ARIS SUMMARY SHEET

Off Confidential: 89.06.06 District Geologist, Kamloops MINING DIVISION: Revelstoke ASSESSMENT REPORT 17446 Silver Basin JPROPERTY: 117 20 00 50 38 00 LONG LOCATION: LAT 476425 11 5608885 UTM NTS 082K11W Triune 1-2, Helco 1, Silver Basin, Morning Star CLAIM(S): OPERATOR(S): Courageous Ex. AUTHOR(S): Chisholm, R.E. JREPORT YEAR: 1988, 60 Pages COMMODITIES SEARCHED FOR: Gold, Silver, Copper, Lead, Zinc GEOLOGICAL Lower Cambrian to Middle Devonian Lardeau Group argillites and JSUMMARY: limestones are intruded by Jurassic dioritic sill of the Kuskanax Exploration targets are quartz siderite veins in Batholith. carbonatized halos adjacent to diorites. Mineralization consists of gold, argentiferous galena, sphalerite and chalcopyrite. WORK Geological, Geochemical, Geophysical, Physical DONE: 9.1 km EMGR Map(s) - 1; Scale(s) - 1:1000745.9 ha FOTO Map(s) - 1400.0 ha GEOL Map(s) - 1; Scale(s) - 1:10 000,1:1000 9.1 km LINE9.1 km MAGG Map(s) - 1; Scale(s) - 1:1000400.0 ha PROS ROAD 1.2 km ROCK 137 sample(s) ;AU,AG,CU,PB,ZN Map(s) - 1; Scale(s) - 1:1000221 sample(s) ;AU,AG,CU,PB,ZN SOIL Map(s) - 1; Scale(s) - 1:000RELATED 07324,09037 **REPORTS:** JMINFILE: 082KNW098

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A GEOLOGICAL EVALUATION of the SILVER BASIN GROUP Lardeau District NTS 82-K/11 Latitude 50°39' North Longitude 117°20' West Revelstoke Mining Division British Columbia

# GEOLOGICAL BRANCH February 154 5983 ESSMENT REPORT

on behalf of COURAGEOUS EXPLORATION INC. Calgary, Alberta ,44(

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R. E. Chisholm, F.GAC, P.Geol.

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#### INTRODUCTION

At the request of Mr. John M. Alston (President, Courageous Exploration Inc., Calgary, Alberta), Taiga Consultants Ltd. undertook to examine and sample reported mineral occurrences on the Silver Basin property in British Columbia. In addition, a program of geological mapping, prospecting, soil geochemical sampling, and geophysical surveying was undertaken in certain areas of interest, during the period August 28 to September 26, 1987.

#### Property Status

The Silver Basin property is located in the Lardeau District of the Revelstoke Mining Division of British Columbia (Figure 1) within NTS 82-K/11 W. The property is currently registered in the name of American Chromium Ltd. (an associated company), and a transfer to Courageous Exploration Inc. is pending. The property consists of one Crown-granted claim and five mineral claims for a total area of approximately 1,843 acres (745.9 ha). A description of the claims and grants is tabulated below:

TABLE 1 - CLAIMS DATA No.of Approx. Record Date of Assessment Due <u>Req'd</u> <u>Claim Name</u> <u>Units</u> Area <u>Number</u> Record Date\_ Jun.09/88 11073G Jun.09/74 **Ş 200** King 1 \* 1 25.0 ha 1,600 Jun.20/88 Silver Basin 8 156.0 ha 368(6) Jun.20/77 Sep.07/77 1,200 Sep.07/88 Triune 1 6 75.0 ha 395(9) Jul.18/88 2 Jul.18/78 400 Helco 1 31.0 ha 509(7) Jul.29/88 18 438.0 ha 2424 Jul.29/87 1,800 Triune 2 <u>20.9 ha</u> L.4574 Morning Star <u>CG</u> \$5,200 35 745.9 ha + 1 CG

NOTE: CG = Crown grant

\* formerly the "Scottish Chief" Crown grant



# COURAGEOUS EXPLORATION INC.

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FIGURE 1

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## COURAGEOUS EXPLORATION INC. PROPERTY MAP

Assessment expenditure requirements are \$100/unit/year for the first three years, then \$200/unit/year thereafter. In addition, a fee of \$5 per \$100 of work filed is required upon submission of assessment documents. Total assessment work to keep the claims in good standing is \$5,200/year. Yearly taxes of \$12.96 must be paid to keep in good standing the Morning Star Crown grant.

### Location and Access

The Silver Basin property is located 72 km southeast of Revelstoke, B.C., centered about 50°38' North latitude and 117°23' West longitude. The claims are accessible via paved road (Highway 23) from Revelstoke to Shelter Bay on Upper Arrow Lake and thence by ferry to Galena Bay, and Highway 31 (all-weather gravel) 30 km to the hamlet of Trout Lake. Northeast from Trout Lake, the seasonally accessible gravelled "Alpha" logging road leads to the northwest corner of the property along Lardeau Greek, continuing up Triune Creek allowing access to the western Property boundary. This latter section of the road is very steep but has been recently upgraded to a very passable condition. A second road switch-backs up a ridge adjacent to Nine Mile Creek, 14.7 km east of Trout Lake. The Foggy Day Road eventually crests the east ridge of Triune Mountain and ends at the head waters of North Brown Creek allowing access to the southeastern half of the property. A series of horse trails was constructed by the B.C. Government around the turn of the century. The trails allow foot access to the various underground workings located on the property.

### **Physiography**

The claims are located along the crest and northeast-facing flanks of Silver Cup Ridge in the Columbia Mountains. Elevations on the property range from 1,372 to 2,438 m ASL. The Triune 1 and King 1 claims are situated above treeline (~2,134 m ASL) in alpine tundra. Slopes facing Lardeau Creek are very steep and covered with a thick growth of spruce, fir,

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balsam, and underbrush. The headwaters of Triune and North Brown Creeks drain the claims.

The region has been glaciated to an elevation of at least 2,500 m ASL, and Triune and Silver Cup peaks form prominent horns above this elevation. Most valleys exhibit evidence of glaciation. Cirques, arrêtes, and serrated razorback ridges are common. Two small remnant glaciers are located in the southwest portion of the property on the northeast slope of Triune Mountain. The lower slopes of mountains are covered with variable thicknesses of glacial deposits, resulting in only fair bedrock exposures.

#### REGIONAL GEOLOGY

The first geological map of the area was published in 1930, accompanying Geological Survey of Canada Memoir 161 (Walker + Bancroft, 1930). Numerous descriptions of mineral occurrences in the region appear in B.C. Minister of Mines Annual Reports from 1894 to 1930. Other descriptions appear in G.S.C. Summary Reports and Annual Reports (Brock, 1903). Regional geology and mineral deposits are well documented in B.C. Department of Mines Bulletin 45 (Fyles and Eastwood, 1962). G.S.C. Bulletin 193 (Read, 1973) includes much relevant regional geological information. The most useful and up-to-date work is included in G.S.C. Open File 464 (Read, 1977).

The Silver Basin property lies within a geologically and structurally complex zone known as the Kootenay Arc, which forms part of the Purcell Anticlinorium in the southern Rocky Mountains. In the Trout Lake area, the Kootenay Arc is comprised of interbedded sedimentary and volcanic rocks of Late Proterozoic to Mesozoic age which have been subjected to multiple phases of deformation, metamorphism, and intrusion. The Silver Basin claims are underlain by mafic volcanics, fine-grained argillaceous and siliceous sediments, grits, and carbonates of the Lardeau Group of Lower Cambrian to Middle Devonian age. These rocks have been subjected to at least one episode of metamorphism and now consist of greenstone, limey green phyllite, phyllitic grit, quartz grit, quartzite, limestone, and phyllitic limestone (Figure 3). Read (1973) has interpreted two distinct phases of deformation in the area.

The Broadview, Jowett, Sharon Creek, Ajax, Triune, and Index Formations are of chief importance in the project area. Considerable difficulties attend the separation and correlation of these units owing to their similarities in composition, rapid facies changes laterally and along strike, lack of fossil controls, and repetition of sequences through faulting and folding.



