ARIS SUMMARY SHEET

District Geologist, Kamloops — Off Confidential: 90.02.09

ASSESSMENT REPORT 18373 — MINING DIVISION: Lillooet

PROPERTY: Lucky Strike
LOCATION: LAT 50 59 00 LONG 122 53 00
UTM 10 5647759 508189
NTS 092J15W 092O02W

CAMP: 034 Bridge River Camp

CLAIM(S): Ural 2-7,Lucky Strike,Bob 3-6,Homestake 4
OPERATOR(S): Golden Rule Res.
AUTHOR(S): Cruickshank, R.
REPORT YEAR: 1989, 52 Pages
COMMODITIES SEARCHED FOR: Gold,Silver
KEYWORDS: Paleozoic,Fergusson Group,Triassic,Cadwallader Group,Cretaceous Taylor Creek Formation,Eldorado Stock,Ultramafics,Chert,Basalt Gold

WORK DONE: Geological,Geophysical,Physical,Geochemical
EMGR 8.0 km;VLF
Map(s) - 2; Scale(s) - 1:1000
GEOL 2000.0 ha
Map(s) - 3; Scale(s) - 1:1000,1:5000
LINE 12.6 km
PETR 3 sample(s)
ROCK 22 sample(s) ;AU,AG,CU,PB,ZN,AS,SB

RELATED REPORTS: 09062,11231,11930,11931,13666,14812

1988 GEOLOGICAL and GEOPHYSICAL REPORT

GOLD BRIDGE PROJECT, BC
(URAL CLAIM GROUP)

GOLDEN RULE RESOURCES LTD.

by

R.D. Cruickshank, M.Sc., FGAC

November 9, 1988

1988 GEOLOGICAL and GEOPHYSICAL REPORT

GOLD BRIDGE PROJECT
(URAL CLAIM GROUP)

NTS 92J/15W and 92O/2W

LATITUDE 51 deg. 00' NORTH

LONGITUDE 122 deg. 52' WEST

LILLOOET MINING DIVISION

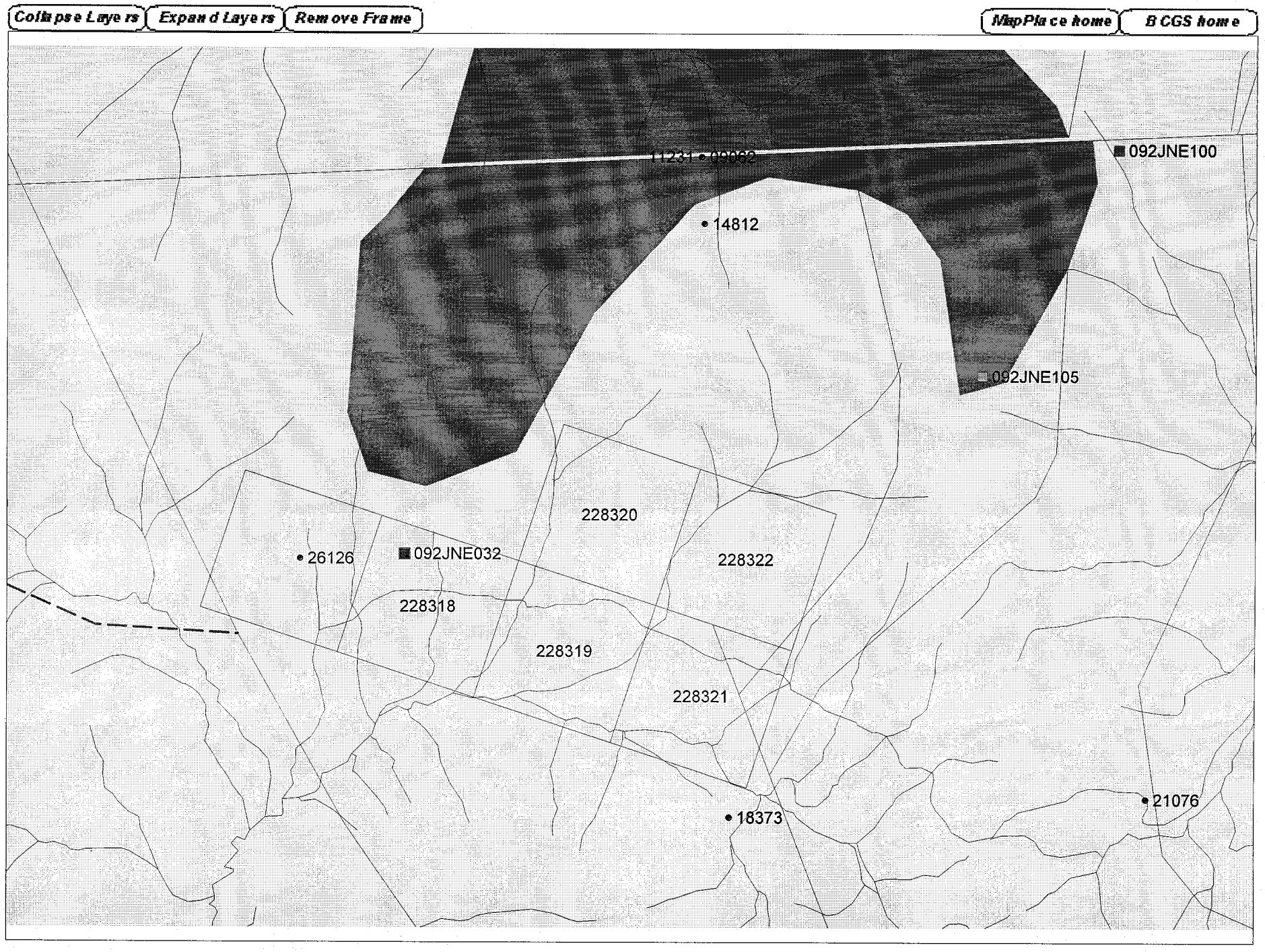
for

GOLDEN RULE RESOURCES LTD.

by

R. D. CRUICKSHANK, M.Sc., FGAC

NOVEMBER 9, 1988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• 21076

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Capsule Geology and Bibliography

Printable Report

092JNE032

Name	LUCKY JEM	Mining Division	Lillooet
Status	Prospect	NTS	092J15W NAD 27
Latitude Longitude	50 59 25 N 122 53 45 W	UTM	10 5648530 507311
Commodities	Gold Silver	Deposit Types	I05 : Polymetallic veins Ag-Pb-Zn±Au.
Tectonic Belt	Coast Crystalline	Terranes	Plutonic Rocks. Cadwallader.

Capsule Geology

The Lucky Jem polymetallic vein prospect is located at the headwaters of Eldorado Creek, 4 kilometers southwest of Eldorado Mountain. The prospect is mostly within or adjacent to dykes and apophyses of quartz diorite, granite and granodiorite, related to the Eldorado pluton of Paleocene age. Mineralization also occurs in country rocks of siltstone, sandstone, mudstone and arkose of the Upper Triassic Hurley Formation, Cadwallader Group. The sedimentary rocks are partly schistose. Stringers of arsenopyrite and pyrite are within decomposed and oxidized igneous and sedimentary host rocks; this material, when panned, will yield fine gold.

The prospect has been explored by two adits. The No. 1 adit vein, in a well defined fissure in granite, strikes northwest for 11 metres, dipping shallowly east. A wide (30 to 90 centimetres) oxidized zone carries arsenopyrite streaks surrounded by several centimetres of talcose gouge grading into decomposed granite. Assays ran from 34.28 grams per tonne gold and 17.1 grams per tonne silver over 50 centimetres to 0.68 grams per tonne gold and 34.28 grams per tonne silver over 50 to 90 centimetres (George Cross News Letter No.202, 1983). Sixty-five metres west of the No. 1 adit vein another drift, the No. 2 adit, follows two 30 to 60 centimetre subparallel, north striking veins through decomposed granite. The veins carry arsenopyrite and pyrite mixed with quartz and oxidation products. Assays across 127 centimetres at the junction of two veins graded up to 1.37 grams per tonne gold and 48 grams per tonne silver (George Cross News Letter No.202, 1983). A best assay of 43.88 grams per tonne gold and 89.14 grams per tonne silver is reported from an open cut southwest of No. 2 adit (Assessment Report 9062).

Bibliography	
	EMPR AR 1913-269; 1924-142; 1933-268; 1940-59; 1968-161 EMPR ASS RPT 5659, 6002, *9062, 14288, 14812, 18373 EMPR BULL 20, p. 4 EMPR EXPL 1975-118; 1976-130; 1985-C223; 1986-C268 EMPR FIELDWORK 1974, p. 35; 1985, pp. 303-310; 1986, pp. 23-29; 1987, pp. 93-104, pp. 115-130; 1988, pp. 131-143; 1989, pp. 45-51, pp. 53-72; 1990, pp. 75-83 EMPR GEM 1969-185 EMPR OF 1987-11; 1989-4 EMPR PF (Special Report by B.T. O'Grady, 1935) GSC EC GEOL #4, p. 84 GSC MEM 130 GSC P *43-15; 77-2 (GSC 76-50) GSC SUM RPT 1913, p. 206 ECON GEOL 84-8-1989, pp. 2226-2236, (Leitch et al, 1989) GCNL #202, 1983 Sebert, C.F.B. (1987): Description of the 22 Mineral Properties, Bridge River Mining Camp, Unpublished B.Sc. Thesis, University of British Columbia

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MINFILE Home page

This page last updated: June 11, 2001

SUMMARY

This property occurs within the Bridge River mining camp, specifically about 14 km north of the village of Gold Bridge in southwestern British Columbia. Access is via four-wheel drive road or by helicopter. Gold showings on the property were first discovered about 1910, and have since been explored intermittently, with no resulting production.

This report describes the results of geological mapping and geophysical surveys conducted in August and September of 1988. A large part of the property was mapped at a scale of 1:5000, and two gold showings, known as Lucky Strike and Lucky Gem, were also mapped at 1:1000. A contractor established 8 line km of grid at Lucky Strike, and conducted 10 line km each of VLF-EM and magnetic surveys.

Bedded rocks on the property belong to three (3) major stratigraphic packages: the Paleozoic Fergusson Group (oceanic cherts); the Upper Triassic Cadwallader Group, comprising Pioneer Formation basalts, and Hurley Formation sediments; and Lower Cretaceous Taylor Creek Formation marine conglomerates. Intrusive lithologies consist of Lower Jurassic ultramafic rocks, commonly emplaced along fault zones; the Eldorado Stock (granodiorite of Paleocene Age); and a variety of mafic and felsic plugs and dykes.

The degree of fold deformation increases with stratigraphic age. Numerous normal faults have been identified: these subdivide the area into a mosaic of individual fault blocks. Iron carbonate alteration is present in some (especially north trending) fault zones: it is most conspicuous in ultramafic rocks, but occurs in other lithologies as well. Metamorphic effects have been minimal.

The known gold showings in general appear to: 1) occupy steeply dipping, north trending fault zones; 2) contain more silver than gold; and 3) be associated with iron-carbonate alteration in wall rocks. The Lucky Strike mineralization consists of small, discontinuous pods and veins of polymetallic massive sulphides, that carry 0.2 to over 1.0 ounce per ton Au. Lucky Gem displays quartz veins, with several tens of percent arsenopyrite and some pyrite, grading up to over 0.5 ounce per ton Au and 4.0 ounces per ton Ag; the largest vein is about 1.2 m wide at surface.

Magnetic data were collected incorrectly by the contractor and are of no value. A VLF-EM conductor corresponds very well with the surface trace of the Lucky Strike mineralization, and continues into a covered interval to the north.

It is recommended that any further exploration be explicitly directed to locating drill targets. Four (4) areas of interest are identified: 1) Lucky Strike; 2) Lucky Gem; 3) a fault zone along the ridge, east of Lucky Strike ("Taylor East Anomaly"); and 4) a fault zone on the Ural 7 claim ("Ural 7 Anomaly"). Drill targets within these areas should be identified by; 1) reference to the geological maps; 2) detailed prospecting and lithogeochemistry; 3) a review of the existing soil geochemical data; and 4) geophysical surveys as recommended by a geophysicist. Given the heavy sulphide association with the known gold showings, it is possible that a geophysical method that directly detects metallic minerals (such as induced polarization) may be most useful. It is also recommended that the 1:5000 scale geological map be refined, and extended to cover the entire property.

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I INTRODUCTION

The property occurs within the Bridge River mining camp as defined by Church (1987a, Figure 2-2-1). About 4,000,000 ounces of gold were produced in this camp in the period 1898 to 1971 (Harrop and Sinclair, 1986; Leitch and Godwin, 1986). The overwhelming majority of this production was from the Bralorne and Pioneer Mines, located 22 km to 25 km south of the Ural property (production at the Bralorne Mine has recently resumed). Gold-bearing veins on the Ural property have been known and intermittently explored since at least 1910, with no resulting production.

This report describes the results of property inspection and geological mapping by the author on August 2, 1988 and from September 15 to 28, 1988. The September, 1988 work was hindered to some degree by variable amounts of ground snow cover and by intermittent snow storms; however the overall quality of the geological map was not greatly impaired by this factor. The results of grid establishment and geophysical surveys by a contractor in late August of 1988 are also presented.

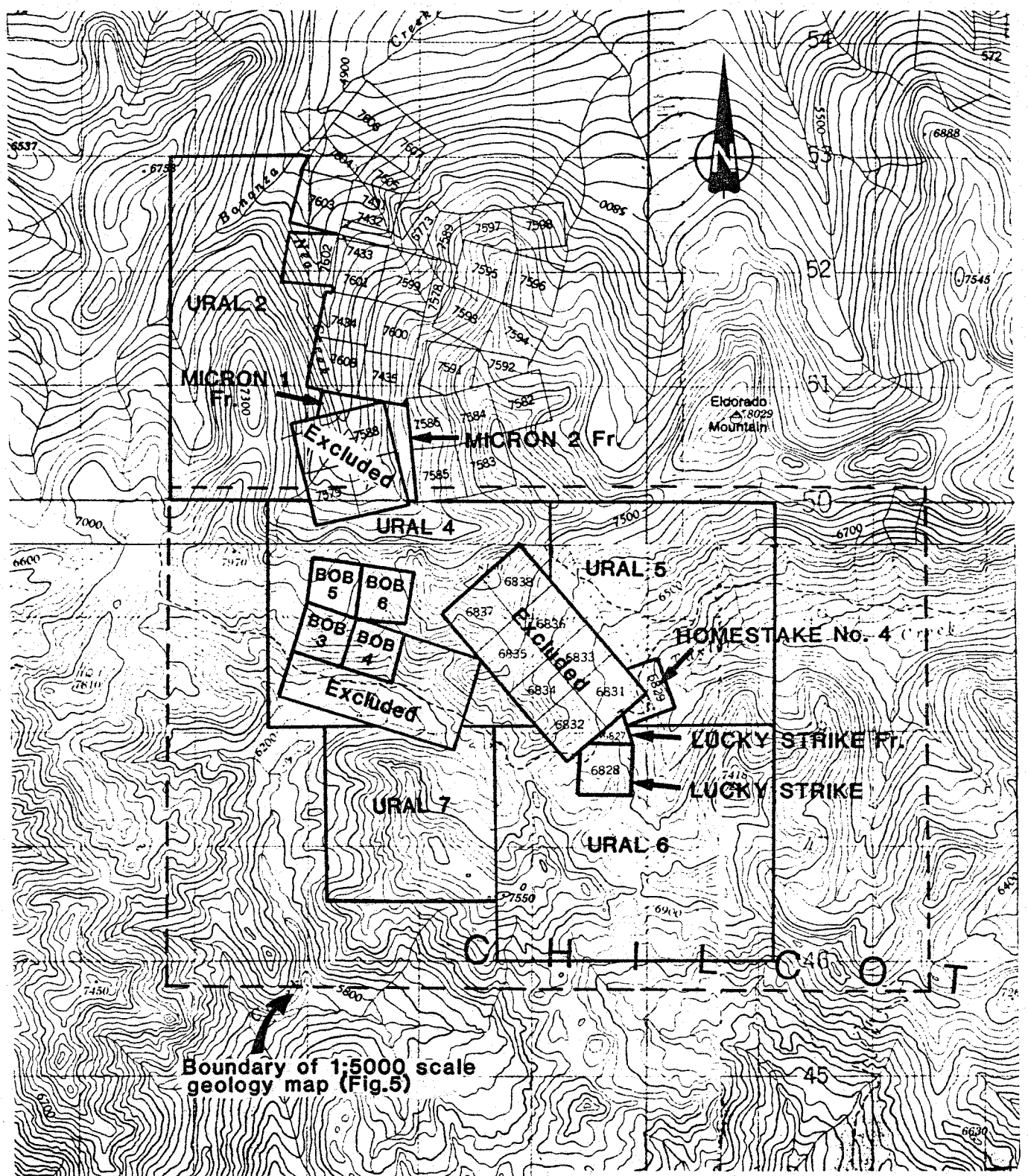
II PROPERTY

Table 1 is a list of the mineral claims along with their assessment status. The total number of units (92) is within the maximum allowed for grouping (100). Ural 2, Ural 4 through 7, and the Micron 1 and 2 Fractions are owned outright by Golden Rule Resources Ltd. Ural 2 was restaked in 1986 after the first claim of that name was allowed to lapse. Two (2) other claims obtained in the original staking, Ural 1 and Ural 3, have been forfeited, and Ural 5 and 7 have been reduced from their original 20 units each. The claims are indicated on the Property Map (Figure 1).

