GEOPHYSICAL REPORT

on the

JIM CLAIMS

Record #'s 8578, 8579, 9907 and 9908

MANSON CREEK, BRITISH COLUMBIA

Omenica Mining Division

N.T.S. 93N/10

Lat. 55° 44'N; Long. 124° 37'W

BY: Robert M. Cann, M.Sc.

September 1990

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SUMMARY

The Jim claims are located 235 km northwest of Prince George in north-central British Columbia. Claims straddle the Germansen River between the settlements of Manson Creek and Germansen Landing.

The property overlies a section of the Manson Creek Fault Zone; a 65 km long, up to 1 km wide, complex series of anastomosing splays hosting carbonatized and silicified ultramafics, volcanics and sediments. Numerous gold-bearing quartz-carbonate alteration zones and quartz veins are developed along or marginal to the fault.

Work in 1989 located float, apparently originating from gossanous cliffs on the west side of the Germansen River, which carried up to 19.8 g/t Au (0.58 opt).

In 1990, a magnetometer survey was conducted over much of the Jim 4 claim to help define the location of the Manson Fault Zone on the west side of the Germansen River. The survey defined a strong, 400 m wide anomaly which is believed to reflect ultramafic rocks within the fault zone. The anomaly passes through the northwest corner of the Jim 4 claim.

