84-1061- 12988

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,988

ASSESSMENT REPORT

ON

SHEEP CREEK NORTH GROUP

82F/3E

NELSON M.D.
117° 12' W longitude
49° 9' N. latitude

For Coldrich Resources Inc.
By W.C. Day, B.Sc.
November, 1984

84-1061-

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Appendix I Analytical Results

I. INTRODUCTION

1.1 During the period September 13, 1984 to September 17, 1984 assessment work was conducted on the Sheep Creek North Group of claims. This work was conducted in the vicinity of old mining operations known as the Cayote Mine and Bluestone Mine. The assessment work conducted consisted of road construction to both portal areas and test geochemical and geophysical surveys. The geochemical and geophysical tests were conducted to determine their effectiveness in locating the vein type mineralization which exists in the Sheep Creek Camp.

2. SUMMARY

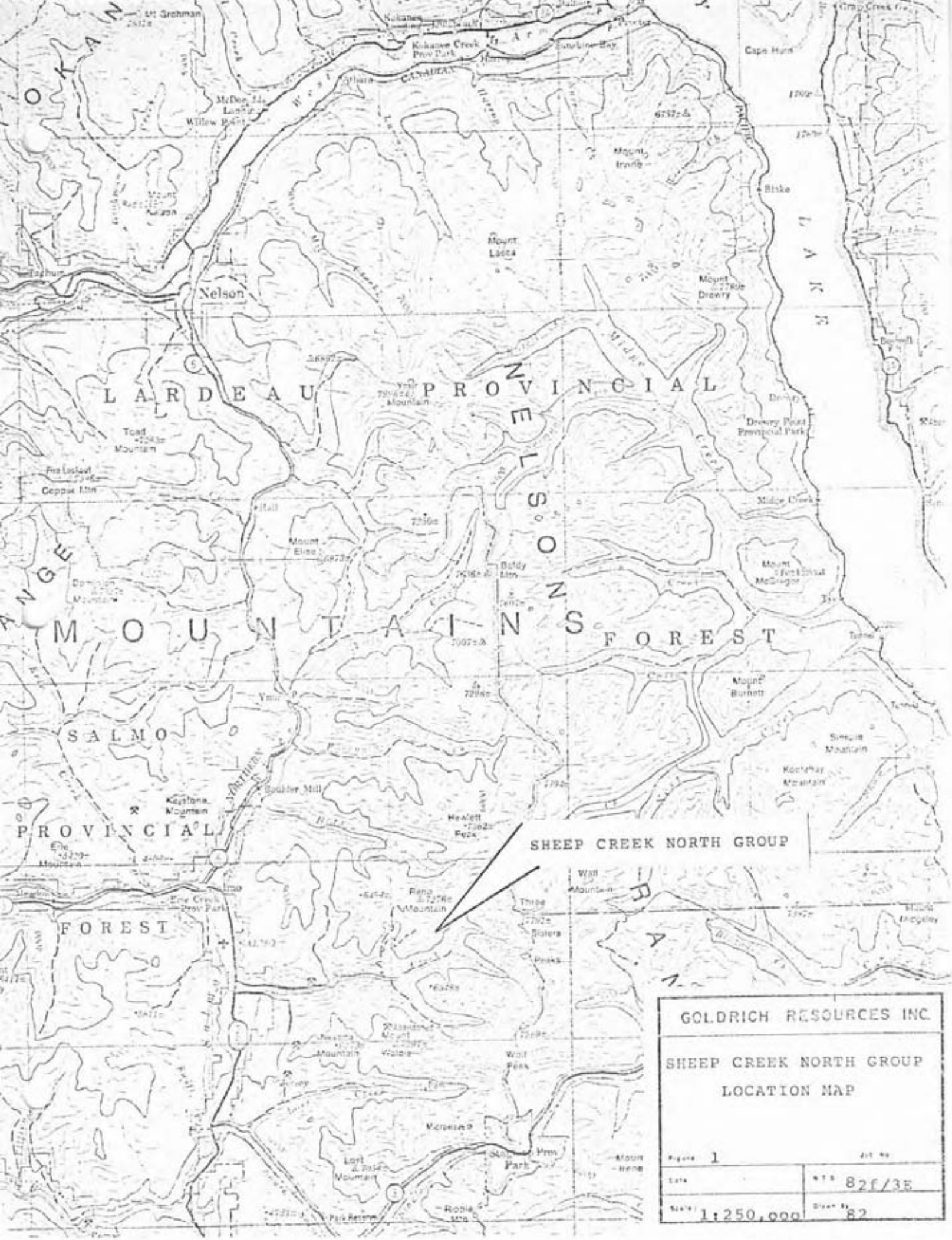
2.1 Approximately 500 meters of road were constructed from the Nugget Mine road to each portal area. These roads were constructed to gain access to the portals and clear off the mine dumps so that the mine workings can be opened up for inspection in 1985.

2.2 Small grids were laid out over each site and 110 soil samples were collected (55 from each site). Magnetometer and VLF-Em surveys were also run over the grids. Results from the geochemistry on the Bluestone were inconclusive with anomalous conditions likely being caused by the old workings, similarly with the geophysics in this area. The geochemistry on the Cayote proved more interesting as anomalous conditions detected for zinc and silver have no obvious cultural source. No anomalous effects of consequence were detected in the geophysics within the cayote grid.

3. LOCATION AND ACCESS (Fig 1)

3.1 Much of the Sheep Creek NOrth Group is accessible by a number of four wheel drive roads from the main Sheep Creek road. The Sheep Creek road itself is a good gravel road departing from a point 6.5 Km south of Salmo, B. C. on provinical highway 3.

3.2 More specifically the claims are located in southeastern British Columbia some 40 Km south of Nelson, 46 Km northeast of Trail and 13 Km southeast of Salmo. The claims lie within the Nelson map sheet boundaries (82F NTS) and are centered near 117^{o} 12' W longitude and 49^{0} 9' N latitude.



GOLDRICH RESOURCES INC.	
SHEEP CREEK NORTH GROUP LOCATION MAP	
Figure 1	Ref No.
Date	NTS 82F/3E
Scale 1:250,000	Drawn By 82

4. CLIMATE AND PHYSIOGRAPHY

4.1 The climate of the Sheep Creek Camp is cool temperature with modertae precipitation. Mean annual precipitation is 60 to 75 cm in the valleys and increasing by an additional 25 cm in the adjoining mountains. Greatest precipitation occurs during the winter months. The mean annual temperature is about $3^{o}C$, varying from $-5^{o}C$ in January to $15^{o}C$ in July. Snow levels vary from 1 to 1½ meters in Sheep Creek Valley to 2 to 30 meters at higher elevations.

4.2 The property covers much of the drainage basin of upper Sheep Creek and its pups. Elevation on the claims rise from a low of 975 meters in the valley to a height of 2225 meters at the summit of Mt. Waldie. Typical of the southern Selkirk Mountains, the slopes rise steeply out of valley bottoms. Snowslides are common in seasons of heavy snowfall, particualrly on over steepened, northfacing rocky slopes. The area is timbered with Douglas Fir and Cedar-Hemlock forests, notably on North-facing slopes at lower levels where glacial drift cover is deepest. The forests on south-facing slopes were dominantly destroyed by fire around the turn of the century and have been replaced by perennial shrubs. Above the 1800 meter elevation open grassland predominates. Trees are stunted and scattered about 2200 meters but some grow within a few feet of the highest summits.

4.3 Water is available for industrial and domestic use at almost all seasons from Sheep and Waldie Creeks. Many of the smaller creeks also have obtainable quantities for most uses. At high elevations water is in short supply except during spring and early summer.

5. CLAIM DATA (Fig. 2)

5.1 The Goldbelt property consists of 35 crown granted mineral claims of the original Goldbelt Mines property.

In addition to the crown granted claims a total of 49 units in 3 located mineral claim blocks are held in the camp.

The above crown granted claims and mineral claims form a contiguous group.

5.2 A summation of the claim holdings is as follows:

a) Original Gold Belt property

Name of Claim	Lot No.
Nuggest (Part of)	8341
Cotote	8343
Bluestone	9054
Blackstone	9055
Snowdrift	9927
Golden Fawn (part of)	12493
Curlew	12681
Dandy	12682
Manhatten Fraction	13038
Rhomberg Fraction	13494
Larkhall	14455

Cassiar Fraction	14456
Joint	8344
Double Joint	8345
Dominion	8815
Golden West	8816
Nevada	8869
Columbia	8870
Clyde	8873
Belt	9334
Sunbeam Fraction	9342
Blue Bird	10032
Cathie Fraction	10156
Belle Watson Fraction	10157
Leach Fraction	10158
Lilly D	10164
Shmrock	10405
Bruce Fraction	10602
Lillian Fraction	14871
No. 10 Fraction	14872
G.B. Fraction	14873
Lulu Fraction	9052
Peggy	9055
Twilight Fraction	9910
Happy Jean	9911
Beatrice Fraction	11741
Fraction No. 1 Fraction	14874
Fraction No. 2 Fraction	14875
Nevada Fraction	14917

TOTAL 39 CROWN GRANTED CLAIMS

B) Located Claim

Claim	Units	Record Number	Record Date
Goldrich 1	1	3869	Sept.11/84
Goldbelt 2	20	2949	October 6, 1980
Gamble	10	2026	November 30, 1980
Curtis	18	2027	November 30, 1980

6. GEOLOGY (Fig 3)

6.1 The rocks within the claim area consist essentially of sediments. Intrusive rocks exist in the area as granitic masses, quartz porphyry sills and dykes, pre-vein basic dykes and post vein dykes.