The seven (7) reverted crown-granted claims are under option to Golden Rule Resources Ltd. from William Cook of Lillooet, BC. This option agreement was signed in February, 1981.

III LOCATION AND ACCESS

The property is located on the east side of the Coast Mountains, about 180 km north of Vancouver, and 14 km north of the village of Gold Bridge (Figure 2). The easiest road access to Gold Bridge is via Lillooet, about 110 km to the east. The road from Gold Bridge to Vancouver is open in the summer months only. The nearest commercial airport is at Kamloops, approximately 3.5 hrs away by road.



GOLDEN RULE RESOURCES LTD.	
GOLDBRIDGE PROJECT (URAL CLAIMS) BRITISH COLUMBIA	
PROPERTY MAP	
Date:	N.T.S.: 92-J-15/92-0-2
Revised:	FIGURE 1.
Scale: 1:50,000	

TABLE 1

PROPERTY STATUS

Modified Grid Claims:

Claim Name	No. of Units	Record Number	Date of Record	Assessment Due Date	Amount of Assessment Required
Ural 2	18	3418	1986-4-1	1989-4-1	$1,800 + $ 90 fee
Ural 4	20	1283	1980-3-13	1989-3-13	$4,000 + $200 fee
Ural 5	16	1284	1980-3-13	1989-3-13	$3,200 + $160 fee
Ural 6	20	1285	1980-3-13	1989-3-13	$4,000 + $200 fee
Ural 7	9	1309	1980-3-31	1989-3-31	$1,800 + $ 90 fee
Micron 1 Fr.	1	1464	1980-7-29	1989-7-29	$ 200 + $ 10 fee
Micron 2 Fr.	1	1465	1980-7-29	1989-7-29	$ 200 + $ 10 fee

Reverted Grown-Granted Claims:

Claim Name	Lot Number	Record Number	Date of Record	Assessment Due Date	Amount of Assessment Required
Lucky Strike Fr.	6827	1238	1980-2-11	1990-2-11	$200 + $10 fee
Lucky Strike	6828	1239	1980-2-11	1990-2-11	$200 + $10 fee
Homestake No. 4	6829	1240	1980-2-11	1990-2-11	$200 + $10 fee
Bob No. 3	8046	1241	1980-2-11	1990-2-11	$200 + $10 fee
Bob No. 4	8047	1242	1980-2-11	1990-2-11	$200 + $10 fee
Bob No. 5	8048	1243	1980-2-11	1990-2-11	$200 + $10 fee
Bob No. 6	8049	1244	1980-2-11	1990-2-11	$200 + $10 fee

Summary

Total number of units: 92
Total annual assessment: $16,600 (will increase to $18,400 in 1990 because of Ural 2 claim)

Road access to the eastern part of the property is possible, but time consuming. This involves taking a road which passes Tyaughton Lake, leaving the Lillooet road about 12 km east of Gold Bridge. The last 6 km or 7 km of this route follow a narrow four-wheel drive road along Taylor Creek. This road has been closed past the alpine areas in upper Taylor Basin by the BC Ministry of Forests.

The most efficient means of local access is by helicopter. In 1988, a machine operated by Cariboo Chilcotin Helicopters was based at the tourist lodge on Tyaughton Lake. A round trip from the lodge to the property takes 0.2 hrs of flying time.

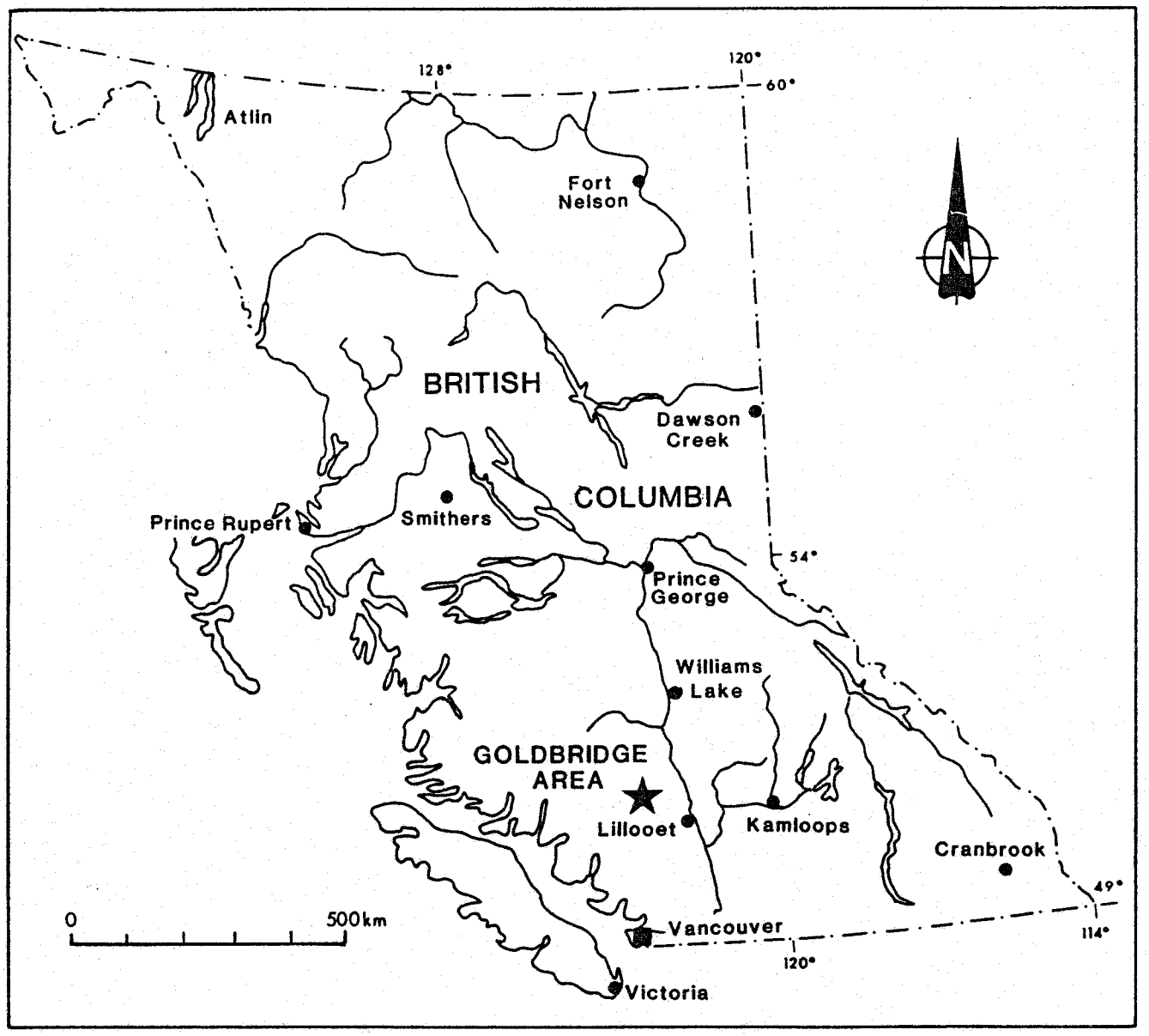
Local intrastructure in Gold Bridge includes a reasonably priced hotel/cafe, as well as a motel, grocery store, hardware store, and gas station. It is also possible to rent houses in Bralorne, about 10 km to the south, which has been largely depopulated since large scale mining ended in 1971. More expensive accommodation is available at the tourist lodge on Tyaughton Lake.

The property occurs entirely within a land management unit known as the "Spruce Lake Integrated Resource Management Plan". The objective of this plan is to provide for multi-purpose use of the area, but with an emphasis on retaining scenic values. The effect on mineral exploration is to restrict the types of activities that will be permitted: road building or trenching in alpine areas would almost certainly not be allowed. Helicopter supported drilling is acceptable, however. This is a popular recreational area, and some local businesses cater to hikers, hunters, skiers, and campers. Any proposal to develop a mine would undoubtedly generate opposition from these quarters.

IV PHYSIOGRAPHY AND CLIMATE

Topography on the claims is steep, but almost all areas can be reached on foot without hazard. Only a few cliffs on north-facing slopes are inaccessible. The property covers the headwaters of Taylor, Eldorado, and Bonanza Creeks. Vegetation varies from subalpine to alpine; the tree line occurs at an elevation of about 2000 m (6,500'). Elevations on the property range from 1450 m to 2500 m; the elevation of Carpenter Lake at the bottom of the valley near Gold Bridge is 650 m.

Outcrop exposures constitute less than 10% of the area of this property, as indicated on the property geology map (Figure 5). Most exposures occur on cirque headwalls and ridges. Valley and cirque bottoms are generally covered by morainal debris resulting from alpine glaciation. Most slopes are covered by



GOLDEN RULE RESOURCES LTD.

GOLDBRIDGE PROJECT
(URAL CLAIMS)
BRITISH COLUMBIA

LOCATION MAP

Date:	N.T.S.: 92-J-15/92-O-2
Revised:	FIGURE 2.
Scale:	

talus and felsemeer. Creek cuts, north of the Lucky Strike area, indicate that several meters of allochthonous overburden are present on lower slopes. Minor landslide deposits have been recognized at two localities.

Due to high elevation, the climate is characterized by short, warm summers and long winters. Snow can be expected anytime after the end of August: late September of 1988 was characterized by periodic snowfalls at intervals of 2 to 4 days. The snow pack in March, 1986 was reported to be 3 m to 5 m deep (Fox, 1986).

V HISTORY PRIOR TO 1980

The history of these properties prior to their acquisition by Golden Rule Resources Ltd. has been discussed by Fox (1981). This history will only be briefly reviewed here, with the above as the principal reference. A number of gold occurrences in this vicinity have been explored intermittently since the early years of this century.

The Lucky Gem occurrences (Figure 5) were discovered as early as 1910. Two adits are reported by Fox (1981), although only one remains in evidence today. Other work included ground sluicing and trenching near the adits: the effects of this are still visible. It was reported in 1933 that free gold could be panned from most soils in this area. The old BC Minister of Mines Annual Reports quote gold assays exceeding 1 oz/ton (Fox, 1981). One of the adits was extended in 1945 and 1946.

Work on the Lucky Strike showing commenced in either 1912 or 1925 (locations in the reports are vague). Sulphide mineralization in the adit consisted of sphalerite, jamesonite, pyrite, chalcopyrite, and arsenopyrite. According to the old reports, this mineralization occurs along both sides of a 3 m wide dyke at its contacts with serpentinite. Numerous gold analyses of 0.20 oz/ton to 1.3 oz/ton over widths of up to 1.5 m were recorded in the BC Minister of Mines Annual Report for 1936, as quoted by Fox (1981). The Lucky Strike No.2 adit is mentioned in the 1937 Minister of Mines Annual Report (Fox, 1981). Both Lucky Strike adits are still open, as located on Figure 5.

Adits were driven on the Northern Lights claims (lots 6831 through 6838, excluded from the Golden Rule property), in the early 1930's. Work proceeded on two adits, both of which are still in evidence, as shown on Figure 4. The No.1 adit was driven to investigate quartz veins within the granodiorite pluton; mineralization included gold, pyrite, and arsenopyrite. Gold values in excess of 1 oz/ton were reported. The Northern

Lights No.2 adit was driven to investigate auriferous arsenopyrite veinlets that occur at a contact between diorite and serpentinite.

Other gold showings are known from adjacent claims to the north of the Golden Rule property (Robson and Nea Creek areas). Work in this area dated from at least 1913. Gold values are reported from arsenopyrite veinlets in a large felsic dyke. A few tons of ore were reportedly produced and shipped by horseback (Fox, 1981). Work here continued until at least the late 1930's. A system of roads switchbacking up the mountain in this area is visible from the ridge above Lucky Gem.

VI PREVIOUS WORK (1980 - 1987)

A number of exploration programs have been conducted by Golden Rule Resources Ltd. since acquiring this property in 1980. They are detailed in several previous assessment reports (Fox, 1981, 1983, 1986; Netolitzky, 1985a, 1985b). The property was optioned to Geomex Canada Resources Ltd. in 1983/84, and to CanAmerica Precious Metals Inc. in 1987; in both cases it was subsequently returned to Golden Rule. Table 2 summarizes exploration activities in this period. As shown on the table, activities can be described in terms of three geographical areas: Taylor Basin (including the Lucky Strike showing); the Lucky Gem area; and the Ural 7 claim.

The Lucky Strike showing is accompanied by an areally restricted, multi-element (Au, Ag, Cu, Zn, As, Pb, Sb) soil anomaly. The location of the vein appears to correspond to a VLF anomaly and to a magnetic contact on the 1986 winter geophysical data. In addition, a very large, multi-element (Au, Ag, Cu, Zn, As, Pb) soil and talus fines geochemical anomaly was located on the mountainside on the opposite (east) side of the valley ("Taylor East Anomaly"). This anomaly measures about 700 m X 2000 m in area.

The Lucky Gem area, located north of Eldorado Creek, received only reconnaissance level soil geochemistry. A multi-element anomaly here consists of Au, Ag, Cu, Pb, Zn, and As, which exhibit an east-west zonation across the slope above the adit. These anomalies occur over an area measuring about one kilometer square. The winter 1986 geophysical results indicate a magnetic high on the slope above the adit, and two VLF conductors, neither of which correspond to the known mineralization.

The former Ural 7 grid was located on the opposite (south) side of Eldorado Creek from Lucky Gem. A combined gold-silver soil anomaly was found to extend from the cirque floor southwestwards up to the rim of the cirque and beyond ("Ural 7

TABLE 2

SUMMARY OF EXPLORATION, 1980 TO 1987

Year and Program	Taylor Basin Area (1)	Ural 7 Claim	Lucky Gem Area (2)
1980			
-recon. mapping	X	X	X
-lithogeochemistry	X	X	X
-soil geochemistry	100,200 X 25 or 50 m	100 X 50 m	200 X 50 m
1982			
-soil geochemistry	100 X 25 or 50 m	100 X 25 m	-
1983			
-soil geochemistry	-	100 X 25 m	-
1984			
-reanalyse soils	X	X	-
-reanalyse rocks	X	X	X
1986			
-winter geophysics (VLG & MAG)	X	X	X
1987			
-trenching and sampling	@ Lucky Strike	-	@ Lucky Gem

(1) Ural 5, Ural 6, Lucky Strike, Lucky Strike Fr., Homestake No. 4
(2) Bob 3 to 6, Ural 4

NOTE: Exploration on the now-defunct Ural 1 claim was also undertaken in 1980, 1983, and 1984.

Anomaly"). Anomalous levels of Cu, Pb, Zn, and As are also present. The winter geophysics showed this zone to contain a narrow magnetic high, and a couple of weak VLF conductors.

VII ACTIVITIES IN 1988

Work in 1988 had two principal objectives: i) to obtain geological and geophysical data over the Lucky Strike and Lucky Gem showings, in sufficient detail to control a diamond drilling program; and ii) to map property geology in order to elucidate the broader controls on gold mineralization.