Many of the showings in the Manson Creek area have undergone only cursory examinations. Occurrences that have been examined in more detail have never been fully evaluated. Potential exists for the discovery of additional high grade quartz systems and extensive, lower grade, larger tonnage style precious metal bearing alteration zones.

INTRODUCTION

The Jim claim group lies along the Manson Creek Fault. This fault trends northwesterly, is steeply dipping and consists of a complicated series of anastomosing splays, characterized by carbonatized and silicified ultramafics, mafic volcanics and deep water sediments. Movement is interpreted to be strike slip and the width varies from a few hundred metres to over 1,000 metres.

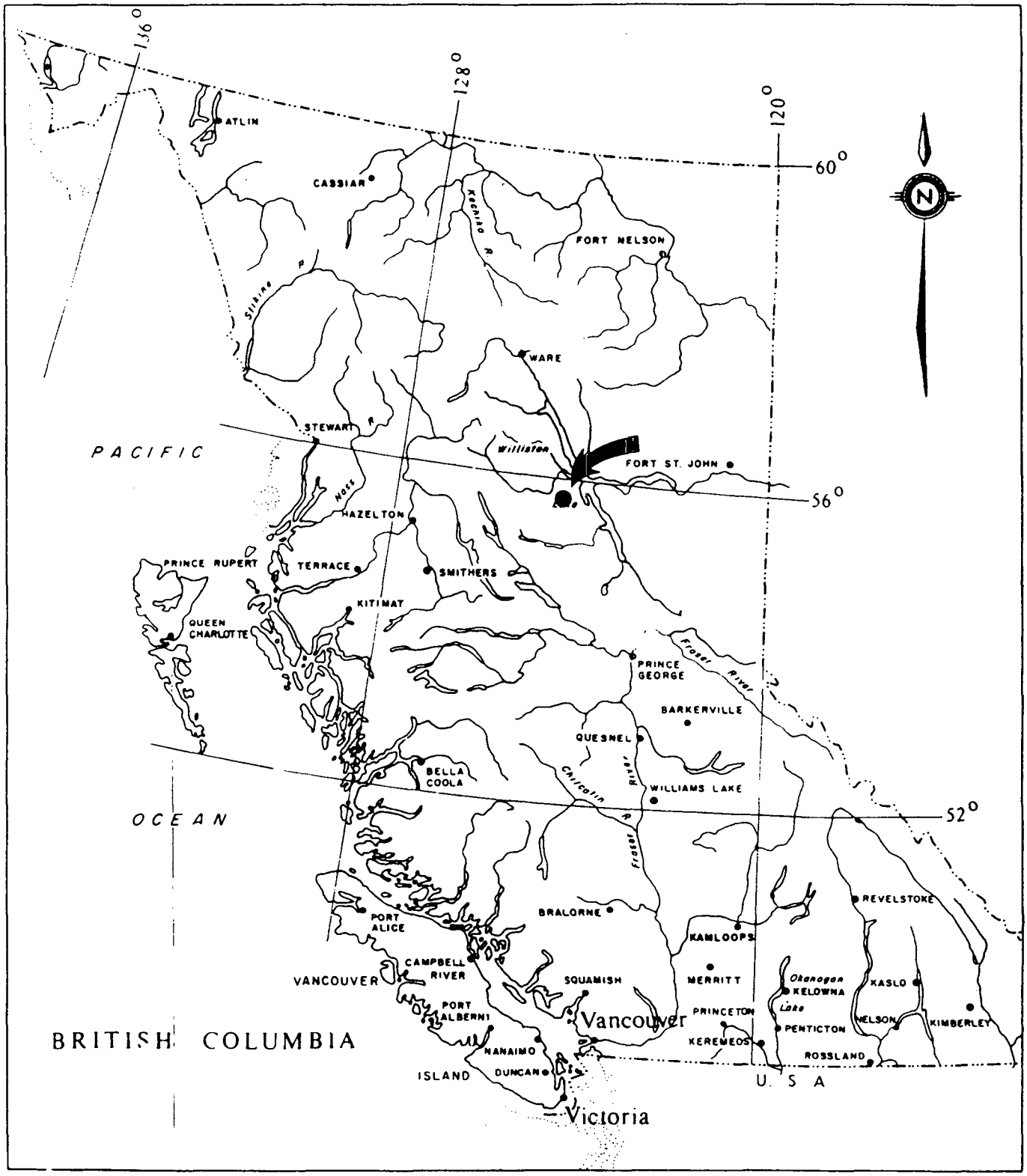
The fault is host to numerous precious metal vein occurrences, one of which (Farrell showing) lies within the Jim 4 claim. Auriferous quartz stockwork mineralization, hosted by extensive silica-carbonate alteration, occurs southeast of the property (QCM claims - Central Zone). A prolonged history of placer mining has also been documented along all major creeks draining the Manson Creek Fault.