6.2 Table 1 summarizes the geologic formations which exist in the claim area.

Table I - Table of Formations

Age	Formation			Lithology	Thickness in Feet	
Lower Cambrian	Lalb Group			Argillite.	200[1]	1,070-1,[illegible]
				Grey limestone.	150[1]	
				Argillaceous to some localities, elsewhere dominantly calcareous.	300-500[1]	
				Limestone and argillite.	150-300[1]	
				Argillaceous beds, bioclastic and amphibolitic schists.	100-300[1]	
				Limestone.	0-65[1]	
Precambrian (?)	Reno Formation	Upper Reno		Impure dark bluish or greenish quartzite with some grit beds.	125[2]	300-900[2] *
		Lower Reno		Argillite, argillaceous quartzite.	450 [illegible][2]	
	Quartzite Range Formation	Nevada Member	Upper Nevada	Massive white quartzite.	20-150	120-300 * *
			Lower Nevada	Dark thin bedded quartzites and argillaceous quartzites.	100-150	
		Nugget Member	Upper Nugget	Massive white quartzite.	135-375	540-960 ** *
			Middle Nugget	White, grey and dark quartzite, dark argillaceous quartzite, and argillite.	175-300	
			Lower Nugget	Argillite and dark argillaceous quartzite.	150-225	
		Motherlode Member	Upper Motherlode	Massive white quartzite.	370-450	1,070-1,[illegible]
			Middle Motherlode	Argillite, grey grit and green schist.	50	
			Lower Motherlode	Massive white quartzite.	250-350	
	Three Sisters Formation			Grey grit, white quartzite and grit and green schist.		500-[illegible]

1. Thickness or range in thickness for the northwestern part of the camp, near the Reno mine.

2. Average thickness for measurements near Reno

* Formation or stratigraphic unit hosting gold deposits in the Sheep Creek Camp.

** Most important unit

6.3 The Three Sisters formation is exposed in the core of the eastern anticline. This formation consists of grey grits-locally including white quartzite and white grit. The grey grits are directly overlain by several feet of green schist commonly containing large dolomite rhombs which may represent a metamorphosed dolomitic tuff. This thick member serves as an effective marker for the top of the Three Sisters formation. It is suggested that the Three Sisters formation forms a relatively incompetent structural unit as none of the faults which cut the overlying quartzite range formation persist into the Three Sister formation. No gold bearing veins are known to exist in this formation.

6.4 The quartize range formation has been divided into three members: The Motherlode, Nugget and Navada members.

The Motherlode member consists essentially of massive white quartzite. A zone of up to 15 M in thickness of argillite, grey schist or amphibolite also occur elsewhere in the member. The Motherlode member is exposed only in the axial region of the Eastern anticline. Only in the Motherlode mine is an orebody known to exist in the Motherlode member.

The Nugget member has itself been divided into three units. The lowest units consists mostly of argillaceous rocks, the middle unit of mixed argillite and quartzite and the upper unit of mostly quartzite. The base of the lowest "important" quartzite bed is regarded as being the top of the lower Nugget unit, and the top of the highest "important" argillaceous zone as being at the base of the upper Nugget. No vein is known to contain oreshoots in the lower Nugget.

Vein fractures within the middle Nugget contain either no quartz or quartz with sub-commercial gold values.

The Upper Nugget beds make up the most competent structural unit in the camp. With the exception of the Reno and Bluestone veins all the productive veins in the camp have yielded ore from the Upper Nugget beds. It has been estimated that fully half of the production of the camp has been from those veins which cut this 250 feet succession of strata.

The Navada member consists of dark thin-bedded quartzite and argillaceous quartzites in the lower half to two thirds and massive white quartzites in the upper remaining portion. Ore shoots have been found in several veins in the Navada Quartzite in the Gold Belt Mine, Kootenay Belle A Vein, in the Bluestone Vein, Reno Vein and Queen Vein. Though the lower Navada is a less favourable host than the upper Nugget considerable tonnage has been won from it in the Gold Belt mine and the Queen vein.

6.5 The Reno formation lies between the top of the Quartzite Range. formation and the base of the in folded Laib series. It is predominantly argillaceous at its base and its contact with the underlying Navada is sharp. The beds become increasingly quartzitic rising in section, to become impure dark bluish or greenish quartzite. Some of the impure quartzite in the upper part of the formation is abundantly charged with magnetite and in other areas is distinctly ferruginous but devoid of magnetite. Except in and to the north of the Reno mine no attempt has been made to map the two subdivisions of this formation.

Excellent exposures and economic potential has justified separation in this area. Except in the area of the Reno mine, where contact metamorphrism has altered the argillites to spotted schists and biotite rich hornfelses, faults generally die out or diminish in this formation. The Reno vein contains extensive ore bodies where the incompetent argillites have been altered to competent schists.

6.6 The Laib group consists of a succession of argillaceous and calcareous sediments overlying the Reno formation. This group represents the lowest portion of the hitherto referred to Pend d'Oreille series. Essentially six members comprise the group with some being absent in areas. The 1st, 3rd & 5th from the bottom are calcareous and the others argillaceous. The first unit exposed on Reno mountain consists of a limestone bed that can be locally missing.

6.7 Granitic intrusions occur in, or close to, the Sheep Creek Camp. Only at the bottom of the Queen Shaft in the Sheep Creek mine and in diamond drill holes cored from the west end of 12 level was such a mass located during mining. This rock is microcline-microperthite granite exhibiting strained quartz with minor oligioclase together with muscovite and garnet. A granitic mass underlying the entire Sheep Creek camp has been postulated by early writers as the cause for the bottoming of ore in various veins. Mathews (1953) disagrees with this hypothesis though admits that granites may underlie parts of the camp at greater depths. Inclusions of granite in lamprophyre dykes, apparently torn from depth, is cited for support.

6.8 Quartz-porphyry occurs as a major sill swarm and as isolated sills, dykes, and swarms. It can be distinguished from the quartzites by the presence of widely scattered phenocrysts of quartz and feldspar. It may be cherty in

some instances and difficult to distinguish from the quartzites. These sills tend mostly toward the east than the beds though they may be parallel to the beds and enechelon to one another. The relationship of the porphyry to the granitic stocks is unknown, however, the time of intrusion is fairly clear. The sill swarm apparently post dates the major folding in the camp. Most, if not all, post date the right-hand fault movement on the north easterly trending vein fractures. The porphyry was likely intruded as a melt along pre-existing planes of weakness having a northerly strike and steep dip.

6.9 Pre-vein dykes are known in a few localities notably in the Gold Belt Mine. They strike northerly, approximately parallel with the axes of major folds and dip nearly vertically. Pyrite is conspicuous with these dykes and are, at least locally, accompanied by gold.

6.10 Occurring locally are post-vein lamprophyre dykes. These dykes range from a few centimeters to 30 cm in width. They are characterized by biotite and/or altered olivine crystals. These dykes post date most, if not all, of the veining.

6.11 A few other dykes whose relationship is unknown also occur in the camp. Some are pegmatites, others feldspar porphyries and still others diorite porphyries.

6.12 Metamorphism in the greater part of the Sheep Creek Camp is low. Sandstones have been metamorphosed to quartzites and shale to argillite but no metamorphic minerals have been formed.

In the northern part of the camp, where metamorphism is most notable, a spotted appearance has developed in the argillaceous sediments. These spotted rocks also occur near the Gold Belt Mill, quite removed from the known stocks in Sheep Creek Valley and from the Reno Mine area. Metamorphism, at least in part, post dates the major folding in the area.

6.13 The dominant structures of the Sheep Creek Camps is a major anticline (eastern anticline) and a smaller anticline (western anticline) intervened by a tight syncline. The eastern anticline is overturned with the axial plane dipping variously to the east. The plunge of this anticline is apparently to the south at an undetermined angle. The character of the western anticline is much better known from the more extensive underground workings in this region. This fold is likewise overturned to the west, but less so than the eastern anticline. The plunge of this structure likewise is to the south at 5° - 10° The plunge of the intervening syncline varies at angles up to 10° to the south at the Reno Mine and 5° to the north in the Sheep Creek Mine. The limbs of the western anticline maintain fairly regular dips and warping in the quartzites is concentrated in narrow belts close to the axial plane. Barring the marker horizons at the top of the Three Sisters formation, the Nugget and Navada beds and Reno formation, detailed structure is difficult to discern. Drag folding is common in the quartzites of the Upper Nugget and at the Reno/Laib contact with amplitudes as much as 60 meters and 10's of meters across. The less competent members exhibit more extensive drag folding. The axes of these folds plunge at very nearly the same attitudes as the main structures. Jointing is well developed in the quartzites and less so in the argillaceous rocks particularly where stratification is conspicuous. In argillites jointing is crude and arrise as schistosity

or less commonly as fracture cleavage.