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#### GEOLOGICAL LEGEND

LARDEAU (	GROUP
1 Pbs	BROADVIEW FORMATION GREY AND GREEN GRIT, DARK GREY AND GREEN PHYLLITE - MINOR VOLCANICS
lPjv	JOWEIT FORMATION MAINLY VOLCANIC ROCKS - PYROCLASTICS ON S.W. LIMB OF ANTICLINE
IPscp	SHARON CREEK FORMATION DARK GREY TO BLACK SILICEOUS ARGILLITE
IPaq	AJAX FORMATION HASSIVE GREY QUARTZITE
[Ptp	TRIUNE FORMATION GREY TO BLACK SILICEOUS ARGILLITE
IPip	INDEX FORMATION GREY AND GREEN PHYLLITE: LIMESTONE; QUARTZITE; AND VOLCANIC ROCK
	ZONE OF EXTENSIVE "CARIONIZATION" CALC-SILICATE ROCK, SIDERITE, MARIPOSITE
巨小公	INTRUSIVE DIORITE(?) - MEDIUM TO FINE GRAINED
	STHBOLS
8600999999960000100000	CLAIN BOUNDARY
2629 m	SURVEY POINT: ELEVATION IN METRES
≻ ∎	MINING EXCAVATION: ADIT, INTERNAL SHAFT
	ROADS AND TRAILS
	GEOLOGICAL CONTACT: APPROXIMATE
<u>حبہ حا</u>	FOLIATION: INCLINED, VERTICAL
	BEDDING: INCLINED, VERTICAL, OVERTURNED
· ··	JOINTING: INCLINED, VERTICAL
<u>+</u>	ANTIFORH
<u> </u>	Synform
	FLUNG OF FOLD
~~~~	FAULT: DEFINED, INFERRED
	MINERALIZED FISSURE VEIN: Ag, Pb, Zn, Cu, Au
NOTE: Adapte of the by A. 1	d from "Freliminary Geolegical and Froperty Nap Triune Project"; May 8, 1979; Dwg. No.79 T-2, R. Parker, F.Eng.
0	500 1000 m
<b></b>	SCALE 1: 20 000
	GEOLOGY MAP
SILV	ER BASIN PROPERTIES

## FIGURE 3

#### EXPLORATION TARGETS

The Lardeau district, which is highly analogous to the Kaslo, Slocan, and Trout Lake silver/lead/zinc camps, is host to at least two hundred and late-stage fissure-vein shear types of polymetallic occurrences (predominantly Pb, Zn, Ag, Au, Cu). In the immediate vicinity of the Silver Basin property, the Silver Cup and Triune (both former small, high-grade producers) were the best known deposits of these styles. More recently, the Granges Exploration/Windflower Mining 'Goldfinch Project' (4 km north of Camborne, 30 km northwest of the Silver Basin) has yielded exceptionally encouraging gold values from a fault or shear-hosted quartz vein-stockwork system. Diamond drilling has delineated a preliminary estimate of 165,000 tons grading 0.24 oz/ton Au in the Dorothy vein, probable reserves of 165,000 tons grading 0.25 oz/ton in the Dorothy North Zone, and additional uncalculated reserves in the East Zone. Granges is planning a \$3,000,000 underground exploration program on this property for 1988 ("The Northern Miner", Nov.30, 1987).

A number of quartz vein systems within the Silver Basin property and numerous veins immediately adjacent to the property have been explored and developed since 1890 to the present. Mineralization consists of narrow zones (commonly 10-18 inches) of sulphides within ribbon quartz veining. Gangue minerals are quartz, ankerite, siderite, calcite, and inclusions of wallrock. Sulphides include pyrite, galena, chalcocite, sphalerite, and minor chalcopyrite. Hicks (1979) has stated that the major silver-bearing sulphide is freibergite (a variety of tetrahedrite) although silver also substitutes in galena. Parker (1979) states that gold is found free although probably some gold substitutes in sulphides.

In general, the veins tend to be narrow, in the order of a few metres wide, with lengths of a few hundred metres. Vertical continuity tends to be much greater. The adjacent Silver Cup vein, 1.3 km to the west, extended down-plunge for 400 m and is open at depth (Fyles & Eastwood, 1962).

The present Silver Basin property contains at least four documented gold/silver occurrences and a number of small poorly described showings. Important occurrences include the IXL, Morning Star, Chance, and Noble Five veins. Information has been garnered primarily from the 1914 Annual Report of the B.C. Minister of Mines, Fyles & Eastwood (1962), and from Parker (1979). Detailed plans of the underground workings, descriptions of the mineralization, and locations of samples taken were not available to this author.

The IXL, Morning Star, and Noble Five veins are all located along strike of each other within the Silver Basin mineral claim, and may be extensions and offshoots of a single vein system. The vein systems are described individually, below.

#### Morning Star Vein System

The Morning Star occurrence is located in the southwest corner of the property and was first reported in the 1894 B.C. Annual Report. Two narrow quartz veins crosscut the stratigraphy at 350°-360° dipping variously at 45°E to 90°E. The host rock was described as a siliceous limestone containing a high percentage of "chlorite", later identified as mariposite by Parker (1979).

The vertical vein set known as the Morning Star was explored by two adits and is described as a collection of quartz/sulphide stringers with maximum widths of 12 inches within a single fracture zone. Sulphide mineralization consists of galena, chalcocite, pyrite, and minor sphalerite. A government geologist obtained a grab sample of sulphides that yielded values of 0.6 oz/ton Au and 107.8 oz/ton Ag.

The second vein set, known as the Flat, was explored by a small cut 15 feet above the Morning Star vein. Within the cut, the vein was reported to have a very narrow width of 4 to 6 inches, with mineralization similar to the Morning Star. A B.C. Dept. of Mines sample assayed 0.25 oz/ton Au, 137.4 oz/ton Ag, and 44.6% Pb.

#### <u>IXL Vein</u>

The IXL vein is located approximately 400 m west of the Morning Star, and was first reported in the B.C. Annual Report for 1898. A narrow quartz vein (average width 12-18 inches) striking north-south and dipping  $25^{\circ}$ -70°E, crosscuts the talcose schists of the Index Formation. Total underground development consists of 250 feet of drifting in two adits and a 30-foot winze. A seven-ton hand-cobbed shipment of ore mined from the upper adit was sent to a smelter some time before 1914. Parker (1979) reports government assays of 1.14 oz/ton Au, 55 oz/ton Ag, 27% Fb, and 3% Zn for this shipment. A government sample taken from the lower adit yielded assays of 1.46 oz/ton Au and 12.0 oz/ton Ag. Parker (1979) also sampled the working and obtained similar results. In addition, Parker sampled "barren appearing fault gouge" taken at the 6920-foot elevation at the drift face which returned values of 1.06 oz/ton Au, 9.78 oz/ton Ag, 3.51% Pb, and 1.51% Zn over one foot.

#### Noble Five Vein

The Noble Five vein is located approximately 750 m southeast and on strike with the Morning Star, and consists of a narrow (18-inch) quartz/ sulphide vein which is subconformable with the enclosing carbonaceous limey phyllite which strikes  $315^{\circ}$  and dips  $67^{\circ}-75^{\circ}$ . The vein has been exposed on surface and by a 30-foot drift and a small crosscut. Mineralization consists of galena, pyrite, and chalcocite. A government sample of vein material returned values of 0.36 oz/ton Au, 117.3 oz/ton Ag, and 16% Pb over a width of 18 inches.

### Chance Vein

The Chance vein is located approximately 300 m southwest of the Morning Star and was first mentioned in the 1911 B.C. Annual Report. The vein consisted of a narrow zone (8-18 inches) of quartz/sulphide mineralization striking 335° and dipping at 72°E, obliquely cutting a bed of carbonaceous phyllite adjacent to a dyke of porphyritic diorite. Pyrite and galena are found in the forms of disseminations, ribbons, and pods within the vein.

The distribution of gold values was erratic as shown by this list of government assays (1914 Annual Report):

 	TABI	LE 2 - CHANCE V	EIN	
 Width	<u>Au oz/ton</u>	<u>Ag oz/ton</u>	<u>Pb</u> %	
18"	0.08	161.2	12	
3"	0.38	97.1	31	(selected sample
 8"	trace	2.2	-	

Total development on the vein consists of at least 330 feet of drifting in two adits. Parker (1979) was able to gain access to the workings and obtained the following values from a composite sample of a 2'x40' mineralized shoot: 0.15 oz/ton Au, 145.1 oz/ton Ag, and 16.5% Pb.

The Chance workings are located 600 m south-southeast and along strike of the Triune Mine workings, the latter being situated outside the present property area. Prior to 1905, the Triune produced 534 tons of ore mined from a vein varying in width from 2 to 8 feet. The shipments assayed 0.9 oz/ton gold, 250 to 400 oz/ton silver, and 33%-50% lead, according to the 1914 B.C. Annual Report.

#### Silver Cup Mine

The Silver Cup Mine shaft is located outside the Silver Basin property, approximately 1 km northwest of the Triune Mine. The Silver Cup occurrence was mentioned as early as 1894 in the B.C. Dept. of Mines Annual Report. From that time until 1939, a total of 242,000 tons of material was broken, grading 0.146 oz/ton Au, 17.0 oz/ton Ag, 3.99% Pb, and 3.59% Zn, of which only 10% was estimated to have been sent to the smelter (Hicks, 1979). The remaining 90% of mineralized material was used as backfill in the mine or stored in dumps on surface. This property therefore had a significant production history. Parker (1979) states that the mine closed down due to