Between July 6, 1990 and July 17, 1990 work was carried out on the Jim 4 mineral claim. A total of 7.3 km of grid was established and 5.9 line-km of magnetometer surveying conducted. The survey was expected to help define the location of the Manson Fault Zone to the west of the Germansen River. A float sample taken from this area in 1989 carried 19.8 g/t Au.

Property, Location and Access

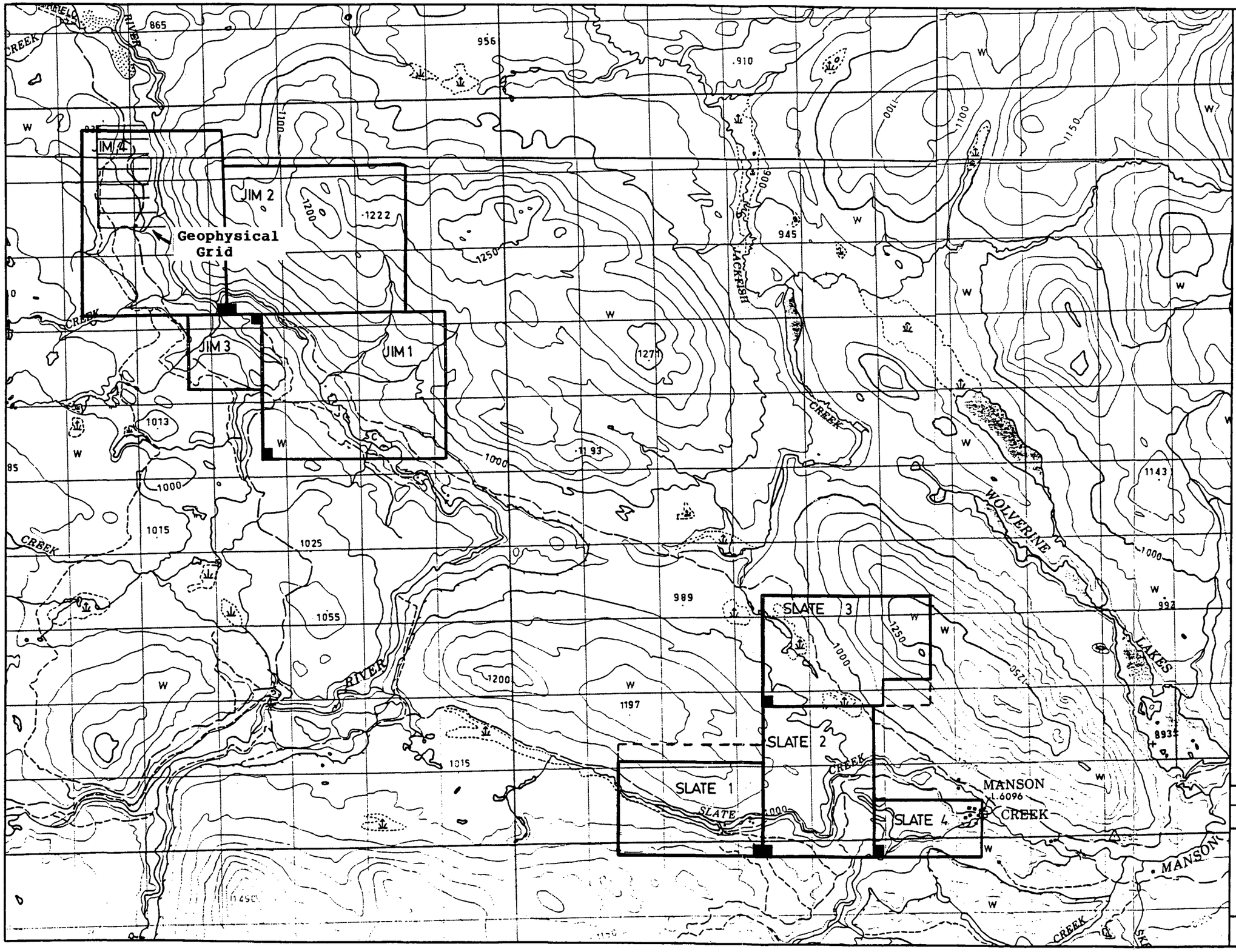
The Jim claims are located along the Germansen River and are centered 12 km northwest of Manson Creek and approximately 235 km northwest of Prince George, B.C. in NTS: 93N/10 (Fig. 1). Access to Manson Creek is best facilitated by a 225 km stretch of 2 wheel drive gravel road, north from Fort St. James. Alternate road access is provided by a network of well maintained logging roads, which join the Hart Highway (B.C. Highway No. 97) approximately 160 km north of Prince George and 30 km south of MacKenzie.

Float planes fly into the Manson Lakes and fixed wings service Germansen Landing, 27 km to the northwest of Manson Creek. Room, board and provisions can be obtained in both Manson Creek and Germansen Landing.



LOCATION MAP

DATE	SCALE	NTS	DRWG NO.
1989.	1 7500 000		1



0·5 0 1·0 2·0
Kilometres

CLAIM MAP

Figure 2

The property comprises 64 contiguous units (Figure 2) registered to R. M. Cann. Claim data are listed below.

Claim Name	Units	Record #	Expiry
Jim 1	20	8578	July 17, 1991
Jim 2	20	8579	July 17, 1991
Jim 3	4	9907	Oct. 29, 1990
Jim 4	20	9908	Oct. 30, 1990

History

Placer gold was discovered on Germansen River, Manson River and their tributaries in 1870-71. Production was almost continuous from Germansen River and some 24,138 ounces of gold were recovered until 1949. Total recorded production from Slate Creek, Manson River and several tributary streams was an additional 12,815 ounces of gold.

Intensive prospecting within the Manson Creek - Germansen River camp led to the discovery of a number of lode gold - silver occurrences. Several of these showings, including the Farrell, Ah-Hoo Creek, Motherlode (Flagstaff), QCM, Discovery Bar, Sunset and Fairview, are distributed along or are proximal to the Manson Creek Fault (Figure 3).

