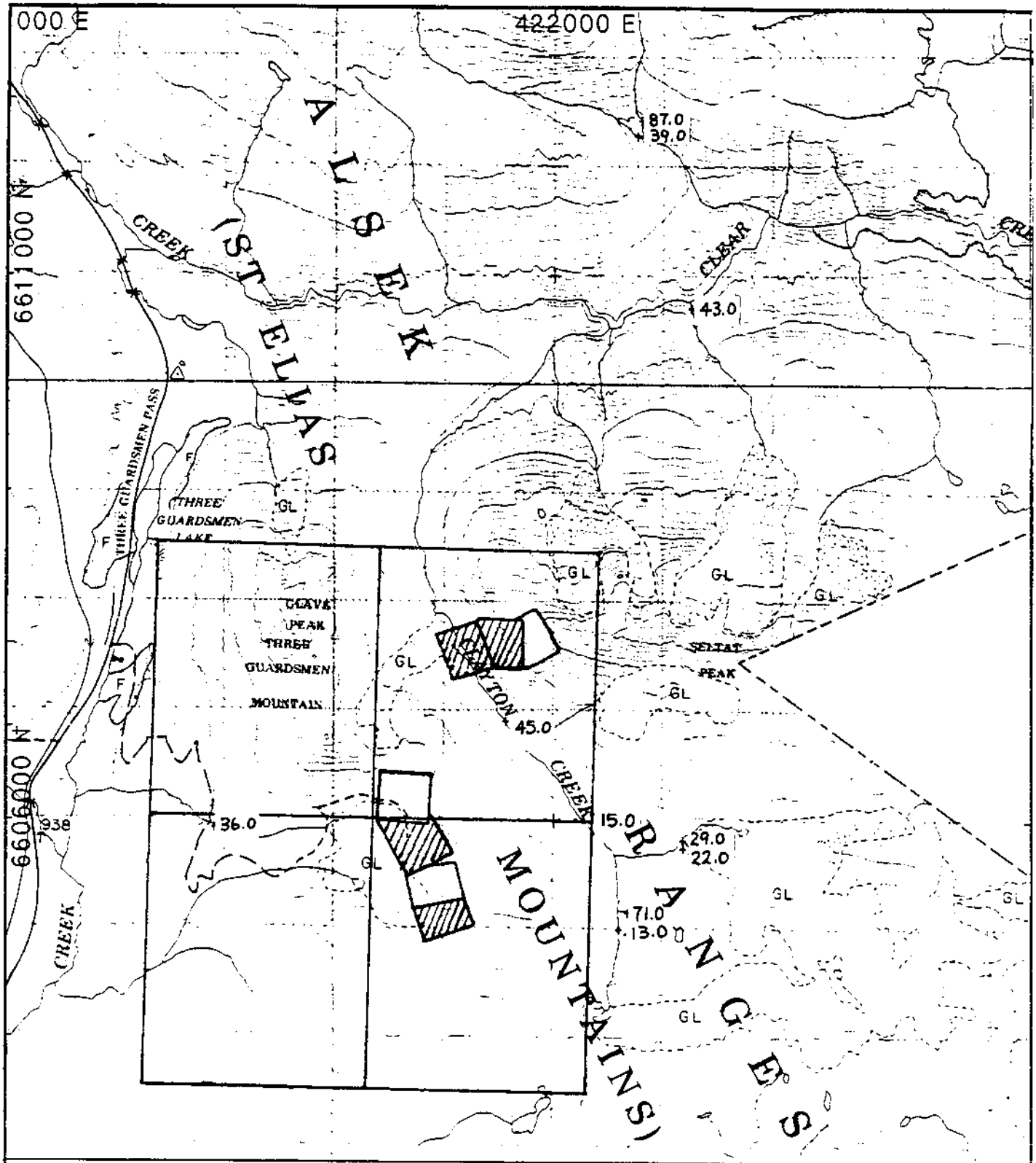
Meters
500 250 0 500 1000

Iron (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	**Date** OCTOBER 1988	**Report No.** ATL-TG-1	**Fig. No.**

New Horizon Software.



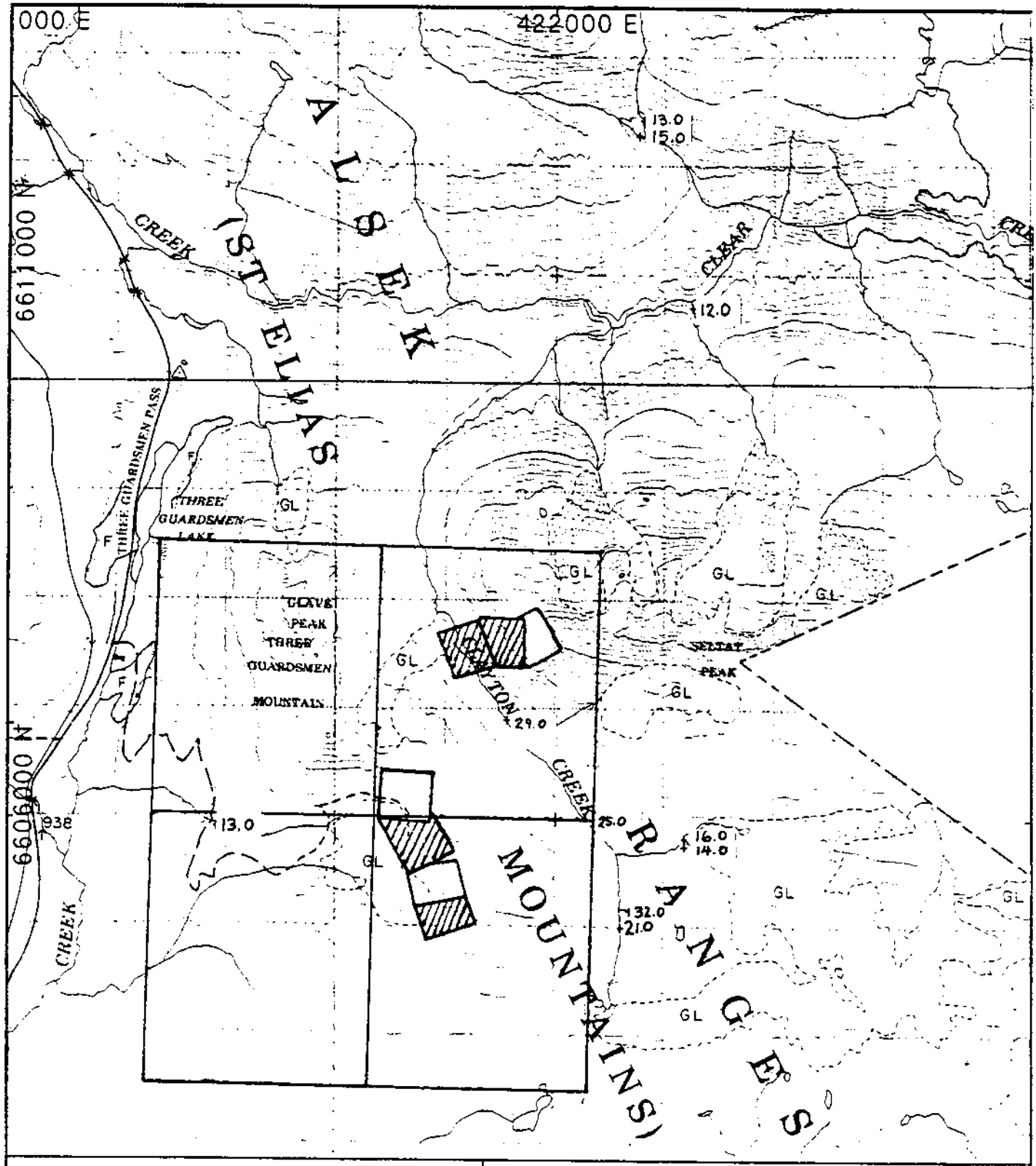
Lead (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

New Horizon Software.



Meters
500 250 0 500 1000

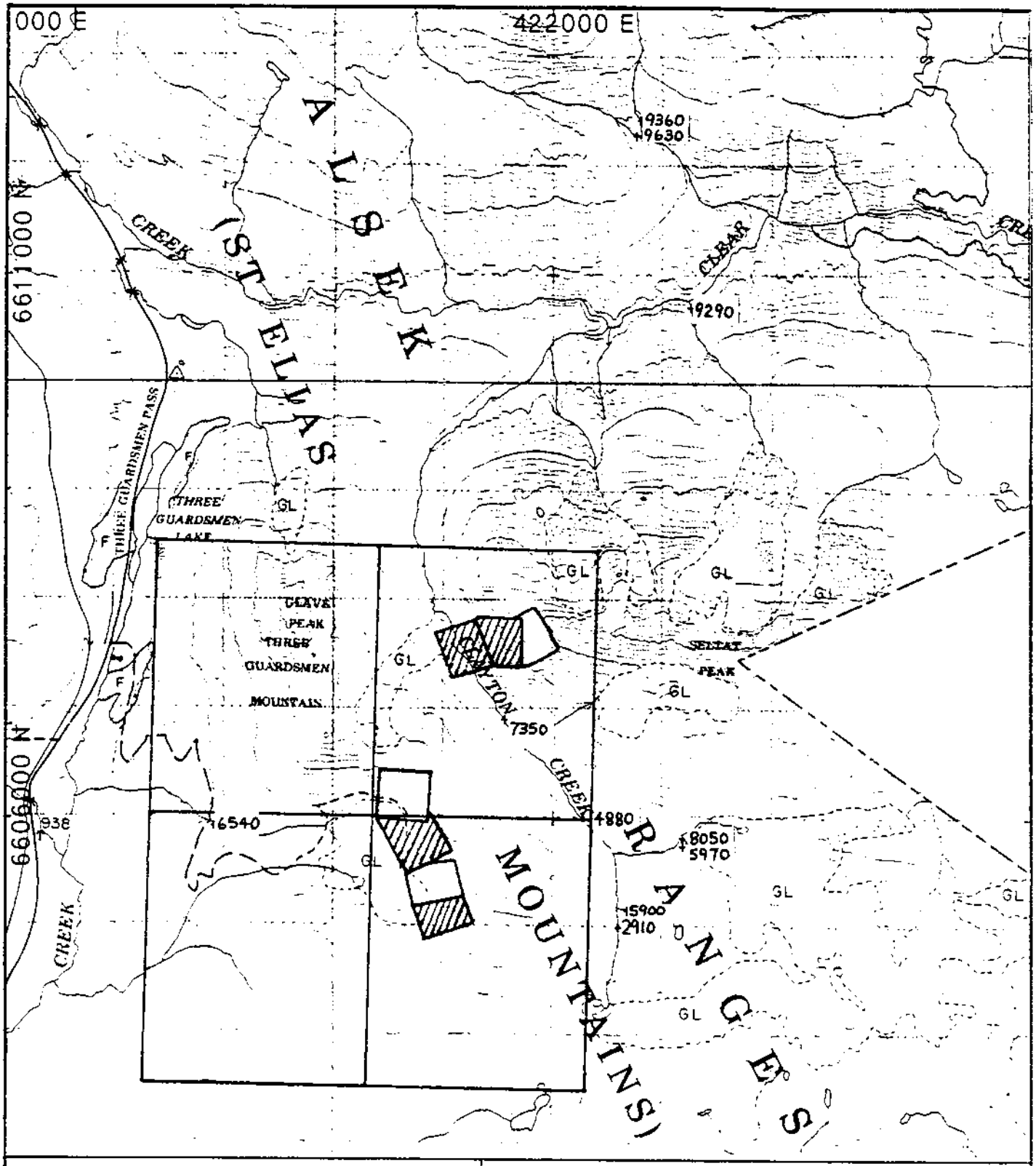
Lithium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date: OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