As few traces of the previous grids remain, a program of grid establishment at Lucky Strike and Lucky Gem was devised, along with a long baseline linking these two areas. Peripheral Exploration Ltd. of Kamloops was contracted to conduct this work. Several problems were encountered and/or created by the contractor, with the result that: i) the baseline azimuth at Lucky Strike was set at 352 degrees, instead of due north, as specified; ii) as a result of (i), the baseline ended up at the wrong place when extended to Lucky Gem; iii) the Lucky Gem grid was never started; and iv) pickets were inscribed with felt marker instead of pencil as specified. Approximately 10.0 km of line were established at Lucky Strike.

The same contractor was hired to conduct geophysical surveys. Approximately eight line kilometers each of VLF-EM and magnetic data were collected on the Lucky Strike grid. The contractor was apparently unfamiliar with the fluxgate magnetometer employed in this survey, resulting in unusable data. The VLF results are not obviously incorrect, but must be regarded as suspect given the debacle with the magnetics. The contractor was in the field in late August of 1988.

Orthophotos of most of the property were prepared at a scale of 1:5000, and used as control for the geological mapping program. The Ural 2 claim and the Micron 1 and 2 Fractions were excluded from the map, but most of the remaining area was covered (Figure 5). Two claim groups enclosed by, but excluded from the Golden Rule property were mapped on a reconnaissance basis, in order to obtain a complete geological picture of the area. The Lucky Strike and Lucky Gem areas were also mapped at a scale of 1:1000.

The Lucky Strike grid was used as control for the 1:1000 scale geological map. The grid lines wander a great deal, compromising the accuracy of this work. In order to resolve this problem, two or three points from each line were located on the orthophoto, resulting in the grid plan shown on Figures 5 and 6.

Initial inspection of the Lucky Strike and Lucky Gem areas was conducted on August 2, 1988, with the bulk of the work completed in the period September 15 to 28, 1988. During the course of this work, twenty-two (22) rock samples were collected for geochemical analysis, along with three (3) specimens sent for petrographic description. All of this work was conducted by the author of this report.

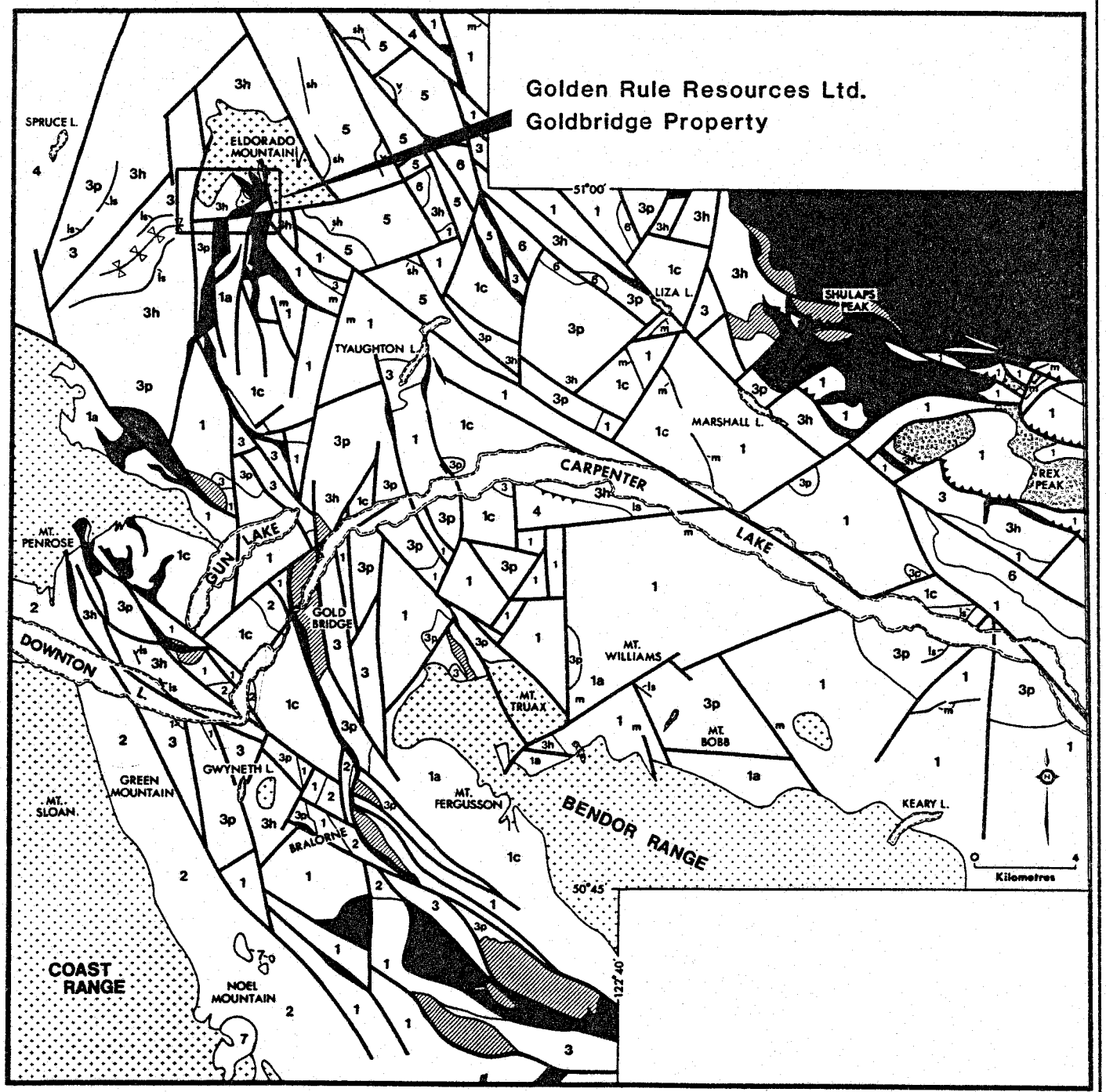
The September work was hindered to some degree by ground snow cover, snow storms, and cold weather. The principal detrimental effect was physical discomfort, particularly along the (usually windswept) higher ridges. Most outcrops in the area project steeply from the ground surface, and are therefore not obscured by light snow cover. Low cloud cover at times impaired helicopter access to the property.

VIII REGIONAL GEOLOGY AND GOLD DEPOSITS

The geological branch of the British Columbia Ministry of Energy, Mines, and Petroleum Resources has been financing a study of the Bridge River mining camp and surrounding areas since 1985. Various results of this work have been published by Harrop and Sinclair (1986), Leitch and Godwin (1986, 1987, 1988), Church (1987a, 1987b), Church et al (1988), and Glover et al (1988). The Golden Rule property was mapped in the summer of 1988, and preliminary results should be available in January of 1989.

The regional geology map (Figure 3a) and its legend (Figure 3b) included in this section, is taken from Church et al (1988). The regional stratigraphic column (Figure 4) has been taken from Church (1987a). This stratigraphic picture differs in some respects from previous publications on the area, and from the nomenclature employed in previous assessment reports on the Golden Rule property. Stratified rocks in the region belong to three major packages: i) the Fergusson Group of Paleozoic age; ii) the Upper Triassic Cadwallader Group; and iii) the Lower Cretaceous Taylor Creek Group. There are also three principal groups of intrusive rocks: i) the Bralorne Intrusions, diorite and gabbro of Permian (post-Fergusson Group) age; ii) the Lower Jurassic President ultramafic rocks; and iii) the Coast Plutonic Complex, granitic rocks of Upper Cretaceous to Lower Cenozoic age. Mesozoic and Cenozoic dykes and sills, ranging from mafic to felsic in composition, also occur throughout the region.

The oldest strata in the district belong to the Fergusson Group (mostly equivalent to what was formerly termed the "Bridge River Group"). This consists of "recrystallized and silicified ribbon cherts", with "intercalated pyllites, micaceous schists and thin marble bands" (Church et al, 1988). These rocks have been highly deformed and metamorphosed. This unit locally



Geology from Church, et al, 1988

(See Figure 3b for legend)

GOLDEN RULE RESOURCES LTD.	
GOLDBRIDGE PROJECT (URAL CLAIMS) BRITISH COLUMBIA	
REGIONAL GEOLOGY	
Date:	N.T.S.: 92-J-15/92-0-2
Revised:	FIGURE 3a
Scale: 1:250,000	

LEGEND
BEDDED ROCKS

TERTIARY

7 *(Miocene?) "Plateau Volcanics", basaltic lavas and breccias*

6 *(Eocene?) Lavas, pyroclastics and minor sedimentary rocks*

LOWER CRETACEOUS

5 TAYLOR CREEK GROUP: *mostly boulder and pebble conglomerate and sandstone with some intercalated shale marker beds (sh) and volcanics (v)*

UPPER JURASSIC

4 RELAY MOUNTAIN GROUP: *buchia-bearing grey shales, siltstones, tuffaceous and polymictic conglomerate*

UPPER TRIASSIC

3 CADWALLADER GROUP: *comprising the Pioneer Formation (3p) consisting of basaltic pillow lava, aquagene breccia, tuffs and amygdaloidal lava, and the Hurley Formation (3h) consisting of brown, black and green argillites (siliceous and calcareous) with sandstones, polymictic conglomerates and limestone marker beds (ls); inclusive of all or part of Noel argillites*

PALEOZOIC

2 *(Permian?) dark argillites, turbidites previously assigned to the Noel Formation*

1 FERGUSSON GROUP: *mostly ribbon chert (lc), phyllite ranging to biotite quartz gneiss, some marble (m) marker bands, chloritic schist, and fine grained amphibolite (la)*

INTRUSIVE IGNEOUS ROCKS

TERTIARY

REX PEAK PORPHYRY: *a felsic phase of the (Eocene) Mission Ridge pluton*

UPPER CRETACEOUS

COAST PLUTONIC COMPLEX: *biotite and hornblende-bearing diorite, granodiorite and granite stocks and plutons; including the outlying Bendor and Eldorado stocks*

LOWER JURASSIC

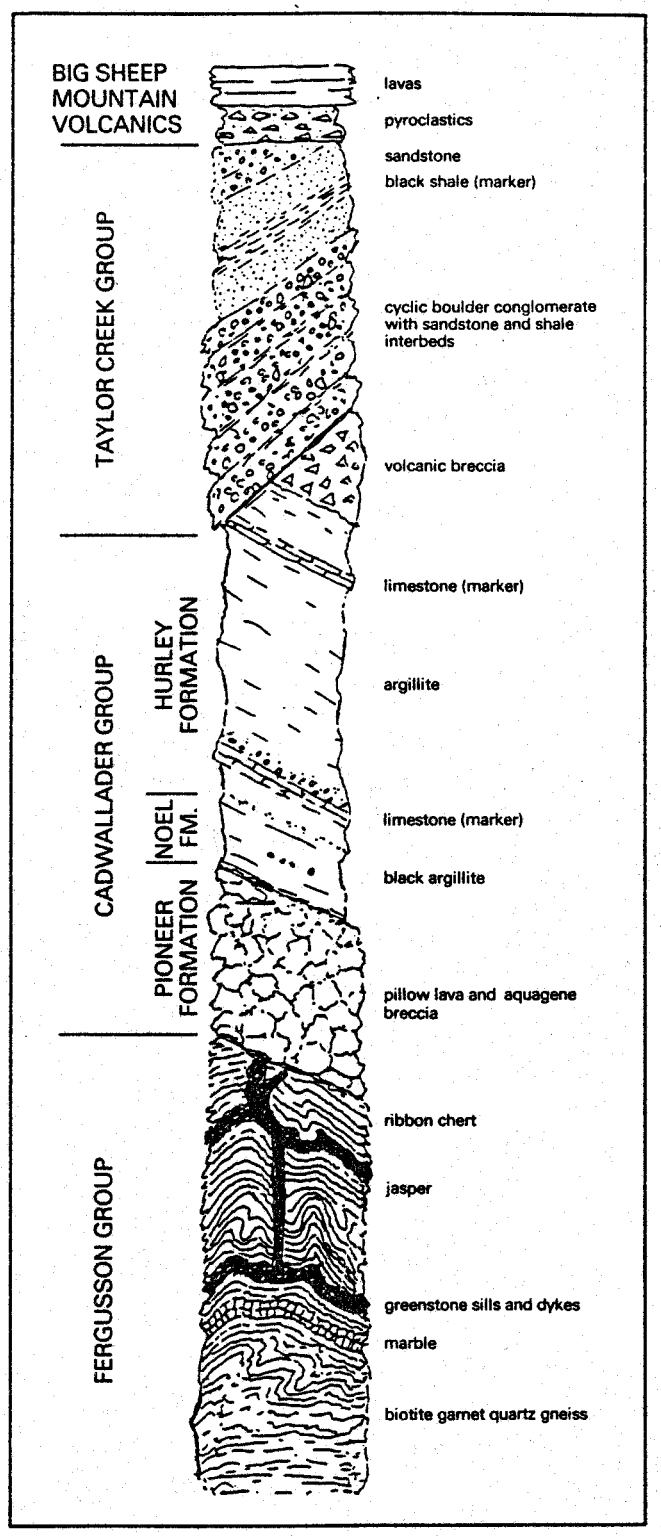
Ultrabasic Rocks: comprising the Shulaps and President hartzburgite, peridotite, dunite, serpentine and listwanite bodies

PALEOZOIC

BRALORNE INTRUSIONS: *heterogeneous fine and medium-grained diorite and gabbro stocks characterized by a reticulation of felsic veinlets*

From Church, et al, 1988.

GOLDEN RULE RESOURCES LTD.	
GOLDBRIDGE PROJECT (URAL CLAIMS) LEGEND FOR REGIONAL GEOLOGY MAP	
Date:	N.T.S.:
Revised:	FIGURE 3b
Scale:	



From Church, 1987a.

GOLDEN RULE RESOURCES LTD.	
GOLDBRIDGE PROJECT (URAL CLAIMS) REGIONAL STRATIGRAPHIC COLUMN	
Date:	N.T.S.:
Revised:	FIGURE 4
Scale:	

contains greenstone sills and dykes. Although Church (1988) does not mention the presence of volcanic rocks, Leitch and Godwin (1986), and Glover et al (1988) list basalts as one component of this group. The Fergusson Group principally or entirely represents a series of cherty oceanic sediments.

The lowermost unit in the Cadwallader Group is the Pioneer Formation, consisting of pillowed and massive mafic lavas and aquagene breccias. The Noel Formation, which in places overlies the Pioneer lavas, consists of fine clastic sediments, and probably does not occur in the vicinity of the Golden Rule property. The uppermost unit in this group is the Hurley Formation, principally comprising argillite and cherty argillite, with lesser amounts of siltstone, sandstone, limestone, calcarenite, and polymictic conglomerate. There are also coarse volcanic breccias in the upper part of the Hurley succession, but there is no mention of volcanic flows in these recent references. Two fold episodes are recorded in the Hurley rocks, which are notably much less deformed than the Fergusson Group cherts. The Fergusson and Cadwallader Groups have been considered by some authors to collectively comprise the "Bridge River Terrane" (Church et al, 1988).

The Taylor Creek Group, believed to be of marine origin, consists mainly of conglomerate, with lesser siltstone, shale, and a few volcanic rocks. Clasts in the conglomerate are mostly chert, with minor sandstone, shale, and a few igneous rocks, but with no granitic clasts. This unit generally exhibits steep westerly dips, but is not demonstrably folded.

Two principal fault sets occur in the region. A north trending group represents a tensional regime separating horst and graben blocks. The second, northwest set represents the principal shear direction (Church, 1987a). Faults are frequently accompanied by ultramafic rocks, which are believed to have been emplaced into the structures in a solid state. The ultramafic rocks were subsequently metasomatized in part to produce conspicuous orange carbonate bands known as "listwanites". The effect of all the faulting is to subdivide the area into a large number of individual fault blocks, as suggested on Figure 3.

Harrop and Sinclair (1986) catalogue seventy-one (71) gold/silver occurrences in the Bridge River mining camp. Five achieved significant production, with the overwhelming majority of gold production coming from the Pioneer (41.5 metric tonnes) and Bralorne (87.8 metric tonnes) Mines (Church, 1987a). It is believed that the mineralization is related to the Coast Plutonic Complex: a lateral zonation of deposits peripheral to the plutons has been recognized, and lead isotope data also support this interpretation. The large number of faults in the region have been deemed important as channels for auriferous hydrothermal fluids, and as sites of gold deposition. At the

Bralorne and Pioneer Mines, gold-arsenopyrite veins are concentrated in tensional features in the relatively competent Bralorne intrusions and Pioneer Formation volcanics. Gold veins in the region appear especially rich when in proximity to ultramafic bodies (Church, 1987a). Harrop and Sinclair (1986) divide all prospects in the region into two populations based on Au:Ag ratios, with a threshold value of 1.5 to 2; both major producers fall into the high Au:Ag category.