Limited trenching and underground development was carried out on the Farrell showing (currently on the Jim 4 mineral claim-Figure 3) prior to 1949 (Armstrong and Thurber, 1949). A 0.7m sample assayed 0.8 oz/t Au and 1.6 oz/t Ag.

Golden Rule Resources Ltd. of Calgary operated the Opec (the Slate 1 to 4 claims cover the Opec 1, 2, 3 and 10) and Flume claims (the Jim 1 to 4 claims cover the Flume 1, 2, 3, 6, and 7) in 1980. Grab samples collected from the Farrell and Fairview showings confirmed previous values (0.345 oz/t Au and 0.550 oz/t Au from the Farrell and 0.098 oz/t Au from the Fairview). Approximately 40 line km of grid controlled geological mapping, geochemical sampling, ground VLF/EM and magnetic geophysical surveying were carried out on the Flume claims (B.C.D.M. Assessment Report 8957). The grid was situated to test suspected major structures and quartz-carbonate alteration zones southeast of the Germansen River.

The Flume claims were re-examined in 1983 by Manson Creek Resources Ltd. (B.C.D.M. Assessment Report 12,362). The program consisted of geological mapping, geochemical sampling and geophysical surveys over the Farrell showing, the Ah-Hoo Occurrence and over selected gold geochemical anomalies outlined

in previous surveys. Several gold and silver soil geochemical anomalies were outlined in an area 400m by 250m and further investigations were recommended. Limited trenching and sampling around the Farrell adit returned up to 0.511 oz/t Au over 3.0m. Altered wallrock adjacent to the vein returned 0.184 oz/t Au over 1.0m.

A limited diamond drilling program (304.8m) was conducted in 1984 in order to evaluate the continuity and extent of the Farrell showing (B.C.D.M. Assessment 12,130). Three holes were drilled proximal to the showing and one hole was located along strike to the north. Results were discouraging and the interpretation was that the Farrell showing lacked vertical and lateral extent. However, the drill spacing and locations may not have been sufficient in order to adequately test this structure. Continued work on the remaining untested soil anomalies was recommended.

GEOLOGY

Regional Geology

The Manson Creek area lies within the allocthonous Intermontane Belt (Ferri and Melville, 1988 and 1989) consisting of Late Triassic to Early Jurassic Takla Group, Middle Paleozoic to Early Triassic Slide Mountain Group and possible Middle to Late Paleozoic Harper Ranch Group. These are intruded by the Early Cretaceous Germansen batholith and the Triassic to Cretaceous Hogem batholith.

The Harper Ranch Group comprises carbonate, epiclastics and mafic volcanics overlain by Slide Mountain Group deep water sedimentary, volcanic and igneous rocks. The Takla Group is an arc assemblage of subalkaline to cal-alkaline pyroclastic and epiclastic rocks with lesser mafic flows.

The most prominent structure in the area is the 65 kilometre long Manson Creek fault zone, which separates the Takla Group in the southwest from the Slide Mountain Group to the northeast. The fault trends northwesterly and varies from a few hundred meters to over a kilometre in width. Lenses of altered ultramafics occur along the zone and are clearly delineated by aeromagnetics. Strike slip motion is inferred by stretched fault-breccia clasts and phyllite clasts, slickensides and fibrous crystal growths. The sense and amount of motion has not been deduced. The Slate Creek lineament is probably a splay off the Manson fault.

Property Geology and Mineralization

The Jim claims are predominantly underlain by a northwest trending series of variably serpentinized ultramafics and mafic volcanics. As the Manson Creek Fault zone is approached the ultramafics become increasingly carbonate altered with the local development of listwaenite (quartz-carbonate-pyrite-fuchsite) and talc schist.