6.14 Four well defined fault sets can be recognized in the camp. The most important group are northeasterly trending right-hand strike-slip structures. This group hosts all the known productive veins. These vein fractures occur at intervals of generally not more than 150 meters and strike at 50 to 90° east of north almost without exception. The north wall of these fractures has been displaced eastward (right hand) in respect to the south wall for distances of a few to some 60 to 70 meters. It is also indicated that the north wall has moved upward at approximately 1/2 the strike-slip movement. Many of the vein fractures consist of a single fracture or group of closely spaced fractures within a zone a few feet wide. Others branch, are sub-parallel or enechelon across a zone some 60 meters in width, forming a fracture system. Competency of the wall rocks appear to account for variations in strike. As a general rule; as these fractures extend from the quartzites to the less competent argillites their strike swings to the left as much as 15°. The only exceptions are where displacement is small and diminishes to zero in the argillitic member or where the fracture enters a relatively flat lying argillitic member from a quartzite. In these cases the fracture surfaces splay off to right or left or in the later case en echelon fractures develop. The en echelon fractures tend to strike more easterly.

In the northern part of the camp; strikes in the quartzites trend north 75 - 80° east while in the south, the average is north 60° east. Intermediate trends prevail between the tw Also, veins may tend to change strike with depth; becoming more easterly as they deepen. Most of the veins dip steeply to the south within quartzites. Variations in displacements

on a vein fracture are related to changes in wall rock. In quartzites displacement is greatest as drag is of minor importance. In argillites and calcareous sediments drag is considerable and hence less displacement. Displacement also varies with differences in width of the quartzite and compensating fractures during failure. Minor readjustment has occurred on some of the veins which indicate left-hand movement has occurred during post-vein time. These vein fractures exceed in most cases, 300 meters in lateral extent and often range to the west limb of the eastern anticline. In some cases where dislocation is small, say several meters, the veins are only continuous across the Upper Nugget quartzite member. The vertical range of the fractures is known to exceed 4,700 feet though none of the individual fractures have been traced through as great a range.

The interval between successive northeasterly trending faults (veins) is rarely in excess of 150 meters. It is interesting to note that of 12 faults intersected in drifting in the southern part of the camp 10 are known to have contained ore. Around the Gold Belt Mine ten such fractures occur of which 5 yielded ore. Distances between fractures is irregular with spacings ranging from 60 meters to 150 meters in the northern part of the Gold Belt Mine to less than 15 meters to 210 meters in the Sheep Creek Mine. The greatest slip noted has been in the Sheep Creek Mine and as such is suspected as having been subjected to the greatest stress.

6.15 Only four northwesterly trending faults are known to be present. They strike 45° west and dip nearly vertically and offsets are left-hand. One of these faults intersected in the Gold Belt Mine has mineralization that assayed as high as .10 oz. per ton. Nowhere else have these faults carried mineralization.

6.16 The major structure of the Sheep Creek Camp was folding which affected the lower Cambrian sediments within the camp. This structure consists of two northerly trending anticlines with an intervening syncline. Primary drag folds developed on the flanks of the major anticlines and syncline and secondary drag folds appearing on the eastern anticline appear to diminish from north to south.

Granitic intrusion following folding metamorphosed the sediments in the vicinity of intrusions. Northeasterly and northwesterly trending faults post date folding and in the Reno Mine appear to post date the metamorphism in that area. Injection of pre-vein basic dykes occurred before or during movement of the north-easterly trending faults.

Renewed movement along northeasterly trending faults gave rise to right-hand displacement of the pre-vein dykes. Quartz was introduced into the vein fractures that were developed and the quartz was subsequently fractured by additional movement. It is not known whether the ore minerals were deposited during this faulting.

The faulting was followed by intrusion of northerly trending quartz-porphyry sills and post-vein lamprophyre dykes. Normal faulting followed injection of the lamprophyre dykes. Erosion surfaces indicate intermittent uplift.

MINERALIZATION

7.1 Pyrite is the most abundant sulphide; galena and sphalerite are present, but usually occur in commercial quantities only where the veins cut limestone.

7.2 Most of the gold produced has been from areas where either one or both of the vein walls consist of quartzites of the Nugget or Navada members of the Quartzite Range formation. The upper limit of ore bodies is either the ground surface, or in the western anticline, the crest of the quartzite beds. In the southern part of the camp the veins become narrower upward. High-grade ore occurs less abundantly in lower levels. In the veins that have been explored, oreshoots have been found within a vertical range that is not more than 1,600 feet for any vein.

7.3 Other minerals occur in minor amounts and include; calcite, sericite, scheelite, wolframite, chalcopyrite, arsenopyrite, marcasite, tetrahedrite, ruby silver and gold.

7.4 Sulphides occur in veins as long streaks as much as several inches wide, paralleling the walls, in small fractures cutting the vein; in blebs and masses usually less than 1 inch across or as disseminated crystals. The combined sulphides rarely make up more than 10 to 20% of the full vein width.

7.5 The sequence of mineralization is as follows:

a) Introduction of quartz and scheelite
b) Shearing and fracturing of early vein filling
c) Introduction of sulphides, late quartz and calcite.

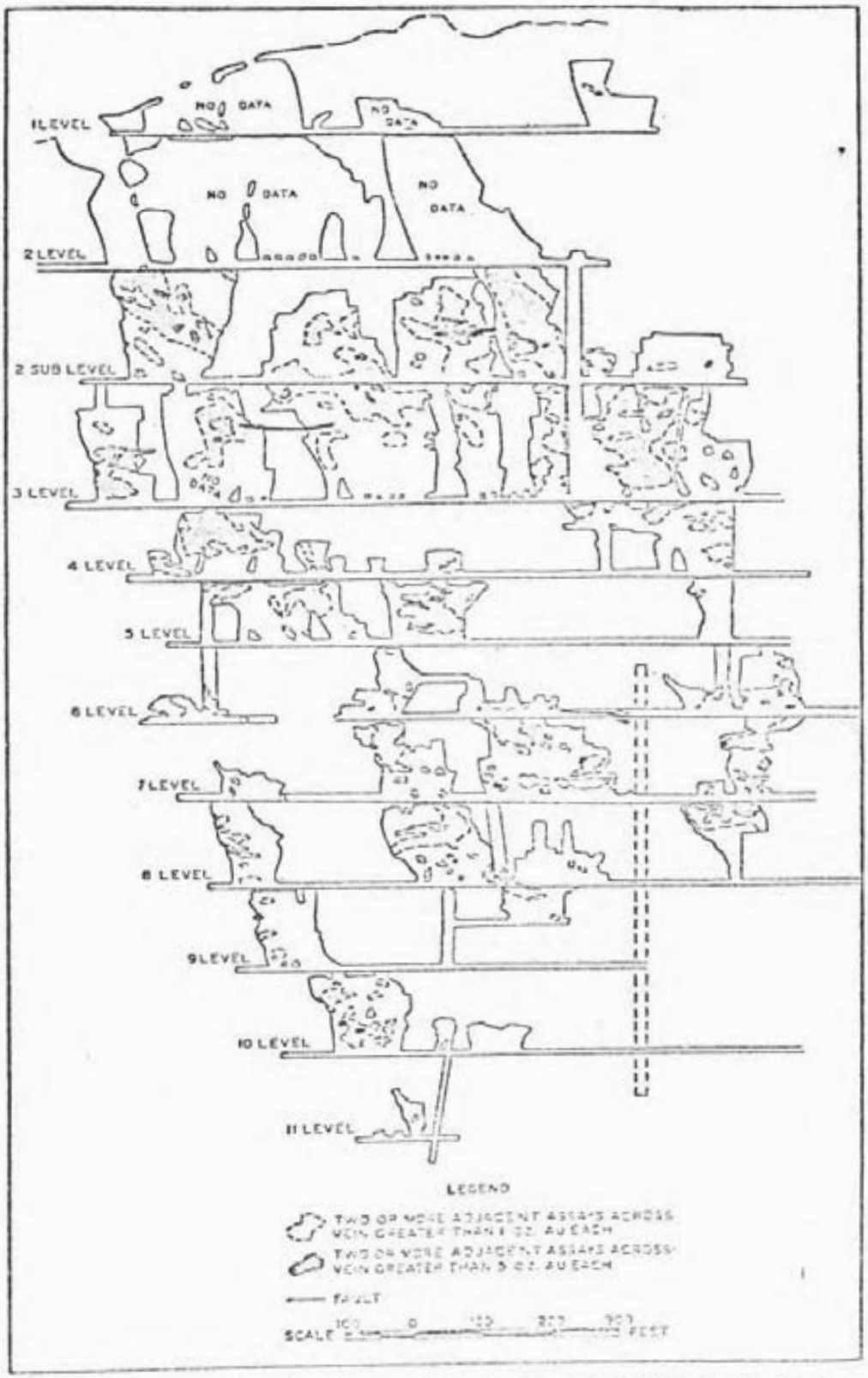


Figure 4 Longitudinal section of Kootenay Belle A vein showing distribution of gold values.