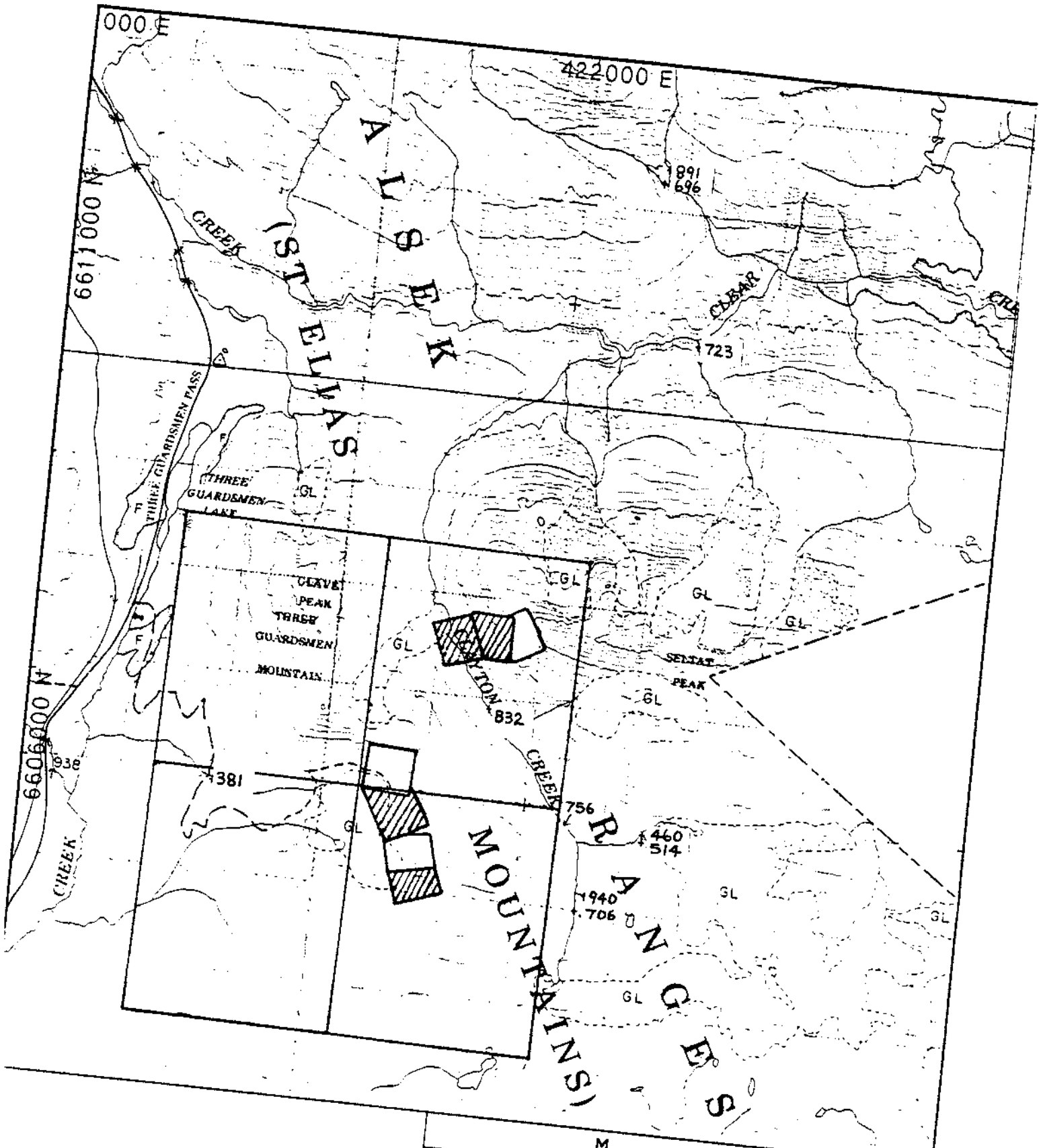
Meters
500 250 0 500 1000

Magnesium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED

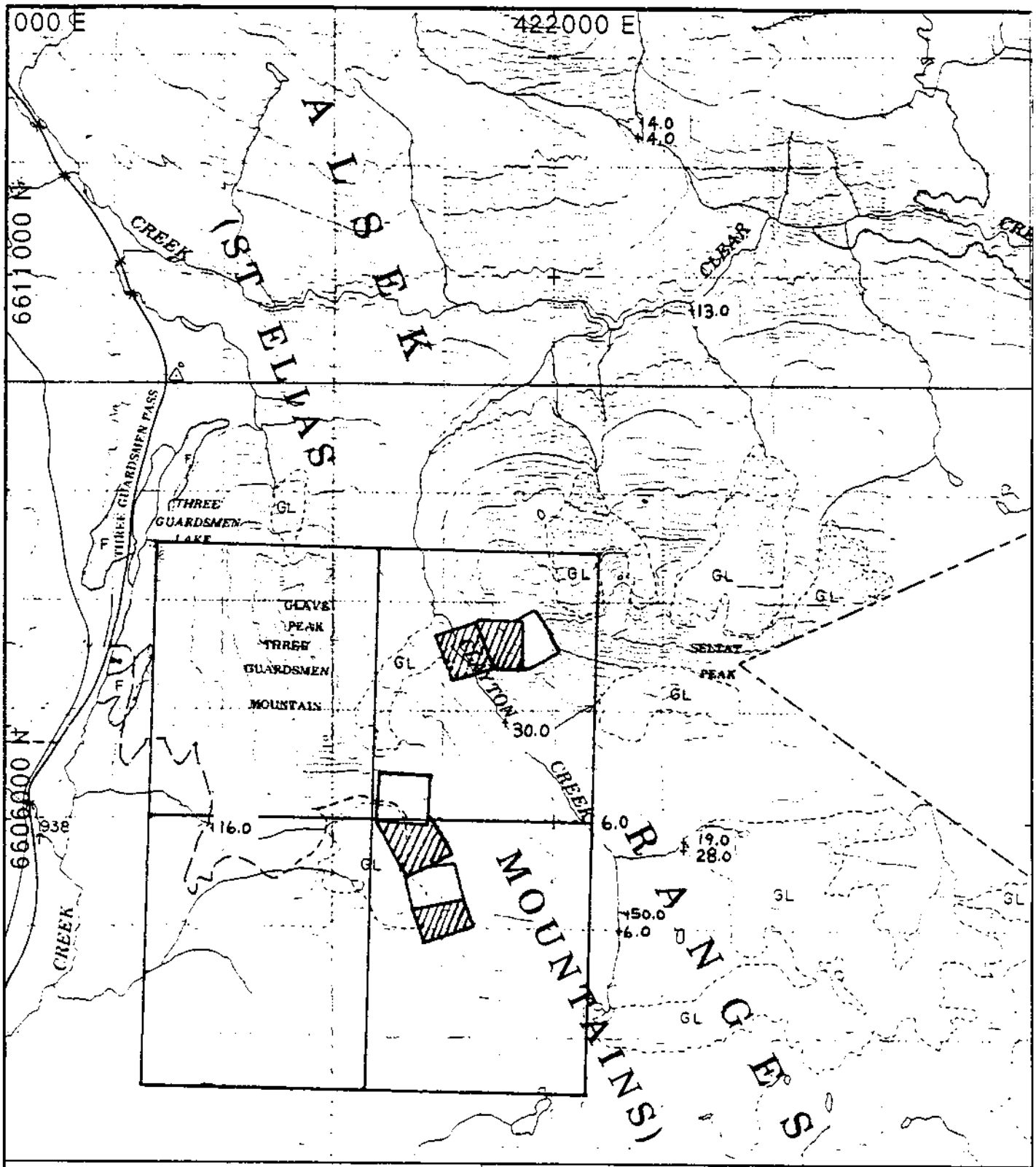


Meters
500 250 0 500 1000

Manganese (ppm)
ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

MOUNTAINSIDE MANAGEMENT LIMITED

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	Report No.	Fig. No.
OCTOBER 1988	ATL-TG-1	