On the Jim 1 and 4 claims (Figure 5) and along the Germansen River, these mafics and ultramafics are in fault contact with graphitic schists and meta-siltsones. At the Farrell showing, a northwest trending zone of mafic volcanics, within the ultramafics, hosts chalcopyrite - tetrahedrite bearing quartz veins. Previous sampling of the largest vein returned 0.511 oz/t Au over 3 m (A.R. 12,362). A sample of quartz - carbonate altered float taken in 1989 on the west side of the Germansen

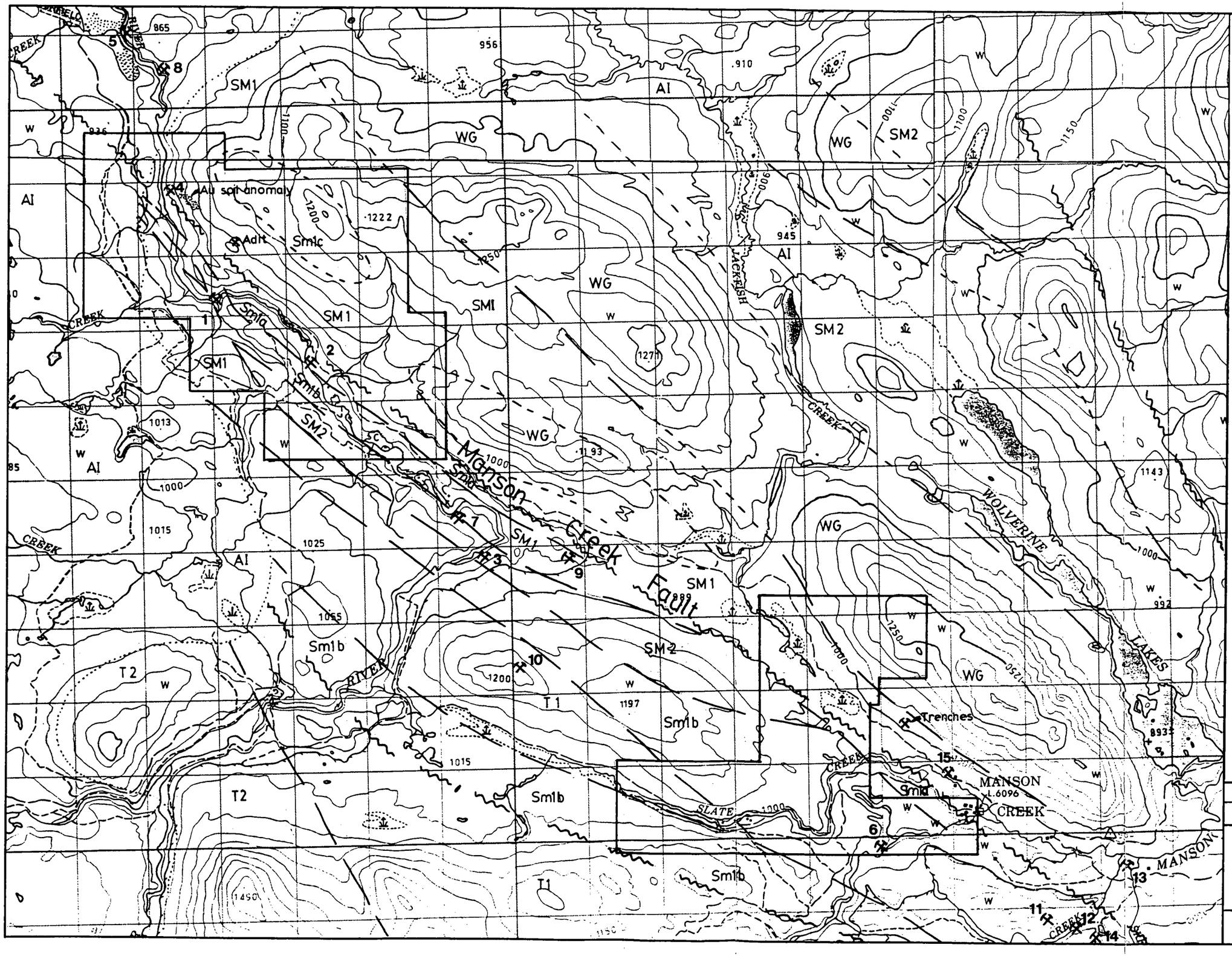
River opposite the Farrel showing ran 0.58 oz/t Au (A.R. 19,211).

