1025

GEOLOGICAL AND GEOPHYSICAL

REPORT ON THE

GOLD CORD PROPERTY

RAINY HOLLOW AREA

NTS 114 P/7,8

59° 27' N, 136° 30' W

Atlin Mining Division, British Columbia, Canada

CLAIMS:

ERO 1, 2: Record Nos. 2434 - 2435

CM 1 - 5: Record Nos. 2428 - 2432

Karl 1 - 20: Record Nos. 635 - 650, 656 - 659

WORK PERIOD (FIELD):

August 1st to August 15th, 1988

FOR

SHIRABOB GOLD MINE INC.
Suite 1270, Stock Exchange Tower
609 Granville Street
P.O. Box 10372, Pacific Centre
Vancouver, B.C.
V7Y 1G6

BY

M.H. SANGUINETTI, P.ENG.
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September 28th, 1988

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SUMMARY AND CONCLUSIONS

The Gold Cord property, consisting of ~~142~~ 139 claim units, is situated in the Rainy Hollow area of northwestern British Columbia on the Alaska Border. The property was acquired in 1987 by Shirabob Gold Mine Inc. under option agreement from Mr. Karl Gruber of Whitehorse, Yukon.

Gold was reported in this area in the early 1900's and an extensive exploration program was later conducted between 1925 and 1931. Work consisted of trenching, sampling and the sinking of numerous shallow shafts. The vein system was traced over a strike length of 2,895 m, of which only 600 m was of significant width and grade. A 11 km road was built into the property and preliminary engineering studies were completed in 1968 and 1969. However, this failed due to lack of financing. In 1984 the property was under option to Noranda in joint venture agreement with Canadian United Minerals Inc. A program of surface sampling and 163.5 m of diamond drilling in three holes was carried out. Their option agreement was terminated even though continued exploration was recommended (W. Reid and W. Mercer, 1985).

During the current year an orthophoto base map (at scales of 1:2500 and 1:10,000), geological mapping (1:2500), trenching, sampling, grid preparation and a VLF-EM survey (8.1 km) were conducted on behalf of Shirabob. The purpose of this work program was to evaluate the vein and the surrounding host rocks and, by means of the VLF-EM survey, to define the main vein and possible parallel veins in areas covered by overburden or snow.

The Gold Cord property is underlain by Oligocene Tkope River Intrusions (diorite, granodiorite) which have intruded Paleozoic Sediments and Late Triassic(?) mafic submarine volcanic rocks. Alteration of the sediments to a dense white marble and pyritic hornfels occurs along a narrow zone in contact with the intrusive. Numerous lineaments and faults were observed in both the intrusive and the sediments. Where these structures have been infilled with basic dykes or quartz, such as the Gold Cord vein, they tend to form resistant ridges. These lineaments generally trend easterly (100° to 120°), parallel to the intrusive-sediment contact.

The sediments are mostly thin-bedded, gritty, light grey limestones striking west to northwest and dipping north at 40° to 60°. Basaltic or andesitic dykes and sills intrude both the diorite and the sediments. These trend approximately east-west, parallel to the gullies and to the bedding of the sediments.

The Gold Cord vein is a white quartz vein occurring along a shear zone within the diorite and adjacent metasediments. It is mineralized with finely disseminated free gold, pyrite, minor chalcopyrite and traces of sphalerite. The vein trends approximately east-west and dips to the north at 30° to 80°. It follows a pronounced gulley or depression at some locations and tends to lie along the south side of this depression. Locally, the vein splits into two or three distinct veins 0.30 m to 1.30 m wide; along strike it pinches and swells from 0.10 m to 1.8 m in width but averaging about 1.2 meters.

Surface sampling of the vein and the dumps was conducted by the writer. Results of this work show a wide variation of gold values, from trace to 1.342 oz/ton in dumps and from 0.007 to 0.792 oz/ton in channel samples. Sampling of the vein in the "East Shaft" returned values of from Trace to 1.83 oz/t gold across 0.46 m (Cathro, 1968). A weighted average of the results of five channel samples collected by the writer is 0.135 oz/t gold across 1.01 m.

A VLF-EM survey conducted over the picketed grid delineated six conductors trending east-west, parallel to the strike of the Gold Cord vein. The structure hosting the vein was delineated by this survey.

From the results of the 1988 field programs it was concluded that significant gold values occur within the Gold Cord vein. This vein appears to be associated with an east-west trending structure which has topographical and geophysical expressions.

Respectfully submitted,
Sanguinetti Engineering Ltd.

M.H. Sanguinetti, P.Eng.

September 28, 1988
Vancouver, B.C.

INTRODUCTION

This report describes a program of geological mapping, trenching and a VLF-EM survey conducted on the Gold Cord property between August 1st and August 15th, 1988.

The purpose of the work program was to map the mineralized zone and surrounding area, to sample mineralization in the Gold Cord vein, and by means of a VLF-EM survey, to define the main vein and possible parallel veins in areas covered by overburden or snow. The field work was conducted by a 4-man crew employed by Sanguinetti Engineering Ltd. under contract to Shirabob. Some of the background information used in this report is taken from a previous report by the writer (Sanguinetti, 1987) and from data obtained from reports by the B.C. Dept. of Mines (MacIntyre and Schroeter, 1985), Noranda (Reid and Mercer, 1985), Archer-Cathro (Cathro, 1968) and Dalton Gold Mines (Singhai, 1986).

This report has been written to conform to the requirements for assessment work of the Ministry of Energy, Mines and Petroleum Resources of British Columbia.

LOCATION AND ACCESS

(Figures 1 and 2)

The Gold Cord property is centered at approximately 59° 27' north latitude and 136° 30' west longitude (NTS 114P/7E,W). The claims encompass much of Mt. McDonell, on the Alaska - British Columbia border. The showings are approximately 8 km west of the border Customs House of Pleasant Camp, on the Haines Highway. Haines, Alaska is located 65 kms south of the border crossing and Haines Junction, Yukon is 190 kms to the north.

A rough four-wheel drive / cat road has been built from Pleasant Camp, across the Klehini River to the property. The crossing of the Klehini River presents a serious access problem and construction of a "Bailey Bridge" further upstream from the present crossing is recommended. From the Klehini River the road traverses west along the north side of Jarvis Creek and the edge of Jarvis Glacier to the westerly part of the property and then turns easterly in a series of very steep switchbacks to the old Noranda Camp and the vein showings. Landslides are common along the section above the glacier.

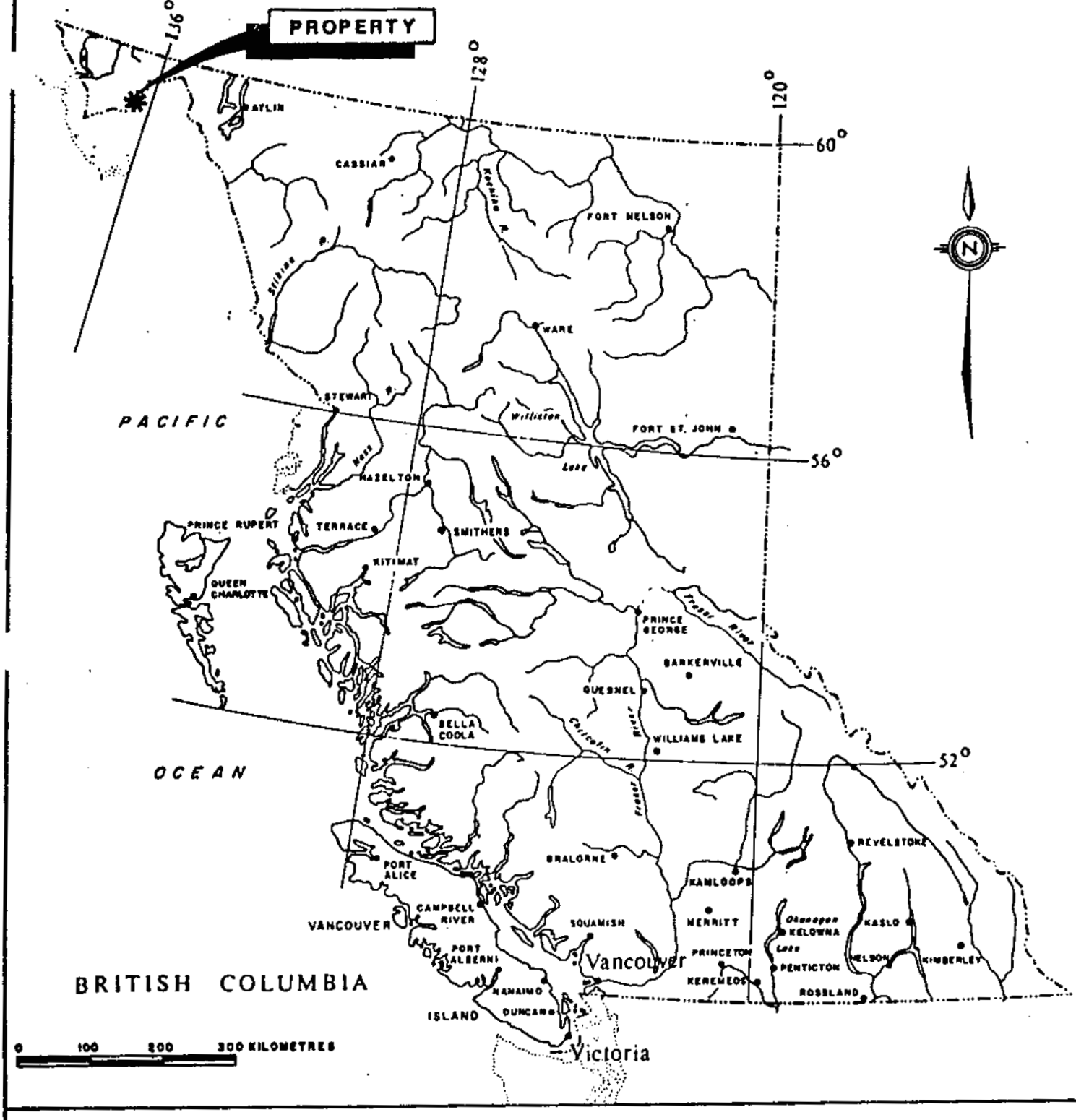
The most convenient access is by helicopter; these are based in Whitehorse and Atlin. Capital Helicopters based in Whitehorse provided access for the 1988 program; logistics and supplies were also out of Whitehorse.