A closer analogue to mineralization on the Ural property (both in terms of distance and geology) may be the Congress deposit. Geology here is briefly described by Church (1987a): "At the Congress Mine, mineralization is characterized by an abundance of stibnite, arsenopyrite, and some cinnabar associated with ankeritic alteration and quartz lenses in shears. The host rocks include fissured Tertiary porphyry dykes. The deposit is distal to local granitic intrusions." Congress is classified by Harrop and Sinclair (1986) as belonging to a higher Au/Ag category, which would differ from both Lucky Strike and Lucky Gem. Harrop and Sinclair (1986) also distinguish Congress from the Bralorne and Pioneer types, on the basis of its lesser dependence on lithological controls. The Congress deposit has been re-examined over the last several years, and is currently in an advanced stage of exploration and evaluation.

IX PROPERTY GEOLOGY

i Introduction

The geology of a large portion of this property is shown on Figure 5, at a scale of 1:5000. The orthophoto base for this map also illustrates the topography and vegetation of the area. This map indicates the interpretive problems caused by relatively poor outcrop exposure. Outcrops are numerous enough to demonstrate the structural complexity of the region, but too few to allow resolution of all of these problems. A further difficulty is that alteration is at times so intense that it obscures lithological details. The effect of this on the interpretation is increased because alteration is most intense at important sites such as the vicinities of fault zones and mineralized veins. Table 3 is a Table of Formations present on the property.

ii Lithology

a) Fergusson Group

Rocks mapped as Fergusson Group in 1988 generally correspond with the "Bridge River sediments" described in previous assessment reports on the property. These are overwhelmingly cherty in composition. Massive chert predominates, but exposures

TABLE OF FORMATIONS TABLE 3

Mesozoic to Cenozoic

A variety of mafic and felsic dykes.

Cenozoic

Paleocene

Eldorado Stock: granodiorite or quartz-diorite

---------- INTRUSIVE CONTACT ----------

Mesozoic

Lower Cretaceous

Taylor Creek Formation: chert pebble conglomerate

---------- UNCONFORMITY ----------

Lower Jurassic

Ultramafic Rocks.

---------- INTRUSIVE CONTACT ----------

Upper Triassic

Cadwallader Group

- Hurley Formation: thin bedded fine clastic sediments; limestone; polymictic conglomerate
- Pioneer Formation: basalt

---------- UNCONFORMITY ----------

Paleozoic

Fergusson Group: chert, minor argillite, conglomerate, basaltic dykes

showing contorted chert layers several centimeters thick are also widespread. Both types can occur in the same outcrop. The layered cherts at times have thin argillite partings, and interbedded chert granule and chert pebble conglomerates were noted in one exposure. Basalt dykes are sometimes encountered in this unit; these appear very similar to flows assigned to the Pioneer Formation. Rocks of this formation underlie a large portion of the southern part of the map area. The unit's age is described only as "Paleozoic" in even the most recent references.

b) Pioneer Formation

One fault block on the southern boundary of the map consists of basalt, with minor chert interbeds. These rocks were assigned to the "Bridge River Group" in previous reports, but are redefined as Pioneer Formation here to conform to regional stratigraphy as outlined by Church (1987a, 1988). As these volcanics are confined to and predominate in one fault block, it is quite possible that they belong to the separate (Pioneer) formation. The unit forms massive, rubbly, brown weathering outcrops. Neither pillows nor pyroclastic textures were observed. A smaller occurrence of basalt in the extreme southwest corner of the map has also been assigned to this unit.

If correctly identified, these rocks belong to the Upper Triassic Cadwallader Group, along with the more extensive Hurley Formation sediments. Alternatively, they may comprise part of the Fergusson Group.

c) Hurley Formation

Rocks assigned to this formation occur along the western side of the map, and on the ridge across the valley to the east of the Lucky Strike showing. These are primarily thin-bedded, fine clastic sediments. Limestone interbeds were observed at several locations, notably in the Lucky Gem area. A conspicuous, resistant limestone lens occurs on a ridge in the southwest corner of the map, and is assigned to the Hurley Formation on the basis of associated thin-bedded siltstones. Beds of polymictic conglomerate occur in the southeast corner of the Lucky Strike grid and elsewhere.

d) Taylor Creek Formation

Two large, cliffy outcrops of this unit appear on the edge of the map east of Lucky Strike. The northernmost one was checked in detail and found to consist of chert pebble conglomerate. The thick bedding in this unit, which dips about 40 degrees to the west, is most clearly visible from a distance. When viewed at close range, the conglomerate appears massive,

with few or no visible bedding features. Beds are several meters thick. The Taylor Creek Formation is considered to be of Lower Cretaceous age.

e) Ultramafic Rocks

Large bodies of ultramafic rocks occur west and northwest of the Lucky Strike showing. Narrower bodies occur along fault zones elsewhere on the property. Where relatively unaltered, these comprise dark grey-green rocks which are a conspicuous medium green colour on the weathered surface. These have been largely serpentinized, and therefore contain abundant magnetite; most strongly attract the hand magnet.

Many of these ultramafic rocks in the immediate vicinities of fault zones have been metasomatized to "listwanites". This is an ankeritic alteration, with subsequent near-surface limonite formed by weathering of the iron-carbonate. Chromian micas are also sometimes present. Silicification consists of stockworks of thin quartz or chalcedony veinlets. These rocks generally do not attract the hand magnet. Listwanite outcrops have a conspicuous orange weathering colour. Other rock types have also been subjected to iron-carbonate metasomatism, however, so that care must be exercised in determining original lithologies.

These ultramafic rocks are probably correlative with the Lower Jurassic President ultramafics in the Bralorne Area.

f) Eldorado Stock

This stock occurs across the northern part of the map area. This is an equigranular, unfoliated, medium-crystalline granitoid that carries quartz, biotite, and hornblende. In hand specimen, it appears that plagioclase is by far the most abundant feldspar, making this a granodiorite or quartzdiorite. An age of 63.7 Ma (Paleocene) was reportedly obtained by the G.S.C. for this pluton (Church, 1988). This is considered a satellite pluton to the Coast Plutonic Complex, which ranges from Upper Cretaceous to Lower Tertiary in age.

Three small dykes or pipes of granodiorite occur in southern Taylor Basin, and a petrographic report on a highly altered specimen adjacent to the Lucky Gem vein describes altered quartzdiorite (specimen GP-03, Appendix 1). There is a suggestion, therefore, that the pluton may be more extensive at depth to the south of its main outcrop area.

g) Mafic Plugs and Dykes

A number of bodies of this type are present, particularly in the Lucky Strike area.

Two basaltic outcrops occur uphill from the Lucky Strike No.1 adit. There is no unequivocal evidence as to whether these represent a flow or a dyke. This lithology is distinctive from the Pioneer lavas, principally in that it is much fresher. The fact that only two smallish outcrops are present suggests that this is a dyke, but the possibility of it being a flow cannot be entirely discounted. A specimen collected for petrography (GP-01, Appendix 1) was described as "hypobyssal basalt", indicating that it could be either a shallow dyke or a flow. The exact relationship of this intrusion to stratigraphic units in the area is unknown.

Massive, aphanitic, medium green mafic plugs were also recognized. Three of these occur west and north of Lucky Strike, where they intrude Fergusson Group rocks. These may be related to the Pioneer basalts, but this is unproven.

h) Felsic Dykes

Many felsic dykes have been recognized. They are usually porphyritic, with phenocrysts of feldspar, quartz, or hornblende. Dykes range from a few tens of centimeters to several meters in width, and usually cannot be traced over any great strike extent. Many examples seen in the field were too small to be noted on the map. None was observed to cut the Eldorado Stock, but it is assumed that most are of a similar age or younger.

iii) Structural Geology

a) Folding

The Fergusson Group cherts, where bedding can be determined, are seen to be highly contorted and deformed. No sensible fold patterns can be discerned, even locally, as bedding attitudes literally point all over the map. Minor folds observed in these rocks also have a variety of orientations. This phenomenon was also noted by Church (1987a), who ascribed it to: "i) the presence of primary slump folding; ii) deformation at the irregular margins of the granitic plutons; and iii) rotation of beds by repeated episodes of faulting".

Bedding attitudes in the Hurley sediments are much more regular. Two east-northeast trending folds have been recognized in this unit: i) a syncline northeast of Lucky Gem; and ii) an anticline east of Lucky Strike (Figure 5).

The Taylor Creek Formation conglomerates are not demonstrably folded within the map area, but display a uniform westerly dip, possibly due to fault rotation.

b) Faulting

Many faults have been identified or inferred by the mapping program. With one possible exception, all are normal faults. Other faults are undoubtedly present, but have gone unnoticed because of poor exposure. Some of the more significant structures will be discussed in the following paragraphs.

All large exposures of the Eldorado Stock occur north of a lineament that runs along Taylor Creek, and which can be extended to the Taylor - Eldorado divide, and possibly as far as the Lucky Gem area. The strike of this feature is almost due east-west. Since the intrusive pluton is exposed on its north side, it is assumed that movement was south side down.

A steeply dipping, northeast trending fault crosses the entire Ural 7 claim, where it is occupied by a 50 m to 90 m wide ultramafic body. The fault can be traced across Eldorado Creek to the northeast, where it forms the contact between a wider ultramafic body and Hurley sediments. On Ural 7, this fault zone separates Hurley Formation units on the west from Fergusson Group rocks to the east. Some listwanites are present in the ultramafic unit. The previously detected soil geochemical anomaly on the Ural 7 grid follows the trend of this fault, generally falling on the eastern side in the area underlain by Fergusson Group rocks. The anomaly is strongest in the vicinity of a parallel, poorly exposed feldspar porphyry dyke. The main fault is certainly near-vertical in attitude, and cannot be a thrust as described in previous reports on the property.

Several chert/ultramafic contacts west and north of Lucky Strike represent a system of north trending faults. The Lucky Strike mineralization occurs in close proximity to one of these, and the basaltic dyke described earlier also follows this trend. Outcrop is too sparse to accurately determine the structural situation in this area.

The east-northeast striking fault that runs along line 12+00N of the Lucky Strike grid is documented by numerous abrupt changes in lithology as shown on the geology map. An east dipping fault in the cirque headwall southeast of the Lucky Strike grid must be a normal fault, as younger rocks of the Hurley Formation occur in the hanging wall, with older Fergusson sediments in the footwall.

A wide breccia and alteration zone follows the ridge on the east side of the property south of Taylor Creek. The geology here is complex, with Fergusson, Hurley, and Taylor Creek strata all adjacent to this north trending structure. Carbonate altered rocks occur intermittently along this feature, attaining a width of about 50 m near Taylor Creek. The protolith for these metasomatized rocks is usually not apparent; ultramafic rocks

have not been positively identified here, although they may occur. In the central part of the ridge, a tectonic breccia of Hurley rocks with carbonate matrix has been identified. It is important to note that the very large multi-element soil anomaly (Taylor East Anomaly) reported by previous workers occurs down slope to the west of this fault zone.

An "assumed" thrust fault is shown to separate Taylor Creek and Fergusson rocks to the east of the fault zone described above. Alternatively, a normal fault could be drawn in almost the same position. The thrust interpretation is preferred for now as it best explains the author's field observations on the ridge on the south side of the cirque. Re-examination of this area under summer conditions may elucidate the nature of this fault.

North-south faults may be important hosts of gold mineralization in this region. The veins at Lucky Strike and Lucky Gem both occupy structures of this orientation. The Lucky Strike trend can be extended north to the vicinity of the Northern Lights No.2 adit, and it is believed that the veins exposed near Northern Lights No.1 also approximately follow a north-south trend.

iv) Metamorphism

Metamorphic effects in the area have been minimal, with the possible exception of recrystallization of Fergusson Group cherts. Metamorphic textures, minerals, or foliations have not been observed.

X ECONOMIC GEOLOGY

i) Lucky Strike Occurrence

Figure 6 is a 1:1000 scale geology map of the Lucky Strike grid. Outcrop is not abundant here, and the locations of many of the contacts are speculative. Mineralization occurs in proximity to a fault contact between listwanite on the west, and Fergusson Group cherts to the east. This contact is offset by a cross-fault about 100 m south of the No.2 adit. The cherts to the east of the fault have been described in previous reports as "silicified argillites", and this cannot be entirely discounted in the absence of petrographic data. However, the siliceous rocks do not differ greatly in aspect from massive Fergusson cherts which are common in this part of the property (here they are orange due to minor ankerite, with black quartz veinlets). The problems in interpretation of the basaltic rocks around the No.1 adit have already been discussed: the interpretation favoured here is that this body is a dyke.

The mineralized zone follows a fine grained, compact, light grey felsite dyke about 2 m wide. The dyke carries traces of sulphide minerals and quartz-sulphide veins. Pods of massive sulphide occur locally along the dyke contacts. Sulphide minerals include pyrite, chalcopyrite, galena, sphalerite, and arsenopyrite, in association with quartz and ankerite. Similar material occurs on the No.1 adit dump. The massive sulphides almost invariably return gold assays in the range of 1 to 15 grams/metric tonne (samples G-01, G-04, G-05 and G-16, Appendix 2). Massive sulphide samples have returned silver analyses to 68 g/tonne, arsenic in excess of 18%, antimony to 8.5%, lead to 7.9%, zinc to 23%, and anomalous mercury (Appendix 2). Samples of the dyke run very much lower, with gold values of 934 ppb in G-03 (this sample carries some quartz-sulphide material), and 62 ppb Au in G-17. The massive sulphide pods are never more than a meter or two long by 10 cm to 20 cm wide, and overall grades over mineable widths are undoubtedly subeconomic in exposed parts of the structure. This dyke has been traced over a strike length of about 120 m.

The No.2 adit was driven on a massive sulphide vein, which measures 8 cm to 20 cm wide at the portal. Samples G-02, collected from the dump, and G-15, from the vein, assayed 32.8 and 45.2 g/tonne gold, respectively; G-02 also contained 98 g/tonne silver, G-15 has 212 g/tonne silver, and both returned high arsenic, antimony, lead, and zinc. Sample G-14, collected from altered wall rock adjacent to the vein, returned only 32 ppb gold, and 1190 ppm arsenic. This vein, as exposed, is too narrow to be economic.

The Lucky Strike No.1 adit portal is at the bottom of the slope, an estimated 60 m lower in elevation than the exposed mineralization. The two basaltic outcrops occur about a third of the distance up the hill from the adit. The portal was collared in basalt, but material on the top of the dump consists of chert, carbonate, and sulphides. These observations indicate that the western contact of the basalt was crossed by the workings, and that this contact must be relatively steeply dipping. From the occurrence of massive sulphide material on the dump, it is apparent that the mineralized zone has a minimum vertical extent of about 60 m. The review of the old data by Fox (1981) suggests that the drift along the mineralized structure encountered good gold grades (0.20 to 1.3 oz/ton) over a strike length of about 12 m, and widths varying from 15 cm to 229 cm. Extensions of the drift to the south of this shoot failed to encounter gold in economic quantities.

The No.2 adit portal is located at a higher elevation near the ridge crest, so work there did not test any great vertical extent of mineralization.

The Lucky Strike zone, if projected north along strike, would come very close to the Northern Lights No.2 adit (Figure 5). The total distance from the cross-fault at the south end of Lucky Strike, to Northern Lights No.2, is about 800 m, of which 550 m is on the Golden Rule property. There is little or no exposure over most of this distance, so the economic potential must be regarded as unproven, but also untested. It was hoped that the geophysical survey could define structures in this area; those results are discussed in a separate section of this report.

ii) Lucky Gem Occurrence

This occurrence is located on a steep south-facing slope to the north of Eldorado Creek. Outcrop is almost absent here, with most exposures, even in trenches, being only a few meters in dimension. Figure 7 is a 1:1000 scale map of the area. A number of old trenches are visible, with most of them trending down the (north-south) fall line of the slope, approximately parallel to the strike of the known veins. Only one large trench cuts across this trend. One adit portal is still recognizable, and one or two caved pits may represent the sites of former adits.