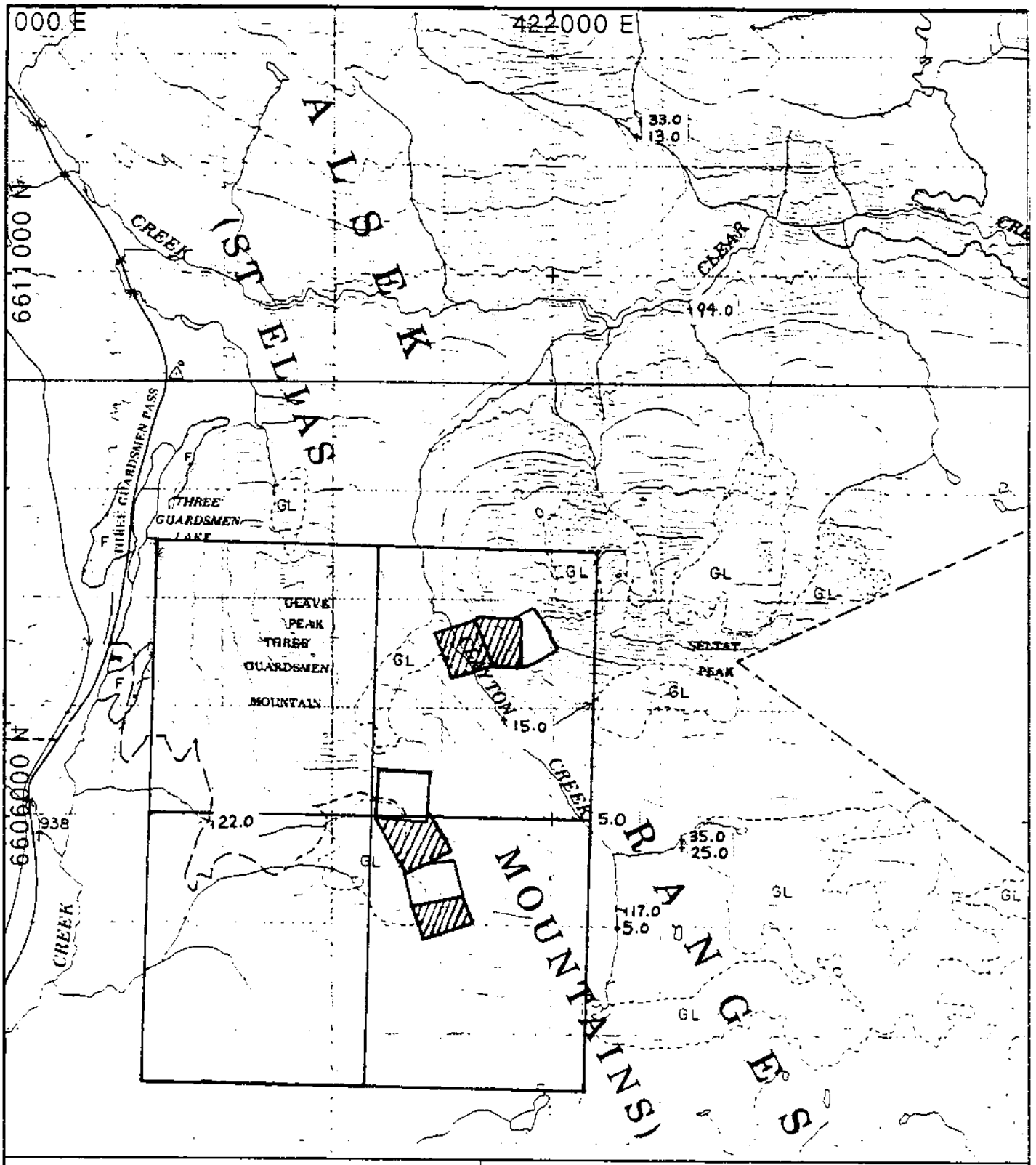


Molybdenum (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No.: ATL-TG-1	Fig. No.



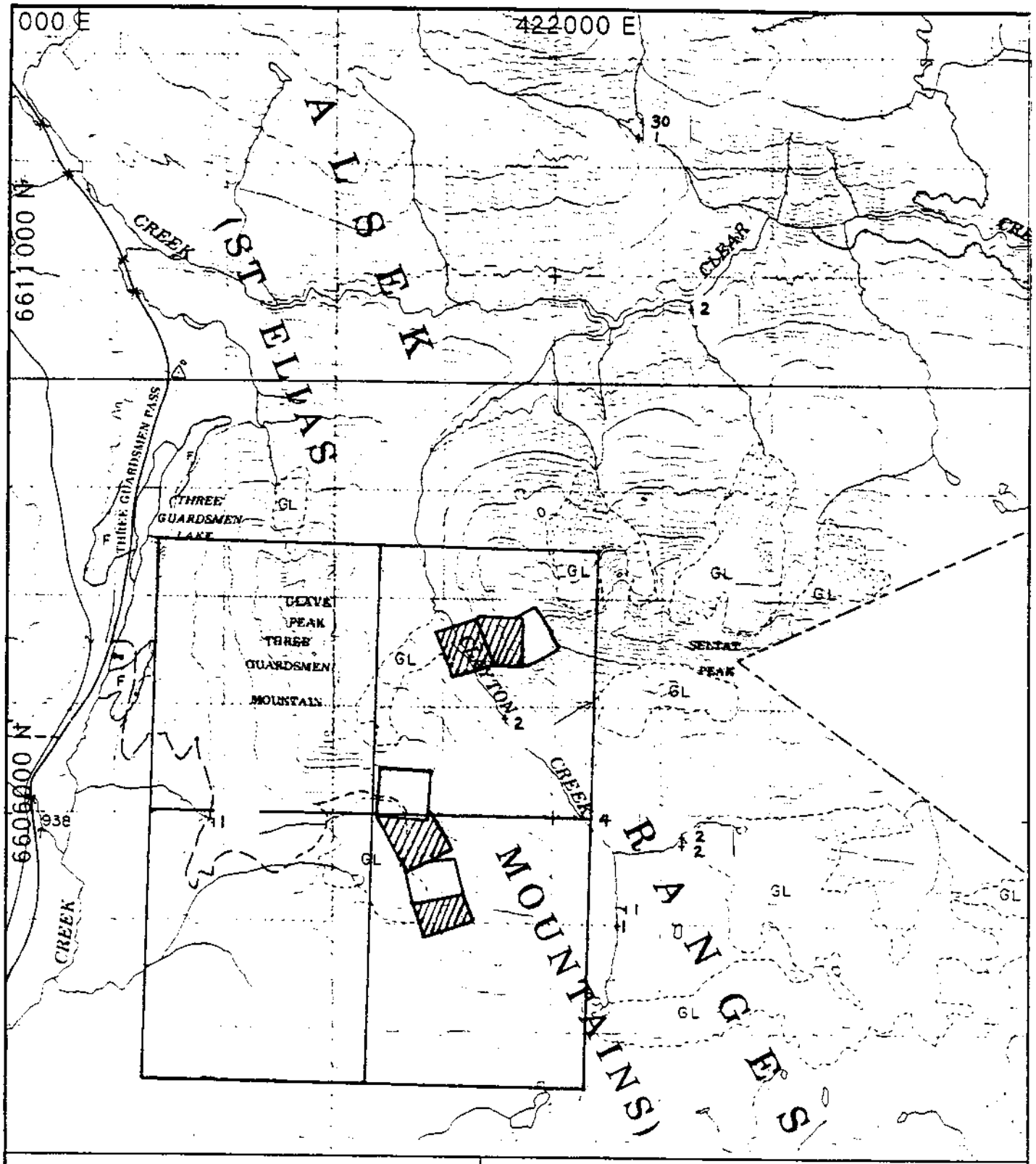
Meters
500 250 0 500 1000

Nickel (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED

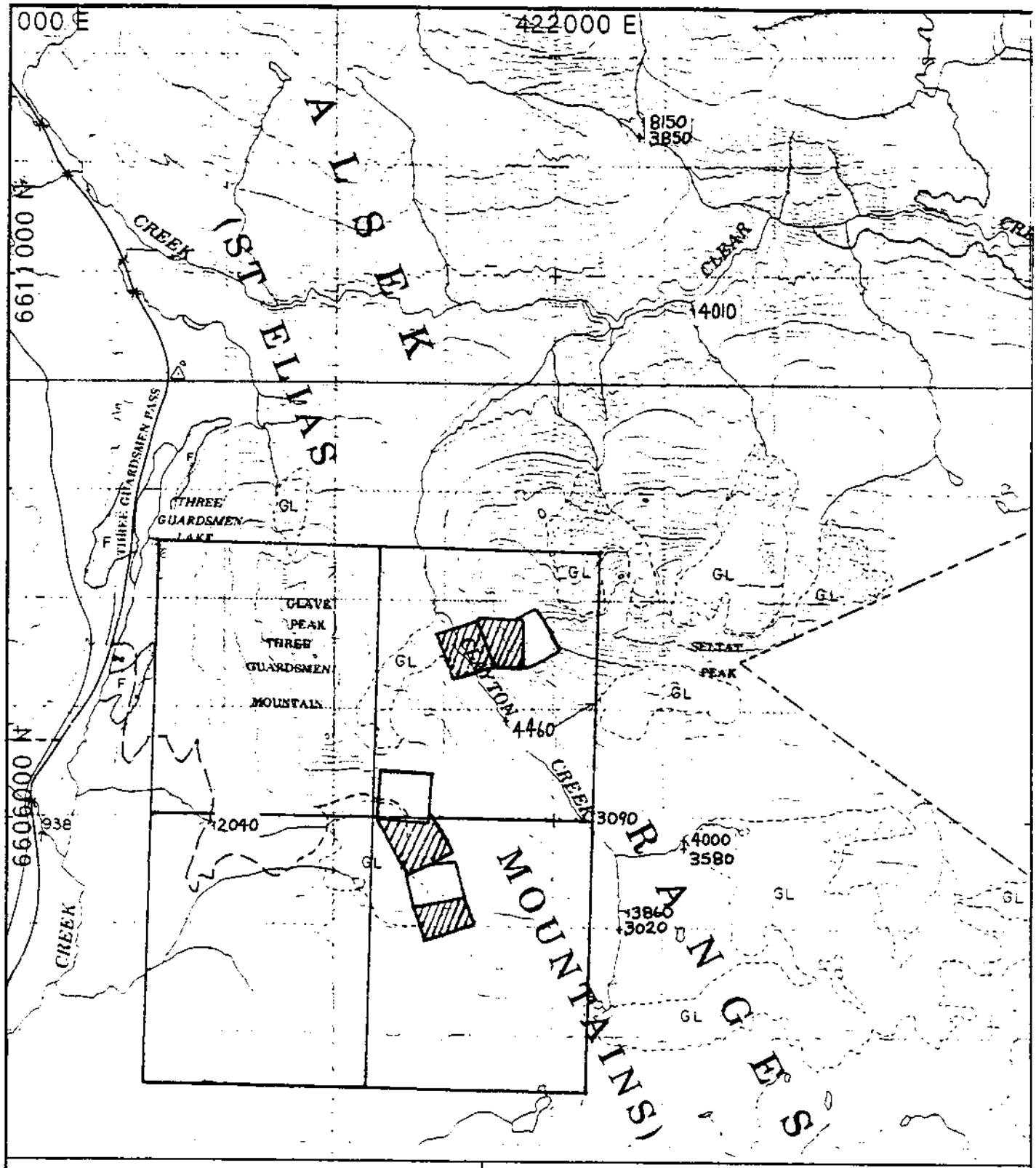


Palladium (ppb)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No.: ATL-TG-1	Fig. No.