Supplies and equipment are available in Haines, Skagway, Haines Junction or Whitehorse. Deep-sea port facilities exist at Haines.

CLAIMS

(Figure 3; Appendix "C")

The Gold Cord property consists of 20 two-post located claims and seven modified grid system claims comprising ~~122~~ 119 units. Title to the claims is held by Shirabob Gold Mine Inc. Claim records were examined by the writer in the office of the Mining Recorder in Vancouver, B.C. All claims are presently in good standing. A summary of all claims is in Appendix "C".



S H I R A B O B G O L D M I N E I N C .

GOLD CORD PROPERTY

RAINY HOLLOW AREA

BRITISH COLUMBIA AND ALASKA

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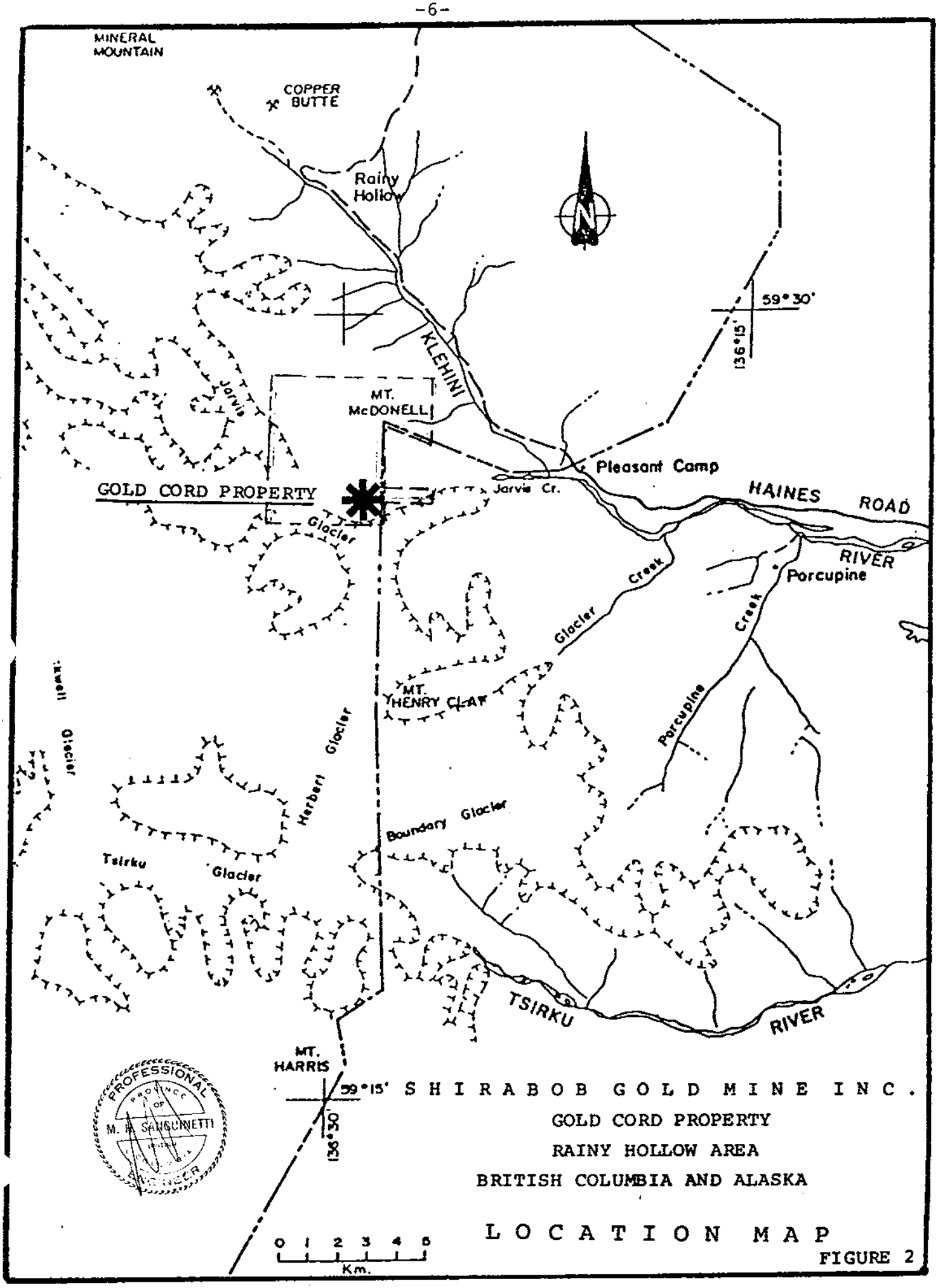
M. H. SANGUINETTI

L O C A T I O N M A P

FIGURE 1



S H I R A B O B G O L D M I N E I N C .

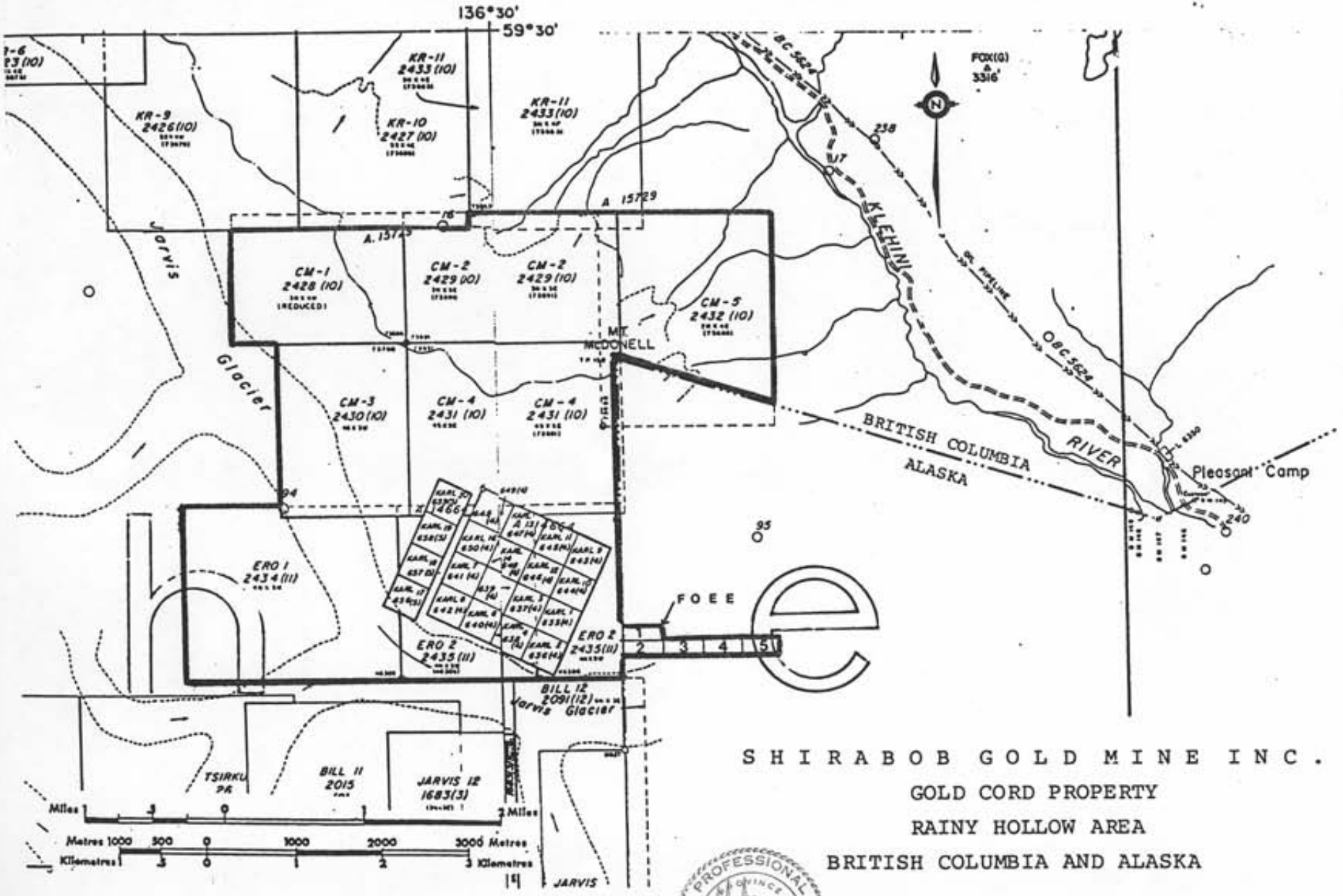
GOLD CORD PROPERTY

RAINY HOLLOW AREA

BRITISH COLUMBIA AND ALASKA

L O C A T I O N M A P

FIGURE 2



S H I R A B O B G O L D M I N E I N C .