the fact that the vein system passed onto the Free Coinage Crown grant then owned by a competitor. At that time, a deal could not be struck between the two parties and the mine closed for lack of easily accessible ore.

In 1976, C.T. Exploranda Ltd. of Vancouver rehabilitated, mapped, and sampled a portion of the old Silver Cup mine. 935 feet of drifting and crosscutting were completed in order to facilitate an underground drill In 1979-80, 820 feet of development adit were driven into the program. Yuill, Silver Cup, and Towser veins. The adit was collared at the 1500 m elevation, below the lower limit of previous mine workings. In 1981, an additional 300 feet of raising and 600' of drifting were completed as well as further diamond drilling. During the period October 1982 to January 1983, 525 tons of ore were shipped to the HB mill at Salmo.

In 1980, Apex Airborne Surveys Ltd. carried out a helicopter-borne closely spaced electromagnetic/magnetic survey over the property for American Chromium (Sheldrake, 1980). Sheldrake interpreted the data as indicating the presence of several graphitic formational units some of which also show coincident modest magnetic highs. Two of these units trend onto the Morning Star Crown grant and the Helco 1 mineral claim. The magnetic data suggest the presence of a number of crosscutting fault structures not recognized by previous workers.

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#### 1987 EXPLORATION PROGRAM

The Triune Mine Road was re-established and the Foggy Day Road extended by 1.2 kilometres to allow access to the southeast and western portion of the property, respectively. A camp was established adjacent to a tarn lake at the headwaters of North Brown Creek.

The 1987 exploration program initially consisted of relocating all of the historical workings and detailed rock chip sampling of reported mineralized occurrences and underground workings. A chained and flagged survey grid of 9.1 line km was subsequently established on the west side of North Brown Creek (Map 1). Geological mapping, soil geochemical sampling, and magnetic and VLF-EM surveying were completed on the grid. Areas external to the grid were geologically mapped and prospected at a scale of 1 to 10,000.

The North Brown Creek grid was established with base and tie lines oriented at an azimuth of 320° with cross lines spaced variously at 100, 50 and 25 metre intervals. Stations were spaced at intervals of 25 metres.

#### MAPPING AND SAMPLING OF UNDERGROUND WORKINGS

Seven of the ten Chance, Morning Star, IXL, and Noble Five adits were found to be accessible and in generally good condition with stable walls and backs. Of these workings, the lowest IXL and Noble Five adits are partially flooded with mud and water. Rock fall from slopes above the adits has, in most cases, nearly blocked the tunnel entrances with rubble.

Foot access to the various workings is via horse trails which are tributary to the main North Brown Creek Trail. Locations of the workings and trails are shown on Map 2.

#### Chance Workings

The two Chance adits are located at elevations of 2294 m (7526') and 2305 m (7562') respectively, and have been driven northwestward into a large scree slope on the west side of the North Brown Creek Valley. Cut-stone retaining walls located around the entrances have prevented the unstable scree from slumping into the workings. The upper adit starts in a small rock face and has therefore remained in good condition. The lower adit was started in scree and required extensive timbering. In the meantime, the wooden timbers have rotted away allowing the back to collapse, blocking the entrance.

The upper workings (Figure 4) consist of a 15.1 m long adit which accesses a 53 m long, 330° trending drift. A small exploration pit was excavated on a small outcrop of vein just above the upper adit. The pit is the third in a series of nine shallow excavations trending 330° (spaced over 70 m). All of the remaining eight pits are now completely slumped in.

The drift was driven to follow the vein which is exposed in the drift back and along the east drift wall. At its widest, in the surface pit and below at the adit/drift intersection, the vein is 80 cm thick but pinches and swells rapidly along its length. Within the underground workings, the vein is very barren-looking with lean siderite mineralization and no visible



$\overline{\mathbf{x}}$	<u>er-4</u>	-
Au ppb	9	
Ag <del>p</del> pm	7.6	
Cu ppm	270	
РЬ ррм	180	
Zn ppm	780	
		COURAGEOUS EXPLORATION INC.
		SILVER BASIN GROUP
		UPPER ADIT PLAN CHANCE VEIN
		DATE DEC. 1987 NTS 82 K/II
		PROJECT BC - 87-2   MAPPED/ DRAWN BYR. CHISHOLM
		SCALE   : 200 0   2 3 4 m
		TAIGA CONSULTANTS LTD. FIG. 4

sulphides. Up-dip in the surface pit, the vein contains 2 to 3 cm wide bands of galena and trace pyrite. An examination of the waste pile outside of the adit entrance indicates that mineralization within the vein consists of banded massive pyrite, galena, and lesser amounts of sphalerite and chalcopyrite. A massive-appearing silver grey mineral believed to be tetrahedrite is also found in minor quantities in vein material. Similar appearing material was observed in the lower adit waste pile.

The best values were obtained from the surface pit with 1.13 oz/ton silver and low gold values being assayed over 0.80 m. Analyses of this recent sampling are several orders of magnitude lower than those reported by government samplers or by Parker (1979). It seems likely that the mineralization is podiform and that previous workers have mined out the pods encountered by the present drift. The 2'x40' mineralized shoot described by Parker (1979) could not be substantiated.

#### Morning Star Workings

The Morning Star adits are located at 2345 m (7694') and 2355 m (7726') respectively (Map 2), and have been driven in a northerly direction into outcrop at the base of a near-vertical cliff, 350 m north of the Chance workings. Two adits (Figures 5 and 6) have been excavated to follow the trace of a quartz/ siderite vein which is exposed for approximately 40 m up a large cliff face. The vein is in fact a narrow bifurcating composite zone of veining within a wider mariposite/silica/siderite alteration zone.

The workings are dry, accessible over their entire lengths, and have stable walls and backs. Analytical data are shown on Figures 5 and 6 for upper and lower adits respectively.

Mineralization consists of trace to 5% galena, pyrite, and lesser amounts of chalcocite, and a silver grey mineral tentatively identified as tetrahedrite. Sulphides are found in small pods within a narrow quartz/ siderite vein which pinches and swells from 0 to 30 cm wide. The broad alteration zone surrounding the vein consists of 10% to 50% siderite replace-





 4 <sup>1</sup> (0,2 <sup>0,2</sup> 1,0) CP-20 CR-20 CR-20 CR-22 (68 CR-22 (98,0) CR-23 (38,0) CR-23 (38,0)	
	COURAGEOUS EXPLORATION INC.
	SILVER BASIN GROUP
	LOWER ADIT PLAN MORNING STAR VEIN
	DATE DEC. 1987 NTS 82 K/II
	PROJECT BC - 87-2 MAPPED/ DRAWN BYR. CHISHOLM
	SCALE 1:100 0 1 2 3 4
	TAIGA CONSULTANTS LTD. FIG. 6

ment, 1% to 5% disseminated pyrite cubes, and scattered irregular quartz/ siderite veinlets. Immediately adjacent to the main vein, the host rock is bright green, probably derived from the presence of relatively small quantities of a mineral identified by Parker (1979) as mariposite, a chromium-rich muscovite. The best analytical results were 1.55 oz/ton Au and 1.45 oz/ton Ag over a width of 22 cm of vein adjacent to the lower adit entrance. Within the adit, vein material returned gold/silver values of 0.35/16.4 and 0.55/13.1 oz/ton over widths of 30 cm and 20 cm respectively.

A total of 10 one-metre wide rock chip samples were collected over the alteration zone on the east side of the Morning Star vein system. In general, the zone is very weakly anomalous in gold and silver with values in the order of 50 ppm and 20 ppm respectively. Within that zone and 5 m east of the vein is a 3 m wide interval which returned highly anomalous gold values. A one-metre wide sample (CR-22) within the anomalous interval returned a gold value of 0.20 oz/ton. Ag, Cu, Pb, and Zn analyses for the zone are quite low. No obvious visual differences between auriferous and barren sample intervals were noted.