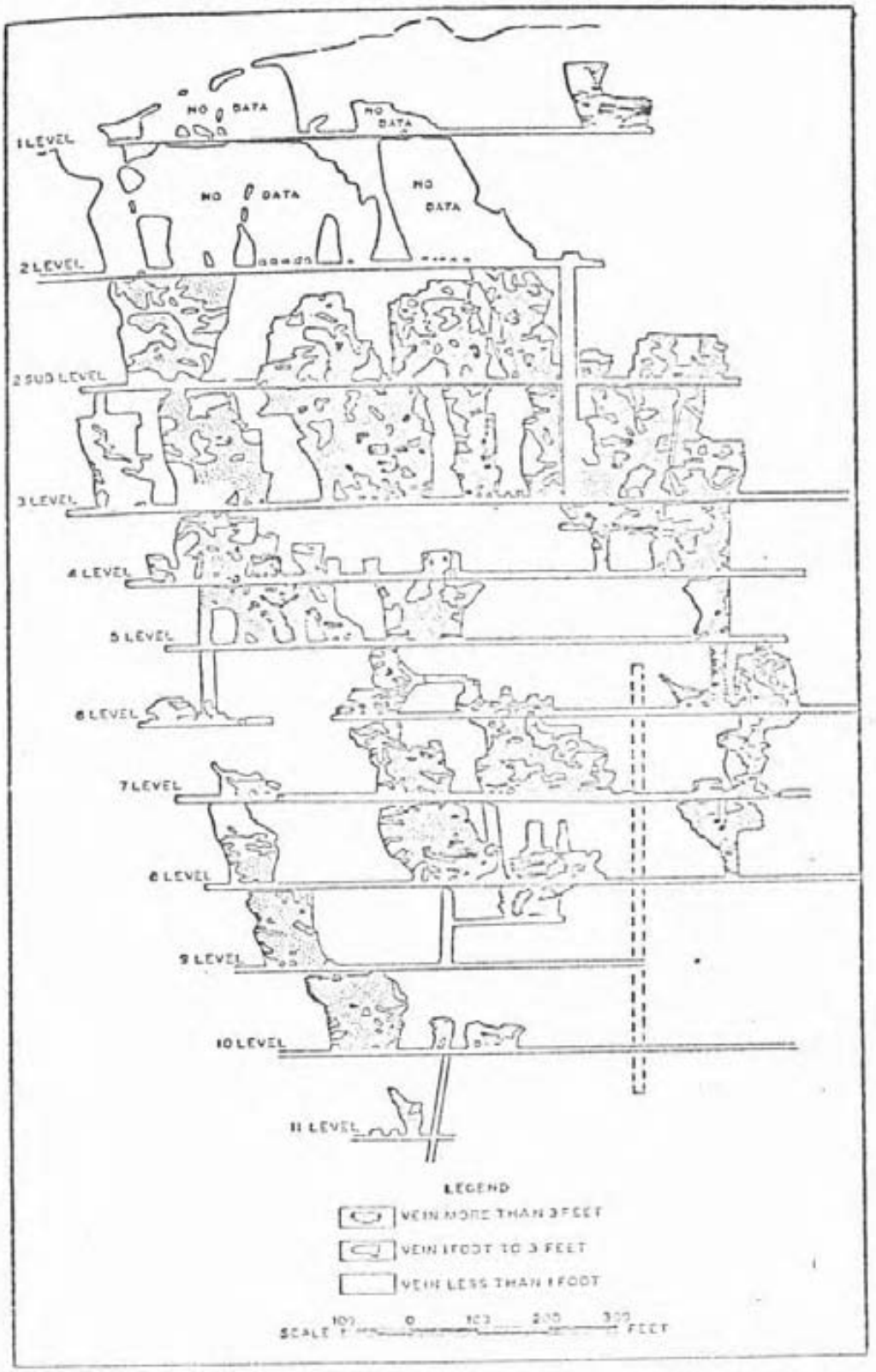


Figure 5 Longitudinal section of Kootenay Belle A vein showing variation of vein widths.

The vein minerals were introduced in four stages:

1) Quartz, pyrite and arsenopyrite
2) Pyrrhotite, sphalerite and calcopyrite
3) Galena, tetrahedrite and ruby silver
4) Gold

7.6 Gold occurs as isolated particles, generally from a few microns to about 30 microns across. Gold may be rarely seen with the naked eye. One third of the gold occurs in the quartz with the balance occurring with sulphides dominantly along quartz-pyrite contacts. A widely accepted generalization in the camp is that areas of the vein relatively enriched in sphalerite and galena (up to 1 kilogram per ton each) are rich in gold.

7.7 Widths of veins range from 1 to several feet. Many of the veins attain widths of 1.2 m to 2 m, but few commonly have such widths. The Queen vein is exceptional having widths as great as 5 m but more commonly little more than 2 m. Other veins such as the Black vein are narrow being less than .3 m wide for most of its stoped length but attaining widths of from 1.7 m - 2 m. Greater than average widths occur where the more favourable stratigraphic units are present, where the vein fracture trends more easterly than normal, between the forks of a branching fracture, where fault movement along the fracture is greater than normal and/or in the lower part of veins.

7.8 Within the veins the ore occurs in shoots with even the most productive veins (eg.Queen and Reno) having sections of considerable size which couldn't be mined profitably. Figures 4 and 5 show the distribution of gold and vein widths within stoped areas of the Kootenay Belle A vein.

Oreshoots that do not reach the ground surface may terminate upward at the upper limit of favourable quartzite or pinch to widths too narrow to mine profitably.

The upper limit of ore slopes southerly in the camp in contrast to the gentle northerly plunge of the fold axis suggesting that controls, other than stratigraphic, were factors in defining upper limits to ore.

In the eastern anticline, non-productive intervals of 300 to 450 feet occur between the bottom of one stope and the top of the ore below it in the same formational unit. Veins remain strong on the lower levels. But grades low, of many mines. As barren vertical intervals separate oreshoots in several veins the development below known orebodies cannot be taken as proving that ore does not exist at lower levels.

8. PROGRAMS

8.1 Road Construction and Trenching

From the Nugget mine road 500 meters of new road was constructed to the Cayote portal and 500 meters was constructed to the Bluestone portal (Fig 6). Two trenches were cut above each of the portals so that an assessment of the veins might be made. Stoping to near surface on the Bluestone weakened the structure and the cat broke through. Due to the dangers involved, further cat trenching that was planned along the strike of the veins was not done.

8.2 Following termination of trenching the portal areas were cleared and the dumps leveled off so that the workings may be opened up by backhoe in 1985.

8.3 Two small test grids were laid out over the workings to assess the applicability of geochemistry and geophysics in locating the Sheep Creek vein systems. Both the Cayote and Bluestone were apparently located by Geophysics in the past though the system used was not divulged. The grids used consisted of five lines each spaced 25 meters apart with the baselines running along the projected strike of the veins. Samples and readings were taken at 10 meter intervals along the lines. A total of 55 soil samples and geophysical readings were taken from each grid.

8.4 The geochemical samples were analysed by Vangeochem labs of Vancouver, B.C. for copper, lead, zinc, silver and gold.

8.5 Geophysics conducted on the property utilized a Phoenix VLF-2 electromagnetic unit using the Seattle, Washington station (Cutler, Main was down) and a McPhar M700 fluxgate magnetometer.

9. RESULTS AND CONCLUSIONS

9.1 Geophysics

No anomalous conditions except those that may be attributable to cultural effects, were detected in either survey. The negetive response may be due to:

a) in the case of the magnetics the lack of sensitivity of the instrument. and

b) in the case of the VLF-Em the potentially conductive vein material having been mined out within the grid area to a sufficient depth as to be non-responsive where still present.

9.2 Geochemistry

a) Bluestone area

Anomalous values were detected in both silver and gold on this grid. The anomalies in both instances were over the mine dumps. No zinc, lead, or copper values of significance was detected.

b) Cayote area

Possibly anomalous values to a few anomalous values were detected insilver and zinc on this grid. The response cannot obviously be attributed to mine contamination in either case. The grid was not sufficiently large to determine the width of anomalies detected at each edge, however, the central zinc anomaly is narrow being detected in single samples on three lines.

9.3 The grids were not sufficiently large to assess with certainty the geophysics. The geochemical response indicates that this may be an effective exploration tool, however, a tight grid spacing appears to be warranted in any future surveys.

9.4 The nature of the mineralization as outlined in part 7 would appear to be responsive to geophysics and the negative response indicated in these tests should not preclude the use of electromatnetics nor magnetics in future.

10. RECOMMENDATIONS

The program conducted was used as a test to assess the feasibility of geochemistry and VLF-Em and magnetics on the property as a whole. From this test I would recommend:

1) The use of magnetics and electromagnetics on the enitre property holdings.

2) Utilizing a proton precession magnetometer with base station recorder to minimize spurious effects.

3) Conducting detailed (ie close spacing) geochemistry over anomalous areas detected in the geophyiscal programs(s) run over the entire claim area.

4) Open up the portals at the Bluestone and Cayote for underground inspection.

11. APPLIED EXPLORATION EXPENDITURES

A) Road Construction

- 1000 meters (Two at 500 meters each 1.75 x .5 x 1000 = 875 cubic meters

Trenching

- Two at 10 m x 2.5 m x 2 meters
- 100 cubic meters

Development

975 cubic meters at $20/meter	$19,500.00

B) Geochemistry/Geophysics

B. Meyer	$1,150.00	
Vehicle and fuel	187.00	
Analyses	1,097.90	
Report and Supervision	1,500.00	
		$ 3,934.90
TOTAL		$23,434.90

CERTIFICATE

I, William C. Day, of residence at 258 W. 24th St., North Vancouver, B.C. hereby certify that:

1) I am a graduate of the University of British Columbia with a B.Sc. degree in geology (1976).

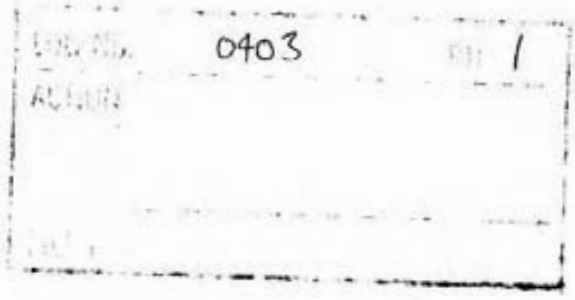
2) I have practised my profession as a geologist since graduation and have worked in mineral exploration since 1965.