GOLD CORD PROPERTY

RAINY HOLLOW AREA

BRITISH COLUMBIA AND ALASKA

C L A I M M A P

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M. H. SANGUINETTI

FIGURE 3

Several claim posts were noted in the field, but in almost all cases tags had been torn off by wildlife or bad weather.

It should be noted that the Karl claims were completely overstaked by the Ero 1, Ero 2 and CM 4 claims. At some time in the future consideration should be given to abandoning parts of Ero 1, CM 4 and all of Ero 2 and Karl 1 to 20 and restaking this area under the modified grid system.

PHYSIOGRAPHY, VEGETATION AND CLIMATE

The property is situated in the Alsek Ranges of the St. Elias Mountains. The main showings are on the southern flank of Mt. McDonell; the south and west boundaries of the claim extend to the Jarvis Glacier. The east and northeast boundaries extend to the valley of the Klehini River. Elevations on the property range from 1,679 m at the peak of Mt. McDonell to 460 m at Jarvis Creek. Slopes are steep but level off to an east-west trending bench with a 10 to 15 degree slope above 1,370 m.

Vegetation on the property is alpine above 760 m; below this is a dense scrub of tag alder, devils club and salal with hemlock, balsam and fir increasing with the decreasing elevation. Timber suitable for mining purposes is to be found along the valley of the Klehini River.

The climate in the area is moderate north coastal. Heavy rain or snow occur from October to May and in the Klehini Valley accumulations of snow can exceed 7 meters. Temperature extremes range from -40°C to 26°C but it is generally classified as moderate; temperature at higher elevations is significantly cooler. Ice and snow cover much of the property, there is perpetual snow above 1,500 m. Water is available in summer months from springs on the property.

HISTORY

Mineralization on Mount McDonell was first discovered in the late 1890's by Indians associated with the legendary Jack Dalton. The Gold Cord showing was examined and sampled by numerous prospectors and geologists between 1899 and 1920. In 1925, the property was staked by J.D. Stenbraten and William Bunting. Between 1925 and 1930 the vein was traced for approximately 2,900 m by hand trenching and three shafts. The Alaska-Juneau Gold Mining Co. partially financed this work and participated in the excavation and deepening of seven shafts and 32 pits before 1929.

Only minor work is reported by the Alaska-Juneau Gold Mining Co. and Livingstone Wernecke during the 1930's. In 1968 and 1969, L. Combs and associates of Whitehorse built an 11 km road to the property and completed engineering studies. Further financing attempts failed.

In 1979, the property was restaked as the Karl 1 to 20 claims. It was optioned to Exotic Gold Inc. (G.C. Singhai, 1979) but no work was conducted. During 1984, the property was under option to Noranda Exploration Co. Ltd. who, in a joint venture with Canadian United Minerals Inc., completed limited surface sampling and 163.5 m of diamond drilling in three holes. The drill program was terminated prematurely due to weather and lack of drilling water, consequently the vein was not adequately tested (W. Reid and W. Mercer, 1985).

In 1987, the property was acquired by Shirabob Gold Mine Inc. who cleaned out and repaired the access road and conducted airphoto - ERTS imagery studies.

1988 EXPLORATION PROGRAM

The purpose of the 1988 exploration program was to map and sample the gold mineralization in the Gold Cord vein. To this end a topographic base map and orthophoto map were prepared from recent aerial photography. This was followed by a field program during August consisting of grid preparation, geological mapping, trenching, rock sampling and a VLF-EM survey.

A total of 8.1 kilometers of grid line was chained and picketed (laths) at 25 meter stations. Three trenches were blasted and mucked out (5 m x 6 m x 2.2 m; 6 m x 7 m x 2.1 m; 9 m x 2 m x 1.5 m) of bedrock and the mineralized material sampled. Several samples were also collected from old dumps. A VLF-EM survey was conducted over the grid as a method of following the Gold Cord vein or the host structure and of locating additional (similar) veins.

REGIONAL GEOLOGY

(Figure 4)

The regional geology of the Rainy Hollow - Porcupine Gold District has been studied since the early 1900's by the U.S. Geological Survey, the B.C. Department of Mines and the Geological Survey of Canada. Ongoing work by the B.C. Department of Mines (1984, 1985) has evaluated many of the mineral occurrences of the area. The most recent regional geological compilation has been by the Geological Survey of Canada (Campbell and Dodds, 1983) at a scale of 1:125,000. This work shows that the Rainy Hollow area is underlain by Alexander Terrane rocks which are bounded on the north by the northwest trending Denali Fault and on the south by the northwest trending Border Ranges Fault. Oligocene Tkope River Intrusions have intruded Paleozoic basinal sedimentary rocks and Late Triassic(?) mafic submarine flows and associated volcaniclastic rocks. The Late Triassic(?) volcanic and volcaniclastic rocks have been preserved as down-dropped blocks within the Paleozoic Terrane by several north and northwest trending lesser faults (MacIntyre and Schroeter, 1985).

PROPERTY GEOLOGY

(Figures 5, & 6)

Much of the property at higher elevations was snow-covered during the time of the 1988 program, however, sufficient outcrop was exposed to define the intrusive-sediment contact and to note the character and trend of the mineralized vein.

A. Lithology, Structure

The Gold Cord property is underlain by fine to medium-grained diorite to granodiorite of the Oligocene(?) Tkope River intrusions and Ordovician to Devonian(?) sediments and metasediments. The intrusive rocks are homogeneous, light to medium-grey, equigranular and appear relatively unaltered except for limonite and local epidote-coated fractures in areas of faulting and shearing (as at 101N, 100+50E). For the most part the intrusive rocks are devoid of sulphide mineralization. Two joint patterns are prominent which trend to the north and northeast.

Cogenetic(?) basaltic or andesitic dykes intrude the diorite (granodiorite) as well as the adjacent sediments and metasediments. These are black to dark green, very fine-grained, generally calcareous and magnetic. Widths vary from 6"(15 cm) to 7 feet (2.1 meters). Most dykes are mineralized with coarse (to 1 cm) euhedral pyrite; very minor amounts of chalcopyrite, pyrrhotite and sphalerite were noted where the dykes are associated with quartz. Quartz veins of 1" to 18" (54 cm) in width, often with submassive calcite, frequently lie sub-parallel to these dykes. The dykes are most prominently exposed in the sediment-metasediment units where they are commonly conformable to bedding and form the resistant edges of short bluffs. The east-west (100° to 120°) trending gullies or linear depressions are most commonly parallel to bedding and are flanked by individual or swarms of dykes.

Sedimentary rocks exposed on the property consist of a thick series of west-northwest trending Paleozoic limestones and ferruginous argillites. These rocks are normally thin-bedded and dip 40° to 60° to the northeast. The limestones are

gritty, light grey coloured and grey to beige weathering. Local "pockets" of siderite, up to 10 meters across, within limonite stained limestone/marble were observed in the area of 96-98E near 97N.

The metamorphic effect of the intrusives upon the sedimentary rocks appears limited to a relatively narrow contact zone. The limestones have been recrystallized to a tan or white compact marble. This marble often lies in thin beds to 5 meters thick separated by thinly bedded, gritty grey or tan limestones. Argillites and slates have been altered to a flinty black hornfels which outcrops in the narrow zone along the intrusive/sediment contact near 99N from 97E to 102E and along the dozer road beside the glacier on the south side of the property (ERO 2).

Numerous lineaments and faults are observed in both the intrusive and the sedimentary units. The most prominent features are east-west (100° to 120°) trending gullies which are occupied by faults, or which lie along the section of the intrusive-sediment contact or which are parallel to sub-parallel to the limestone/marble bedding. Dyke or quartz vein infilling of some of these fault-linears has produced resistant ridges.