Most of the small scattered outcrops to the west of the adit are identifiable as Hurley Formation sediments. Thin-bedded argillite and calcareous beds have been noted. Sample GP-02, submitted for petrography, was described as an "altered tuffaceous mudstone" (Appendix 1). This rock carried thin layers of "fine dacitic lithic tuff".

The easternmost trench passes close to the adit; this trench is filled with carbonate rubble, especially in the area below the adit. The protolith for this altered rock is not obvious in hand specimen, but was described by the petrographer as "quartzdiorite" (specimen GP-03, Appendix 1). The alteration assemblage consists of ankerite, kaolinite, and chlorite. Only quartz is unaltered, but pseudomorphs of hornblende, biotite, and plagioclase were identified. This interpretation is quite believable, as this description fits lithology visible in fresh exposures of the nearby Eldorado Stock. The thin section also revealed veins up to 6 mm wide, consisting of ankerite, with lesser quantities of kaolinite, and very minor quartz. Whether this granitic body is a dyke, or whether it represents the western contact of the larger Eldorado Stock is unknown, given the complete absence of outcrop on the hillside to the east. Exposures of the main body of the stock occur only 150 m to 200 m to the north, as shown on Figure 5.

The mineralized vein is exposed at the adit portal, where it is seen to strike 150 degrees, with a dip of about 80 degrees west. The west side of the zone, 40 cm to 60 cm wide, is a brecciated, gossanous shear zone, carrying occasional clasts of massive arsenopyrite to 30 cm across. The east side, about 50 cm

wide, consists of light coloured, vuggy quartz carrying arsenopyrite and arsenopyrite bloom. Chip samples were collected across the width of both parts of the zone: G-10, from the east side, ran 5.68 g/tonne Au, 11.4 g/tonne Ag, and 27% As; G-11, from the west side, ran 1.8 g/tonne Au, 47 g/tonne Ag, and 0.58% As. Elevated levels of Cu, Zn, Sb, Hg, Zn, and Pb are present, but in much lower quantities than at Lucky Strike (Appendix 2). Wall rocks to this vein consist of metasomatized granitic rocks as described earlier.

Another vein is exposed at the upper end of the easternmost trench. The mineralization consists of white, punky, vuggy quartz and white, powdery, oxidized arsenopyrite. The vein is 50 cm wide, strikes directly into the hillside at 355 degrees, and dips between vertical and 80 degrees west. Wall rocks are very limonitic and ankeritic, and probably also represent metasomatized granitoid. A composite sample from this vein (G-13, Appendix 2) ran 0.266 g/tonne Au, 1.38 g/tonne Ag, and 8.7% As.

A narrow oxidized vein is exposed in a road cut 35 m west of the adit. Quartz constitutes 50% of the vein, with limonitic gossan comprising the remainder. The attitude and width of this vein could not be determined, owing to very rubbly exposure. A composite sample (G-12) ran 2.92 g/tonne Au, 28.0 g/tonne Ag, and 10.6% As.

Three float samples, G-06, G-07, and G-09 were collected from mineralized rubble on the lower dump, and in the gully below the adit; their original source was probably the underground workings. These consist mainly of pyrite and arsenopyrite in a quartz gangue. Gold analyses were 10.4 g/tonne, 19.0 g/tonne, and 9.9 g/tonne, with silver ranging from 39.0 to 146.0 g/tonne, and arsenic from 14.4% to 30.0%. G-07 also analyzed 1.4% copper. Again, antimony, lead and zinc contents were all very much lower than at Lucky Strike. One float sample of ankeritic wall rock (G-08) was also analyzed, returning 74 ppb gold.

The Lucky Gem occurrence is very similar to mineralization at the Northern Lights No.1 showing, located about 1800 m to the east (on claims not controlled by Golden Rule). Veins at Northern Lights No.1 also: i) are associated with ankeritic alteration in granodiorite; ii) consist of quartz with abundant arsenopyrite; and iii) strike in a northerly direction. A sample from the Northern Lights dump ran 20.4 g/tonne Au, 94.8 g/tonne Ag, and 8.3% As (Appendix 2).

iii) Other Sampled Localities

A few samples were collected from veins encountered elsewhere on the property, as shown on Figure 5. With one exception, these were found to contain only a few ppb Au. This

mirrors historic results on the property, where dozens of samples have been collected with very little encouragement (assessment reports). The exception is sample G-18, collected near the southeast corner of the Lucky Strike grid from a felsite dyke carrying disseminated (3%) sphalerite that ran 308 ppb Au.

iv) Other Reported Occurrences

The compilation map of Fox (1981) indicates a mercury occurrence on the main ridge 1000 m south of Lucky Strike, and a "pyrrhotite skarn" 1000 m northeast of the adit, along Taylor Creek. These showings were not relocated in 1988, and are consequently omitted from the geology map.

Another mercury occurrence is present near the headwaters of North Cinnabar Creek, outside of the property boundary, about 4 km southeast of Lucky Strike (Roddick and Hutchison, 1973; Church 1987a). According to the latter reference, "cinnabar and native mercury occur with calcite in a fissure system near the contact of the Fergusson and Cadwallader Groups".

v) Discussion

Two distinctive types of gold mineralization occur in this area: polymetallic massive sulphides with relatively minor quantities of quartz gangue (Lucky Strike No.1 and No.2, possibly Northern Lights No.2); and quartz-arsenopyrite veins, so far only known from granitic host rocks (Lucky Gem, Northern Lights No.2). The two types have some common characteristics: i) silver content exceeds that of gold; ii) mineralized zones occur in close proximity to intense iron-carbonate alteration; and iii) mineralization occurs in northerly trending faults and shears.

Although the iron-carbonate metasomatism is most conspicuous in ultramafic rocks, it is also present in other lithologies. Samples of this altered material near auriferous veins indicate that it carries geochemically anomalous, but uneconomic quantities of gold. All known gold mineralization occurs in proximity to carbonate alteration, but all alteration zones do not necessarily carry auriferous veins. The occurrence of precious metals veins and associated alteration within the Eldorado Stock indicates that the mineralizing event occurred after the pluton had solidified. If the Coast Plutonic Complex is related to the precious metals, then the activating plutonic phase must be younger than the Eldorado Stock. Association of Lucky Strike with a felsite dyke suggests that the numerous felsic dykes in the area may have been important in this regard. It has already been noted that extensional faults in this region tend to have northerly strikes; the preference of gold-bearing veins for structures of this orientation is therefore not surprising.

The Ural 7 and Taylor East geochemical anomalies both occur in proximity to major fault zones that display iron-carbonate alteration. These zones are the obvious places to search for any related mineralization.

XI GEOPHYSICS

Approximately 8 km each of magnetic and VLF surveying was conducted by the contractor on the Lucky Strike grid. Magnetic readings were taken at intervals of 12.5 m, and VLF data at 25 m, on all east-west grid lines.

Magnetic data were collected with a Scintrex MF-2 fluxgate magnetometer. It is obvious from the field notes and from the explanation of procedures left by the operator that he did not know how to properly use this instrument. The data are considered unrecoverable and hence, worthless. This development is very disappointing, as it was hoped that the expected high magnetic gradients at ultramafic contacts would elucidate the structure in this area. The results of this survey are not included with this report, due to their dubious quality.

The VLF-EM data were collected with a Sabre receiver, using the transmitter at Seattle, Washington. The author of this report is not familiar with this instrument, and is therefore not qualified to interpret the results. The geophysical operator indicated his interpretation of conductor locations (reproduced here as Figures 8a and 8b). The major conductor axis correlates very well with the trend of the mineralized dyke, and extends 300 m further north under a covered interval. The conductor as interpreted is interrupted along line 17+00N, precisely where a cross-fault was noted in mapping. These data should be evaluated by a geophysicist who is familiar with the Sabre instrument.

XII CONCLUSIONS

i) Stratified rocks on the property belong to three major packages: a) the Fergusson Group (Paleozoic) consisting of siliceous oceanic sediments (cherts); b) the Upper Triassic Cadwallader Group, comprising Pioneer Formation basalts and Hurley Formation sediments; and c) Lower Cretaceous Taylor Creek Formation chert pebble conglomerates.

ii) Intrusive rocks in the area consist of: a) ultramafic rocks probably of Lower Jurassic age, commonly emplaced along fault zones; b) the Eldorado Stock, granodiorite of Paleocene age, which is a satellite of the Coast

Plutonic Complex; c) hypabyssal mafic plugs and dykes of uncertain affinities; and d) large numbers of small felsic dykes.

iii) Fold deformation is most intense in the Fergusson Group, is less so in the Cadwallader Group, and is probably non-existent in rocks of the Taylor Creek Formation.

iv) Many faults on all scales were identified by the geological mapping; with one possible exception, all are normal faults. Other faults probably occur in covered areas.

v) Metamorphic effects have been minimal.

vi) Iron carbonate-kaolinite alteration has been identified in fault zones from several locations. This is most spectacular in ultramafic rocks, but occurs in other lithologies as well. All known gold mineralization occurs in proximity to such alteration, but all alteration zones do not necessarily carry auriferous veins. This alteration seems to be best developed in north trending fault zones.

vii) The Lucky Strike showing occurs along a north trending contact between ultramafic rocks and siliceous sediments (probably Fergusson Group). The showing consists primarily of pods of polymetallic massive sulphides associated with a felsite dyke. A second parallel zone comprises a narrow massive sulphide vein. Grades of over one ounce/ton gold, and three ounces per ton silver, were obtained from massive sulphides. Several percent arsenic, zinc, antimony, and lead also occur in these specimens. The massive sulphide pods tend to be narrow and discontinuous, however,and the sparsely mineralized dyke, which is continuous, returns much lower grades. This zone was traced over a strike length of about 120 m.

viii) Mineralization at the Lucky Gem area is exposed in three small showings. Veins strike northerly, and occur near the contact between Hurley Formation sediments, and extremely altered rocks with a presumed granitic protolith. The largest vein varies from 100 cm to 120 cm in width; two chip samples across the zone returned 5.68 g/tonne Au and 11.4 g/tonne Ag over 60 cm, and 1.8 g/tonne Au and 47.0 g/tonne Ag over 40 cm. Float down slope from an adit driven on the above showing, and probably derived from it, ran up to 19.0 g/tonne Au and 146 g/tonne Ag. Arsenic content is very high, usually in the range of 10% to 30%. In contrast

to Lucky Strike, however, other metals such as zinc, lead, and antimony are very much lower, and the amount of quartz gangue is greater (usually 50% or more). The other two vein exposures at Lucky Gem are similar in aspect to the above description.

ix) Veins at the Northern Lights No.1 adit (on claims excluded from the Golden Rule property) are believed to be very similar in almost all respects to those at Lucky Gem. The principal difference is that Northern Lights No.1 occurs entirely within the Eldorado Stock.

x) The Lucky Strike occurrence projects along strike to the north, to the immediate vicinity of the Northern Lights No.2 adit (which occurs on claims excluded from the Golden Rule property). This suggests a potential zone of interest at least 800 m long, with about 550 m of this occurring on Golden Rule property.

xi) Previous work defined a soil and talus fines geochemical anomaly on the mountainside opposite (to the east of) the Lucky Strike occurrence ("Taylor East Anomaly"). A major fault zone, with much associated ankeritic alteration, occurs along the spine of this ridge, upslope from the anomaly. No gold occurrences are known from this zone, but it remains the most likely source of the anomalous metals.

xii) A second multi-element geochemical anomaly on the Ural 7 claim is also in proximity to a major fault and associated ankeritic metasomatism. Again, no precious metals showings are known, but this fault zone remains an attractive target.

xiii) Magnetic data were collected incorrectly by the contractor and are of no value. A VLF-EM anomaly appears to follow the trend of the Lucky Strike mineralization.

XIII RECOMMENDATIONS

i) Further surface exploration should be explicitly directed to identifying drill targets. The project is at the stage where it is necessary to seriously determine whether this property has economic potential.

ii) Four (4) areas warrant detailed examination, including diamond drilling: a) the Lucky Strike Zone; b) the Lucky Gem Zone; c) the Fault Zone on the Ural 7 Claim; and d) the Fault Zone uphill from the Taylor East geochemical anomaly.

iii) Drill targets should be selected, in part, on the basis of indirect methods such as geochemistry and geophysics, because: a) outcrop exposures along some zones of interest are poor or non-existent; b) no surface mineralization is known from the two fault zones, necessitating the selection of blind targets at depth; and c) some of these zones are too large to be economically tested by a pattern of regularly spaced drill holes.

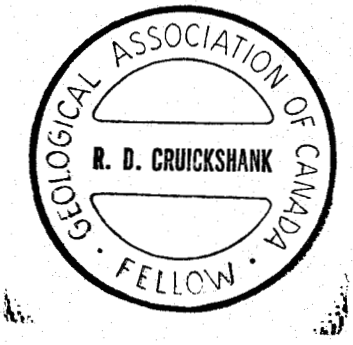
iv) Detailed prospecting and rock sampling should be conducted over these zones, except possibly Lucky Gem (which has very little exposure).

v) The historic geochemical data should be reviewed in detail, with the specific objective of identifying drill targets. Where such targets cannot be relocated by the previous field grid, some resampling should be conducted in the immediate vicinity. During this review, consideration should be given to sampling in detail the Lucky Gem area, which has received only reconnaissance scale coverage in the past.

vi) A geophysicist should be consulted about the most effective surveys for the areas of interest. Given the involvement of ultramafic rocks in two or three zones, magnetics may be useful in defining contacts, but probably not in selecting individual drill targets. The rather heavy metallic mineralization associated with known gold occurrences suggests that some direct method of detecting sulphides would be most useful in spotting drill holes. Induced polarization surveys may be useful in this regard.

vii) The 1:5000 scale property map should be expanded to cover the entire property. Problem areas identified in this report could be re-examined, and specimens collected for petrographic description as necessary.

viii) Drill targets selected by the above activities should be tested at the earliest possible opportunity.



Respectfully submitted,

R Douglas Cruickshank

R.D. Cruickshank, M.Sc., FGAC

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Bibliographical Note: Early literature concerning the property area is referenced and summarized in Fox (1981).

XV CERTIFICATE

1). My name is Roy Douglas Cruickshank, of 224 Ranchview Place, N.W., Calgary, Alberta.

2). I received a B.Sc. (hons.) degree in geology from the University of Calgary in 1969, and a M.Sc. degree in geology (Metamorphic Petrology) from the same institution in 1976.

3). I have practiced my profession as a mineral exploration geologist from 1969 to 1971, and continuously since 1976.

4). I am a Fellow of the Geological Association of Canada.

5). I am the author of the report entitled "Geological and Geophysical Report, Gold Bridge Project (Ural Claim Group), Lillooet Mining Division".

6). This report is based on the references cited in the bibliography, on geophysical data supplied by an independent contractor, and on personal examination of the property on August 2, 1988 and from September 14 to 28, 1988.

7). I am employed on a contract basis by Golden Rule Resources Ltd. I have no interest in the securities of Golden Rule Resources Ltd., nor do I expect to receive any.

GEOLOGICAL ASSOCIATION OF CANADA
R. D. CRUICKSHANK
FELLOW

R Douglas Cruickshank

R.D.Cruickshank, M.Sc., FGAC
November 9, 1988

XVI EXPENDITURES

Gold Bridge Property (Ural Claims)

Expenses incurred between July 30, 1988 and January 31, 1989 to be applied for assessment credit.

Salaries (R.D.Cruickshank)	
Office (preparation and reporting) 12 days @ $180/day	$ 2,160.00
Field 19 days @ $200/day	3,800.00
Subtotal:	5,960.00
Laboratory Analyses	
Thirteen rocks for Au, Ag, Pt, As, Sb, Hg, Te, Cu, Pb, Zn, Ni, Co, Cr @ $34.50	448.50
Nine rocks for Au, Ag, Cu, Pb, As, Sb, Hg @ $27.20	244.80
Subtotal:	693.30
Air Charter	
Helicopter: 6.0 hours @ $622/hour	3,732.00
Subtotal:	3,732.00
Contractor Costs	
Linecutting and picketing (12.6 km)	4,228.54
VLF-EM (8.0 km)	1,101.75
Subtotal:	5,330.29
Field Expenses	
Truck Rental	1,080.00
Food/Lodging/Gasoline	1,586.02
Subtotal:	2,666.02
Miscellaneous	
Orthophotos (1:5000 scale)	2,368.36
Word Processing	475.63
Drafting 110 hours @ $25/hour	2,750.00
Reproduction	216.49
Subtotal:	5,810.43
TOTAL EXPENSES:	**$24,192.09**

A P P E N D I X 1

PETROGRAPHIC DESCRIPTIONS

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
VOX 1JO

PHONE (604) 888-1323

Report for: **Doug Cruickshank**
Golden Rule Resources, Ltd.,
410 - 1122 4th Street S.W.,
CALGARY, Alberta, T2R 1M1

Invoice 7723
October 1988

Project: **GR-BC-6**

Samples: GP- 1, -2, -3

Summary:

GP-1 Porphyritic hypabyssal basalt with clinopyroxene phenocrysts, reaction rims of tremolite and interstitial plagioclase, chlorite and much less calcite/ankerite. It is cut by a zone of strong cataclastic deformation in which the rock was granulated, and replaced mainly by epidote (after plagioclase) and lesser chlorite (after mafic grains). Late replacement patches in the sheared zone consist of calcite and an unknown calc-silicate, which is similar to tremolite but has parallel extinction and length-fast character.