A composite grab sample (CR-35) of a 7.2 m wide gossanous alteration zone situated 30 m east of the lower Morning Star adit returned only background precious and base metals analyses.

Sampling in the upper adit (at the drift face) of a 0.60 m interval of vein returned gold/silver values of 0.22/12.88 oz/ton as well as anomalous Cu, Pb, and Zn analyses.

The mineralization originally described (B.C. Annual Report 1914) as the Flat Vein was relocated at 2360 m (7743'), 5 m above the upper adit. A narrow 0.2 to 1.5 m wide, discontinuous zone of subconformable quartz/ siderite veins was sampled at four different sites over a length of 100 m. In general, the vein system strikes 311° and dips between 45°NE and 70°NE. The results are shown in Table 3 (overpage).

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TABLE 3 - FLAT VEIN ANALYSES <u>Sample</u> <u>Width</u> <u>Au</u> <u>Ag</u> Comments KCRO-400 1.5 m 570 ppb 5.45 ppm sheared, contains tetrahedrite, mariposite KCR0-401 grab 82 ppb 2.03 ppm unsheared KCR0-402 0.3 m 1640 ppb 5.65 oz/T KCRO-403 0.755 oz/T grab 64.7 oz/T from hand-picked material in small trench; galena, pyrite, tetrahedrite; 100 m west of KCR0-402

The results are similar to those reported by the government geologist in 1914.

#### IXL Workings

The IXL workings were found to consist of three adits (Figures 7, 8, and 9) driven due north into the west side of a rocky razorback situated on the west side of the North Brown Creek Valley below the Morning Star workings. Access to the workings is gained via a steep foot trail from the cabins at North Brown Creek. Specifically, the adits are located at elevations of 2098, 2143, and 2153 m (6883', 7031', and 7063') respectively.

Rock fall from the upper slopes has partially blocked the entrances to all three adits. In addition, the rubble has dammed up the water which is seeping in to the lower adit causing flooding in the outer two-thirds of the tunnel.

The adits were driven along a north-trending east-dipping subconformable quartz/siderite vein which was thought (B.C. Annual Report 1915) to be the southern extension of the Morning Star vein system. The vein is exposed intermittently along the steep rock face into which the adits have been driven; however, it is only readily accessible adjacent to each adit.









	/ - IRON- SMITH	<del>`</del>	CR- 56	CR- 57	CR-58	CR- 59	~
	TOOLS	Au ppb	7	82	· 12	36	
		Ag ppm	0.73	0.29	0,16	1,38 1	
	1 / /	Cu ppm	37	46	26	106	
i		Pb ppm	31	22	٣	19	
	ev N	Zn ppm	172	235	148	282	
	VIEW OF OUTSIDE						
						COURAGEOU	S EXPLORATION INC.
	\ À					SILVE	R BASIN GROUP
	RUBBLE						
							TAL ADIT FLAN
	IN SECTION						
						DATE DEC. 19	87 NTS 82 K/II
ļ						PROJECT BC - 87	-2 MAPPED/ DRAWN BYR. CHISHOLM
						SCALE 1:200	0 2 4 6 8
						TAIGA CONS	SULTANTS LTD. FIG. 9
l		÷					

From observations made on outcrop and within the underground workings, it appears that the IXL "vein" is in fact a series of en echelon gash veins with similar trend and variable dip. The veins are made up of 10% to 30% coarse-grained siderite and 70% to 90% white opaque vuggy quartz. The veins pinch and swell in all dimensions from 0.2 to 2.0 m. Within the veins are pods and disseminations of primarily galena and pyrite with lesser sphalerite, chalcopyrite, and a silver grey mineral thought to be tetrahedrite. Sulphide pods within the two lower adits have dimensions in the order of 0.5 m thickness and several metres strike extent. The down-dip extension of the pods is unknown but by analogy to deposits in the region, the vertical dimension is likely to be an order of magnitude greater than the horizontal dimension.

The IXL vein system is hosted by a sequence of light cream to pale green phyllites within a thicker sequence of banded argillaceous limestones. Visible alteration adjacent to the vein system is confined to several percent disseminated pyrite crystals and 5% to 10% disseminated euhedral siderite crystals.

Gold and silver values are confined to portions of the vein which • contain significant pyrite and galena concentrations. Best results (Figures 7, 8, and 9) were obtained from sulphide pods in the lower two adits. Gold/ silver values of 0.62/18.52 oz/ton and 0.32/24.05 oz/ton were received for intervals of 0.55 m and 0.40 m from the central and lower adits respectively. These intervals also returned significant lead/zinc analyses up to 11.95% Pb and 4.36% Zn.

The upper adit returned anomalous gold values up to 3000 ppb (0.08 oz/ ton) and silver values to 5.45 oz/ton over an interval of one metre.

Parker's 1979 sample of "barren appearing fault gouge" which assayed 1.06 oz/ton Au in the lower adit drift face appears to have been a weathered sulphide pod which subsequently assayed 0.89 oz/ton Au (CR-85) during recent sampling.

#### Noble Five Workings

The Noble Five workings were found to consist of a single well-developed adit and the beginnings of two other adits which have been driven southwest into a rock face on the east side of North Brown Creek. Access to the workings is gained via a trail from the falls at North Brown Creek along a steep west-facing scree slope. The lower well-developed adit is situated right at the top of the scree slope at 1905 m (6250') elevation, while the two upper workings are located on the near-vertical rock face above. The ropes and cables which afforded access to the upper workings have long since decayed away and so the upper adit was not visited, while the central adit is accessible via a precipitous ledge. Rock fall from the slope above has almost completely blocked the lower adit and only a 25 cm hole remains open. The adit is flooded to a depth of one metre and all the walls are covered by a layer of mud and calcium carbonate. Outer portions of the central adit have caved away, leaving a 14 m long trench with a small cave at the end. The dimensions of the upper adit are unknown.

The workings were driven into a zone of irregular subconformable quartz veins exposed on a very steep rock face made up of graphitic argillite and argillaceous limestone. A total of 33 m of adit (Figure 10) and a small crosscut were excavated subparallel to the trend of the veins. Due to the thick coating of mud on the walls of the lower adit, it was difficult to follow the veins underground.

A number of grab samples were taken of narrow irregular or crosscutting veins; however, none seemed likely to be extensions of the veins noted in outcrop. The well mineralized vein noted in the B.C. Minister of Mines Annual Report 1914 could not be located. At the time that report was written, the adit had been driven for a distance of only 10 m, one-third of its final length. The mineralized vein may have been mined out during the adit's final extension.

Of the seven rock chip samples and three grab samples taken on the exterior rock face and within the adit, the highest gold value obtained was 296 ppb (CR-67). None of the earlier reported values could be substantiated.



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#### PROSPECTING

Semi-detailed prospecting was carried out in the vicinity of the main siderite alteration zone over the entire width of the Silver Basin property. Gold values obtained from rock samples collected during prospecting traverses are plotted on Map 2.

CR-95: A zone of gossanous pale green phyllite, located in a steep narrow avalanche chute located at 2149 m (7050') elevation and 40 m northeast of the upper IXL adit, was chip sampled in detail across its width (Figure 11). The zone contains 10% euhedral siderite crystals, 1% to 2% coarse-grained pyrite, and numerous irregular subconformable quartz/siderite veins. The veins trend 270° within the host phyllites which strike 314° and dip 74°E. The sampled interval (CR-91) carries moderately anomalous gold values up to Further upslope at 2198 m elevation and along strike to the west, 302 ppb. the degree of siderite replacement increases while the pyrite content decreases. A one-metre wide barren-looking quartz/siderite vein striking 268° and dipping 54°N returned a gold value of 170 ppb (CR-94). At 2253 m elevation, the alteration narrows to a 10 m wide zone with a 2 m wide mariposite rich core. Within that core are scattered, very lean pyrite, chalcopyrite, and tetrahedrite disseminations; a grab sample returned 704 ppb Au, 1.14 oz/ton Ag, 1200 ppm Pb, and 510 ppm Zn.

<u>CR-61</u>: A grab sample (CR-61) of a narrow quartz/siderite vein located 240 m east of the IXL workings at 2038 m elevation, returned a gold value of 724 ppb. The vein is subconformable, trends 306°, and dips steeply to the east.