B. Mineralization (Figures 5,6)

The Gold Cord vein consists of a white quartz vein occurring along a shear zone within the diorite and adjacent metasediments and is mineralized with finely disseminated free gold, pyrite, minor chalcopyrite, and traces of sphalerite. It is one of three mineralized quartz veins forming the Candy Mountain vein system (Parker, 1983) which fills a 10 m wide east-west trending shear zone although only one quartz vein was noted by the writer. This zone has been traced for 2,895 m (610 m in Alaska), however, previous reports indicate that only 600 m of this is of significant width and grade (Reid and Mercer, 1985). It lies roughly parallel to the southern margin of the diorite and forms a pronounced gulley or depression at some locations. The Gold Cord vein tends to follow the south or footwall side of the gulley; the strike is from 080° to 115° and the dip is to the north at 30° to 80°. A series of shallow pits, dug at regular intervals, and three shafts once exposed the vein on the Karl #1 and #3 claims, over a length of 470 meters. Two of these

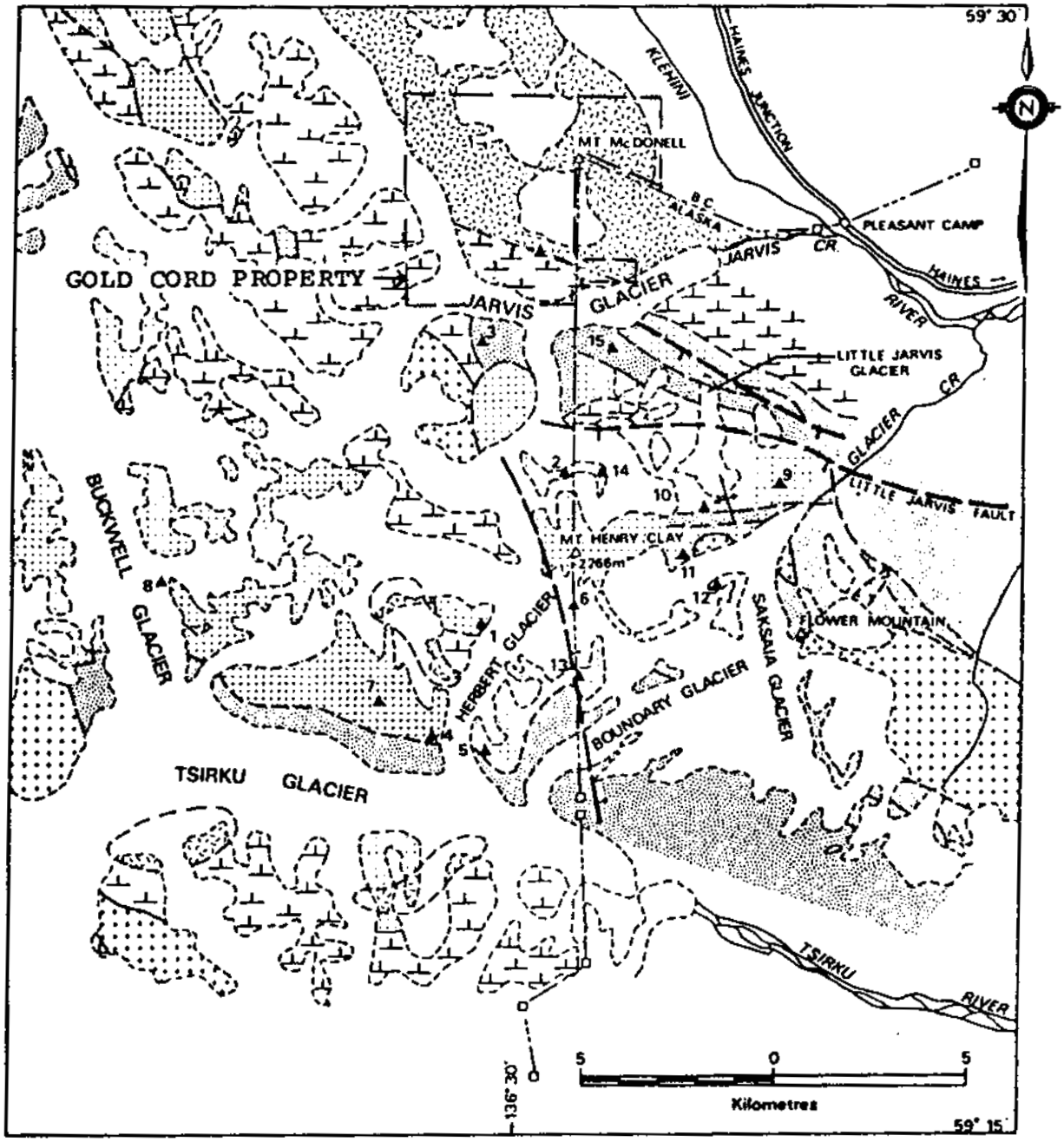
shafts and most of the pits have now caved. The exposure of the vein in the area of the "East Shaft" (100N, 103E) is its highest point of outcrop at 1,475 m elevation. Within this shaft the vein splits into two or three distinct veins 0.30 m to 1.30 m wide separated by 5 to 50 cms of sheared, weakly pyritic diorite. Thin selvages of gouge material usually accompany the vein. On surface the vein pinches and swells from 0.10 to 1.80 m in width but averages about 1.2 meters.

Two of the trenches dug, blasted and sampled during the course of the 1988 field program exposed the Gold Cord vein in the vicinity of 100N from 100E to 100 + 50E. In the more easterly trench (100 + 30E) the vein was 135 cm wide and dipped at 55° to the north. In the more westerly trench (100 E) the vein again split into two segments of 65 cm and 50 cm separated by 100 cm of diorite. The dip of the vein at this point varies from 35° to 54° to the north. A dozer trench between these two hand trenches demonstrates that the vein has been displaced by north-south faulting.

Surface oxidation of pyrite and intense fracturing have resulted in much of the quartz being crumbly and having a light orange colour; malachite is present locally both on the surface dumps and in the "East Shaft". Trace amounts of chalcopyrite were noted.

Within the adjacent metasediments, Stenbraten and Bunting (1925-1930) discovered 16 auriferous quartz veins ranging in width from 15 to 45 cm. The veins are apparently widely separated and contain low grade gold mineralization (Reid and Mercer, 1985).

Four narrow (10 cm to 15 cm) quartz veins were located during the course of mapping. Mineralization consisted primarily of pyrite, with very minor amounts of chalcopyrite, pyrrhotite and sphalerite. Gold content of those veins sampled was negligible (.002 oz/t).



LEGEND

- OLIGOCENE – GRANITIC INTRUSION
- CRETACEOUS – TERTIARY HORNBLENDE GABBRO, DIORITE
- PALEOZOIC AND/OR MESOZOIC MAFIC TO INTERMEDIATE FLOWS; MINOR TUFFS, VOLCANICLASTICS
- PALEOZOIC AND/OR MESOZOIC FINE-GRAINED CLASTIC ROCKS
- ORDOVICIAN TO DEVONIAN(?) LAMINATED CARBONATE AND LIMY MUDSTONE, SILTSTONE; MASSIVE FOSSILIFEROUS LIMESTONE
- ▲1 MINERAL OCCURRENCE

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GOLD CORD PROPERTY

RAINY HOLLOW AREA

BRITISH COLUMBIA AND ALASKA

REGIONAL GEOLOGY AND MINERAL OCCURRENCES

From: MacIntyre and Schroeter, 1985, Fig. 125

FIGURE 4

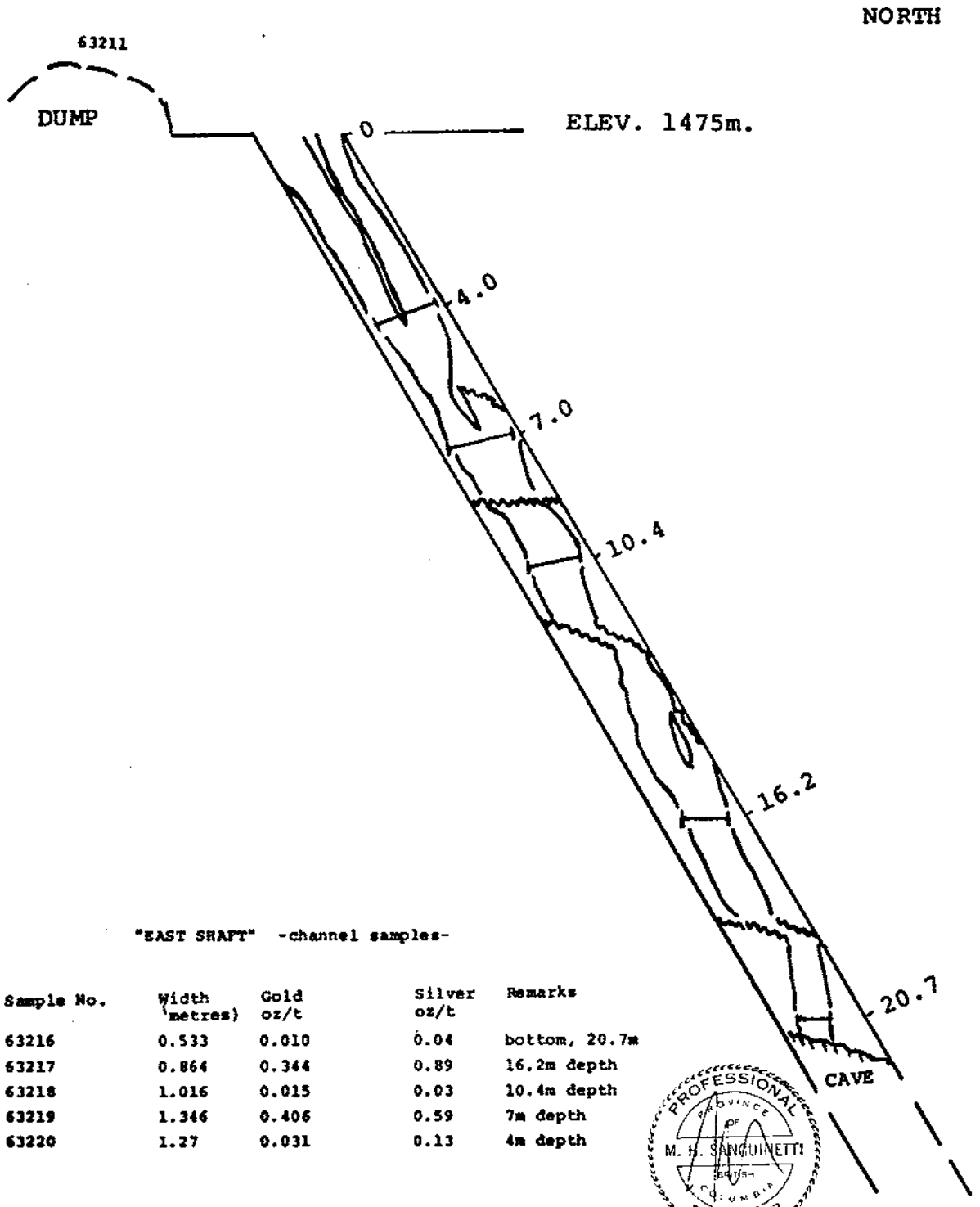
C. Sampling (Figures 5, 6; Appendix "E")