GP-2 Layered tuffaceous mudstone, dominated by mudstone composed of sericite-(Ti-oxide?) with sericite and minor chlorite-kaolinite lenses. It contains lesser beds of fine dacite lithic tuff, with fragments of mudstone/ash tuff, plagioclase, quartz, and apatite in a groundmass of sericite-chlorite-kaolinite-(opaque). Discontinuous veinlets are of quartz and of limonite-(kaolinite).

GP-3 Strongly altered, medium grained hornblende quartz diorite. Plagioclase is altered to kaolinite-ankerite, hornblende to ankerite-(kaolinite-limonite) or quartz-(ankerite-limonite); and biotite to chlorite/kaolinite-limonite with patches of quartz and of ankerite. Disseminated sulfides include pyrite, marcasite (after pyrrhotite) and a trace of chalcopyrite. Some sulfide patches are replaced on borders and fractures by limonite. Veins are of ankerite with interstitial lenses of kaolinite and minor quartz. Borders of veins and adjacent host rock commonly show evidence of strong to moderate cataclastic deformation.

John G. Payne

John G. Payne
604-986-2928

Sample GP-1 **Porphyritic Hypabyssal Basalt cut by Zone of Cataclastic Deformation**

The rock contains phenocrysts of clinopyroxene with overgrowths of tremolite/actinolite, in a variable groundmass dominated by plagioclase and chlorite. It is cut by a zone up to 1 cm wide of intense cataclastic deformation in which the rock was granulated, plagioclase was altered to epidote. This zone contains a few patches and lenses of lenses of calcite and an unknown calc-silicate with minor plagioclase and chlorite.

phenocrysts	
clinopyroxene	20-25%
overgrowths	
tremolite/actinolite	17-20
groundmass	
plagioclase	17-20
chlorite	10-12
calcite/ankerite	3- 4
opaque	minor
sheared zone	
epidote	15-17
chlorite	4- 5
replacement patches	
calcite	2- 3
calc-silicate	1- 2

Clinopyroxene forms equant, subhedral; phenocrysts averaging 0.5-1 mm in size. In the freshest part of the rock these commonly have thin reaction rims of tremolite/actinolite. Some grains also contain irregular disseminated replacement patches of tremolite/actinolite. A few grains of clinopyroxene(?) were altered completely to chlorite and minor sericite(?). Elsewhere, clinopyroxene is altered more strongly to tremolite/actinolite. In the shear zone, clinopyroxene is granulated and replaced partly by tremolite/actinolite.

Tremolite/actinolite forms overgrowths on clinopyroxene grains and ragged porphyroblastic grains up to a few mm across. The latter are fractured slightly, and broken into fragments with slightly disoriented extinction.

The groundmass is dominated by anhedral, interlocking plagioclase grains averaging 0.02-0.05 mm in size and patches of chlorite from 0.2-1 mm in size of extremely fine, nearly colorless grains. Calcite forms irregular, in part ragged patches averaging 0.05-0.1 mm in size. Opaque forms a few patches up to 0.2 mm across as disseminated, extremely fine grains.

On the borders of the sheared zone, pyroxene is granulated and replaced by tremolite/actinolite and chlorite. Plagioclase is granulated and replaced by cryptocrystalline epidote. Very little original texture remains in the shear zone, where granulated clinopyroxene and actinolite relics are preserved in a banded, cryptocrystalline to extremely fine grained zone dominated by epidote and chlorite.

Replacement patches mainly in the shear zone are up to a few mm long, and are dominated by fine to medium grained calcite and/or fine grained calc-silicate. The latter is similar to tremolite in optical

Sample GP-2 **Layered Tuffaceous Mudstone; Veinlets of Quartz and of Limonite/Hematite-(Kaolinite)**

The rock is well layered, with most layers dominated by extremely fine grained grains sericite containing flattened lenses of cryptocrystalline sericite and minor ones of chlorite/kaolinite. At one end of the section, layers are moderately coarser grained and contain fragments of mudstone/tuff, plagioclase,quartz, and apatite, in a groundmass dominated by sericite, chlorite, kaolinite, and opaque. A few discontinuous veinlets are of quartz, and later veinlets and veins are of limonite/hematite with lenses of kaolinite.

main layers		veinlets	
sericite	65-70%	quartz	0.3%
sericite lenses	7- 8	limonite/hematite-(kaolinite)	4- 5
kaolinite/chlorite(?)	1- 2		
opaque	1- 2		
limonite	1		
coarser layers			
fragments			
tuff, mudstone	4- 5		
plagioclase	2- 3		
quartz	0.2		
apatite	minor		
groundmass			
sericite	3- 4		
chlorite/kaolinite	3- 4		
opaque	0.5-1		

The main layers are dominated by extremely fine grained sericite, mixed with minor cryptocrystalline Ti-oxide(?) or other semiopaque mineral which gives the sericite a moderately higher relief than in the sericite lenses. Vague fragmental textures are present locally, with fragments(?) averaging 0.05-0.15 mm in size.

Sericite lenses average 0.05-0.12 mm long and are flattened parallel to bedding. They are cryptocrystalline aggregates of equant, colorless grains with low relief. Kaolinite or chlorite forms a few equant to flattened patches up to 0.08 mm in size. Grain size is cryptocrystalline and birefringence is very low.

Quartz forms scattered angular grains averaging 0.02-0.06 mm in size. Chlorite is concentrated locally in patches up to 0.2 mm in size as very fine grains with a pale green color. Opaque is concentrated moderately in some layers as dusty to very fine grained, irregular disseminated grains and clusters.

The coarser layers, up to a few mm in thickness, are of fine dacitic lithic tuff. They contain moderately abundant fragments of mudstone/tuff up to 0.6 mm long, plagioclase up to 0.4 mm long, and much fewer ones of quartz up to 0.2 mm in size, apatite up to 0.3 mm long, and opaque up to 0.1 mm in size. The groundmass is dominated by extremely fine grained kaolinite and sericite, with moderately abundant patches up to 0.2 mm in size of chlorite, commonly containing abundant dusty to extremely fine grained opaque.

Two discontinuous veinlets up to 0.1 mm wide are dominated by fine to very fine grained quartz. A few wispy veinlets up to 0.03 mm wide consist of extremely fine grained quartz.

Late veins and veinlets, in part braided, average 0.05-0.1 mm in width. They are dominated by dense limonite/hematite with minor lenses and patches up to 0.05 mm wide of cryptocrystalline kaolinite.

Sample GP-3 **Altered Quartz Diorite; Veins of Ankerite-Kaolinite-(Quartz); Minor Cataclastic Deformation**

The rock is very strongly altered, with only quartz and locally mafic minerals showing relic primary textures. Plagioclase is replaced completely by kaolinite-ankerite or sericite-(ankerite). Hornblende is replaced completely by ankerite-limonite-kaolinite or quartz-ankerite. Biotite is replaced completely by chlorite-limonite-(quartz-ankerite). Pyrite and marcasite form disseminated grains. Broad veins up to 6 mm wide are dominated by ankerite with much less kaolinite and minor quartz. Borders of veins and adjacent host rock commonly were deformed by brecciation and granulation.

plagioclase	30-35	vein	
hornblende	17-20	ankerite	25-30%
quartz	10-12	kaolinite	4- 5
biotite	1	quartz	0.5
Ti-oxide	0.3	secondary	
pyrite	0.3	limonite	2- 3
marcasite	0.2		
zircon	trace		

Plagioclase commonly is altered completely to extremely fine grained kaolinite with minor to abundant patches and veinlets of very fine to extremely fine grained ankerite. In a few patches, plagioclase is altered completely to extremely fine grained sericite with minor to moderately abundant patches of ankerite. Vague remnants of original texture suggest that the plagioclase was fine to medium grained.

Hornblende forms equant to prismatic grains from 0.7-1.5 mm in size. Many of the grains are replaced by ankerite, with much less kaolinite and quartz and with moderately abundant limonite. In a few patches, hornblende is replaced by very fine grained, anhedral quartz aggregates with moderately abundant dusty opaque inclusions, and with minor to moderately abundant patches of ankerite-limonite.

Quartz forms interstitial grains averaging 0.3-0.5 mm in size, with a few up to 1 mm across.

Biotite forms a few equant to elongate flakes averaging 0.2-0.5 mm in size. It is replaced completely by pseudomorphic chlorite/kaolinite with abundant patches of limonite, and locally with patches of quartz and/or ankerite.

Ti-oxide forms anhedral patches up to 0.15 mm in size, probably after original ilmenite. Zircon forms one acicular grain 0.55 mm long; it was segmented into a few fragments along an irregular basal cleavage.

Pyrite forms disseminated, anhedral grains averaging 0.1-0.2 mm in size. Some of these are strongly fractured, and a few are altered moderately on borders and fractures to hematite/limonite.

Marcasite (after pyrrhotite) forms a few irregular patches up to 0.15 mm in size. It is extremely fine grained and has strong anisotropism. Chalcopyrite forms a very few anhedral grains up to 0.02 mm in size.

Limonite forms irregular patches, possibly secondary after ankerite.

The vein is dominated by fine to very fine grained ankerite, with some extremely fine grained patches. Kaolinite forms interstitial patches up to 0.5 mm in size of grains averaging 0.005-0.01 mm in size. Quartz forms a few patches up to 0.2 mm in size of very fine to extremely fine grained aggregates. In places, ankerite is brecciated

A P P E N D I X 2

SAMPLE LIST AND ANALYTICAL RESULTS

GOLD BRIDGE PROJECT APPENDIX 2

List of 1988 Rock Samples

1. Samples for Analysis

SAMPLE NO.	LOCATION-FIGURE NO.	DESCRIPTION
G-01	6	Lucky Strike; Composite of mineralized material from No.1 adit dump.
G-02	6	Lucky Strike; Composite of mineralized material from No.2 adit dump.
G-03	6	Lucky Strike; Felsite dyke with quartz-sulphide stringers; specimen from outcrop.
G-04	6	Lucky Strike; Outcrop; 5 cm wide massive pyrite vein.
G-05	6	Lucky Strike; Sphalerite-galena-quartz pod in outcrop.
G-06	7	Lucky Gem; Composite of mineralized material (quartz-pyrite-arsenopyrite) from dump.
G-07	7	Lucky Gem; Float, probably from adit. Quartz-arsenopyrite-pyrite.
G-08	7	Lucky Gem; Float, typical highly altered ankeritic wall rock.
G-09	7	Lucky Gem; Float, probably from adit. Quartz-arsenopyrite.
G-10	7	Lucky Gem; Chip sample over 60 cm. Vuggy quartz-arsenopyrite.
G-11	7	Lucky Gem; Chip sample over 40 cm, continuation from G-10. Gossanous shear; quartz.
G-12	7	Lucky Gem; Composite sample from rubbly exposure. Very gossanous quartz vein.
G-13	7	Lucky Gem; Chip sample over 50 cm. Quartz-(oxidized) arsenopyrite vein.

SAMPLE NO.	LOCATION-FIGURE NO.	DESCRIPTION
G-14	6	Lucky Strike; Altered ultramafic wall rocks to vein, at No.2 adit portal.
G-15	6	Lucky Strike; Composite from 8 cm to 20 cm wide massive sulphide vein, at No.2 adit portal.
G-16	6	Lucky Strike; Composite grab from outcrop. Massive sulphide pod 2 m X 30 cm (approx.) along felsite dyke.
G-17	6	Lucky Strike; Composite from outcrop of sparsely mineralized felsite dyke.
G-18	5	Felsite dyke with 3% disseminated sphalerite. Composite grab over 1 m width.
G-19	5	Gossan at sedimentary/granodiorite contact above Lucky Gem. Composite grab.
G-20	5	Composite grab from rubble blasted from a 1.5 m wide quartz-(minor pyrite) vein.
G-21	5	Composite grab from 20 cm wide quartz-pyrite vein, in a quartz-feldspar porphyry dyke.
G-22	5	Grab of quartz-arsenopyrite from dump at Northern Lights No.1 adit.

2. Samples for Petrographic Description

SAMPLE NO.	LOCATION-FIGURE NO.	DESCRIPTION
GP-01	6	Mafic volcanic outcrop near Lucky Strike No.1 adit.
GP-02	7	Hurley Formation sediments, Lucky Gem area.
GP-03	7	Extremely altered wall rock to Lucky Gem veins.

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Golden Rule Resources

Doug Cruikshank

Date: August 16, 1988

Job No: 88-326

Project: GR-BC-6

P.O. No:

13 Rock

Signed: ymH

14-2235 30th Avenue N.E., Calgary, Alberta, T2E 7C7
Phone (403) 250-9460 Fax (403) 291-7064

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-326

Project: GR-BC-2

Sample Number	Au ppb	Ag ppm	Pt ~~ppm~~ PPB	As %	Sb ppm	Hg ppb	Te ppm
G-1	16200	6.40	< 20	18.1	17600	285	0.2
2	32800	88.0	80	12.6	32000	765	0.4
3	934	7.60	< 20	0.32	1410	275	0.5
4	5480	60.0	120	4.70	3100	4600	0.1
5	3400	68.0	40	0.33	85000	7840	0.2
6	10400	39.0	< 20	14.4	1330	935	0.1
7	19000	44.0	< 20	22.0	1280	2855	0.1
8	74	0.48	< 20	0.073	32	595	0.3
9	9880	146.0	< 20	30.0	1230	1915	0.3
10	5680	11.4	< 20	27.0	410	1575	0.2
11	1820	47.0	< 20	0.58	1570	895	0.2
12	2920	28.0	< 20	10.6	1390	640	0.3
13	266	1.38	< 20	8.70	450	100	0.2

Sample Number	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Cr ppm
G-1	26	17200	3000	13	5	57
2	280	34000	4800	124	5	140
3	210	2300	6900	220	14	220
4	930	4600	34000	198	33	94
5	1920	79000	160000	26	3	141
6	2900	760	1000	4	7	115
7	13900	138	560	2	10	47
8	118	36	124	58	27	188
9	5400	240	820	12	17	41
10	700	40	50	1	5	80
11	1050	21	147	12	7	154
12	510	540	103	1	2	74
13	290	290	11	1	1	74

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Golden Rule Resources

Doug Cruikshank

Date: November 7, 1988

Job No: 88-440

Project: GR-BC-6

P.O. No:

9 Rock

Signed: _____

TERRAMIN RESEARCH LABS Ltd.