<u>MR-4</u>: A 50 cm square, subangular boulder of heavy galena, pyrite, and sphalerite mineralization was sampled (MR-4) adjacent to North Brown Creek below the Noble Five workings. The sample returned gold/silver values of 0.23/24.45 oz/ton as well as 210 ppm Cu, 600 ppm Pb, and 21% Zn. Attempts



 $\Box$ 

 $\left[ \right]$ 

<b></b>							
Zn ppm	58.0	680.0	64	75	143	84	66
Рь ррт	8.0 <sup>`</sup>	120.0	23	21	375	8	46
Ag ppm	1.02	1.45	0.6	0.59	4.44	0.26	0.64
Au ppb	42	35	302	43	142	180	3

COURAGEOUS EXPLORATION INC. LEGEND SILVER BASIN GROUP ALTERATION ZONE 40m LOCATION AND NUMBER OF ROCK CHIP SAMPLES CH I EAST OF UPPER IXL ADIT STRIKE AND DIP OF QUARTZ/CARBONATE VEIN 82 K/II DATE DEC. 1987 NTS DRAWN BY R. CHISHOLM PROJECT BC - 87-2 STRIKE AND DIP OF SCHISTOSITY ∕'n 4 m ٢0 2 3 Г SCALE 1:100 // QUARTZ-CARBONATE VEIN TAIGA CONSULTANTS LTD. FIG. II

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were made to trace the boulder back to a bedrock source by prospecting upslope; however, the effort proved fruitless.

<u>MR-6</u>: A narrow (0.45 m) chip sample (MR-6) taken at 2378 m elevation on the east side of the Triune Valley just north of the remnant glacier, returned an anomalous gold value of 494 ppb, as well as 1.20 ppm Ag, 320 ppm Pb, and 351 ppm Zn. The sample is of a zone of quartz/siderite veining which contains 3% disseminated pyrite and minor galena. No detailed follow-up has been carried out at this sample site.

#### PROPERTY GEOLOGY

The 1987 geological mapping consisted of reconnaissance style investigations in the areas surrounding the regional alteration zone on Silver Cup Ridge and detailed investigations on the North Brown Creek grid.

The Silver Basin property is underlain by a northwest striking sequence of volcanics and sediments which dip steeply to the northeast. As shown by Parker's 1979 geological compilation (Figure 3), the geology is quite complex. A series of southeast trending faults belonging to the Cup Creek regional fault zone transect the north limb of the Silver Cup anticline which plunges to the northwest. The result is that the sequence of rocks on the north limb of the anticline does not contain a full complement of formations, and at least one reversal of stratigraphic sequence is present between offshoots of the Cup Creek faults. Rock formations found within the property boundaries are tabulated below (after Read, 1977):

Lower Cambrian to Middle	Devonian or older
Broadview Formation	grey and green grit, dark grey and green phyllite, minor volcanics
Jowett Formation	mainly volcanic rocks including pyroclastics
Sharon Creek Formation	dark grey to black siliceous argillite
Ajax Formation	massive grey quartzite
Triune Formation	grey to black siliceous argillite
Index Formation	grey and green phyllite, limestone, quartzite, and volcanic rock

In the field, the geological sequence (Map 1) from the head of North Brown Creek to the northeast was found to consist of the following units:

Grey siliceous argilliteTriune FormationGrey massive quartziteAjax FormationBlack graphitic argilliteTriune FormationSerpentinite sillTriune FormationDiorite sillIndex FormationGreen phyllite and argilliteIndex FormationMixed argillaceous limestone and limey argillitesIndex FormationGreen phylliteBroadview Formation

Overprinted onto this sequence is a broad, intense alteration zone situated on the northeast side of the diorite sill. The zone extends from North Brown Creek on the east through the head of Triune Creek valley to at least the Silver Cup Mine, 2 km to the west. Within the Silver Basin property, the zone is intermittently and variably altered over an aggregate width of at least 350 m. Alteration is most intense adjacent to the diorite sill and is characterized by an almost complete replacement of the original argillaceous sediments by massive siderite, calcite, and silica. In addition, the zone is shot with a dense network of cross-cutting white quartz veins and veinlets. This portion of the alteration zone is resistant to weathering and forms a major southwest facing scarp. Northeast of the scarp, alteration weakens to pervasive siderite flooding with fewer quartz veins and then diminishes to discontinuous siderite disseminations ("spotted phyllite") with scattered pyrite disseminations. Within the property, mariposite staining is confined to the Morning Star vein area and the CR-95 sample site.

Significant alteration is not found south of the diorite sill. The sill itself is not much altered except in the old North Brown Greek bed where several quartz/siderite veins crosscut diorite. In most cases, the diorite sill/alteration zone contact is not exposed. Within the topographic saddle separating Triune Mountain from the Morning Star vein system, a narrow zone of talc/carbonate schist may represent altered diorite or serpentinite. The sill consists of a number of separate conformable bodies with major surface exposure at North Brown Greek and adjacent to the Triune Mine.

It is probable that the major scarp face made up of altered sediments is in fact the trace of a major long-lived fault structure. In this case, the diorite and serpentinite sills are likely to have been emplaced opportunistically along the fault. These conclusions runs counter to the opinions of most previous workers who have felt that the zone of alteration is related to a contact effect of the diorite.

#### GEOCHEMISTRY

A total of 221 talus fines soil samples were collected on the North Brown Creek grid at 25 m station intervals. The samples were analyzed for Au, Ag, Cu, Pb, and Zn by Barringer Laboratories (Alberta) Ltd. of Calgary. The gold content was analyzed by fire assay preconcentration and atomic absorption final determination; the other metals were analyzed by standard atomic absorption techniques. Analytical results are presented in Appendix II.

Gold and silver values have been plotted on Map 3b. Gold has been contoured at intervals of 25 ppb, 50 ppb, 100 ppb, and thence by multiples of 100 ppb. The range of each element and the values considered anomalous are shown in Table 5 below.

	TA	BLE 5 - GEOCHEMICAL DATA	· · · · · · · · · · ·
<u>Element</u> Au	<u>Range of Values</u> <2 - 900 ppb	<u>Number of Anomalous Values</u> 51 samples > 50 ppb 22 samples >100 ppb 13 samples >200 ppb	<u>Level of Anomaly</u> weak moderate strong
Ag	<0.02 - 2.7 ppm		
Cu	6 - 660 ppm	34 samples >150 ppm	anomalous
РЬ	<1 - 1240 ppm	28 samples > 50 ppm	anomalous
Zn	21 - 1450 ppm	28 samples >250 ppm	anomalous

A well-defined zone of strongly anomalous gold values has been partially delineated on the eastern margin of the grid (anomaly Sla, Slb). The zone strikes west-northwest from L.2+00N to L.8+25N and is open to the north along almost its whole length. The anomaly is centered about the IXL vein system and trends directly toward the Morning Star vein system. At its north end, the anomaly cuts diagonally across the local topographic slope and so it seems probable that the source of the anomaly is not related just to hydromorphic dispersion from the known auriferous vein systems.

A second strong gold anomaly (S-2) trends down the tie line between L7N and L5N. The anomaly is situated straight downslope from the Morning Star workings and likely is due to hydromorphic dispersion from this source.

A moderate strength gold anomaly (S-3) strikes northwest from 3+00N to 6+00N at 0+75E. The source of this anomaly is not known.

Gold anomaly S-1 has also coincident strong Pb and Zn anomalies with values up to 1240 ppm and 1450 ppm respectively.

Silver results do not appear to outline any significant anomalies. Anomalous copper and many anomalous zinc values are confined to creek bottoms and thus are likely to be due to hydromorphic disperson.

#### VLF-EM\_SURVEY

A Crone 'Radem' VLF-EM survey was completed over the North Brown Creek grid using Seattle, Washington and Cutler, Maine as transmitting stations along cross and base lines respectively. The survey was carried out at 25 m station intervals. Results are presented in profile format on Map 3d. No significant conductors were encountered on the grid. The main siderite/ silica alteration zone does not appear to be conductive.

#### MAGNETOMETER SURVEY

A ground magnetometer survey was completed at 25 m station intervals over the North Brown Creek grid using a Geonics G826 portable proton precession magnetometer. Corrections for diurnal fluctuations were accomplished by looping back to datum points on the base line and noting the difference between first and last readings. Survey data have been plotted and contoured on Map 3c.