During the course of the writer's examination in October, 1987 (Sanguinetti, 1987), samples of mineralized vein material from the Gold Cord vein were collected from the exposed tops of dumps (6 samples), from the "East Shaft" (5 samples) and from outcrops of limonitic hornfels and quartz above the road on the south side of the property (2 samples). These samples were later assayed with the following results; assay certificates are appended. The weighted average of the 5 channel samples from the west side of the "East Shaft" (Figure 6) is 0.135 oz/t gold and 0.315 oz/t silver across 1.01 meters.

Tag No.	Type/Width m	oz/t Au	oz/t Ag	Remarks
Surface - Hornfels along road				
63208	chip 2.13	0.002	0.02	rusty, hornfels
63209	grab	0.002	0.02	quartz, hornfels
Surface				
63210	grab	0.033	0.04	dump, quartz
63211	grab	0.090	0.12	dump, mal.
63212	grab	1.342	0.68	dump, lim.
63213	grab	0.002	0.15	dump, quartz
63214	grab	0.044	0.18	dump, quartz
63215	grab	0.056	0.10	dump, at 71960
"East Shaft" - channel samples				
63216	0.533	0.010	0.04	bottom, 20.7 m
63217	0.864	0.344	0.89	16.2 m depth
63218	0.016	0.015	0.03	10.4 m depth
63219	1.346	0.406	0.59	7 m depth
63220	1.27	0.031	0.13	4 m depth

Six large samples of quartz vein material were collected from dumps along the trace of the Gold Cord vein during the 1988 program. In addition, six channel samples were cut across the Gold Cord vein where exposed in the two new trenches at approximately 100N/100E and 100+10N/100+30E. The vein material in the more westerly trench (100N/100E) had prominent limonite and malachite staining. The vein material in the trench at 100+10N/100+30E appeared to be of two types with

LOOKING WEST



"EAST SHAFT" -channel samples-

Sample No.	Width (metres)	Gold oz/t	Silver oz/t	Remarks
63216	0.533	0.010	0.04	bottom, 20.7m
63217	0.864	0.344	0.89	16.2m depth
63218	1.016	0.015	0.03	10.4m depth
63219	1.346	0.406	0.59	7m depth
63220	1.27	0.031	0.13	4m depth

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S H I R A B O B G O L D M I N E I N C .

0 1 2 3 4 5m.

GOLD CORD VEIN
EAST SHAFT
SAMPLE LOCATIONS

FIGURE 6

white quartz on the south side and limonite stained quartz on the north. Values are significantly lower in the more easterly trench.

One chip sample was collected from the pyritic carbonate rock (tan marble and minor limestone) near 113+50E with negative results. Three samples were collected from narrow pyritic quartz veins intruding the marble and limestone south of the main Gold Cord vein. The values of these (2914 - 2916) were negative.

The results of the 1988 sampling is as follows; assay certificates are appended.

Sample No.	Width	Au oz/t	Remarks
2901	grab	0.083	Dump at 100N, 96+90E
2902	grab	0.091	Dump at 98+05E, 100N
2903	grab	0.186	Dump at 99+90N, 98+90E
2904	50 cm	0.792	Trench at 100N; 100E, vein
2905	100 cm	0.019	Trench at 100N; 100E, sheared diorite
2906	65 cm	0.314	Trench at 100N; 100E, vein
2907	45 cm	0.010	Trench at 100N; 100E, hanging wall diorite
2908	grab	0.981	Dump at trench at 100+10N; 100+30E
2909	60 cm	0.007	Trench at 100+10N; 100+30E; white vein quartz
2910	75 cm	0.069	Trench at 100+10N; 100+30E; rusty vein quartz
2911	grab	0.055	Dump at 100+10N; 102+10E; white quartz
2912	grab	0.034	Dump at 100+10N; 102+10E; rusty quartz
2913	7.6 m	0.002	Trench 27'x6'x5'; rusty carbonate
2914	10 cm	0.002	Vein at 94+90N; 103E; quartz with sulfides
2915	10 cm	0.002	Vein at 94+60N; 102E; quartz in limestone and dyke
2916	15 cm	0.002	Vein at 95+85N; 98E; quartz beside basalt dyke

GEOPHYSICAL SURVEY

(Figures 7, 8, 9)

A hand held Model 27 receiver unit, manufactured by Sabre Electronic Instruments Ltd., of Burnaby, B.C., was used for the VLF-EM survey. The transmitter used was NPM at Lualualei, Hawaii, operating at 23.4 KHz. This was used primarily because of its strength and also the orientation with respect to the strike of the structure. Readings of field strength and dip angle were made at 25 meter stations along lines spaced 100 meters apart.

The VLF (Very Low Frequency) method used military radio transmitter located at various locations in the world which can induce electric currents in conductive bodies great distances away from the radio source. The induced currents set up secondary magnetic fields which can be detected through deviations in the normal VLF field. The instrument is simply a sensitive receiver covering the frequency band of the VLF transmitting stations with means of measuring the vertical field components.

This method requires that the strike of the conductor (mineralized zone) be in the direction (or within 45^{o}) of the transmitting station so that the lines of the magnetic field from the transmitter cut the conductor.

The major causes of VLF-EM anomalies are conductive structures such as faults, shears and breccia zones. Sulphide mineralization is also a causative source. When VLF-EM anomalies correlate with mineralized quartz veins, the anomalies usually reflect the structure associated with the mineralization rather than the mineralization itself.

Variations in intensity from one VLF-EM anomaly to another are due not just to the conductivity of the causative source but also to the direction which this source lies relative to the direction of the transmitter. Generally speaking, conductors lying parallel to the direction to the transmitter may be detected more easily than those lying at greater angles. Depending upon its conductivity, a conductor may be missed completely if it lies at too great an angle to the transmitter direction.

The data collected was manipulated by a simple arithmetic procedure ("Fraser Filtering") to enable the results of zero - crossing profiles to be converted and displayed as contours of the conductor axes thus providing a simplified interpretation.

On the Gold Cord property six east-west trending parallel conductors (Figure 9) are indicated by plotting the results of the "Fraser filtered" dip-angle readings. These conductors lie parallel to prominent gullies or depressions (Figure 5) and possibly represent faulting or shearing parallel to these structures. The conductors are equally strong over both intrusive and sedimentary rocks.

The mineralized Gold Cord vein is exposed roughly parallel to the 100N baseline. A prominent conductor lies roughly parallel to the strike of this vein at about 100+75N. This may reflect a structure related to the vein or a parallel structure related to the prominent gulley lying immediately to the north of the vein.

APPENDIX "A"

PERSONNEL AND COST STATEMENT

Personnel and Dates

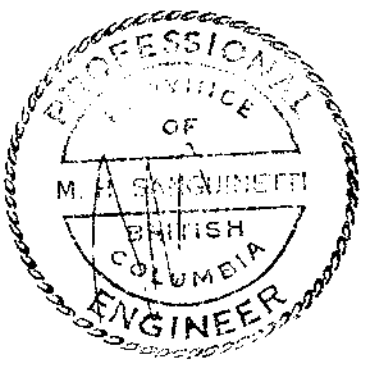
M.H. Sanguinetti, P.Eng. Nov, 1987 - Oct 13, 1988	Geologist, Supervisor Contractor, Report Writing	422 - 470 Granville St. Vancouver, B.C.
Merle Cloutier July 30 - Aug 13, 1988	Trencher, Sampler	502 - 901 Jervis Street Vancouver, B.C.
Michael Harris August 2 - 13, 1988	Trencher, Sampler	3272 Duval Street North Vancouver, B.C.
David Sanguinetti Aug 1 - 15, 1988	Sampler, Geophysical Operator	2208 West 35th Avenue Vancouver, B.C.
Robert Keays Aug 11 - 15, 1988	Logistics; transportation	P.O. Box 500 Fort Nelson, B.C.