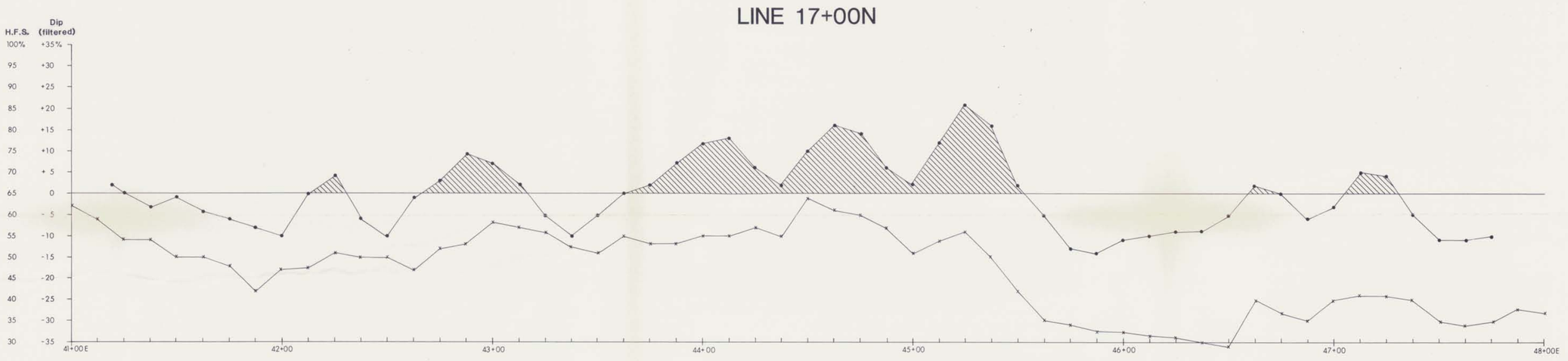
Job#: 88-440

Project: GR-BC-6

	Sample Number	Au ppb	Ag ppm	As ppm	Sb ppm	Hg ppb
G	14	32	0.10	1190	38	55
	15	45200	212.0	127000	92000	2160
	16	1780	56.9	853	106000	6600
	17	62	0.45	318	540	605
	18	308	0.10	39	18	20
	19	6	0.10	70	22	< 5
	20	2	0.10	5	7	105
	21	4	0.10	3	4	25
	22	20400	94.8	83000	16	315

	Sample Number	Cu ppm	Pb ppm	Zn ppm
G	14	10	8	40
	15	490	97000	42000
	16	2600	76000	230000
	17	57	720	2800
	18	50	30	73
	19	25	17	128
	20	5	16	18
	21	34	10	197
	22	26	109	20

LINE 17+00N



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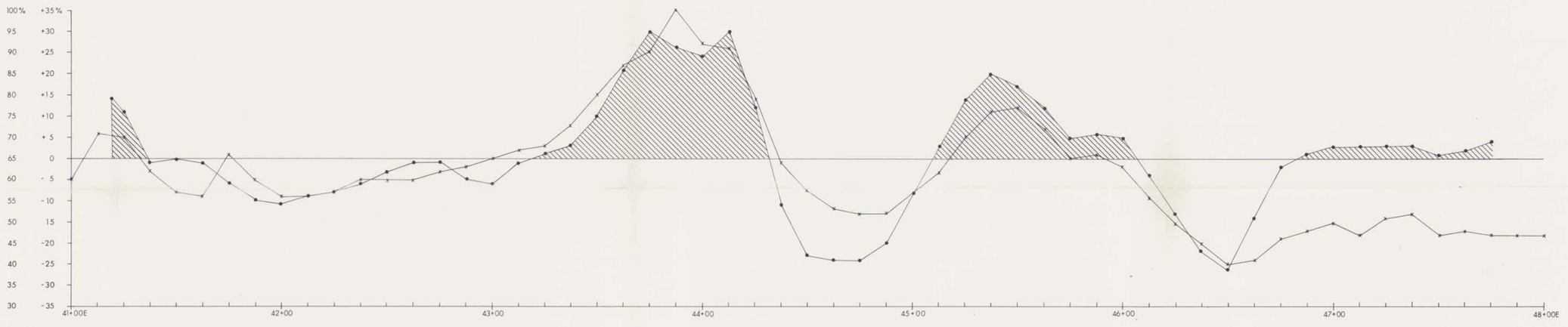

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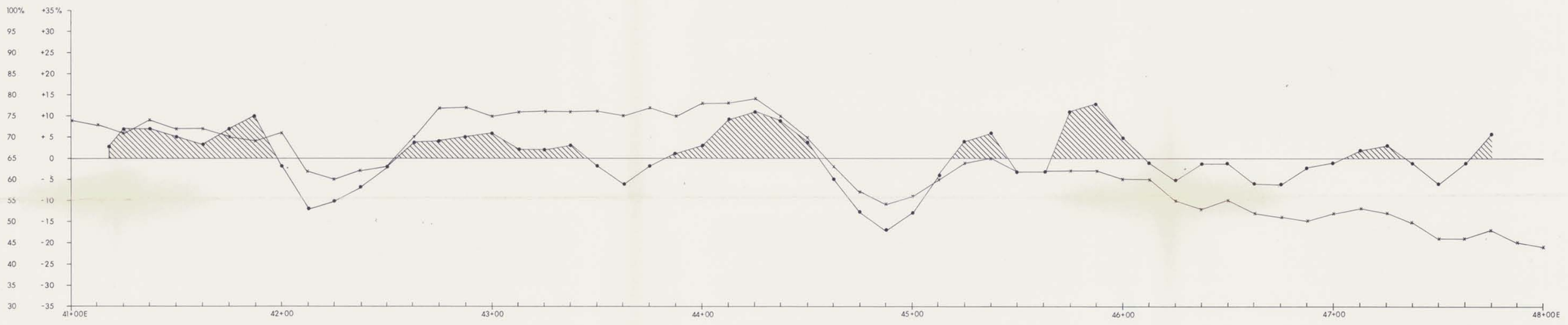
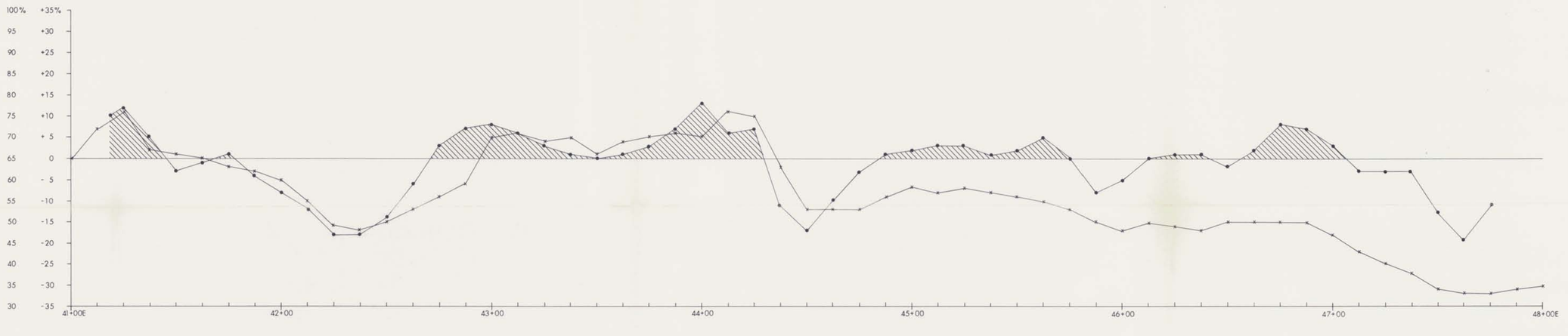
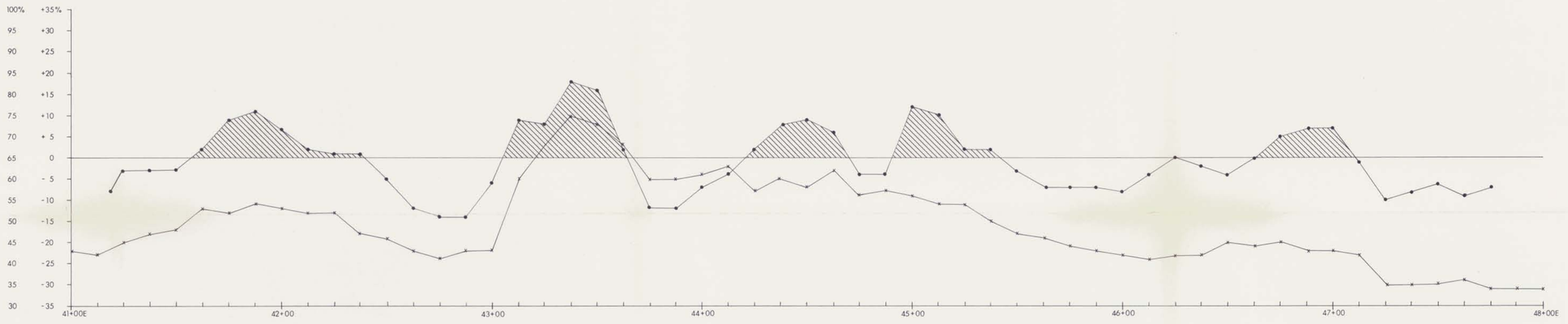


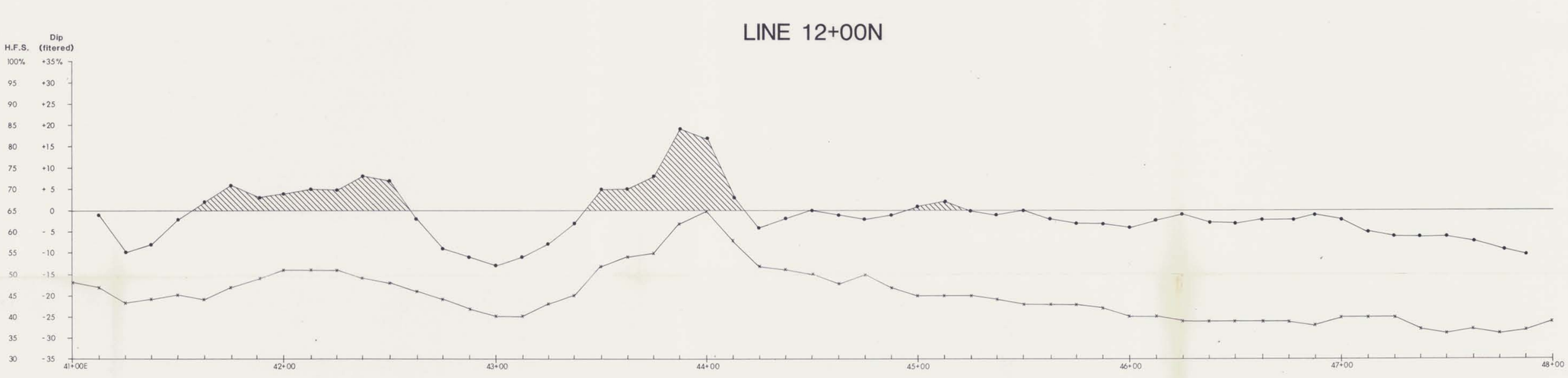
LINE 14+00N



LINE 13+00N



LINE 12+00N



LEGEND

FIELD STRENGTH

DIP (Filtered)

INDICATED CONDUCTORS

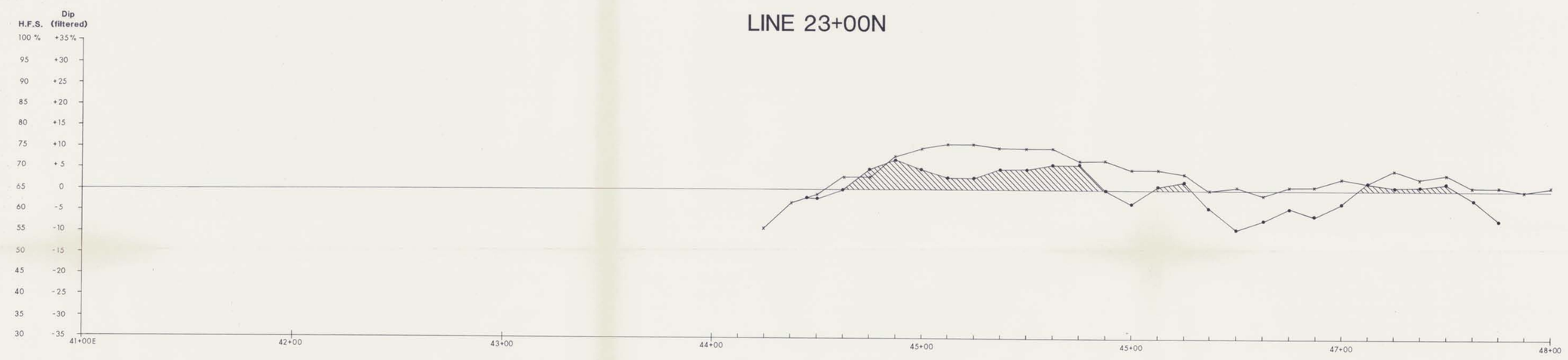
NOTE: SABRE VLF RECEIVER
TRANSMITTER: SEATTLE, WASHINGTON
FOR GRID LOCATION, REFER TO FIGURES 5 & 6.

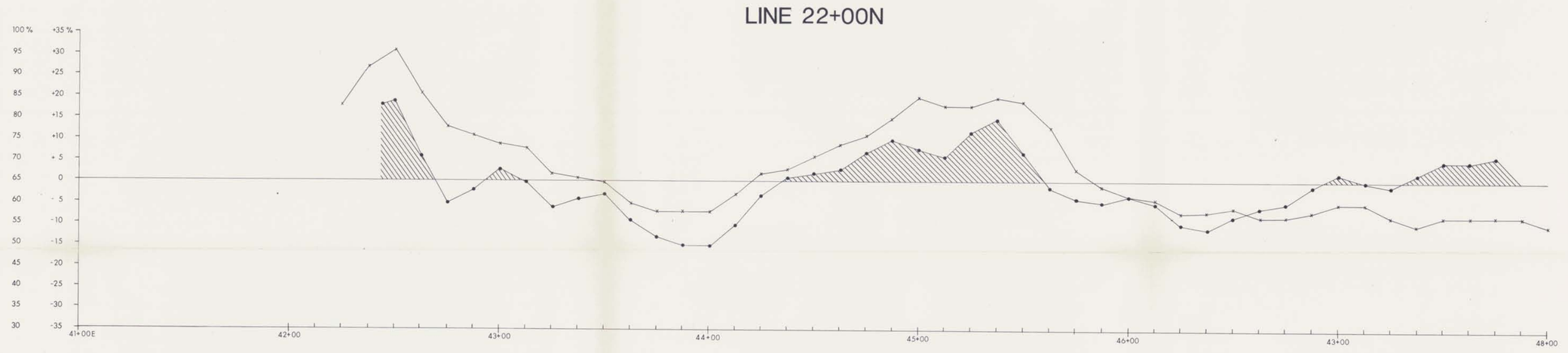
GOLDEN RULE RESOURCES LTD.