Contour lines of magnetic data generally trend 310°. Magnetic relief is moderately low and so data have been contoured at 50-gamma intervals. In general, the magnetic relief accurately reflects the underlying distribution of lithological units. The diorite sill shows as a pronounced magnetic high striking slightly obliquely to the tie line from L.0+50N to L.7+00N. Graphitic argillite shows complex low amplitude changes. The alteration zone identified on the eastern edge of the grid shows as a region of very flat relief reflecting the probable destruction of all mafic and magnetic minerals by the alteration process.

#### CONCLUSIONS

Field examinations of the underground workings present on the Silver Basin property have confirmed that the Morning Star and IXL vein systems contain high-grade gold and silver values in narrow polymetallic sulphiderich pods. Within mineralized pods, gold values range from 0.22 to 1.55 oz/ton in the Morning Star vein, and from 0.32 to 0.89 oz/ton in the IXL vein. Silver values within the sulphide-rich pods are high, up to 16.4 oz/ton in the Morning Star vein and up to 24.05 oz/ton in the IXL vein. Significant lead contents are found in both vein systems, and significant zinc contents in the IXL veins.

The gold/silver values reported in the literature as being present in the Chance and Noble Five veins could not be substantiated. Judging from the presence of sulphide-rich waste outside the two Chance adits, a significant mineralized structure was encountered by the miners earlier in the century at this site. There is little evidence of a significant mineralized structure at the Noble Five site.

The presence of an extensive, intense quartz/calcite/siderite alteration zone within the property and the presence of the Silver Cup and Triune deposits within the same zone outside the property suggest that the Silver Basin property has considerable exploration potential for the discovery of a high-grade gold/silver deposit within its boundaries.

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#### RECOMMENDATIONS

A six- to eight-hole diamond drill program totalling 1000 metres is recommended to investigate the strike and down-dip extensions of the Morning Star, IXL, and possibly the CR-95 vein systems. The program should only be undertaken with a light-weight "flyable" coring drill rig supported by a Hughes 500D or equivalent helicopter based at the original 1987 camp.

Prior to the commencement of the drilling phase of the program, some limited detailed mapping of the known vein structures should be undertaken as well as some topographic reconnaissance to locate drill sites which could be practicably utilized. The steepness and inaccessibility of the terrain will limit the number of available drill sites. Such drill sites as are available will require extensive excavating and crib building.

The proposed budget for this program is set out overpage.

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## PROPOSED 1988 BUDGET

<u>FIELD PROGRAM</u> (prior to drill program)		
Personnel (Project Geologist and Assistant)	3.780	
Camp Costs (room/board, 4x4 truck rental, radio renta)	1) 2.290	
Camp construction	4,000	10 070
	4,000	10,070
Mob & domeb (drill error and error th)	10 000	
Nob & demob (dilli clew and equipment)	10,000	
Diamond drilling, NQ core 1000 m @ \$85/metre	85,000	
Drill supplies and extra services	8,500	
Drill pad preparation 8 @ \$4000/pad	32,000	
Helicopter (incl. fuel) 65 hours @ \$650/hour	<u>58,500</u>	194,000
Mob/demob (geological crew)		
Personnel wayes travel expenses accommodation	1 040	
$D_{-6}$ tractor (read relation) 20 hours $R_{-6}$ (100 /hours	1,040	
D-0 clactor (road renab) 20 nours @ \$100/nour	2,000	
Miscellaneous (lumber, fuel, disposable supplies)	_ 5,000	8,040
Personnel		
Project Supervisor 4 days @ \$400/day	1 600	
Project Geologist 32 days @ \$350/day	11 600	
Labourer/Sampler 32 days ( \$100/day	6 000	
Camp Cool	6,000	
Dwill Gross and Bilets 5 a 20 large	4,800	<u> </u>
Drill Crew and Pilot 5 X 32 days		24,080
260 man days		
Camp Costs		
Room and board 260 man days @ \$45/day	11.700	
Generator rental 32 days @ \$15/day	480	
4x4 truck rental $32$ days $0$ $880/day$	2 560	
Communications (radio rental and calls)	550	
Microgeone and anlitter transit mental & \$25/day	200	
Breisht equipe and dition	1 000	17 000
Freight, courier, expediting	<u> </u>	17,090
POST-FIELD		
Assays 500 core samples @ \$12/e	a 6.000	
Data compilation and final report	4,000	
Drafting 50 hours @ \$24/hour	1 200	
Reproduction of mans: supplies: secretarial services	2,050	
Vepioduccion di maps, supplies, seclecaliai services	2,000	17 950
handling onarges	4,000	17,250
Assessment Filing Fees @ \$5 per \$100 expenditures		13,550
Contingency Allowance		15,920
	TOTAL COSTS	\$ <u>300,000</u>

huh

R. E. Chisholm, B.Sc., F.GAC, P.Geol.

TAIGA CONSULTANTS LTD.

#### **CERTIFICATE**

I, Robin E. Chisholm, of 15 Roseview Drive in the City of Calgary in the Province of Alberta, do hereby certify that:

- 1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 - 17th Avenue S.W., Calgary, Alberta.
- 2. I am a graduate of the Carleton University, B.Sc. (Hons.) in Geology (1977) and have practised my profession continuously since that time.
- 3. I have been engaged in mineral exploration and property development work in the Northwest Territories, Ontario, Saskatchewan, British Columbia, and elsewhere in Canada. I was also engaged in mineral exploration in Niger, Africa; and Algeria, Africa.

Between 1975 and 1985, I have held responsible positions with Uranerz Exploration and Mining, Pan Ocean Oil Ltd., Aberford Resources Ltd., GML Minerals Consulting Ltd., and B.P. Canada Ltd.

- 4. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
- 5. I am the author of the report entitled "A Geological Evaluation of the Silver Basin Property, Lardeau District, Revelstoke Mining Division, British Columbia", dated February 15, 1988. I directly supervised the work described herein.
- 6. I do not own or expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of COURAGEOUS EXPLORATION INC., in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 15th day of February, A.D. 1988.





#### **BIBLIOGRAPHY**

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Chance Vein 1911 (154), 1914\* (304).

IXL Vein 1898 (1067), 1905 (251), 1907 (93), 1911 (290), 1914 (305), 1918 (157), 1924\* (209), 1930 (266).

Noble Five Vein 1914\* (306), 1915 (133), 1921 (161).

Morning Star Vein 1894 (744), 1898 (1066), 1900 (823), 1903 (243), 1913 (127), 1914\* (303).

Free Coinage C.G. 1898 (1066).

\* reports which contain significant property descriptions.

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## APPENDIX I

Summary of Personnel

## SUMMARY OF PERSONNEL

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<u>Name / Address</u>	<u>Position</u>	Dates Worked	<u>Man Days</u>
R. E. Chisholm 15 Roseview Dr. N.W. Calgary, Alberta	Project Geologist	Aug-Dec /87	35
Kip Collard 18 Dalhousie Cr. N.W. Calgary, Alberta	Geologist	Aug-Sep /87	38
James Roberts Stanley Mission Saskatchewan	Prospector Operator	Aug-Sep /87	27
Walter M <sup>C</sup> Leod Stanley Mission Saskatchewan	Prospector Operator	Aug-Sep /87	28
Richard C. Davy 231 - 18th Ave. N.E. Calgary, Alberta	Labourer	Sep 1987	2
J. M. Hislop P. O. Box 745 Cranbrook, B.C.	Labourer	Sep 1987	2
Jack Laughton General Delivery Trout Lake, B.C.	Catskinner	Sep 1987	6
		TOTAL MAN DAYS	138

## APPENDIX II

Certificates of Analysis

BARRINGER Laboratories (NWT) Ltd.

ー P.O. BOX 864, YELLOWKNIFE, NWT, CANADA X1A 2N6 PHONE<sup>-</sup> (403) 920-4500 08-0CT-87

PAGE: 1 OF 12 COPY: 2 OF 2

PROJECT: BC-87-2

WORK ORDER: 4304D-87

\*\*\* FINAL REPORT \*\*\*

ATTN: R. ALLEN

CALGARY, ALBERTA

- PHONE: (403) 250-1901

#### GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

BARRINGER MAGENTA

AUTHORITY:R. CHISOLM

TAIGA CONSULTANTS LTD.

100, 1300 - 8 STREET S.W.

Laboratories (Alberta) Ltd.

42008 - 10 STREET N E., CALGARY, ALBERTA, CANADA T2E 6K3

T2R 1B2

ASSAY ASSAY FIRE ASSAY FIRE ASSAY FIRE ASSAY FIRE ASSAY AU AG AU AG SAMPLE NUMBER PPB PPM OZ/TON OZ/TON 36.0 1.55 CR-BC: NA NA Ī 2 0.68 CR-BC: 12.0 NA NA CR-BC: З 2.0 NÅ NA 6.0 7.6 NA CR-BC: 4 9.0 ΝA 5 CK-BC: 36.0 3.4 NA NA 5.0 0.77 NA NA CR-BC: 6 7 2.92 CR-BC: 86.0 NA NA 8 3.15 NA NA CR-BC: 30.0 CR-BC: 9 204.0 NA NA 1.13 CR-BC: 10 11.0 2.11 NA NA 4.0 0.24 NA NA CR-BC: 11 CR-BC: 12 260.0 1.56 NA NA 1.45 CR-BC: 13 65000.0 NA 1.55 CK-BC: 14 122.0 0.42 NA NA NA ΝA CR-BC: 15 366.0 0.31 CR-BC: 16 90.0 0.64 NΑ NA NA NA CR-BC: 17 44.0 1.08 CR-BC: 18 42.0 3.0 NA NA CR-BC: 19 50.0 3.08 NA NA 440.0 NA CR-BC: 20 0.66 ΝA CR-BC: 21122.0 4,45 NA NA NA CR-BC: 22 6800.0 2.02 0.2 NA 23 38.0 0.24 NA CR-BC: NA CR-BC: 24 46.0 1.0 NA NA CR-BC: 2534.0 0.6 NA 26 0.39 NA NA CR-BC: 6.0 CR-BC: 27 10.0 0.33 NA NA 160.0 2.16 28 NA NA CR-BC: CR-BC: 29 NA 0.35 16.4 NA 13.1 CR-BC: 30 15000.0 NA 0.55