Meters
500 250 0 500 1000

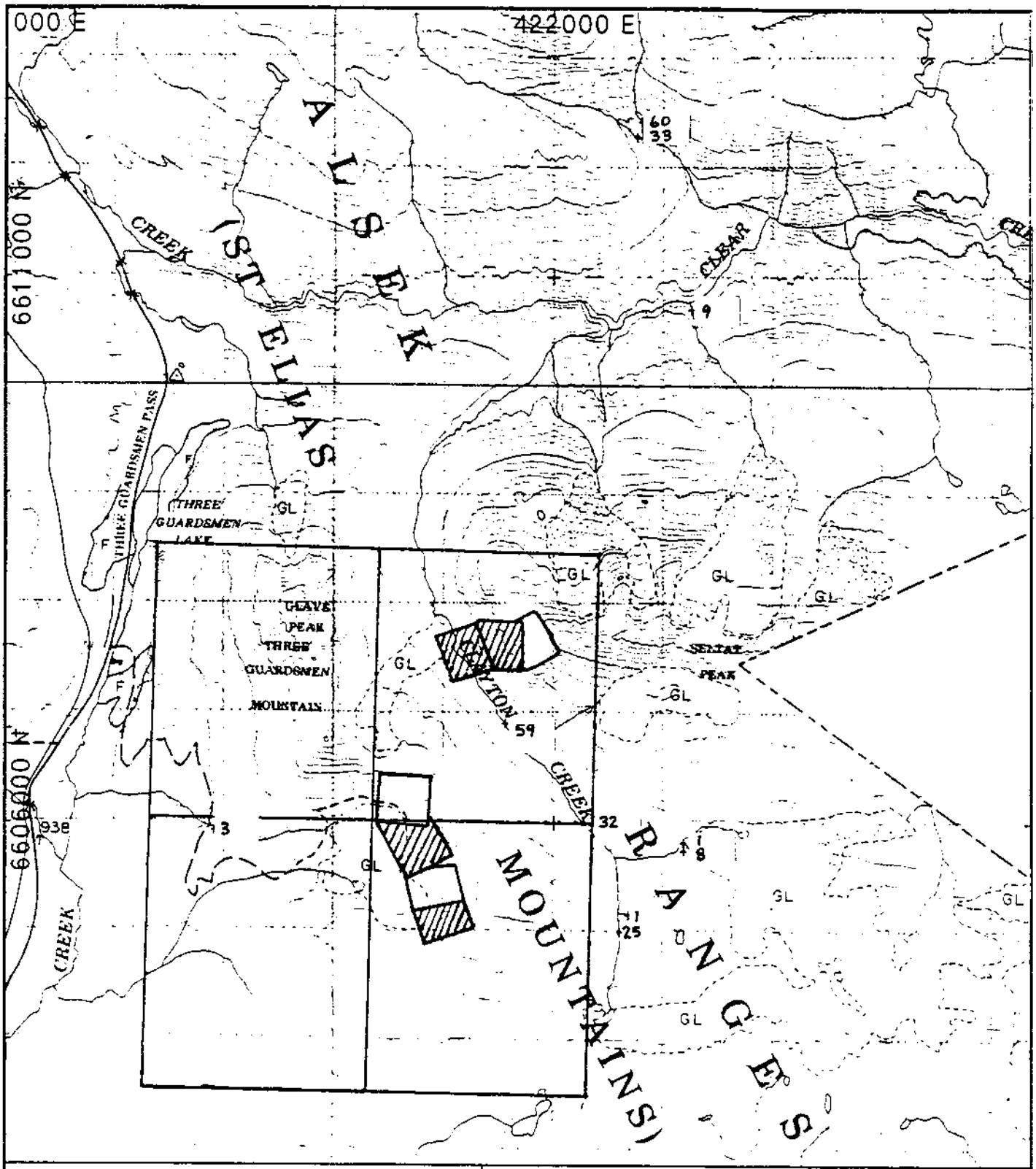
Phosphorus (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



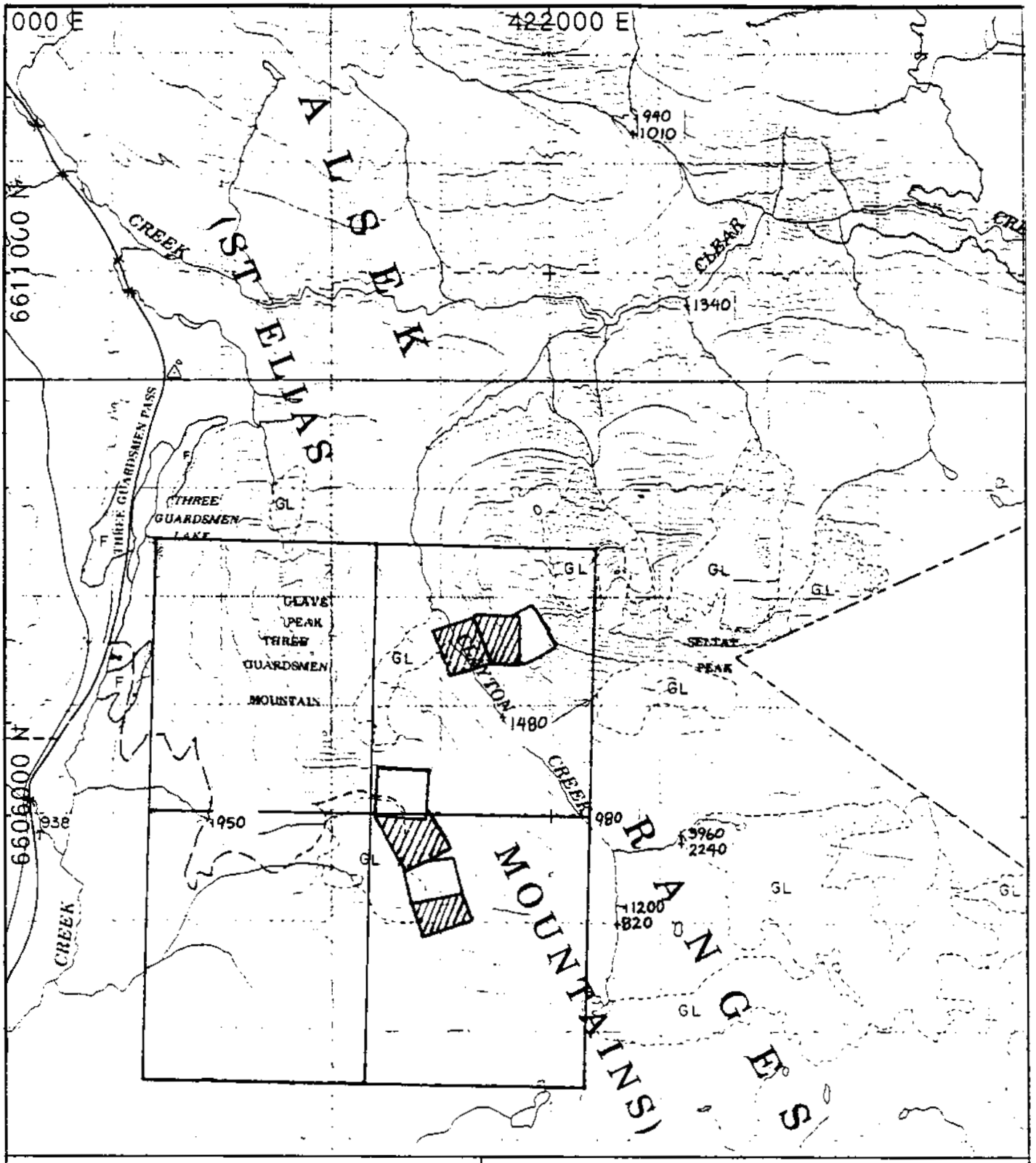
Platinum (ppb)

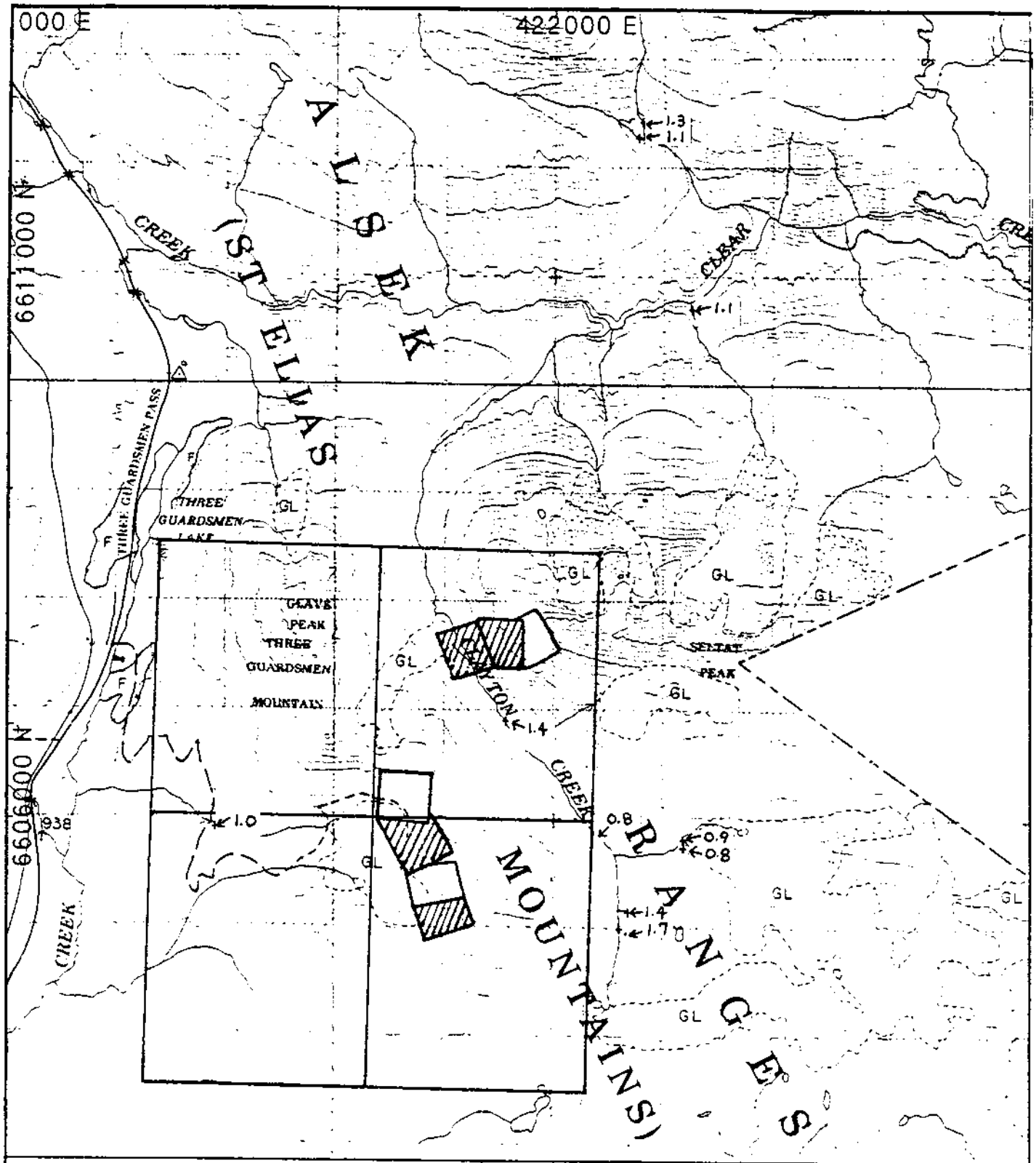
ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No.: ATL-TG-1	Fig. No.