3) I am a member of the Association of Professional Engineers, Geologists and Geophsicists of Alberta.

4) That I caused to have done, supervised and authored the report (Assessment Report on Sheep Creek North Group, 82F/3E, Nov. 84) regarding work conducted on the Sheep Creek North Group.

Dated this 28th day of March, 1985 at Vancouver.

W.C. Day
B.Sc., P.Geol



APPENDIX I

RECEIVED
SEP 26 1984

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 Pemberton Ave.
North Vancouver B.C. V7P 2S3
(604)986-5211 Telex: 04-352578

BRANCH OFFICE
1630 Pandora St.
Vancouver B.C. V5L 1L6
(604)251-5656

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: GOLDRICH REOURCES INC.
ADDRESS: 812 - 475 HOWE STREET
: VANCOUVER B.C.
: V6C 2B3

DATE: SEPT 26 1984
REPORT#: 84-01-092
JOB#: 84497

PROJECT#: --
SAMPLES ARRIVED: SEPT 20 1984
REPORT COMPLETED: SEPT 26 1984
ANALYSED FOR: Cu Pb Zn Ag Au
SAMPLES FROM: BRIAN H. MEYER - NELSON, B.C.
COPY SENT TO: BILL DAY - GOLDRICH RESOURCES

INVOICE#: 8329
TOTAL SAMPLES: 110
SAMPLE TYPE: 110 SOIL
REJECTS: DISCARDED

PREPARED FOR: GOLDRICH REOURCES INC.

ANALYSED BY: VGC Staff

SIGNED:

GENERAL REMARK: None

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PREPARED FOR: GOLDRICH RESOURCES INC.

NOTES: nd = none detected
: -- = not analysed
: is = insufficient sample

REPORT NUMBER: 84-01-092 JOB NUMBER: 84437

SAMPLE #	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
0+75E B-0+10S	21	25	139	.4	nd
0+75E B-0+20S	17	43	99	.2	nd
0+75E B-0+30S	26	31	124	nd	nd
0+75E B-0+40S	23	37	101	nd	nd
0+75E B-0+50S	25	50	123	.2	nd
1+00E B-0+50N	22	39	78	nd	nd
1+00E B-0+40N	20	36	95	.2	5
1+00E B-0+30N	19	34	94	nd	20
1+00E B-0+20N	20	26	91	.1	nd
1+00E B-0+10N	25	35	94	nd	nd
1+00E B-0+00	24	30	99	nd	nd
1+00E B-0+10S	26	39	104	.4	5
1+00E B-0+20S	21	43	100	.2	nd
1+00E B-0+30S	21	39	105	.2	nd
1+00E B-0+40S	25	39	114	.2	nd
1+00E B-0+50S	28	35	128	.2	nd
0+00 C-0+50N	23	40	139	nd	nd
0+00 C-0+40N	16	35	94	.6	nd
0+00 C-0+30N	15	32	79	.2	nd
0+00 C-0+20N	15	35	100	.1	10
0+00 C-0+10N	20	31	105	.2	5
0+00 C-0+00	23	38	104	.2	nd
0+00 C-0+10S	20	60	131	.3	15
0+00 C-0+20S	16	30	80	.3	5
0+00 C-0+30S	21	32	99	.2	20
0+00 C-0+40S	20	38	99	.2	5
0+00 C-0+50S	20	40	120	.1	5
0+25E C-0+50N	22	35	130	.4	10
0+25E C-0+40N	13	24	69	.1	nd
0+25E C-0+30N	15	30	99	.2	5
0+25E C-0+20N	14	34	87	nd	5
0+25E C-0+10N	19	36	101	.3	5
0+25E C-0+00	15	24	109	nd	15
0+25E C-0+10S	16	33	126	.1	5
0+25E C-0+20S	16	44	98	.2	5
0+25E C-0+30S	18	38	90	.1	5
0+25E C-0+40S	19	25	80	.1	nd
0+25E C-0+50S	20	48	135	.3	5
0+50E C-0+50N	23	39	135	.1	10
DETECTION LIMIT	1	2	1	0.1	5

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NOTES: nd = none detected
: -- = not analysed
: is = insufficient sample

REPORT NUMBER: 84-01-092 JOB NUMBER: 84497

SAMPLE #	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
0+00 B-0+50N	15	23	71	.2	nd
0+00 B-0+40N	19	34	72	.2	nd
0+00 B-0+30N	19	22	90	nd	5
0+00 B-0+20N	20	28	75	.3	10
0+00 B-0+10N	24	25	84	.3	5
0+00 B-0+00	22	30	94	.5	5
0+00 B-0+10S	28	30	106	.2	nd
0+00 B-0+20S	20	32	95	.3	nd
0+00 B-0+30S	25	34	111	.5	nd
0+00 B-0+40S	25	30	99	nd	nd
0+00 B-0+50S	26	25	84	.5	nd
0+25E B-0+50N	25	23	90	.2	5
0+25E B-0+40N	21	20	90	.1	nd
0+25E B-0+30N	19	29	75	nd	10
0+25E B-0+20N	21	25	80	.2	10
0+25E B-0+10N	30	30	97	.1	nd
0+25E B-0+00	24	35	83	nd	25
0+25E B-0+10S	17	30	95	nd	nd
0+25E B-0+20S	20	26	114	.1	5
0+25E B-0+30S	21	25	99	.3	nd
0+25E B-0+40S	21	30	92	.1	nd
0+25E B-0+50S	18	30	85	nd	5
0+50E B-0+50N	31	25	82	.4	5
0+50E B-0+40N	25	29	93	nd	5
0+50E B-0+30N	32	25	88	nd	nd
0+50E B-0+20N	25	26	99	.4	nd
0+50E B-0+10N	22	35	88	.2	nd
0+50E B-0+00	11	9	5	.9	520
0+50E B-0+10S	38	37	15	.4	1220
0+50E B-0+20S	39	49	24	.2	140
0+50E B-0+30S	20	30	81	.1	5
0+50E B-0+40S	23	30	94	.3	nd
0+50E B-0+50S	25	41	123	.3	10
0+75E B-0+50N	39	27	91	.2	35
0+75E B-0+40N	22	38	86	.1	5
0+75E B-0+30N	27	35	100	.4	5
0+75E B-0+20N	20	38	90	.4	5
0+75E B-0+10N	28	29	69	nd	5
0+75E B-0+00	15	23	4	.8	1610
DETECTION LIMIT	1	2	1	0.1	5

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NOTES: nd = none detected
: — = not analysed
: is = insufficient sample

REPORT NUMBER: 84-01-092 JOB NUMBER: 84497

SAMPLE #	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
0+50E C-0+40N	18	30	100	.5	10
0+50E C-0+30N	16	33	84	nd	5
0+50E C-0+20N	20	31	79	.5	nd
0+50E C-0+10N	18	25	89	.4	nd
0+50E C-0+00	19	29	109	.2	nd
0+50E C-0+10S	21	33	123	.3	nd
0+50E C-0+20S	28	42	103	nd	nd
0+50E C-0+30S	20	29	69	.3	nd
0+50E C-0+40S	18	45	110	.2	5
0+50E C-0+50S	22	35	128	.1	5
0+75E C-0+50N	14	25	70	.1	5
0+75E C-0+40N	19	25	92	.5	5
0+75E C-0+30N	17	25	81	.4	nd
0+75E C-0+20N	20	25	75	.4	nd
0+75E C-0+10N	24	35	94	.4	nd
0+75E C-0+00	21	30	102	.4	nd
0+75E C-0+10S	19	41	102	.3	nd
0+75E C-0+20S	21	38	100	.2	nd
0+75E C-0+30S	18	40	69	.2	nd
0+75E C-0+40S	21	35	99	.1	nd
0+75E C-0+50S	23	40	123	.3	nd
1+00E C-0+50N	18	34	94	.4	5
1+00E C-0+40N	20	38	83	.5	nd
1+00E C-0+30N	14	29	70	.3	nd
1+00E C-0+20N	21	33	87	.2	nd
1+00E C-0+10N	20	32	98	.3	nd
1+00E C-0+00	21	36	103	.6	nd
1+00E C-0+10S	20	39	98	.1	nd
1+00E C-0+20S	20	44	80	.2	nd
1+00E C-0+30S	20	39	81	.2	15
1+00E C-0+40S	21	50	89	.1	5
1+00E C-0+50S	25	47	116	.2	nd
DETECTION LIMIT	1	2	1	0.1	5

RENO 1
2028(11)

GOLDBELT 2
1949 (10)

GAMBLE
2026 (11)

(RENO)

MANHATTEN FR.

13038

DANDY
12682

CURLEW
12681

9927
SNOWDRIFT

BLACKSTONE
9055

13494

RHOMBERG
FR.

14455
LARKHALL

9054
BLUE
STONE

GOLDEN FAWN

14456
CASSIAR
FR.

12493

10032
BLUE BIRD

COYOTE
8343

NUGGET

(NUGGET)

LILLIAN
FR (Shamrock)

LULU FR.

8341

10405

9052

14871

8344
JOINT

8815

8816

GOLDEN
WEST

(3500)

(Dominion)

8345

DOUBLE
JOINT

SUNBEAM
FR

9342

9334
BELT

14872

BRUCE FR.10602

NUMBER 10
FR.