APPENDIX "A"ii

COST STATEMENT

The following expenses were incurred for assessment during the course of the geological and geophysical program conducted on the CM 1-5, ERO 1-2 and KARL 1-20 mineral claims. Field work was carried out during the period August 1st to August 15th, 1988; preliminary work, office preparation and report writing were carried out during the period November 15, 1987 to October 13, 1988.

Shortried Terrain Data Ltd., base maps, orthophoto	$ 5,200.00
Sanguinetti Engineering Ltd.;	
Project supervision, mapping and consulting, report preparation and production	13,969.81
Supplies, equipment, food	1,846.16
VLF-EM rental	318.00
M. Cloutier; wages, travel, drill rental	5,986.28
M. Harris; wages, travel	1,795.00
Bondar-Clegg, assays	516.25
Capital helicopters	3,886.75
D. Sanguinetti; wages	1,050.00
McCrory Expediting; fuel, explosives	2,200.76
Expenses, telephone, travel, freight	3,791.39
R. Keays; wages, truck, expediting	1,368.14
TOTAL	$41,928.54



APPENDIX "B"

SANGUINETTI ENGINEERING LTD.

422 - 470 GRANVILLE STREET
VANCOUVER, B.C. V6C 1V5
TELEPHONE: (604) 662-3161

WRITER'S CERTIFICATE

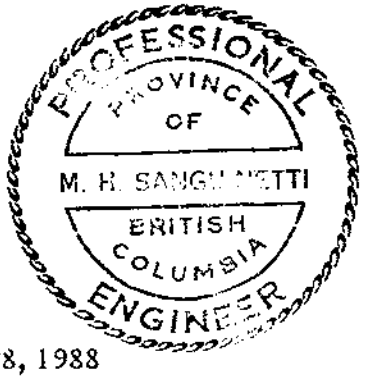
I, Michael H. Sanguinetti of Vancouver, British Columbia hereby certify that:

1. I am a geologist residing at 2208 West 35th Avenue, and employed by Sanguinetti Engineering Ltd. of #422 - 470 Granville Street, Vancouver, British Columbia.

2. I am a graduate of the University of British Columbia, B.Sc., in 1965, and have practiced my profession since that time.

3. I am a member of the Association of Professional Engineers of the Province of British Columbia.

4. I am the author of this report which is based on a study of private and public reports, on a personal examination of the Gold Cord property in October, 1987 and on personal supervision of a work program on the property in August, 1988.



SANGUINETTI ENGINEERING LTD.

September 28, 1988
Vancouver, B.C.

Michael H. Sanguinetti, B.Sc., P. Eng.
Geologist

APPENDIX "C"

CLAIMS SUMMARY

Atlin Mining Division

Title to all claims is in the name of Shirabob Gold Mine Inc.

Modified Grid System Claims	No. of Units	Record No.	Expiry Date
CM 1	~~15~~ 12 not	2428	October 23, 1989
CM 2	15	2429	October 23, 1989
CM 3	12	2430	October 23, 1989
CM 4	20	2431	October 23, 1989
CM 5	20	2432	October 23, 1989
ERO 1	20	2434	November 9, 1988
ERO 2	20	2435	November 9, 1988
	~~122~~ 119 units not		

Two Post Claims	Record No.	Expiry Date
Karl 1	635	April 27, 1991
Karl 2	636	April 27, 1991
Karl 3	637	April 27, 1991
Karl 4	638	April 27, 1991
Karl 5	639	April 27, 1991
Karl 6	640	April 27, 1990
Karl 7	641	April 27, 1990
Karl 8	642	April 27, 1990
Karl 9	643	April 27, 1990
Karl 10	644	April 27, 1990
Karl 11	645	April 27, 1990
Karl 12	646	April 27, 1990
Karl 13	647	April 27, 1990
Karl 14	648	April 27, 1990
Karl 15	649	April 27, 1990
Karl 16	650	April 27, 1990
Karl 17	656	May 7, 1990
Karl 18	657	May 7, 1990
Karl 19	658	May 7, 1990
Karl 20	659	May 7, 1990

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ASSAY CERTIFICATES

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Certificate of Analysis

REPORT: V88-05682.4

PROJECT: SHIRABOB GOLD PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT
R2 2901		0.083#
R2 2902		0.091#
R2 2903		0.186
R2 2904		0.792#
R2 2905		0.019
R2 2906		0.314#
R2 2907		0.010
R2 2908		0.981#
R2 2909		0.007
R2 2910		0.069
R2 2911		0.055
R2 2912		0.034
R2 2913		0.002
R2 2914		0.002
R2 2915		0.002
R2 2916		0.002

Registered Assayer, Province of British Columbia

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Certificate of Analysis

REPORT: 427-0694

PROJECT: SHIRABOB GOLD PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Ag OPT
R2 63208		0.002	<0.02
R2 63209		0.002	<0.02
R2 63210		0.033	0.04
R2 63211		0.090	0.12
R2 63212		1.342	0.68
R2 63213		<0.002	0.15
R2 63214		0.044	0.18
R2 63215		0.056	0.10
R2 63216		0.010	0.04
R2 63217		0.344	0.89
R2 63218		0.015	0.03
R2 63219		0.406	0.59
R2 63220		0.031	0.13

Registered Assayer, Province of British Columbia

105+00N
104+00N
103+00N
102+00N
101+00N
100+00N BL
(Az 295°)
99+00N
98+00N
97+00N
96+00N
95+00N
94+00N

96+00E 97+00E 98+00E 99+00E 100+00E 101+00E 102+00E 103+00E 104+00E 105+00E 106+00E 107+00E 108+00E 109+00E 110+00E 111+00E 112+00E 113+00E

CLIFFS

RIDGE

INSERT

GOLD CORD VEIN

EAST SHAFT

RIDGE

CLIFF

CLIFF

RAVINE

100+00N BL

INSERT

TRENCH 5m x 8m x 2-1m

TRENCH 9m x 7m x 2-1m

PIT

PIT

Dozer Trench

Dozer Trench

BL 100+00N

"Shed House"

0 10 20 30 metres
1:100

LEGEND

1 DIORITE; GRANODIORITE; Grey, medium-grained, unmineralized.

2 HORNFELS; ARGILLITE; Black to dark brown, foliated to thin-bedded.

3 CARBONATES: MARBLE AND LIMESTONE; Grey and brown weathering, white to light tan; medium to thin-bedded, local sandy and phyllitic interbeds; minor siderite and calcite.

/4 DYKES, SILLS; Basaltic, Andesitic; Dark green to black; pyritic; magnetic; often with gouge zoning; commonly conformable to bedding.

6/5 QUARTZ VEINS; White, often pyritic limonitic; tetrahedrite in 'GOLD CORD' vein.

Geological Contact; defined, assumed

Attitude; bedding, jointing

Outcrop area.

Dozer trench, Pit, Dumps

Claim Post

Assay Sample Site

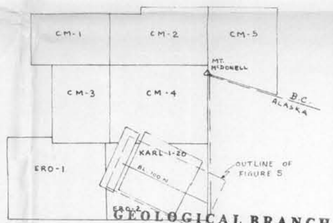
GULLEY OR LINEAR DEPRESSION

SAMPLE RESULTS

SAMPLE No.	WIDTH	Au g/t
63210	grab	0.033
63211	grab	0.090
63212	grab	1.342
63213	grab	<0.002
63214	grab	0.044
63215	grab	0.056

Sample No.	WIDTH	Au g/t
2901	grab	0.083
2902	grab	0.091
2903	grab	0.186
2904	50cm	0.732
2905	100cm	0.013
2906	65 cm	0.314
2907	45 cm	0.010
2908	grab	0.981
2909	60cm	0.007
2910	75 cm	0.069
2911	grab	0.055
2912	grab	0.034
2913	7.6m	0.002
2914	10 cm	0.002
2915	10 cm	0.002
2916	15 cm	0.002

LOCATION MAP



TO ACCOMPANY A REPORT
BY M. H. SANGUINETTI, B.Sc. P.Eng.

DATED: SEP 28 1988

PROFESSIONAL ENGINEER
M. H. SANGUINETTI
BRITISH COLUMBIA
ENGINEER

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,896

SHIRLABOB GOLD MINES INC.