New Horizon Software.


000 E
422000 E
6611000 N
6606000 N
ALSEK
(ST ELIAS)
CREEK
CLEAR
CREEK
THREE GUARDSMEN PASS
THREE GUARDSMEN LAKE
GLAVE PEAK
THREE GUARDSMEN MOUNTAIN
SELTAT PEAK
CREEK
CREEK
MOUNTAINS
RANGES
940
1010
1340
1480
1950
1938
980
3960
2240
1200
820
GL
F
Potassium (ppm)
ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES
Meters
500 250 0 500 1000
Project No. ATL-88-TG
NTS 114P/9
Scale 1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED
Date OCTOBER 1988
Report No. ATL-TG-1
Fig. No.
New Horizon Software.



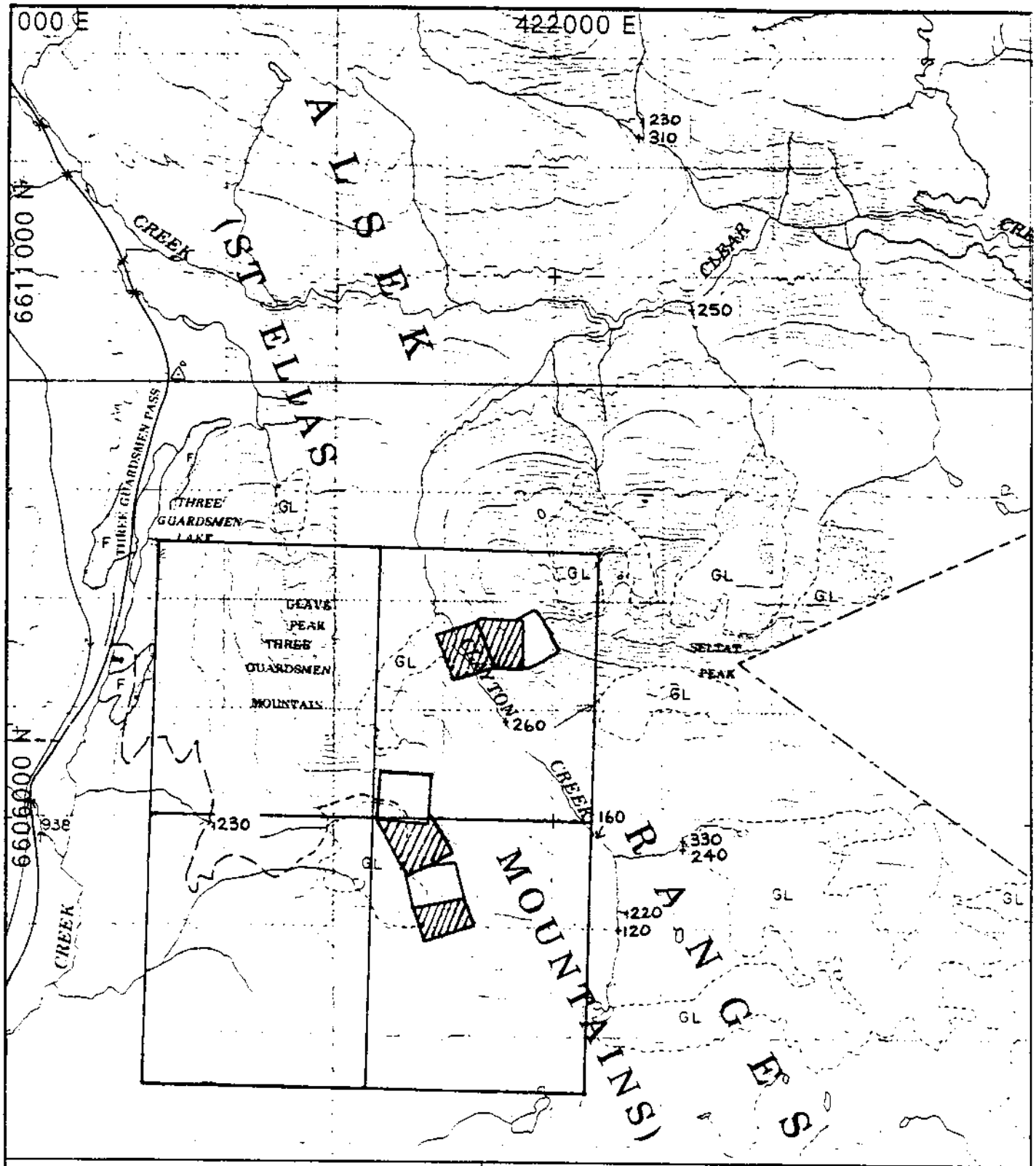
Meters
500 250 0 500 1000

Silver (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED



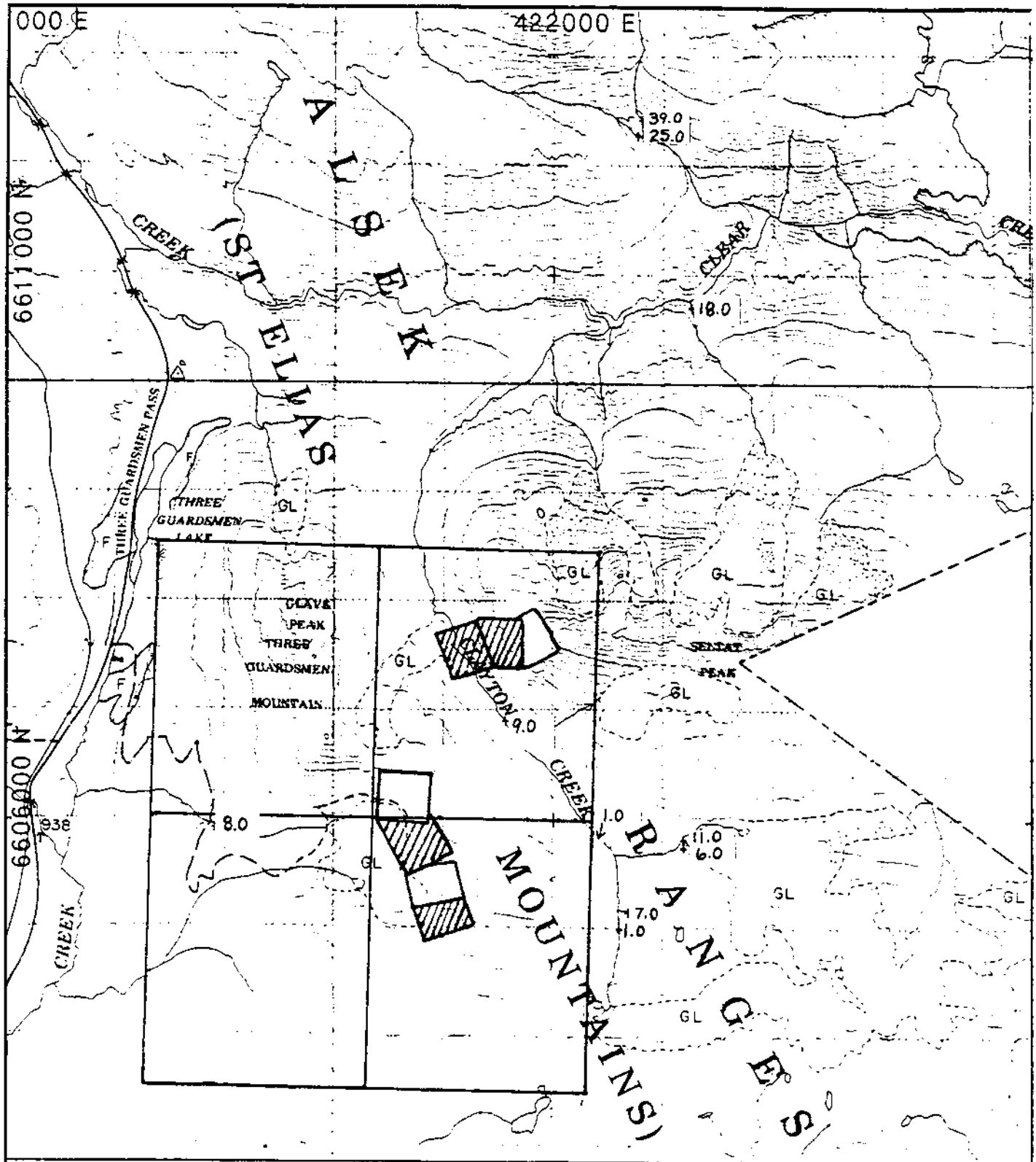
Sodium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED



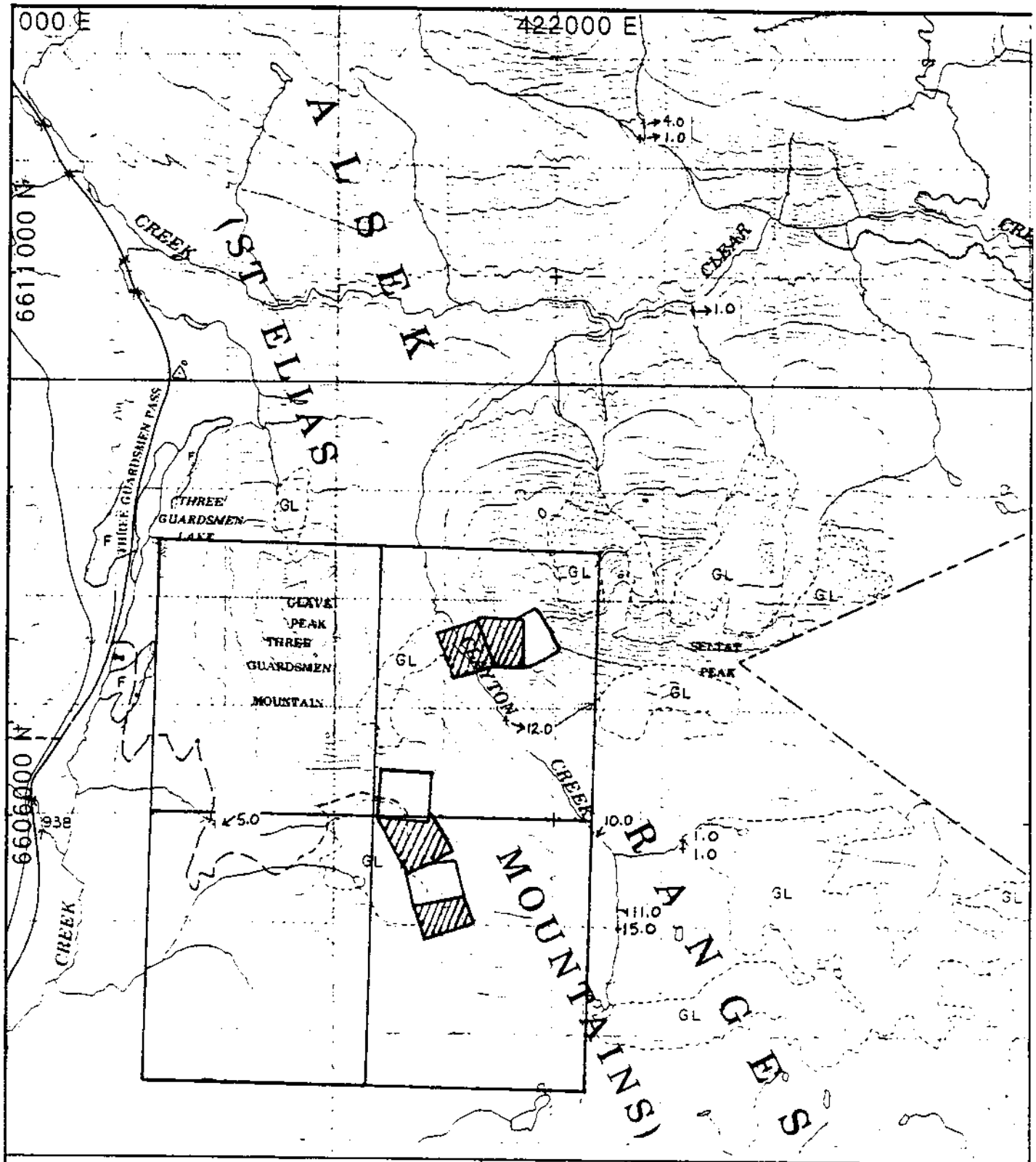
Meters
500 250 0 500 1000

Strontium (ppm)

ATLIN – THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No. ATL-TG-1 / Fig. No.

New Horizon Software.



Meters
500 250 0 500 1000

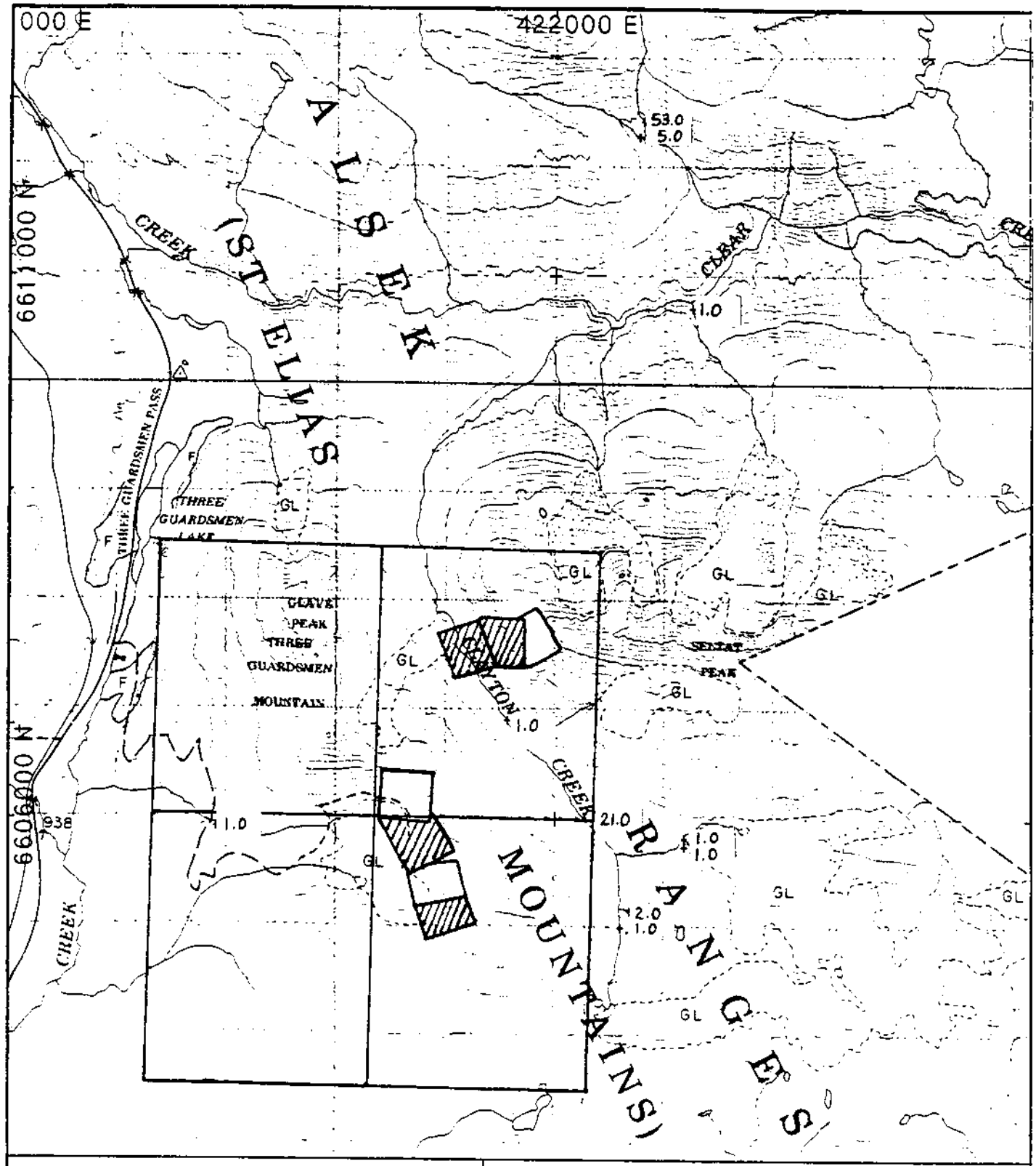
Thorium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date	**Report No.**	**Fig. No.**
OCTOBER 1988	ATL-TG-1	

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



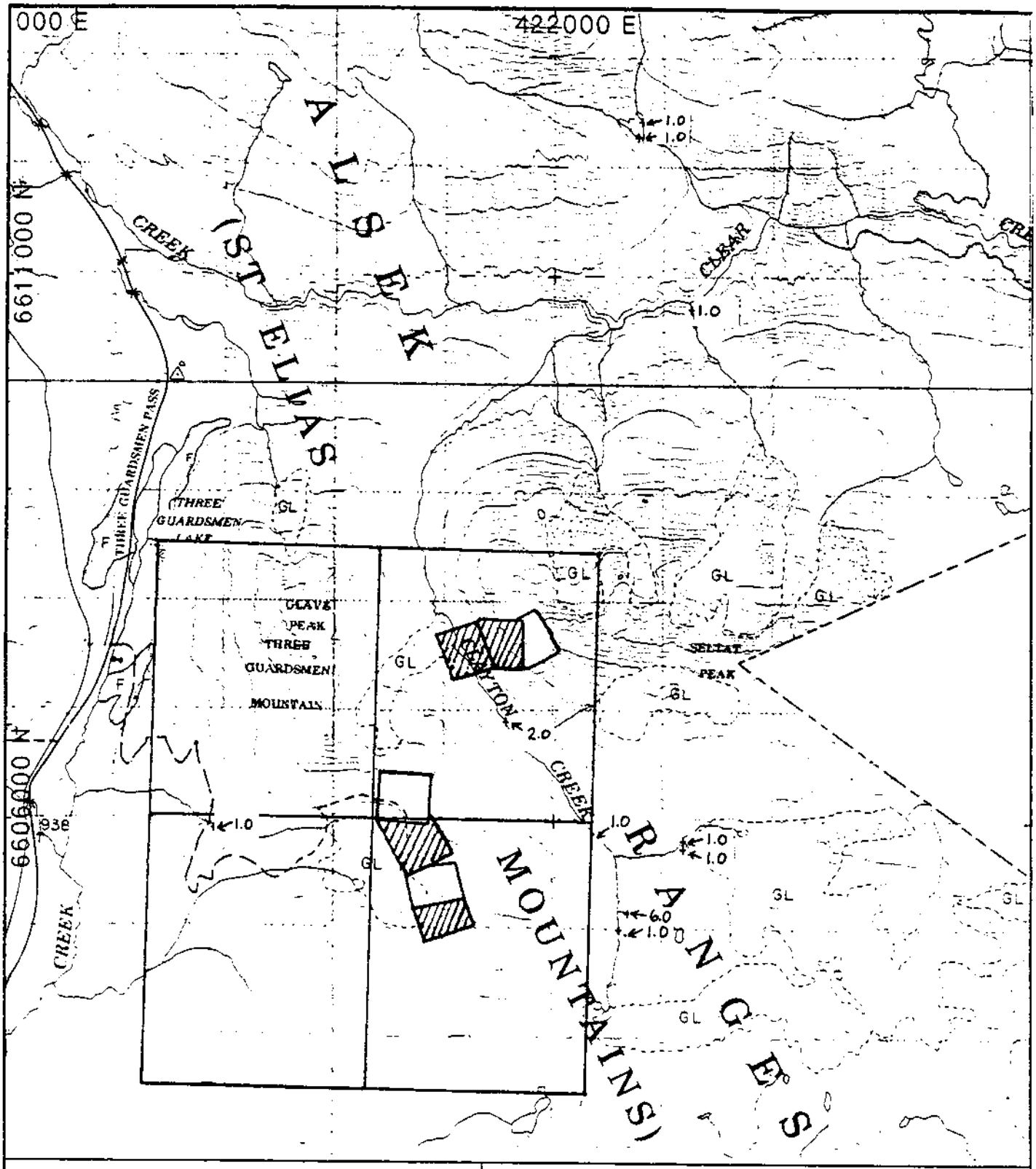
Tin (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date OCTOBER 1988	Report No. ATL-TG-1
		Fig. No.