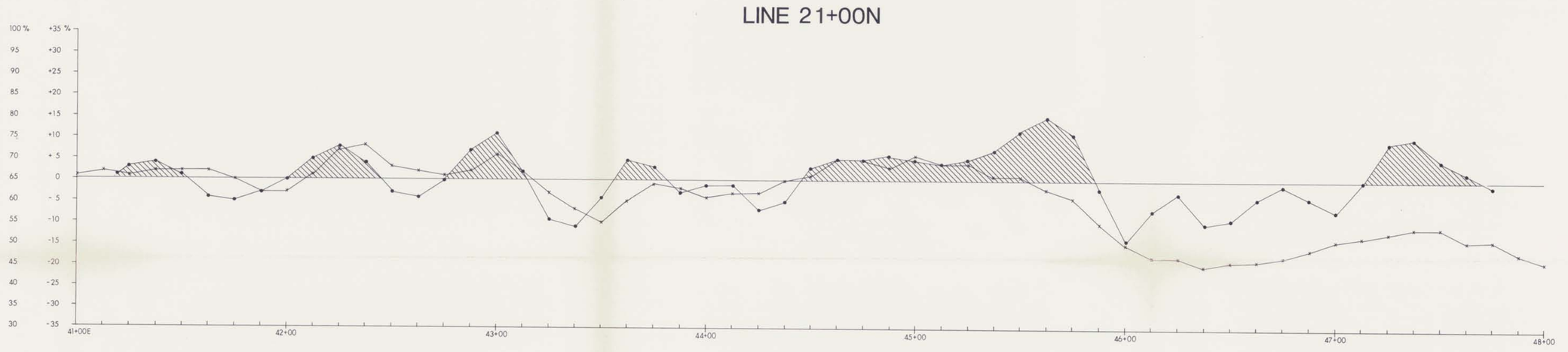
GOLDBRIDGE PROJECTS
(URAL CLAIMS)
BRITISH COLUMBIA

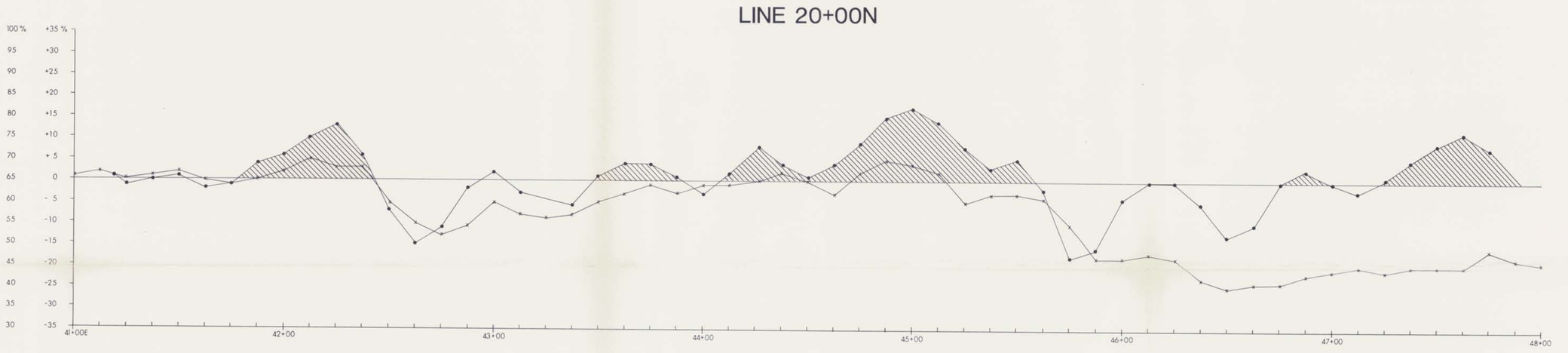
VLF-EM SURVEY
LUCKY STRIKE GRID
(SOUTH PART)

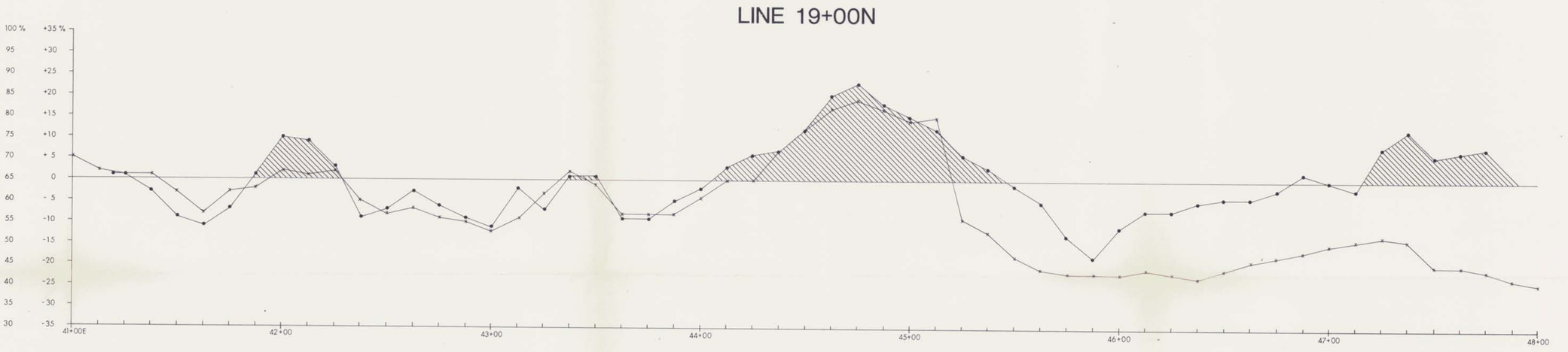
Date: NOV. 1988	N.T.S.:
Revised:	Figure 8a
Scale: 1:1000 (Horiz.)	0 20 40 60m

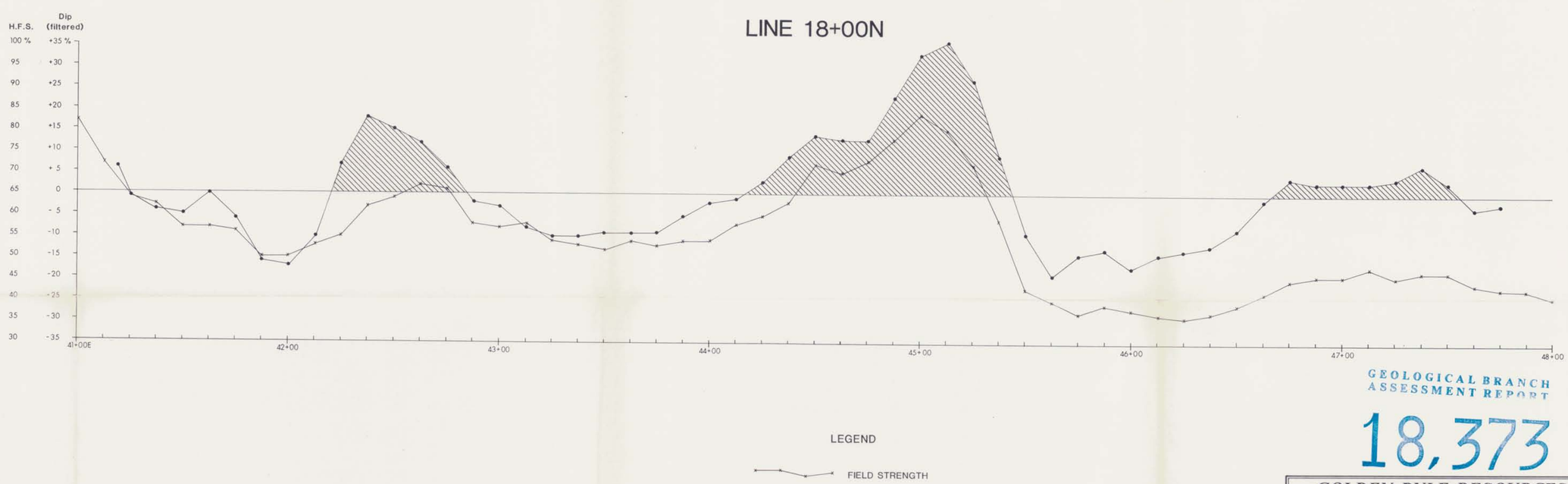












LEGEND

FIELD STRENGTH

DIP (Filtered)

INDICATED CONDUCTORS

NOTE: SABRE VLF RECEIVER
TRANSMITTER: SEATTLE ,WASHINGTON
FOR GRID LOCATION, REFER TO FIGURES 5 & 6.

GOLDEN RULE RESOURCES LTD.

GOLDBRIDGE PROJECT
(URAL CLAIMS)
BRITISH COLUMBIA

VLF-EM SURVEY
LUCKY STRIKE GRID
(North Grid)

Date: NOV.1988	N.T.S.:
Revised:	Figure 8b
Scale: 1:1000 (Horiz)	0 20 40 60m

LOTS 7579, 7582
(excluded from Golden Rule property)

LOTS 7583, 7585
(excluded from Golden Rule property)

LOTS 8831, 10628
(excluded from Golden Rule property)

BOB 5 (L 8048)

BOB 6 (L 8049)

BOB 3 (L 8046)

BOB 4 (L 8047)

JS 1, JS 2, DS 1to 4
(excluded from Golden Rule property)

URAL 4

URAL 5

URAL 6

URAL 7

LUCKY STRIKE GRID
(Figure 6)

LUCKY STRIKE
(L 8050)

Taylor Creek

Elkhorn Creek

LEGEND

INTRUSIVE ROCKS

MESOZOIC TO CENOZOIC

8 Felsic Dykes
- 8fs Felsite
- 8fp Feldspar porphyry
- 8hfp Hornblende feldspar porphyry
- 8h Hornblende porphyry
- 8qfp Quartz feldspar porphyry

7 Mafic Plugs and Dykes
- 7an "Andesite", aphanitic, medium to dark green
- 7vb Basalt, medium grey, clinopyroxene phenocrysts

CENOZOIC (PALEOCENE)

6 Hornblende – biotite granodiorite or quartz diorite
- 6a Altered: ankerite, kaolinite, and limonite: orange weathering

LOWER JURASSIC

5 Ultramafic Rocks (President Intrusions): serpentinized peridotite and dunite
- 5a "Listwanite" carbonitized 5; conspicuous orange weathering

STRATIFIED ROCKS

LOWER CRETACEOUS

4 Taylor Creek Formation: chert–pebble conglomerate

UPPER TRIASSIC

CADWALLADER GROUP

3 Hurley formation
- 3bx Tectonic breccia; carbonate matrix
- 3cg Polymictic conglomerate
- 3d Argillite, siltstone, fine – grained sandstone and greywacke
- 3e As for 3d, with limy and calcareous beds
- 3f Blue, flinty, faintly laminated siltstone
- 3g Conspicuously laminated cherty siltstone
- 3ls Limestone, massive

Pioneer Formation
- 2c Chert
- 2vb Basalt flows

PALEOZOIC

FERGUSSON GROUP (= Bridge River Group)
- 1c Chert, massive to bedded
- 1ca Altered chert; ankeritic, orange weathering
- 1cc Chert, argillite, granule and pebble conglomerate
- 1cs Bedded chert & minor argillite
- 1vb Basaltic dykes

OTHER ROCKS
- A Altered rocks, original lithology unknown carbonitized, orange – weathering
- x Outcrop not examined

SYMBOLS

- Outcrop
- Bedding: inclined, vertical
- Vein attitude: inclined, vertical
- Mineralized zone (Dfs dyke)
- Minor anticline : trend and plunge of axis
- Contact : defined, approximate, assumed
- Fault: defined, approximate, assumed
- Thrust fault: assumed
- Axis of anticline
- Axis of syncline
- Limit of geological mapping
- Claim post encountered in mapping
- Survey pin
- Claim post & survey pin
- Claim boundary
- URAL 6 Claim name
- L.C.P. Legal corner post
- Adit portal
- Rock sample location: "G" for analysis; "GP" for petrography

GEOLOGICAL BRANCH ASSESSMENT REPORT

18,373

GOLDEN RULE RESOURCES LTD.

GOLDBRIDGE PROJECT
(URAL CLAIMS)
BRITISH COLUMBIA

PROPERTY GEOLOGY

18373

R. D. CRUICKSHANK

Date: NOV. 1988	N.T.S.: 92-J-15/92-O-2
Revised:	Figure: 5
Scale: 1:5000	

41+00E 42+00E 43+00E 44+00E 45+00E 46+00E 47+00E 48+00E

23+00N 22+00N 21+00N Baseline 20+00N 19+00N 18+00N 17+00N 16+00N 15+00N 14+00N 13+00N 12+00N

LOTS 6831 & 6832
(excluded from Golden Rule property)

HOMESTAKE #4 (L6829)

LUCKY STRIKE FRACTION (L6827)

URAL 5

Campsite

road blocked here

LUCKY STRIKE (L6828)

URAL 6

LUCKY STRIKE #1 ADIT

LUCKY STRIKE #2 ADIT

Taylor Creek

ridge crest

minor fold - nearly horizontal axial surface

G-01 (Au 16200 ppb)
dump (chert & qz-cb-sulphide veins)

qz. stockwork

grab samples G03, G04, G05 collected along dyke (Au ppb: 934, 5480, 3400 respectively)

bx. cb (possibly not in place)

GP-1

G-02 (Au 32800 ppb)
dump

G-14, G-15 (Au 32 ppb, 45200 ppb)

G-16, G-17 (Au 1780, 62 ppb)
qz, cp, py, asp, gn, mp

mass sulphide vein

38° slope

Large Erratic Boulders

abundant 5 float

moraine

rubble

Talus slope

For details south of this (assumed) fault, refer to 1:5000 scale map

NOTE : All claim boundaries as shown are approximate only; no posts or survey pins were noted in the field.

LEGEND

INTRUSIVE ROCKS

MESOZOIC TO CENOZOIC

- 8 Felsic Dykes
  - 8fs Felsite
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  - 8hfp Hornblende feldspar porphyry
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- Axis of syncline
- Limit of geological mapping
- Claim post encountered in mapping
- Survey pin
- Claim post & survey pin
- Claim boundary
- URAL 6 Claim name
- L.C.P. Legal corner post
- Adit portal
- Rock sample location: "G" for analysis; "GP" for petrography
- Road
- Trench

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,373

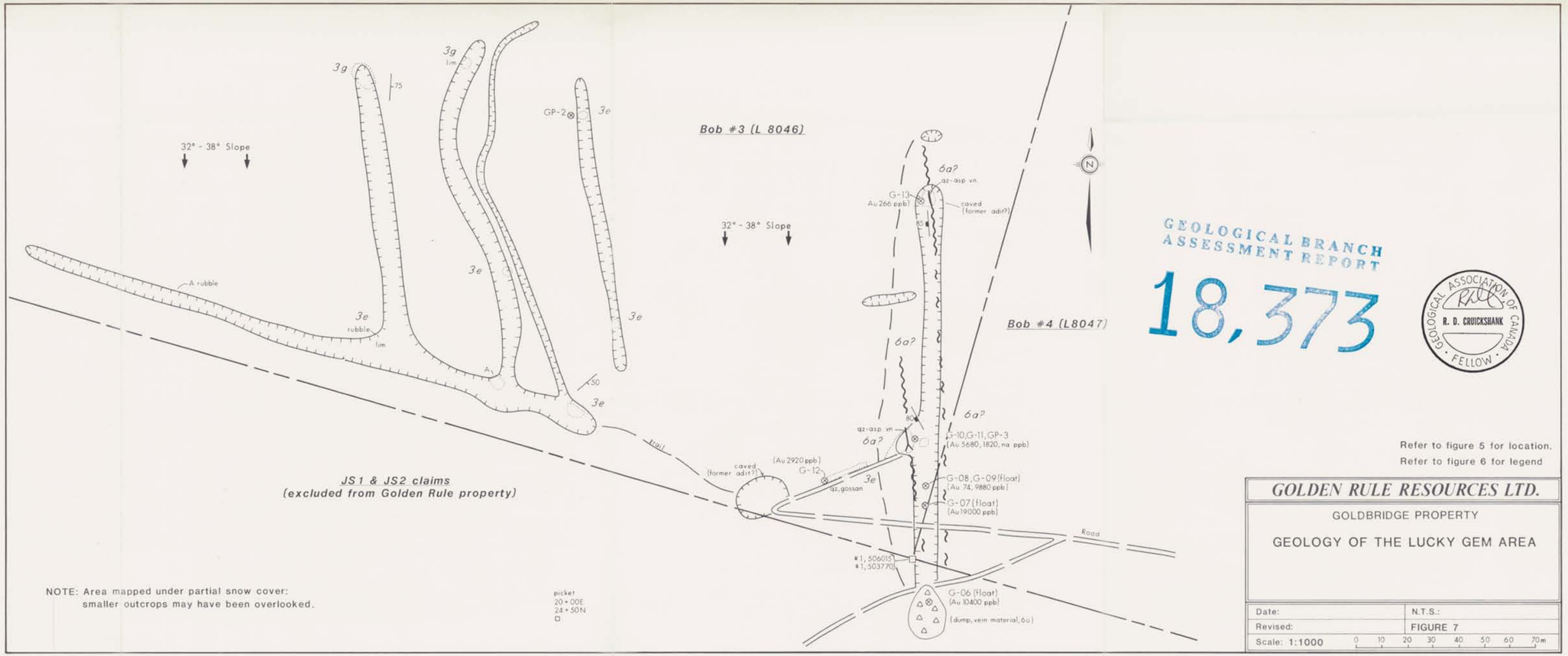
GEOLOGICAL ASSOCIATION OF CANADA · R. D. CRUICKSHANK · FELLOW ·

GOLDEN RULE RESOURCES LTD.

GOLDBRIDGE PROPERTY
(URAL CLAIMS)
BRITISH COLUMBIA

LUCKY STRIKE GRID GEOLOGY

Date: NOV. 1988	N.T.S.: 92-J-15/92-O-2
Revised:	Figure: 6
Scale: 1:1000 0 20 40 60 80 100m	



NOTE: Area mapped under partial snow cover:
smaller outcrops may have been overlooked.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,373

GEOLOGICAL ASSOCIATION OF CANADA
R. D. CRUICKSHANK
FELLOW

Refer to figure 5 for location.
Refer to figure 6 for legend

GOLDEN RULE RESOURCES LTD.

GOLDBRIDGE PROPERTY

GEOLOGY OF THE LUCKY GEM AREA

Date:	N.T.S.:
Revised:	FIGURE 7
Scale: 1:1000	0 10 20 30 40 50 60 70m