GOLD CORD PROPERTY

RAINY HOLLOW AREA

ATLIN MINING DIVISION, BRITISH COLUMBIA
NTS 114P/7,8

GEOLOGY AND SAMPLE LOCATIONS

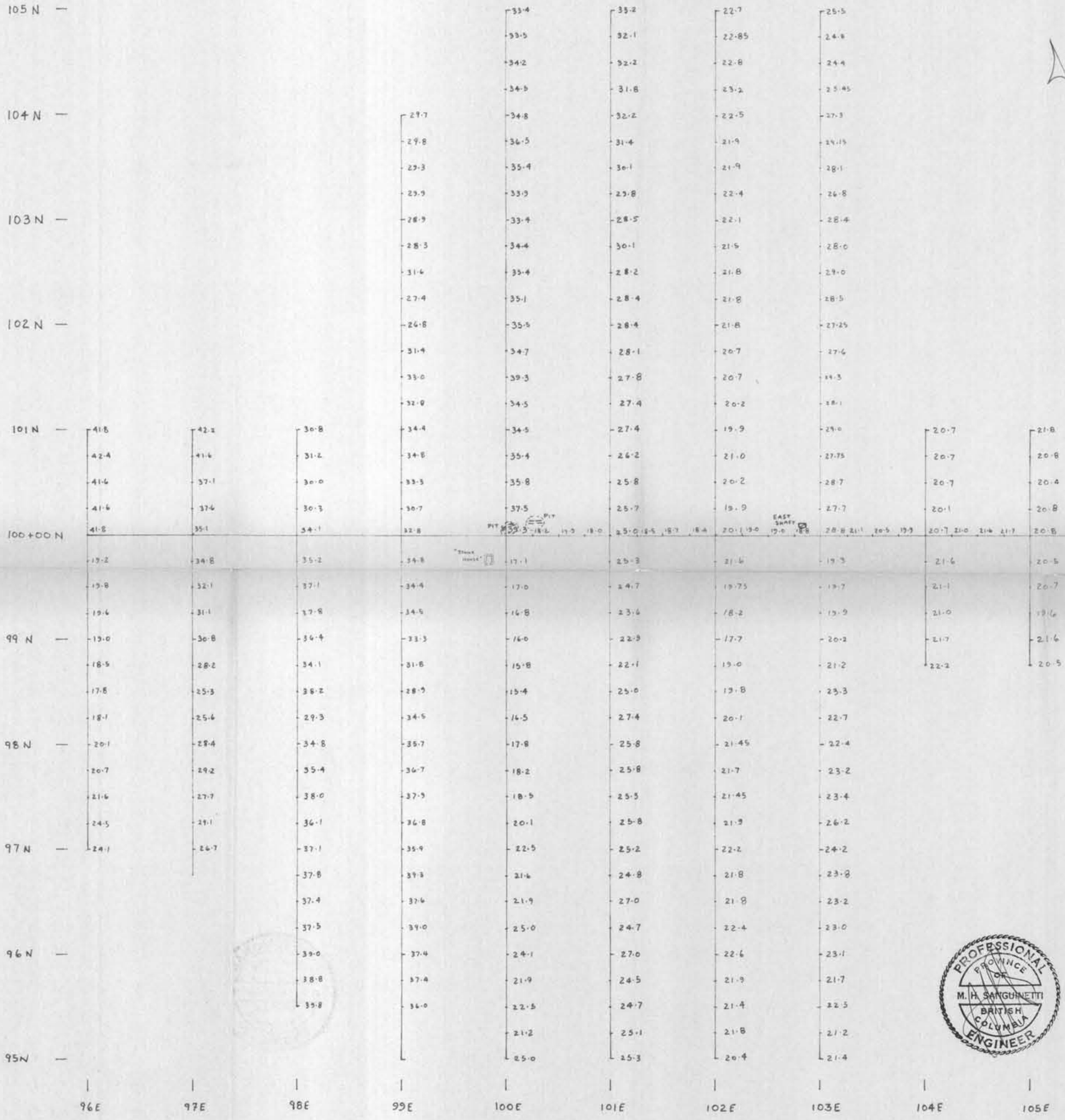
SCALE 1:2,500

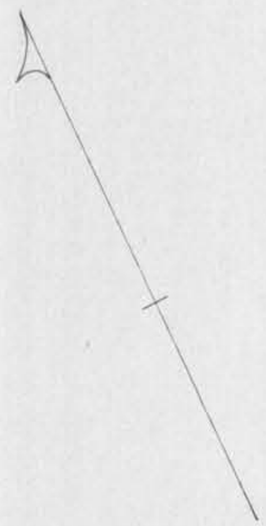
0 50 100 150 200 Metres

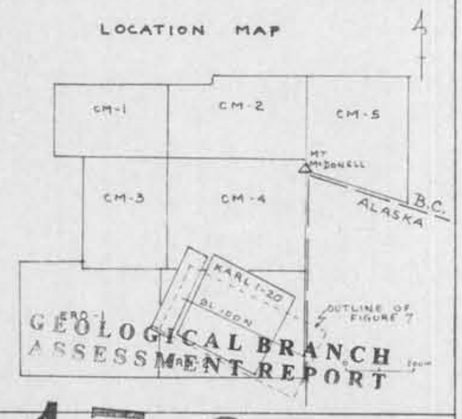
SANGUINETTI ENGINEERING LTD.

SEPTEMBER, 1988

FIGURE: 5







SHIRABOB GOLD MINE INC.
GOLD CORD PROPERTY
RAINY HOLLOW AREA

ATLIN MINING DIVISION, BRITISH COLUMBIA
NTS 114P/7,8

VLF-EM SURVEY
FIELD STRENGTH READINGS

SCALE 1: 2500

0 50 100 150 200 METRES

SANGUINETTI ENGINEERING LTD

SEPTEMBER, 1988

FIGURE: 7

TO ACCOMPANY A REPORT
BY M. H. SANGUINETTI, B.Sc. P.Eng.

SEP 28 1988

INSTRUMENT : SABRE MODEL 27 VLF-EM UNIT
STATION : HAWAII 23.4 KHZ

105N —

104N —

103N —

102N —

101N —

BL 100+00 N —

99 N —

98N —

97N —

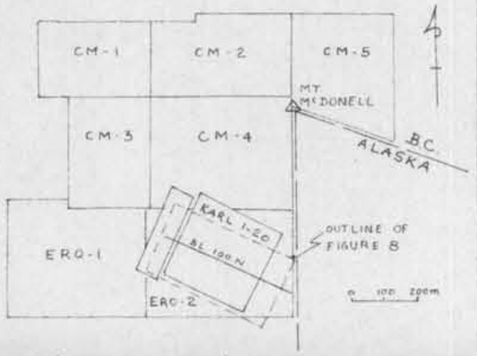
96N —

95N —

96E 97E 98E 99E 100E 101E 102E 103E 104E 105E

EAST SHAFT

INDEX MAP



LEGEND

-6 DIP-ANGLE READING

SHIRABOB GOLD MINE INC.

GOLD CORD PROPERTY

RAINY HOLLOW AREA

ATLIN MINING DIVISION, BRITISH COLUMBIA
NTS 114 P/7, 8

VLF-EM SURVEY

DIP-ANGLE READINGS

SCALE 1:2500

0 50 100 150 200 METRES

SANGUINETTI ENGINEERING LTD.

SEPTEMBER, 1988

FIGURE: 8

TO ACCOMPANY A REPORT
BY M. H. SANGUINETTI, B.Sc. P.Eng.

DATED: SEP 28 1988

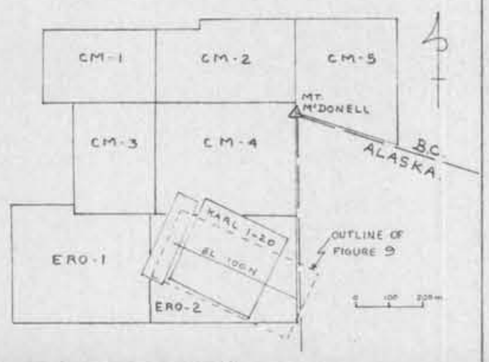
INSTRUMENT: SABRE MODEL 27 VLF-EM UNIT
STATION: HAWAII 23.4 KHz

105 N
104 N
103 N
102 N
101 N
BL 100+00 N
99 N
98 N
97 N
96 N
95 N

96E 97E 98E 99E 100E 101E 102E 103E 104E 105E

PIT
STONE HOUSE
EAST SHAFT

LOCATION MAP



LEGEND

..... CONDUCTOR AXIS
—— 0° DIP ANGLE
—— 5° DIP ANGLE
– – – 10° DIP ANGLE

INSTRUMENT: SABRE MODEL 27 VLF-EM UNIT
STATION: HAWAII 23.4 KHZ

TO ACCOMPANY A REPORT
BY M. H. SANGUINETTI, B.Sc. P.Eng.
DATED: SEP 28 1988

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. H. SANGUINETTI

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,896

SHIRABOB GOLD MINE INC.