New Horizon Software.



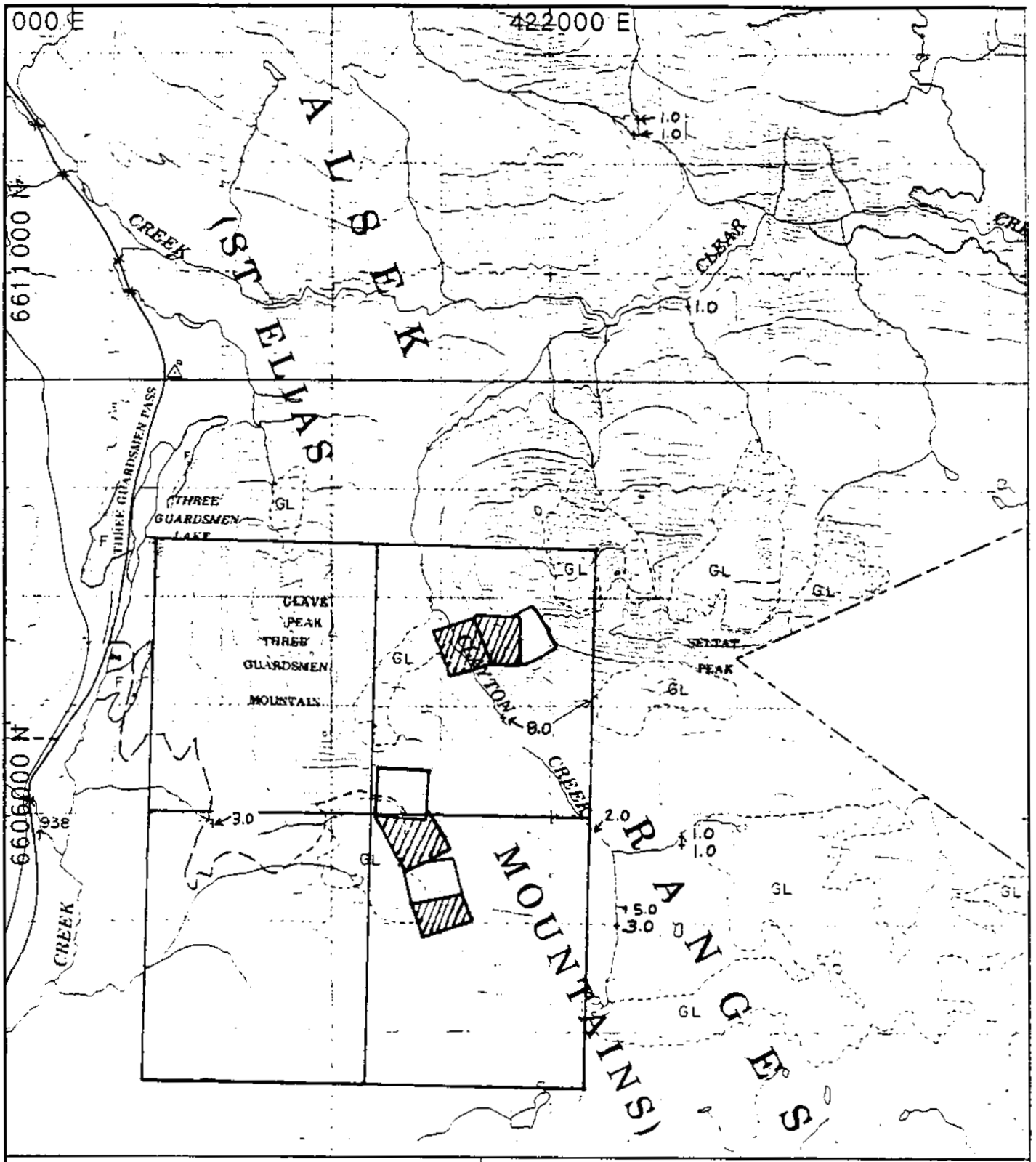
Meters
500 250 0 500 1000

Tungsten (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No. ATL-88-TG	NTS 114P/9	Scale 1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

New Horizon Software.



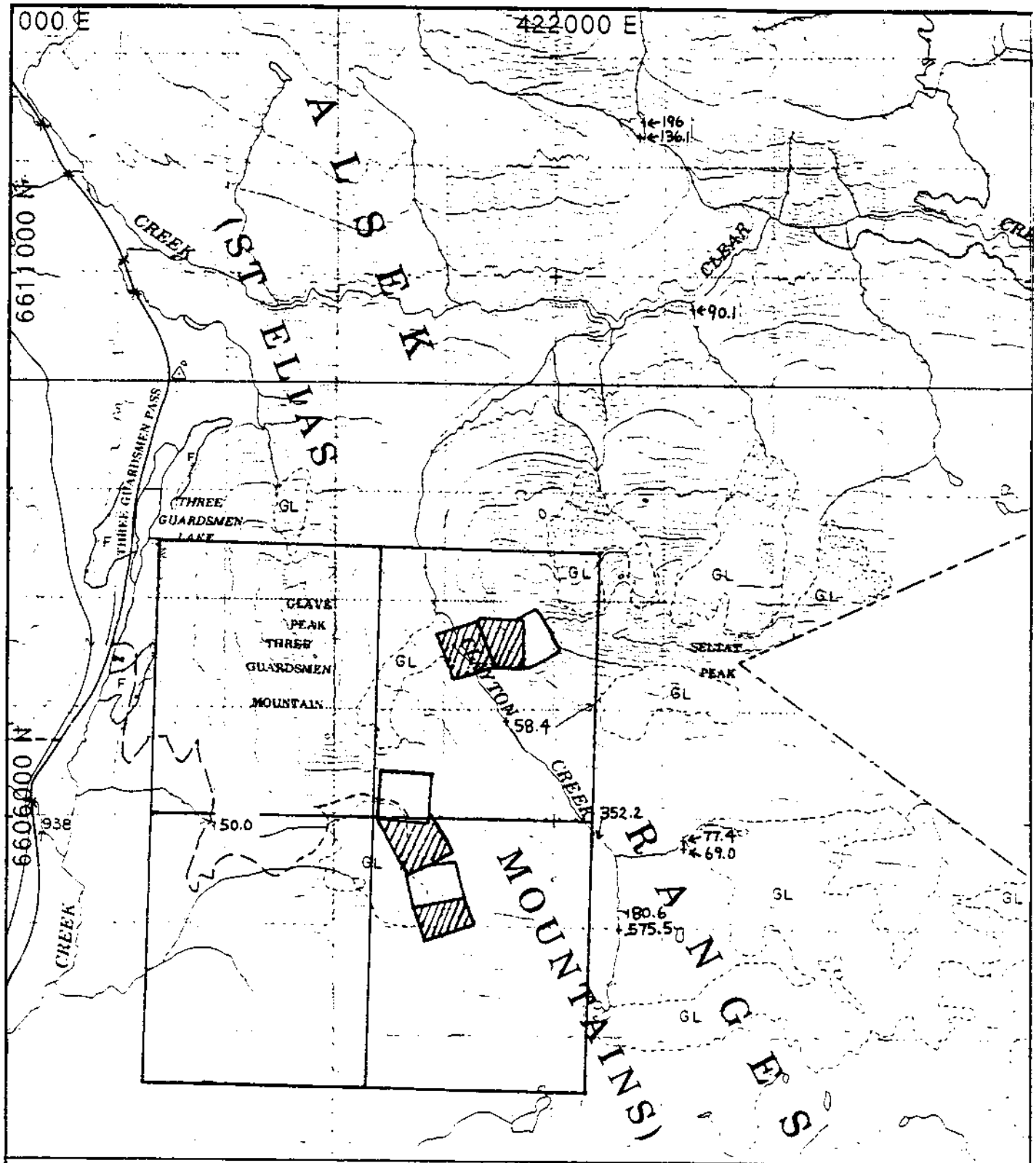
Meters
500 250 0 500 1000

Uranium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No.: ATL-TG-1	Fig. No.

New Horizon Software.



Meters
500 250 0 500 1000

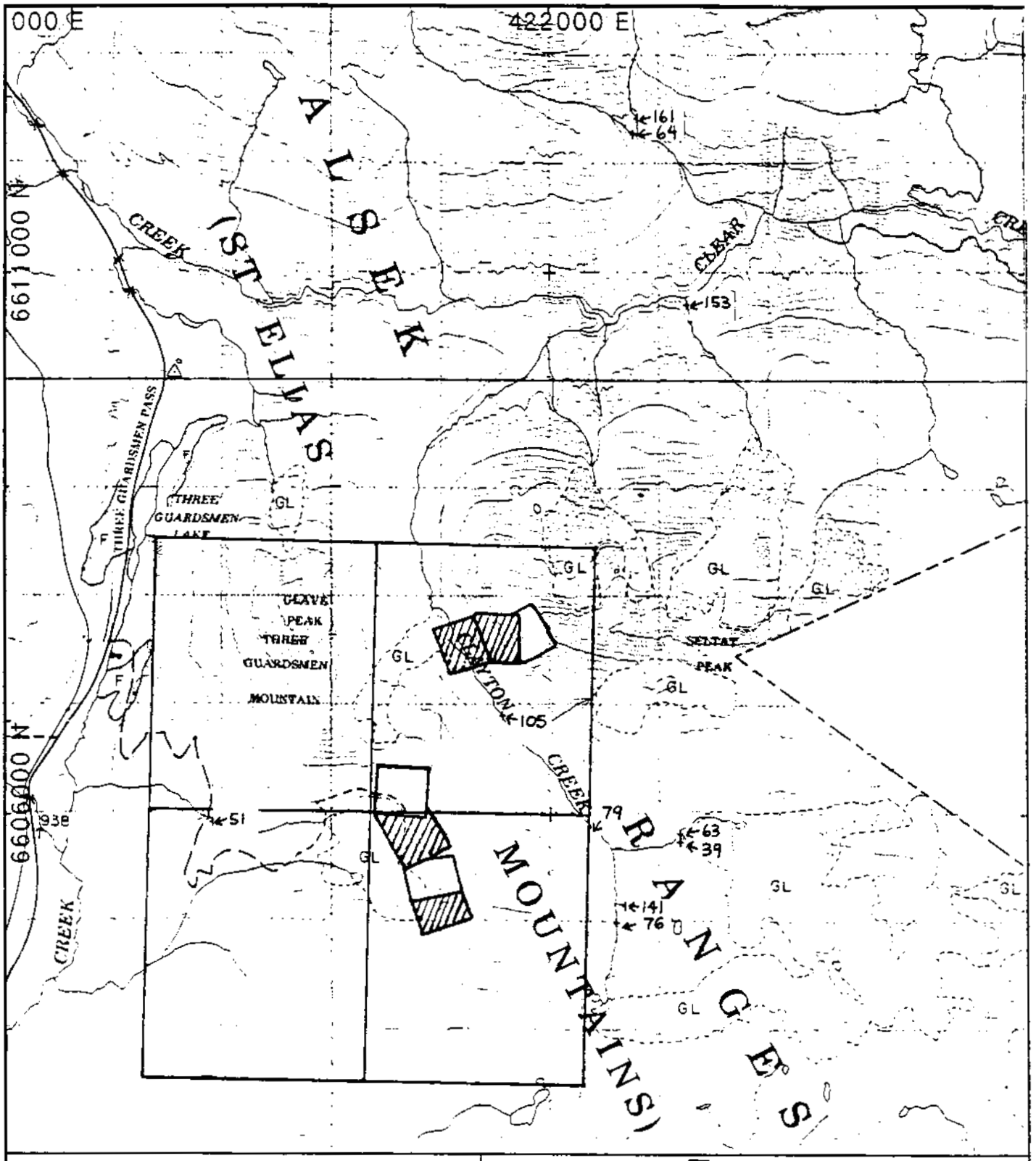
Vanadium (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
Date: OCTOBER 1988	Report No. ATL-TG-1	Fig. No.