BARRINGER Laboratories (NWT) Ltd.

P.O. BOX 864, YELLOWKNIFE, NWT, CANADA X1A 2N6 PHONE: (403) 920-4500 08-0CT-87 PAGE: 3 OF 12 COPY: 2 OF 2

PROJECT: BC-87-2

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WORK ORDER: 43040-87

\*\*\* FINAL REPORT \*\*\*

# CALGARY, ALBERTA T2R 1B2

BARRINGER MAGENTA

AUTHORITY:R. CHISOLM

TAIGA CONSULTANTS LTD.

100, 1300 - 8 STREET S.W.

<sup>-</sup>Laboratories (Alberta) Ltd.

- 42008 - 10 STREET N.E., CALGARY, ALBERTA, CANADA T2E 6K3

ATTN: R. ALLEN

PHONE (403) 250-1901

## GEOCHEMICAL LABORATORY REPORT

SAMPLE TY	YPE: ROCK			
SAMPLE	NUMBER	CU PPM	PB PPM	ZN PPM
CR-BC:	1	265.0	4.0	630.0
CR-BC:	2	40.0	135.0	1260.0
CR-BC:	3	270.0	11.0	400.0
CR-BC:	4	270.0	180.0	780.0
CR-BC:	5	171.0	22.0	335.0
CR-BC:	6	20.0	24.0	213.0
CR-RC:	7	85.0	21.0	415.0
CR-BC:	8	425.0	175.0	285.0
CR-BC:	9	570.0	5000.0	1030.0
CR-BC:	10	211.0	115.0	151.0
CR-BC:	11	47.0	30.0	100.0
CR-BC:	12	37.0	24.0	121.0
CR-BC:	13	130.0	820.0	2900.0
CR-BC:	14	9.0	13.0	63.0
CR-BC:	15	7.0	3.0	66.0
CR-BC:	16	20.0	3.0	80.0
CK-BC:	17	23.0	5.0	89.0
CR-BC:	18	53.0	8.0	89.0
CR-BC:	19	35.0	5.0	66.0
CR-BC:	20	15.0	6.0	45.0
CR-BC:	21	40.0	7.0	63.0
CR-BC:	22	71.0	2% 0	111.0
CR-BC:	23	33.0	3.0	93.0
CR-BC:	24	30.0	140.0	99.Ö
CR-BC:	25	9.0	3.0	87.0
CR-BC:	26	4.0	5.0	48.0
CR-BC:	27	3.0	5.0	31.0
CR-BC:	28	162.0	57.0	90.0
CR-BC:	29	360.0	1.8	2400.0
CR-BC:	30	1020.0	1.4	1400.0



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4200B - 10 STREET N E, CALGARY, ALBERTA, CANADA T2E 6K3 PHONE: (403) 250-1901

AUTHORITY:R. CHISOLM

TAIGA CONSULTANTS LTD.

100, 1300 - 8 STREET S.W.

CALGARY, ALBERTA T2R 1B2

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08-0CT-87 PAGE: 2 OF 12 COPY: 2 OF 2

PROJECT: BC-87-2

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WORK ORDER: 4304D-87

\*\*\* FINAL REPORT \*\*\*

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ATTN: R. ALLEN

## GEOCHEMICAL LABORATORY REPORT.

SAMPLE TYPE: ROCK

SAMPLE	NUMBER	FIRE ASSAY Au PPB	FIRE ASSAY Ag FPM	ASSAY FIRE ASSAY AU OZ/Ton	ASSAY Fire Assay Ag Oz/Ton
CR-BC:	31	122.0	5.8	NA	NA
CR-RC:	32	8600.0	NA	0.22	12.88
CR-BC:	33	380.0	3.1	NA	NA
CR-BC:	34	4000.0	NA	0.095	0,53
CR-BC:	35	11.0	0.53	NA	NA



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- 4200B - 10 STREET N.E , CALGARY, ALBERTA, CANADA T2E 6K3 - PHONE. (403) 250-1901

AUTHORITY:R. CHISOLM

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PROJECT: BC-87-2

WORK ORDER: 43040-87

ATTN: R. ALLEN

## \*\*\* FINAL REPORT \*\*\*

## GEOCHEMICAL LABORATORY REPORT.

SAMPLE TYPE: ROCK			
SAMPLE NUMBER	CU	РВ	ZN
	PPM	Ррм	PPM
CR-BC: 31	21.0	200.0	410.0
CR-BC: 32	1040.0	1200.0	1250.0
CR-BC: 33	50.0	25.0	149.0
CR-BC: 34	155.0	880.0	3400.0
CR-BC: 35	35.0	8.0	121.0

BARRING Laborat Laborat PHONE: (403) 250-19	GER MAGEN'I Cories (Alberta) Li .e., calgary, alberta, canal 101	ГА td. da т2е 6кз		RINGER aboratories (NWT) Ltd. 864, yellowknife, nwt, canada x1a 2N6 403) 920-4500
AUTHORIT	ſY:ROBIN CH1SOL∦	1		PAGE: 11 OF 11 COPY: 1 OF 2
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······			WORK ORI	0ER: 4358D-87
			*** FIN	AL REPORT ***
	HEMICAL	LABOR	TORY	REPORT
بسا الساب تشغلا الشرا				
SAMPLE IYI	PE: ROCK	ZN PPM		
SAMPLE TY SAMPLE TY KCR0:412 KCR0:416 KCR0:428 KCR0:430	PE: ROCK	ZN PPM 53.0 161.0 3.57%		



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AUTHORITY: ROBIN CHISOLM

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## WORK ORDER: 4358D-87

### \*\*\* FINAL REPORT \*\*\*

#### GEOCHEMICAL LABORATORY REPORT -- ----

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SAMPLE TYPE: ROCK

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SAMPLE NUMBER	FIRE ASSAY AU PPB	FIRE ASSAY AG PPM	FIRE ASSAY AG Oz/Ton	PB PPM
KCR0:412	< 2.0	0.31	NA	32.0
KCR0:416	<2.0	0.02	NA	4.0
KCRO:429	<2.0	0.08	NA	1.6.0
KCR0:430	722.0	NA	1.67	3500.0

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\*\*\* FINAL REPORT \*\*\*

## GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

SAMPLE	NUMBER	FIRE ASSAY AU PPB	FIRE ASSAY AG PPM	PB PPM	ZN PPM
<u> </u>	9	<2.0	з.с	980.0	310.0
MR-:	10	<2.0	0 " (3 1	25.0	50.0
MR-:	11	4000.0	NA	1900.0	19800.0
MR "	12	<2.0	0.72	2500.0	78.0
MR-:	19	<2.0	0.1	9.0	23.0
JR-:	1	<2.0	0.19	63.0	134.0
JR-:	3	<2.0	04	62.0	13.0
JR−:	3	<2.0	0.08	36.0	41.0
JK-:	4	<2.0	<0.02	2.0	8.0
JR− <b>‡</b>	5	<2.0	0.54	8.0	120.0

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-100, 1300 -CALGARY, A	- 8 STREET S.( ALBERTA T2R 1)	82 82			
			WORK O	RDER: 4358D-8	7
		-	*** 51	NAL KEPORT :	***
			*** FI	NAL KEPORT :	***
GEO	CHEMICA	IL LABO	*** FI Ratory	REFORT	***
GEC Sample 1	CHEMICA	ASSAY	*** FI Ratory Assay	REFORT	***
GEC SAMPLE 1	CHEMICA YPE: ROCK	ASSAY FIRE ASSAY	ASSAY FIRE ASSAY	REPORT	***
GEC Sample 1 Ample	NUMBER	ASSAY FIRE ASSAY AU OZ/TON	ASSAY FIRE ASSAY OZ/TON	REFORT	***
GEC SAMPLE I A M P L E MR-:	NUMBER 9	ASSAY FIRE ASSAY AU OZ/TON NA	ASSAY FIRE ASSAY OZ/TON NA	REFORT	***
GEC SAMPLE J A M P L E MR-: MR-:	YPE: ROCK	ASSAY FIRE ASSAY AU OZ/TON NA NA	ASSAY FIRE ASSAY AG OZ/TON NA NA	REFORT	***
GEC SAMPLE I A M P L E MR-: MR-: MR-: MR-:	CHEMICA YPE: ROCK NUMBER 9 10 11	ASSAY FIRE ASSAY AU OZ/TON NA NA 0.07	ASSAY FIRE ASSAY OZ/TON NA 1.16	REPORT	***
GEC SAMPLE 3 A M P L E MR-: MR-: MR-: MR-: MR-:	CHEMICA YPE: ROCK NUMBER 9 10 11 12 13	ASSAY FIRE ASSAY AU OZ/TON NA NA 0.07 NA NA	ASSAY FIRE ASSAY FIRE ASSAY AG OZ/TON NA 1,16 NA NA	REPORT	***
GEC SAMPLE 3 A M P L E MR-: MR-: MR-: MR-: MR-: JR-:	CHEMICA YPE: ROCK NUMBER 9 10 11 12 13	ASSAY FIRE ASSAY AU OZ/TON NA NA NA NA NA	ASSAY FIRE ASSAY FIRE ASSAY AG OZ/TON NA 1.16 NA NA NA	REPORT	***
GEC SAMPLE I A M P L E MR-: MR-: MR-: MR-: MR-: JR-: JR-: JR-:	STATE	ASSAY FIRE ASSAY AU OZ/TON NA NA NA NA NA NA NA	ASSAY FIRE ASSAY FIRE ASSAY AG OZ/TON NA NA 1,16 NA NA NA	REFORT	***
GEC SAMPLE 3 A M P L E MR-: MR-: MR-: MR-: JR-: JR-: JR-: JR-: JR-:	CHEMICA YPE: ROCK NUMBER 9 10 11 12 13 1 3	ASSAY FIRE ASSAY AU OZ/TON NA NA NA NA NA NA NA NA	ASSAY FIRE ASSAY FIRE ASSAY AG OZ/TON NA 1.16 NA NA NA NA NA	REFORT	***

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AUTHORITY:ROB.N CHISOLM

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PROJECT: BC-87-2

WORK ORDER: 43580-87

\*\*\* FINAL REPORT \*\*\*

## GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

AUAGPESAMPLENUMBERPPBPPMPPM $\ \ \ CR-:$ 108<2.00.027.0 $\ \ CR-:$ 10913.00.4110.0 $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	
S A M P L E N U M B E K       PPB       PPM       PPM       P                 CR-:              108              22.0              0.02              7.0              cr:              109              13.0              0.41              10.0              sc:              100              56.0              1.11              176.0              91.0              Sc:              Sc:              110              56.0             1.11             176.0             91.0                CR-::             111             2900.0             1.76             128.0             3                CR-::             112             22.0             0.32             13.0             23                CR-::             113             67.0             0.22             27.0             1               CR-::             114              22.0             0.35             17.0             13                CR-::             115              22.0             0.61              21.0                CR-::             116             4.0             0.14             8.0	ZN
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	PM
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4.0
$\vee$ CR-:       110       56.0       1.11       176.0       99 $\vee$ CR-:       111       2900.0       1.76       128.0       3 $\vee$ CR-:       112       <2.0       0.32       13.0       23 $\vee$ CR-:       113       67.0       0.22       27.0       1 $\vee$ CR-:       114       <2.0       0.35       17.0       19 $\vee$ CR-:       115       <2.0       0.61       <1.0       2 $\vee$ CR-:       116       4.0       0.14       8.0	50.0
N CR-:       111       2900.0       1.76       128.0       3         N CR-:       112       <2.0	30.0
CR-:       112       <2.0	0.80
CR-:       113       67.0       0.22       27.0       1         CR-:       114       <2.0	10.0
CR-:       114       <2.0       0.35       17.0       18         NCR-:       115       <2.0	10.0
NCR-:         115         <2.0         0.61         <1.0         2           N CR-:         116         4.0         0.14         8.0	34.0