Geological mapping away from the Germansen River is restricted due to the paucity of outcrop. Exposures do indicate however, repeated belts of ultramafics, mafic volcanics and Slide Mountain Group meta-sediments.

Table 1

Mineral Occurrences

Map	Type	MINFILE Number	Name	Economic Minerals	Geological Description
1	Asbestos	093N 115	Germansen River	Chrysotile	Asbestos is found in varying amounts in a serpentinized ultramafic body near and within the Manson fault zone.
2	Ultramafic-hosted base and precious metals	093N 116	Ah-Hoo Creek	Pentlandite, platinum, gold	Mineralization disseminated in pyrrhotite-bearing serpentinized ultramafic bodies within and near the Manson fault zone.
3	"	093N 024	Motherlode (Flagstaff)	Azurite, malachite, gold, tetrahedrite, chalcopyrite	Mineralization occurs in a shear related to the Manson fault separating a quartz-carbonate-altered andesite(?) and a pyritiferous argillite(?) of the Slide Mountain Group.
4	"	093N 025	Farrell	Tetrahedrite, chalcopyrite, gold	Mineralization occurs in three quartz veins in quartz-carbonate-altered and sheared Slide Mountain rock (andesite?) within the Manson fault zone.
5	Vein-hosted base and precious metals	093N 026	Sunset	Chalcopyrite, gold, silver	A pyrite and chalcopyrite-bearing quartz vein approximately 3 metres wide follows the plane of schistosity in quartz-rich schists near the Manson fault zone.
6	"	093N 063	Discovery Bar	Galena, sphalerite, tetrahedrite	Numerous quartz stringers are sparsely mineralized in a 3.65-metre shear zone separating quartz-carbonate-altered schists and black phyllites of the Slide Mountain Group.
7	"	093N 130	Not named	Tetrahedrite, gold	"
8	"	093N 144	Not named	Chalcopyrite, gold, galena, tetrahedrite	Numerous folded and semi-continuous pyritiferous quartz veins containing varying amounts of mineralization hosted by a well-foliated and pyritiferous quartz-rich schist.
9	"	093N 145	Not named	Chalcopyrite, tetrahedrite	Mineralization occurs in several quartz veins in Slide Mountain volcanics and sediments.
10	Disseminated/stockwork precious metals	093N 198	QCM Claims	Gold	Gold occurs disseminated or in quartz vein stockwork within quartz-carbonate-altered Takla volcaniclastics near the Manson fault zone.
11	Vein-hosted molybdenum and tungsten	93N-078	Tait Tungsten	Scheelite	Scheelite is found in quartz stringers parallel to axial plane cleavage of folds within the Manson fault zone.
12	Vein-hosted precious and base metals	93N-030	Kathy (Joy, Troy)	Galena, tetrahedrite, sphalerite ± scheelite, bornite, chalcopyrite, gold, molybdenite	Mineralization occurs in quartz veins, fault breccia zones and hydrothermally altered rocks related to the Manson fault zone. Veins are hosted in limestones, argillites, ultramafics and chlorite schists of the Slide Mountain Group.
13	(Pb ± Ag, Au)	93N-117	Lost Creek	Galena ± silver, tetrahedrite, gold	Sulphide-bearing quartz veins in limestones, argillites, greenstones and cherts of the Slide Mountain Group within the Manson fault zone.
14	"	93N-136	Not named	"	"
15	(Au, Ag, Cu, W)	93N-023	Fairview	Tetrahedrite, gold, azurite, malachite, chalcopyrite (?)	A 0.5-metre-wide quartz vein is found in a shear zone bounded by quartz-carbonate-altered ultramafics and gabbros. It is traced for approximately 50 metres.