MOUNTAINSIDE MANAGEMENT LIMITED

New Horizon Software.



Zinc (ppm)

ATLIN - THREE GUARDSMEN
1988 GEOCHEMICAL SURVEY
BULK MINERAL SAMPLES

Meters
500 250 0 500 1000

Project No.	NTS	Scale
ATL-88-TG	114P/9	1 : 50000
MOUNTAINSIDE MANAGEMENT LIMITED	Date: OCTOBER 1988	Report No.: ATL-TG-1	Fig. No.

Revised: NEW 1987 IDENTITY: 114P(85)

Common Name: **STONE** Other Names:

Mining Div: Atlin NTS: 114P/9W Metals: Cu,Zn,Pb

Latitude: 59°37' Longitude: 136°20' Status: Showing

MINFILE ID: --- Terrane: Alexander

Deposit Type: Skarn

History:

Year	Property Data	Owner/Operator	Work
1985	Stone	Noranda Exp Ecl	GL,GP(mag,em),GC

Description:

Chalcopyrite, sphalerite and minor galena occur with magnetite and pyrrhotite in small pods and veins within skarns developed along contacts between a Tertiary granitic stock and Upper Paleozoic schists and limestones.

References:

EBC 1985, p.C415
AR 13786

Revised: Feb. 29/88 IDENTITY: 114P(61)

Common Name: SELTAT PEAK Other Names:

Mining Div: Atlin NTS: 114P/9W Metals: Cu, (Au?)

Latitude: 56°32' Longitude: 136°24' Status: Float

MINFILE ID: --- Terrane: Alexander

Deposit Type: Skarn

History:

Year	Property Data	Owner/Operator	Work
1974		Union OC Can L	DI

Description:

Chalcopyrite in a rounded boulder composed of garnet skarn in gneiss was found in glacial till.

References:

GSC OF 926
Cathro, R.J. (1975), PR, AC Files

Revised: Feb. 28/87 IDENTITY: 114P(13)

Common Name: **MILDRED** Other Names: Three Guardsmen

Mining Div: Atlin NTS: 114P/9W Metals: Cu (Ag)

Latitude: 59°38' Longitude: 136°25' Status: Showing

MINFILE ID: 114P 013 Terrane: Alexander

Deposit Type: Skarn

History:

Year	Property Data	Owner/Operator	Work
1909	Mildred; 1 CL		DI,ST
1911	" "		PR
1914	" ; 14 CL	A. Smith, etc.	PR,SS
1969	" , etc; 51 CL	Premier Mg CL/Taneloy ML	GL
1971	" " ; 55 CL	Eagle River ML/Imperial O Ent L	GL,GP(mag),DD(8/1067m)

Description:

Country rocks are Upper Paleozoic metasedimentary rocks chiefly consisting of schist, gneiss, argillite, quartzite and marble that are located along the easterly margin of a large Oligocene granitic body. The marble occurs in many areas as lenses and irregular masses, ranging from about 1 to 100 m wide. Skarn replaces the marble along its contacts with other metamorphic rocks and with quartz diorite. Much of the mineralized skarn is a green, medium- to fine-grained variety with abundant actinolite along with diopside, garnet and epidote.

Magnetite containing chalcopyrite, pyrite and bornite forms about 30% of an irregular, westward-dipping skarn zone about 30 m wide and 150 m long which is overlain by quartz diorite and underlain by grey marble. Almost massive magnetite constitutes scattered lenses about 3 to 4 m wide and numerous smaller masses. A chip sample across a 3 m wide magnetite lens assayed Nil Au, 6.9 g/t Ag and 0.3% Cu.

References:

MMAR 1910, p.55; 1911, p.60; 1914, p.98
GEM 1969, p.28; 1971, p.32
BCMM Bull 25, p.58
GSC Sum Rpt 1913, p.32
GSC OF 926
Hilker, R.J., PR, AC Files

Revised: Feb. 28/87 IDENTITY: 114P(12)

Common Name: **SIMCOE** Other Names: Three Guardsmen

Mining Div: Atlin NTS: 114P/9W Metals: Cu,Fe (Au,Mo)

Latitude: 59°36' Longitude: 136°24' Status: Showing

MINFILE ID: 114P 012 Terrane: Alexander

Deposit Type: Skarn, Fracture Fillings

History:

Year	Property Data	Owner/Operator	Work
1909	Simcoe; 1 CL		DI,ST
1911	"		PR
1914	" ; 14 CL	A. Smith, etc.	PR,SS
1969	Ice, etc; 57 CL; 4 CG	Premier Mg CL/Taneloy ML	RD,DD(1)
1971	" " "	Taneloy ML/Eagle River ML	

Description:

Country rocks are Upper Paleozoic metasedimentary rocks chiefly consisting of schist, gneiss, argillite, quartzite and marble that are located along the easterly margin of a large Oligocene granitic body. The marble occurs in many areas as lenses and irregular masses, ranging from about 1 to 100 m wide. Skarn replaces the marble along its contacts with other metamorphic rocks and with quartz diorite. Much of the mineralized skarn is a green, medium- to fine-grained variety with abundant actinolite along with diopside, garnet and epidote.

Two showings comprise the Simcoe occurrence. The upper showing (at 1310 m elevation) is a lens about 6 m wide and 11 m long with about 75% magnetite and minor chalcopyrite. A typical sample assayed 1.0 g/t Au, Nil Ag and 0.8% Cu.

The lower showing (at 1190 m elevation) consists of narrow lenses of chalcopyrite-bearing magnetite skarn in the hanging wall of the intrusive contact. At the contact, molybdenite occurs as fracture fillings in silicified quartz diorite and in skarn. A sample across a 15 cm wide magnetite lens assayed Nil Au, Nil Ag and 0.3% Cu.

1917, p. 251

References:

MMAR 1910, p.55; 1911, p.60; 1914, p.98; ~~1969, p.28~~
BCMM Bull 25, p.57
GSC Sum Rpt 1913, p.32
GSC OF 926
GCNL July 8, Oct.28,31, Dec.15,18/69
Mill, G. (1971), PR, AC Files

GCNL 1969, p.28

Revised: IDENTITY: 114P(14)

Common Name: CANADIAN VERDEE Other Names: Three Guardsmen

Mining Div: Atlin NTS: 114P/9W Metals: Ag,Cu,Zn (Bi,Au)

Latitude: 59°35' Longitude: 136°24' Status: Showing

MINFILE ID: 114P 014 Terrane: Alexander

Deposit Type: Skarn

History:

Year	Property Data	Owner/Operator	Work
1909	Canadian Verdee; 1 CL		DI,ST
1911	" "		PR
1914	" ;14 CL	A. Smith, etc.	PR,SS
1969	" ; 1 CG	/B.C. Yukon EC	GL

Description:

Country rocks are Upper Paleozoic metasedimentary rocks chiefly consisting of schist, gneiss, argillite, quartzite and marble that are located along the easterly margin of a large Oligocene granitic body. The marble occurs in many areas as lenses and irregular masses, ranging from about 1 to 100 m wide. Skarn replaces the marble along its contacts with other metamorphic rocks and with quartz diorite. Much of the mineralized skarn is a green, medium- to fine-grained variety with abundant actinolite along with diopside, garnet and epidote.

At one locality, a lens of massive magnetite 90 cm wide lies in a 3 m wide band of skarn in marble. A grab sample of this material assayed Tr Au, 96.0 g/t Ag and 2.5% Cu. About 150 m north of this area, a few narrow lenses of coarse-grained garnet skarn occur in marble. They are mineralized with narrow sulphide bodies composed of bornite, chalcocite and sphalerite with minor chalcopyrite and wittichenite (copper bismuth sulphide). A sample across a 30 cm wide mass of this material assayed 1.0 g/t Au, 809 g/t Ag, 20.5% Cu, 14.6% Zn and 0.55% Bi.

References:

MMAR 1910, p.55; 1911, p.60; 1914, p.98
BCDM Bull 25, p.58
GSC Sum Rpt 1913, p.32
GSC OF 926
Hilker, R.J. (1969), PR, AC Files

Summary of Expenditures

Geological

Truck (includes km)	14 days @ $75.00/day	$ 1,050.00
U-Haul	16 days @ $21.00/day	336.00
ATV	14 days @ $30.00/day	420.00
Field gear rental	14 days @ $20.00/day	280.00
Lab analysis		1,344.25
Wages	23 man days @ $125.00/day	2,875.00
Helicopter	3.7 hrs @ $600.00/hr. + $250.00 fuel	2,470.00
Food		1,150.00
Accommodations		500.00
Report writing		500.00
TOTAL:		**$11,675.25**