CLYDE

8873

GOLD-
RICH 1
(8000)

8870

G.B. FR.14873

3869

LEACH FR.

10158

CLYDE CR.

10164

COLUMBIA

LILLY D.
(Cathie Fr)

1174
BEATRICE FR

8869
NEVADA

NEVADA FR
14917

10156

10157

BELLE
WATSON FR.

9355
PEGGY

14875
FR No.2
FR.

14874
FR No.1
FR.

9911
HAPPY
JEAN

9910
TWILIGHT
FR

To Salmo
12.5 Km.

SHEEP CREEK

(QUEEN)

(BLACK)

VICTORIA
FR10008

BURLINGTON
FR.

MARIE
FR
10107

12213

PAT FRACTIONAL

5706
PAT

1079

PLACER FR
19079

14916

HENRY FR.

1076
QUEEN

8325
BULLION

9078

ALEXANDRA

1077

EDWARD
7
9077

NIAGRA

14697
BRUHN
No2

1078
LEWISTON

14696

MARGARET

SUCCESS
10009

10172

VERNON
14020

STRUGGLE

10265
ORE
HILL No.3

ORE HILL
2073

10267
STANDARD

14009
ROYAL ANN
FR.

10269
LAST DOLLAR FR

DIXIE
10264

15236
QUEEN
ANN
FR.

ROYAL ANN
14010

14011
ROYAL
ANN No.1

15235
QUEEN
ANN No.1

CURTIS
2027 (11)

YELLOWSTONE
2025 (11)

NORTH GROUP
SOUTH GROUP

VIXEN
2024 (11)

The claims in this open area are not optioned by Goldrich Resources Inc.

NUGGET CREEK

BILLINGS CREEK

TWILIGHT CREEK

PANTHER CREEK

GAMBLER CREEK

SHEEP CREEK

MUSKRAT CREEK

McARTHUR CREEK

CURTIS CREEK

WALDIE CREEK

VIXEN CREEK

WEASEL CREEK

STOAT CREEK

KING LAKE

WALDIE LAKE

N

MAGNETIC DECLINATION
20°01'

SCOPE
EXPLORATION
SERVICES
LTD.

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GOLDRICH RESOURCES INC.

GOLDBELT GROUP

CLAIM LOCATION MAP

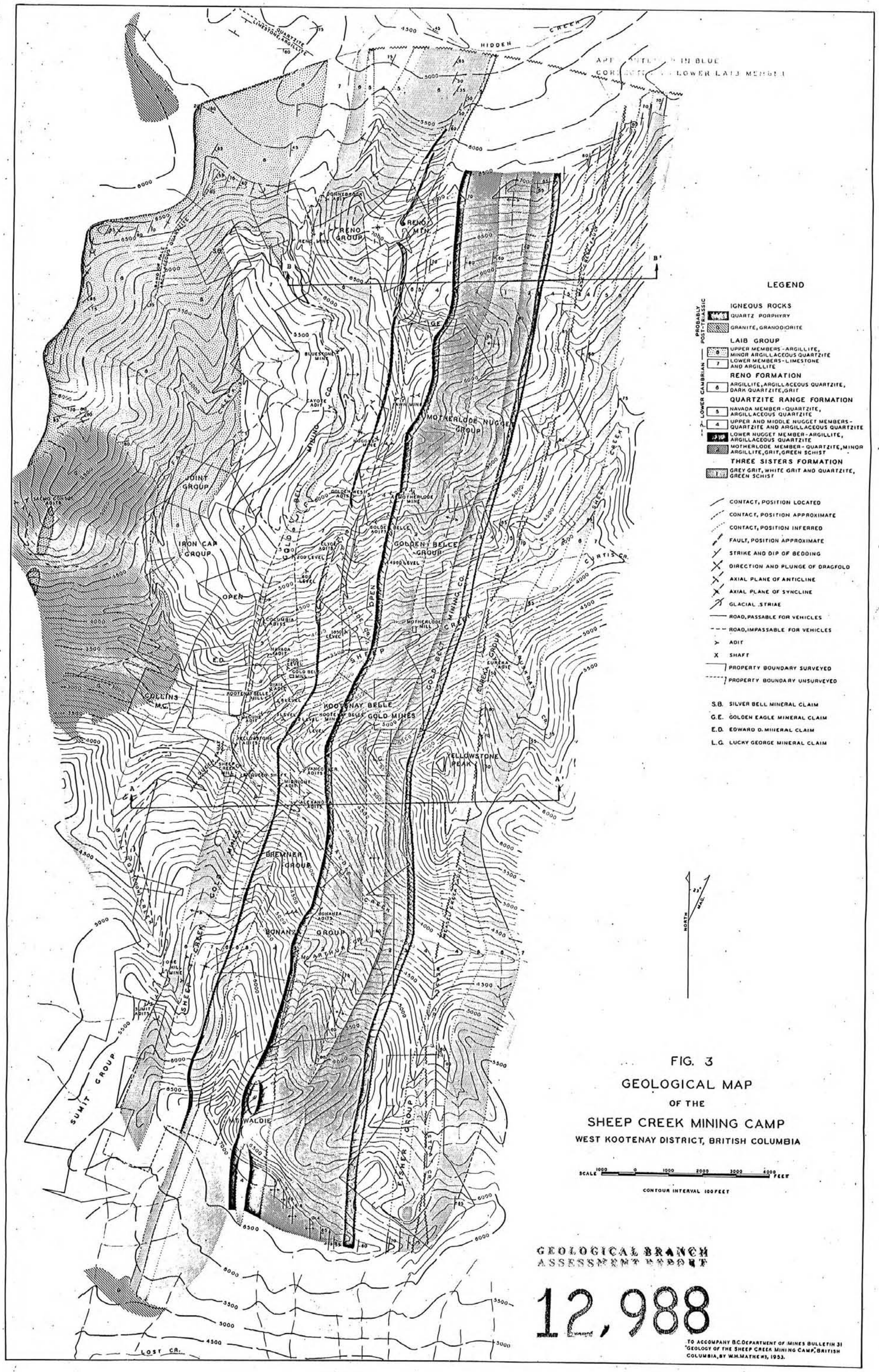
DWG. BY R.M., 28/05/84.

DERIVED FROM NTS82F3

500m 0 500 1000m

SCALE=1:20,000

Fig. 2



LEGEND

IGNEOUS ROCKS
- QUARTZ PORPHYRY
- GRANITE, GRANODIORITE

PROBABLY POST-TRIASSIC

LAIB GROUP
- 8 — UPPER MEMBERS - ARGILLITE, MINOR ARGILLACEOUS QUARTZITE
- 7 — LOWER MEMBERS - LIMESTONE AND ARGILLITE

RENO FORMATION
- 6 — ARGILLITE, ARGILLACEOUS QUARTZITE, DARK QUARTZITE, GRIT

QUARTZITE RANGE FORMATION
- 5 — NAVADA MEMBER - QUARTZITE, ARGILLACEOUS QUARTZITE
- 4 — UPPER AND MIDDLE NUGGET MEMBERS - QUARTZITE AND ARGILLACEOUS QUARTZITE
- LOWER NUGGET MEMBER - ARGILLITE, ARGILLACEOUS QUARTZITE
- MOTHERLODE MEMBER - QUARTZITE, MINOR ARGILLITE, GRIT, GREEN SCHIST

LOWER CAMBRIAN ?

THREE SISTERS FORMATION
- GREY GRIT, WHITE GRIT AND QUARTZITE, GREEN SCHIST

- CONTACT, POSITION LOCATED
- CONTACT, POSITION APPROXIMATE
- CONTACT, POSITION INFERRED
- FAULT, POSITION APPROXIMATE
- STRIKE AND DIP OF BEDDING
- DIRECTION AND PLUNGE OF DRAGFOLD
- AXIAL PLANE OF ANTICLINE
- AXIAL PLANE OF SYNCLINE
- GLACIAL STRIAE
- ROAD, PASSABLE FOR VEHICLES
- ROAD, IMPASSABLE FOR VEHICLES
- ADIT
- X SHAFT
- PROPERTY BOUNDARY SURVEYED
- PROPERTY BOUNDARY UNSURVEYED

S.B. SILVER BELL MINERAL CLAIM
G.E. GOLDEN EAGLE MINERAL CLAIM
E.D. EDWARD D. MINERAL CLAIM
L.G. LUCKY GEORGE MINERAL CLAIM

NORTH 23° MAG.

FIG. 3
GEOLOGICAL MAP
OF THE
SHEEP CREEK MINING CAMP
WEST KOOTENAY DISTRICT, BRITISH COLUMBIA

SCALE 1000 0 1000 2000 3000 4000 FEET

CONTOUR INTERVAL 100 FEET

GEOLOGICAL BRANCH
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TO ACCOMPANY B.C. DEPARTMENT OF MINES BULLETIN 31 "GEOLOGY OF THE SHEEP CREEK MINING CAMP", BRITISH COLUMBIA, BY W.H. MATHEWS, 1953.