Geology & Mineral Occurrences

Figure 3

MAGNETOMETER SURVEY

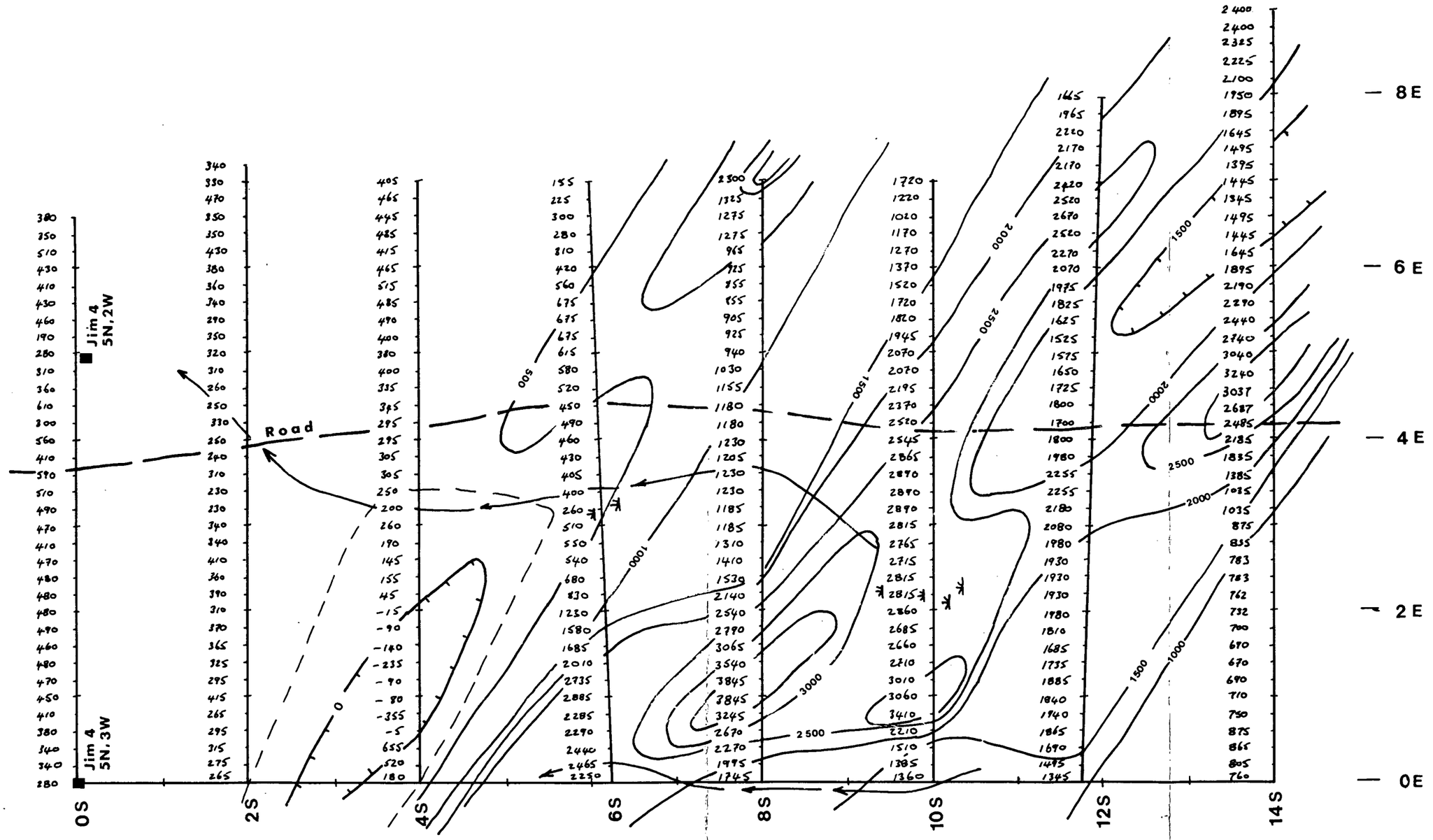
Purpose and Procedure

Because of the lack of outcrop away from the Germansen River and because of the importance of the Manson Fault Zone in controlling gold mineralization it was felt a magnetic survey would be useful for defining structures in this area.

For control a flagged grid was established with 200 m spaced east-west lines and stations established at 20 m intervals (Fig. 2 and Fig. 4). Readings were taken using a Scintrex MF-1-BR fluxgate magnetometer reading to +/- 5 gammas. Diurnal variation was corrected by taking repeated readings at a base station.