N CR~: 116 4.0 0.14 8.0	77.0
	13.0
CK-: 117 10.0 0.02 3.0	7.0
▷ CR-: 118 5.0 0.02 2.0	21.0
→ CR-: 119 <2.0 0.17 21.0 6	40.0
Ck-: 122 <2.0 0.04 17.0	13.0
N KCRD-: 432 <2.0 0.32 1.0 1	38.0
KCRO-: 434 2.0 0.22 <1.0	90.0
KCRD-: 435 <2.0 <0.02 1.0	63.0
N KCRO-: 436 2.0 <0.02 <1.0 1	0.40
KCRD-: 437 <2.0 <0.03 <1.0 1	33.0
КСкО-: 438 3.0 3.51 12.0	8.0
▶ KCRO-: 439 <2.0 0.1 7.0	34.0
KCRO-: 440 <2.0 <0.02 <1.0	43.0
KCRD-: 441 30.0 0.16 6.0	50.0
<sup>™</sup>   KCRO~: 443 <2.0 0.04 2.0	30.0
N KCRD-: 445 <2.0 <0.02 1.0	48.0
N KCRO-: 446 <2.0 <0.02 <1.0	19.0
KCRO-: 447 <2.0 0.32 32.0	17.0
MR-: 5 32.0 0.68 8.0	43.0
MR-: 6 494.0 1.22 320.0 3	51.0
MR-: 7 121.0 NA <1.0 1	93.0
MR-: 8 <2.0 3.03 182.0 7	90.0

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PROJECT: BC-87-2

WORK ORDER: 4358D-87

## \*\*\* FINAL REPORT \*\*\*

#### GEOCHEMICAL LABORATORY REPORT - ... . . . .

SAMPLE	TYPE: ROCK	ASSAY Fire Assay	ASSAY FIRE ASSAY
		AU	AG
SAMPL	ENUMBER	OZ/TON	OZ/TON
C R - :	108	NA	NA
CR-:	109	NA	NA
CR-:	110	NA	NA
C R – t	111	0.08	NA
C R = #	112	NA	NA
C R – :	113	NA	NA
CR-:	114	NA	NA
CR-:	115	NA	NA
CR-1	116	NA	NA
CR-:	117	NA	NA
C R - :	118	NA	NA
C R – 🕯	119	NA	NA
CR-:	122	NA	NA
KCRO-:	432	NА	NA
KCR0-:	434	NA	NA
KCRO-:	435	NA	NА
KCRO-:	436	NA	NA
KCRO-:	437	NA	NA <sup>.</sup>
KCRO~:	438	NA	NА
KCRO-:	439	NA	NA
KCRO-:	440	NA	NA
KCRO-:	441	NA	NA
KCRO-:	443	NA	NA
KCRO-:	445	NA	NA
KCR0-:	446	NA	NA
KCRO-:	447	NA	NA
MR-:	5	NA	NA
MR	6	NA	NA
MR-:	7	NA ·	0.74
MR:	8	NA	NA



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PROJECT: BC-87-2

WORK ORDER: 43180-87

\*\*\* FINAL REPORT \*\*\*

## ATTN: R. ALLEN

## GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

SAMPLE	N U M B E R	FIRE ASSAY AU PPB	FIRE ASSAY <b>Ag</b> PPM	CU PPM	PB PPM
CR-BC2:	66	3.0	0.2	18.0	19.0
CR-BC2:	67	296.0	0.77	17.0	22.0
CR-BC2:	68	50.0	1.84	32.0	76.0
CR-BC2:	69	7.0	0.02	16.0	14.0
CR-BC2:	70	10.0	0.17	15.0	26.0
CR-BC2:	71	5.0	0.16	10.0	9.0
CR-BC2:	72	<2.0	12.0	25.0	4.0
CR-BC2:	73	32.0	0.04	44.0	510.0
CR-BC2:	74	З.О	0.08	9.0	8.0
CR-BC2:	75	910.0	NA	310.0	790.0
CR-BC2:	76	NA	NA	3200.0	670.0
CR-BC2:	77	1260.0	NA	560.0	1140.0
MR-BC2:	1	376.0	9.0	40.0	295.0
: MR-BC2:	2	3.0	1.41	143.0	50.0
MR-BC2:	3	8.0	7.4	65.0	680.0
MR-BC2:	4	NA	NA	2100.0	600.0
KCRO-:	400	570.0	5.45	12.0	91.0
KCRO-:	401	83.0	2.03	12.0	80.0
KCRO-:	402	1640.0	NA	1000.0	3500.0
KCRO-:	403	NA	NA	2500.0	1.17%
KCRO-:	.405	36.0	NA	40.0	1080.0

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ATTN: R. ALLEN

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## \*\*\* FINAL REPORT \*\*\*

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## GEOCHEMICAL LABORATORY REPORT;

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SAMPLE TYPE: ROCK

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SAMPL	E NUMBER	ZN PPM	ASSAY FIRE ASSAY AU OZ/TON	ASSAY FIRE ASSAY AG OZ/TON	
CR-BC2:	66	67.0	NA	NA	
CR-BC2:	67	44.0	NA	NA	
CR-BC2:	68	235.0	NA	NA	
CR-BC2:	69	74.0	NA	NA	
CR-BC2:	70	79.0	NA	NA	
CR-BC2:	71	69.0	NA	NA	
CR-BC2:	72	22.0	NA	NA	
CR-BC2:	73	76.0	NA	NA	
. CR-BC2:	74	58.0	NA	NA	
CR-BC2:	75	4.8%	NA	3.25	
CR-BC2:	76	5.0%	0.15	14.68	
CR-BC2:	77	6.8%	0.02	3.63	
MR-BC2:	1	1200.0	NA	NA	
MR-BC2:	2	282.0	NA	NA	
MR-BC2:	3	183.0	NA	NA	
MR-BC2:	4	21.0%	0.23	24.45	
KCRŪ-:	400	1400.0	NA	NA	
KCRO-:	401	1120.0	АИ	NA	
KCRO-:	402	5200.0	0.05	5,62	
KCRO-:	403	4000.0	0.755	64.7	
KCRO-:	405	122.0	NA	0.51	



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PROJECT: BC~87-2

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#### GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

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AUTHORITY: ROBIN CHISOLM

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		FIRE ASSAY	FIRE ASSAY		
		AU	AG	PB	ZN
SAMPLE	. NUMBER	PPB	PPM	FPM	PPM
C R :	78	<2.0	0.13	28.0	54.0
C R – 5	79	N2.0	0.08	10.0	13.0
CR-:	80	<2.0	<0.02	12.0	17.0
C X ~ :	81	<2.0	×0.02	4.0	77.0
Ck-:	82	<2.0	0.5	100.0	30°0
C R – :	83	12000.0	NA	11.95%	4,25%
C K - :	84	101.0	3.61	280.0	1000.0
CR-:	85	32000.0	NA	1720.0	4.36%
Ck-:	86	84.0	4.0	17.0	31.0
CR-:	87	43.0	0.59	21.0	75.0
CR-:	88	143.0	4.44	375.0	143.0
СЖ-:	89	180.0	0.26	8.0	84.0
CR-:	90	3.0	0.64	46.0	66.0
CR-:	91	303.0	0.6	23.0	64.0
CR-:	92	35.0	1.45	120.0	680.0
CR-:	93	<2.0	1.02	8.0	58.0
CR-:	94	170.0	0.53	20.0	43.0
CR-:	95	704.0	NA	1200.0	510.0
CR-:	96	2.0	1,48	70 <b>.</b> 0	59.0
C R - :	97	12.0	0.7	61.0	143.0
CR-:	98	<2.0	0.09	6.0	13.0
C R - :	59	<2.0	0.12	7.0	57.0
CK-:	100	<12.0	0.06	5.0	32.0
CR-:	101	10.0	0.08	17.0	78.0
C R - :	102	2.0	0.12	10.0	72.0
CR-:	103	<2.0	0.08	8.0	232.0
CR-:	104	9.0	1.43	11.0	24.0
CR-:	105	32.0	<0.02	8.0	20.0
CR-:	√ 10G	103.0	0.44	2.0	173.0
С К – :	<b>№</b> 107	<2.0	]. " 4	11.0	69.0

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PROJECT: BC-87-2

WORK ORDER: 4358D-87

## \*\*\* FINAL REPORT \*\*\*

#### GEOCHEMICAL LABORATORY REPORT \_\_\_\_\_

	OHULT	6 IIPE; KUCH	ž	ASSAY Fire Assay Au	ASSAY Fire Assay Ag
S	АМРІ	Е И П И В Е	R	OZ/TON	OZ/TON
	CR-:	78		NA	NA
	CR-:	79		NA	NA
	CR-:	80		NA	NA
	CR-:	81		NA	NA
	CR-:	82		NA	NA
	CR-:	83		0.32	24.05
	Ck-:	84		NA	NA
	CR−:	85		0.89	22.95
	CR-:	86		NA	NA
	CR-:	87		NA	NА
	CR-:	89		NA	NA
	C R – :	89		NA	NA
	C R – 🕻	90		NA	NA
	CR-:	91		NA	NA
	CR-:	92		NA	NA
	CR-:	93		NA	NA
	CR-:	94		NA	NA
	CR-:	95		NA	1.14
	C R - :	96		NA	NA
	CR-:	97		NA	NA
	Ck-:	98		NA	NA
	CR−:	99		NA	NA
	CR-:	100		NA	NA
	CR-:	101		NA	NA
	CR-:	102		NA	NA
	CR-:	103		NA	NA
	CR-:	104		NA	NA
	C R - :	105		NA	ΝА
	Ck-:	106		NA	NA
	CR-:	107		NA	NA



# BARRINGER MAGENTA

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AUTHORITY:R. CHISOLM

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ATTN: R. ALLEN

CALGARY, ALBERTA

## GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK FIRE ASSAY FIRE ASSAY AU AG CU PΒ PPB SAMPLE NUMBER PPM PPM PPM CR-BC2: 36 15.0 0.07 27.0 <1.0 CR-BC2: 154.0 11.0 37 0.5 12.0 6.4 CR-BC2: 38 44.0 88.0 18.0 CR-BC2: 39 3000.0 NA 155.0 7400.0 CR-BC2: 40 720.0 NA 280.0 1530.0 CR-BC2: 41 42.0 0.97 7.0 88.0 CR-BC2: 42 0.54 4.0 4.0 29.0 CR-BC2: 43 8.0 0.61 56.0 78.0 CR~BC2: 25.0 44 9.0 0.77 117.0 CR-BC2: 45 110.0 0.42 12.0 10.0 144.0 CR-BC2: 46 420.0 2.6 132.0 CR-BC2: 47 5.0 0.46 36.0 2.0 CR-BC2: 48 34.0 1.15 10.0 30.0 49 CR-BC2: 62.0 1.5 33.0 88.0 CR-BC2: 50 20000.0 3.5% NA 1100.0 CR-BC2: 51 7.0 3.2 74.0 300.0 CR-BC2: 52128.0 2.25 21.0 410.0 CR-BC2: 53 15.0 1.37 32.0 30.0 CR-BC2: 54 156.0 2.0 64.0 123.0 CR-BC2: 557.0 0.57 9.0 10.0 CR-BC2: 56 37.0 31.0 7.0 0.73 57 CR-BC2: 82.0 0.29 46.0 22.0 CR-BC2: 58 12.0 0.16 7.0 26.0 59 CR-BC2: 36.0 1.38 106.0 19.0 CR-BC2: 60 <2.0 0.61 450.0 3.0 CR-BC2: 724.0 61 0.15 10.0 2.0 CR-BC2: 62 2.0 0.1 22.0 5.0 CR-BC2: 63 0.04 3.0 6.0 14.0 CR-BC2: 64 60.0 0.46 6.0 125.0 CR-BC2: 65 0.54 15.0 6.0 12.0



AUTHORITY:R. CHISOLM

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PROJECT: BC-87-2

WORK ORDER: 43180-87

### \*\*\* FINAL REPORT \*\*\*

## GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

ATTN: R. ALLEN

ASSAY ASSAY FIRE ASSAY FIRE ASSAY ZN AU AG SAMPLE NUMBER PPM OZ/TON OZ/TON 72.0 NA CR-BC2: 36 ΝÁ 37 CR-BC2: 32.0 NA NA CR-BC2: 38 280.0 NA NA 39 CR-BC2: 1.4% 0.08 5.45 CR-BC2: 1.427 40 NA 3.23 CR-BC2: 500.0 ΝA 41 NA CR-BC2: 42 127.0 NA NA CR-BC2: 43 410.0 NA NA CR-BC2: 44 880.0 NA NA CR-BC2: 45 141.0 NA NA CR-BC2: ΝA NA 46 1.88% CR-BC2: 47 930.0 NA NA NA CR-BC2: 48 860.0 NA 49 2700.0 NA NA CR-BC2: 18.52 CR-BC2: 50 1.37% 0.62 2440.0 CR-BC2: NA NA 51CR-BC2: 52600.0 NA NA CR-BC2: 53 695.0 NA NA 54 1250.0 NA NA CR-BC2: CR-BC2: 55 123.0 NA NA CR-BC2: 56 172.0 NA NA CR-BC2: 57 NA 235.0 NA CR-BC2: NA 58 148.0 NA CR-BC2: 59 282.0 NA NA CR-BC2: 60 51.0 NA NA NA NA CR-BC2: 48.0 61 CR-BC2: 62 30.0 NA NA CR-BC2: 63 27.0 NA NA CR-BC2: 64 48.0 NA NA CR-BC2: 65 44.0 NA NA

## 1987 SUMMARY OF EXPENDITURES

## SILVER BASIN GROUP CLAIMS

Personnel'

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R.E. Chisholm, P.Geol.	35 X 350/day	12,250.00	
K. Collard, B.Sc.	38 X 275/day	10,450.00	
J. Roberts	27 X 190/day	5,130.00	
W. McLeod	28 X 190/day	5,320.00	
R.C. Davy	2 X 190/day	380.00	
J.M. Hislop	2 X 190/day	380.00	33,910.00
General Costs			
Lab Analyses:	137 rock samples	3,314.40	
	221 soil samples	4,765.25	
Drafting	-	1,229.44	
Maps & Reproductions		1,434.07	
Room/Board: 108 man	days X 40/day	4,320.00	
Equip. Rental: Truck, A	TV, Geo.Inst. Radio	<b>4,536.45</b>	
Travel Expenses		3,081.21	
Helicopter		897.60	
Secretarial		136.95	
Disposable Supplies		984.72	
Handling Charges		2,027.94	26,728.03
D6Z Cat Rental (road ex	ctension) 29 hrs X 2	l01.65/hr	2,947.60
		TOTAL	\$63,585.63

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![](_page_68_Figure_0.jpeg)

![](_page_69_Figure_0.jpeg)