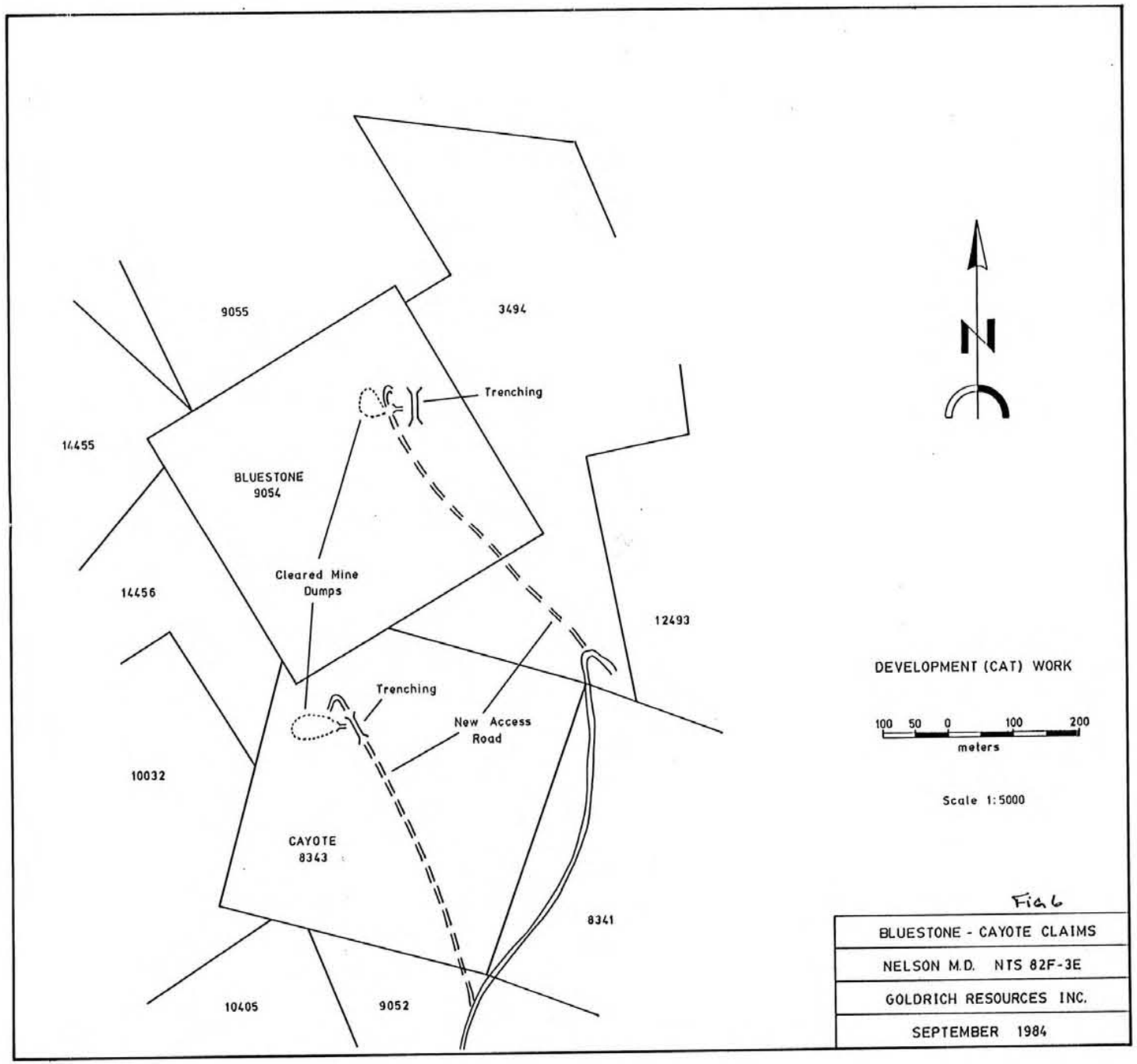

Fig 6

BLUESTONE - CAYOTE CLAIMS

NELSON M.D. NTS 82F-3E

GOLDRICH RESOURCES INC.

SEPTEMBER 1984

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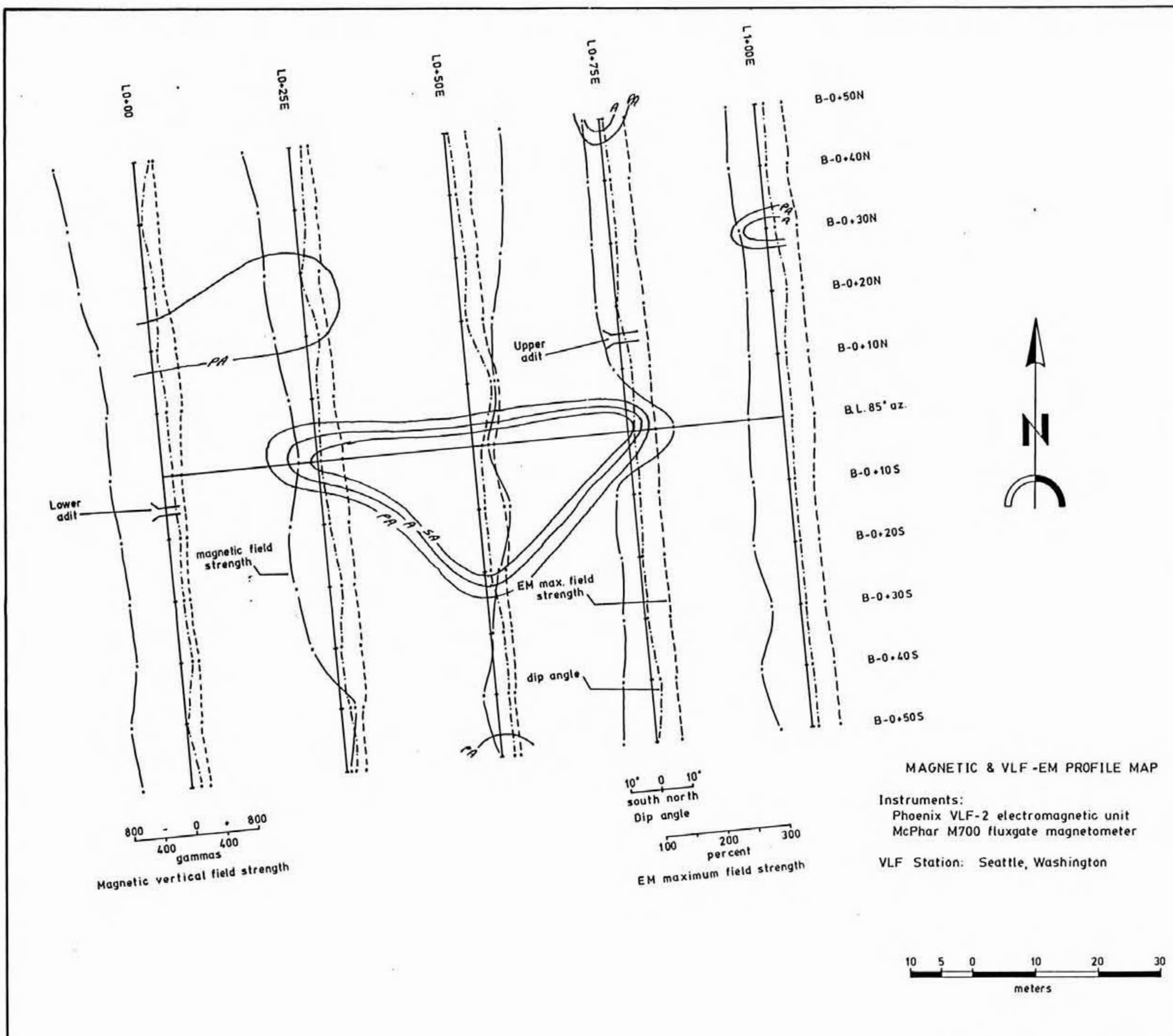

MAGNETIC & VLF-EM PROFILE MAP

Instruments:
Phoenix VLF-2 electromagnetic unit
McPhar M700 fluxgate magnetometer

VLF Station: Seattle, Washington

10 5 0 10 20 30
meters

PA - Possibly Anomalous
A - Anomalous
SA - Strongly Anomalous

Gold Geochemistry Fig 7a

BLUESTONE PROPERTY
NELSON M.D. NTS 82F-3E
GOLDRICH RESOURCES INC.
SEPTEMBER 1984

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L0+00 L0+25E L0+50E L0+75E L1+00E

B-0+50N
B-0+40N
B-0+30N
B-0+20N
B-0+10N
B.L. 85° az.
B-0+10S
B-0+20S
B-0+30S
B-0+40S
B-0+50S

PA
A
SA
Upper adit
Lower adit
magnetic field strength
EM max. field strength
dip angle

N

800 - 0 + 800
400 400
gammas
Magnetic vertical field strength

10° 0 10°
south north
Dip angle
100 200 300
percent
EM maximum field strength

MAGNETIC & VLF-EM PROFILE MAP

Instruments:
Phoenix VLF-2 electromagnetic unit
McPhar M700 fluxgate magnetometer