GOLD CORD PROPERTY

RAINY HOLLOW AREA

ATLIN MINING DIVISION, BRITISH COLUMBIA
NTS 114P/7,8

VLF-EM SURVEY

FRASER FILTERED
DIP-ANGLE READINGS

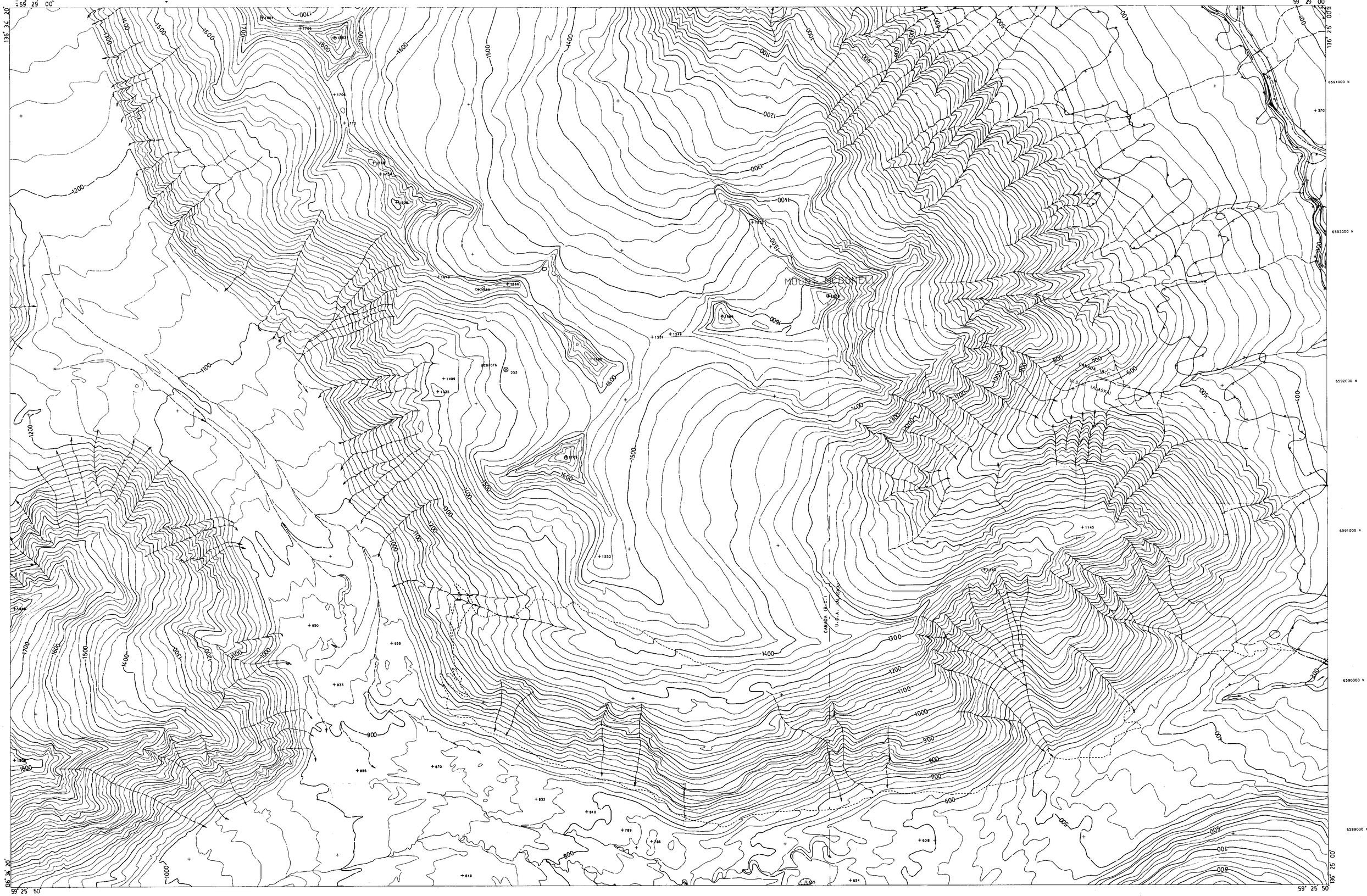
SCALE 1:2500

0 50 100 150 200 METRES

SANGUINETTI ENGINEERING LTD.

SEPTEMBER, 1988

FIGURE: 9



RAINY HOLLOW AREA

NTS 114P/7,8

ATLIN MINING DIVISION, BRITISH COLUMBIA
HAINES MINING DISTRICT, ALASKA

SHIRABOB GOLD MINE INC.
VANCOUVER, BRITISH COLUMBIA

GOLD CORD PROPERTY

17,896

SCALE 1:10 000

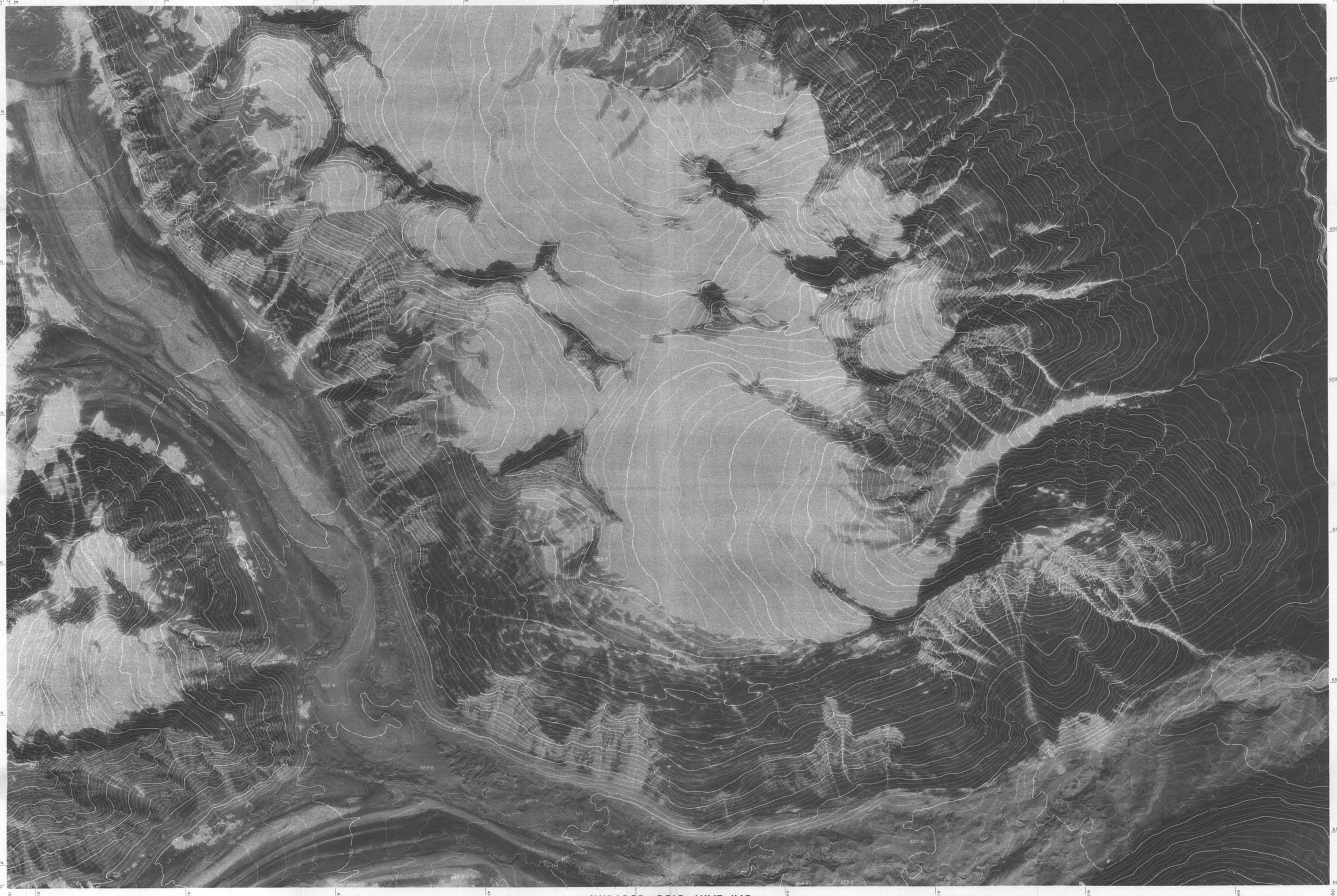
200 0 200 400 600 800 1000 Metres
200 0 200 400 600 800 1000 Yards

DATE | DRAWN BY

REVISION | BY

SANGUINETTI ENGINEERING LTD.
422-470 GRANVILLE STREET
VANCOUVER, B.C.

SHORTREID TERRAIN DATA LTD.



RAINY HOLLOW AREA

NTS 114P/7,8

ATLIN MINING DIVISION, BRITISH COLUMBIA
HAINES MINING DISTRICT, ALASKA

SHORTREID TERRAIN DATA LTD.

SHIRABOB GOLD MINE INC.

VANCOUVER, BRITISH COLUMBIA

GOLD CORD PROPERTY

17,896

SCALE 1:10 000

200 0 200 400 600 800 1000 Metres

200 0 200 400 600 800 1000 Yards

DATE	DRAWN BY
REVISION	BY

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422-470 GRANVILLE STREET
VANCOUVER, B.C.