Results

Readings (less 58,000 gammas) are shown in plan form in Figure 4. Principal contours are at 500 gamma intervals. Data shows a significant 400 metre wide anomaly, with 1,500 to 2,500 gammas of relief, extending from the southeast corner of the grid and passing through 0 E/ 6 S. If extrapolated the anomaly would pass just south of the Farrel showing (Fig. 3).



NOTE: Readings are Total Magnetic Field
(less 58,000 gammas)

Contour Interval: 500 gammas

0 100 200 300 m

JIM CLAIMS
Omineca Mining Division

MAGNETOMETER SURVEY

Azimuth Geological Incorporated	By:	Figure: 4
	Drawn:	
	Date:	

CONCLUSIONS AND RECOMMENDATIONS

A magnetic survey on the Jim 4 claim, in an area of extensive overburden, has outlined a strong, linear, northwest trending magnetic anomaly. This anomaly is probably caused by ultramafic rocks which are spatially associated with with the important Manson Fault Zone.

Further work is highly recommended on the Jim claims. Geological mapping and prospecting should be conducted along the length of the fault. Particular attention should be placed on float samples and recently uncovered road exposures. Detailed soil sampling should be undertaken and anomalies outlined by previous surveys should be closely examined. The Farrell showing should be re-evaluated in terms of hosting a steeply plunging vein system.

REFERENCES

Armstrong, J.E. and Thurber, J.B., 1945, Manson Creek Map-Area, British Columbia, G.S.C. Paper 45-9.

Ferri, F. and Melville, D.M., 1988, Manson Creek Mapping Project, B.C.D.M. Geological Fieldwork, 1987, Paper 1988-1, pp 169-180.

Ferri, F. and Melville, D.M., 1989, Geology of the Germansen Landing Area, British Columbia, B.C.D.M. Geological Fieldwork, 1988, Paper 1989-1, pp 209-220.

B.C.D.M. Assessment Reports: 4245, 4246, 8956, 8957, 9944, 10746, 11627, 12130, 12362, 16602.

CERTIFICATE OF QUALIFICATIONS

I, Robert M. Cann, of the City of Vancouver, British Columbia hereby certify that:

1) I am a consulting geologist with offices at 205 - 470 Granville St., Vancouver, B.C.

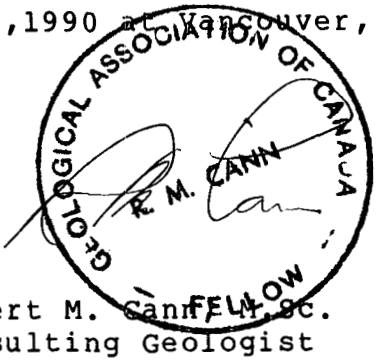
2) I hold a degree of Master of Science in Geology from The University of British Columbia, 1979 and a Bachelor of Science in Geology from The University of British Columbia, 1976.

3) I am a fellow of the Geological Association of Canada.

5) I have been employed in my profession for the past 15 years.

6) This report is based on work directly supervised by myself and on personal knowledge gained while employed in the area in 1983.

Dated on this 5th day of September, 1990 at Vancouver, B.C.



Robert M. Cann, F.G.A.C.
Consulting Geologist

APPENDIX A

Cost Statement

Cost Statement

Jim Claims

1/2 Mob/Demob (50% of $1,671.00)	$835.50
Supervision: R. Cann, M.Sc. 1 day	350.00
Grid Establishment & Surveying:	
W. Taylor, B.Sc.; July 6-17 5 days @ $300/day	1,500.00
M. Vaskovic, B.Sc.; July 6-17 4 days @ $200/day	800.00
Food/Accom (Germansen Landing) 4 @ 100/day	400.00
Truck Rental 6.5 @ 75/day	487.50
Instrument Rental 5 days @ $50/day	250.00
1/2 supplies, fuel, misc.	160.30
Report (writing, drafting, secretarial)	750.00
Total	**$ 5,533.30**