VLF Station: Seattle, Washington

10 5 0 10 20 30
meters

PA - Possibly Anomalous
A - Anomalous
SA - Strongly Anomalous

Silver Geochemistry Fig. 76

BLUESTONE PROPERTY
NELSON M.D. NTS 82F-3E
GOLDRICH RESOURCES INC.
SEPTEMBER 1984

GEOLOGICAL BRANCH
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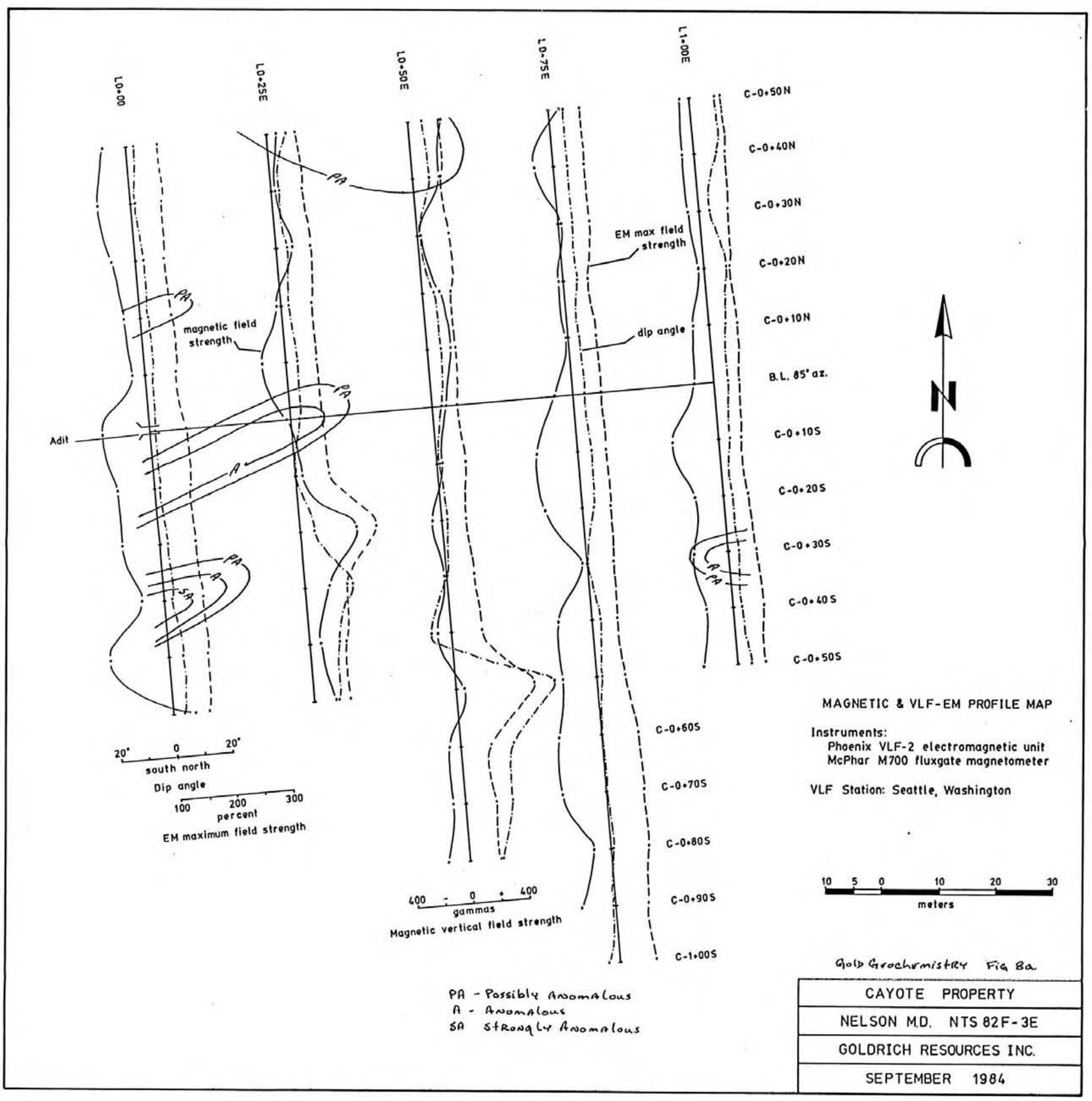

MAGNETIC & VLF-EM PROFILE MAP

Instruments:
Phoenix VLF-2 electromagnetic unit
McPhar M700 fluxgate magnetometer

VLF Station: Seattle, Washington

10 5 0 10 20 30
meters

Gold Geochemistry Fig 8a

PA - Possibly Anomalous
A - Anomalous
SA Strongly Anomalous

CAYOTE PROPERTY
NELSON M.D. NTS 82F-3E
GOLDRICH RESOURCES INC.
SEPTEMBER 1984

GEOLOGICAL BRANCH
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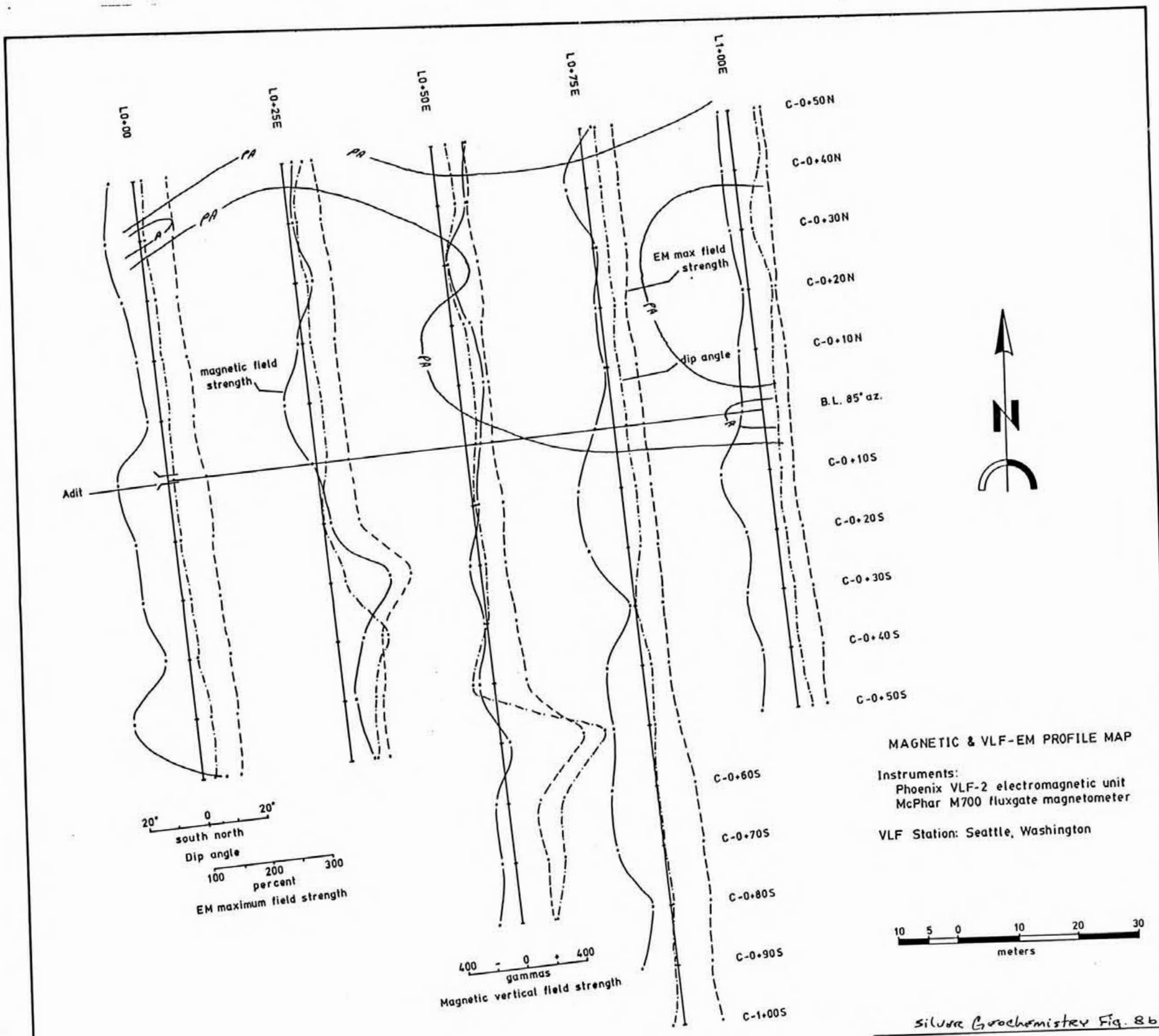

MAGNETIC & VLF-EM PROFILE MAP

Instruments:
Phoenix VLF-2 electromagnetic unit
McPhar M700 fluxgate magnetometer

VLF Station: Seattle, Washington

Silver Geochemistry Fig. 8b

CAYOTE PROPERTY
NELSON M.D. NTS 82F-3E
GOLDRICH RESOURCES INC.
SEPTEMBER 1984

GEOLOGICAL BRANCH
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L0+00 L0+25E L0+50E L0+75E L1+00E

C-0+50N
C-0+40N
C-0+30N
C-0+20N
C-0+10N
B.L. 85° az.
C-0+10S
C-0+20S
C-0+30S
C-0+40S
C-0+50S
C-0+60S
C-0+70S
C-0+80S
C-0+90S
C-1+00S

A
PA
PA
A
PA
A
PA

magnetic field strength

EM max field strength

dip angle

Adit

20° 0 20°
south north
Dip angle

100 200 300
percent
EM maximum field strength

400 - 0 + 400
gammas
Magnetic vertical field strength

N

MAGNETIC & VLF-EM PROFILE MAP

Instruments:
Phoenix VLF-2 electromagnetic unit
McPhar M700 fluxgate magnetometer

VLF Station: Seattle, Washington

10 5 0 10 20 30
meters

PA- Possibly anomalous
A- Anomalous

Zinc Geochemistry Fig 8c

CAYOTE PROPERTY
NELSON M.D. NTS 82F-3E
GOLDRICH RESOURCES INC.
SEPTEMBER 1984

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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