GEOCHEMICAL AND PROSPECTING REPORT

on the

SLATE CLAIMS

RECORD #'s 8575, 8576, 8577 and 8578

MANSON CREEK, BRITISH COLUMBIA

Omenica Mining Division

N.T.S. 93N/9 & 10

Latitude 55°41'N Longitude 124°32'W

BY: Gregory G. Crowe, M.Sc., P.Geol.

October, 1989

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SUMMARY

Precious metal mineralization in the Manson Creek area is spatially associated with the Manson Creek Fault zone; a 65 km long, up to 1000m wide, complex series of anastomosing splays hosting carbonatized and silicified ultramafics, volcanics and sediments. Numerous gold bearing quartz veins and quartz-carbonate alteration zones are developed along or occur marginal to the fault.

The Slate claims are located along the Manson Creek Fault and lie immediately northwest of the town of Manson Creek. Several precious metal occurrences have been documented within the vicinity of the property.

The Slate claims lie along a possible strike extension of the Fairview showing, currently held by Chevron Minerals Ltd. Grab samples from the Fairview have returned up to 0.524 oz/t Au, from a 1.0m wide quartz vein/shear system. The zone may extend for up to 850m along strike to the northwest.

Recent sampling of the Fairview showing confirmed high gold and silver values to be associated with chalcopyrite and tetrahedrite +/- stibnite bearing quartz veins. Soil sampling conducted along the southern margin of the Slate 3 mineral claim returned weak gold and arsenic anomalies, which may be associated with the northwestern extension of the Fairview system.

The Discovery Bar occurrence, located near the southern boundary of the Slate claims, hosts galena, sphalerite and tetrahedrite bearing quartz stringers developed within a 3.65m wide shear. This showing was not examined during the most recent exploration program.

Samples collected elsewhere on the property were not anomalous.

The area hosts numerous precious metal mineral occurrences. Known showings require further detailed exploration surveys and regional studies should be conducted in order to evaluate the potential of the entire Manson Creek Fault zone.

INTRODUCTION

The Slate claims lie along the Manson Creek Fault. This fault trends northwesterly, is steep 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.

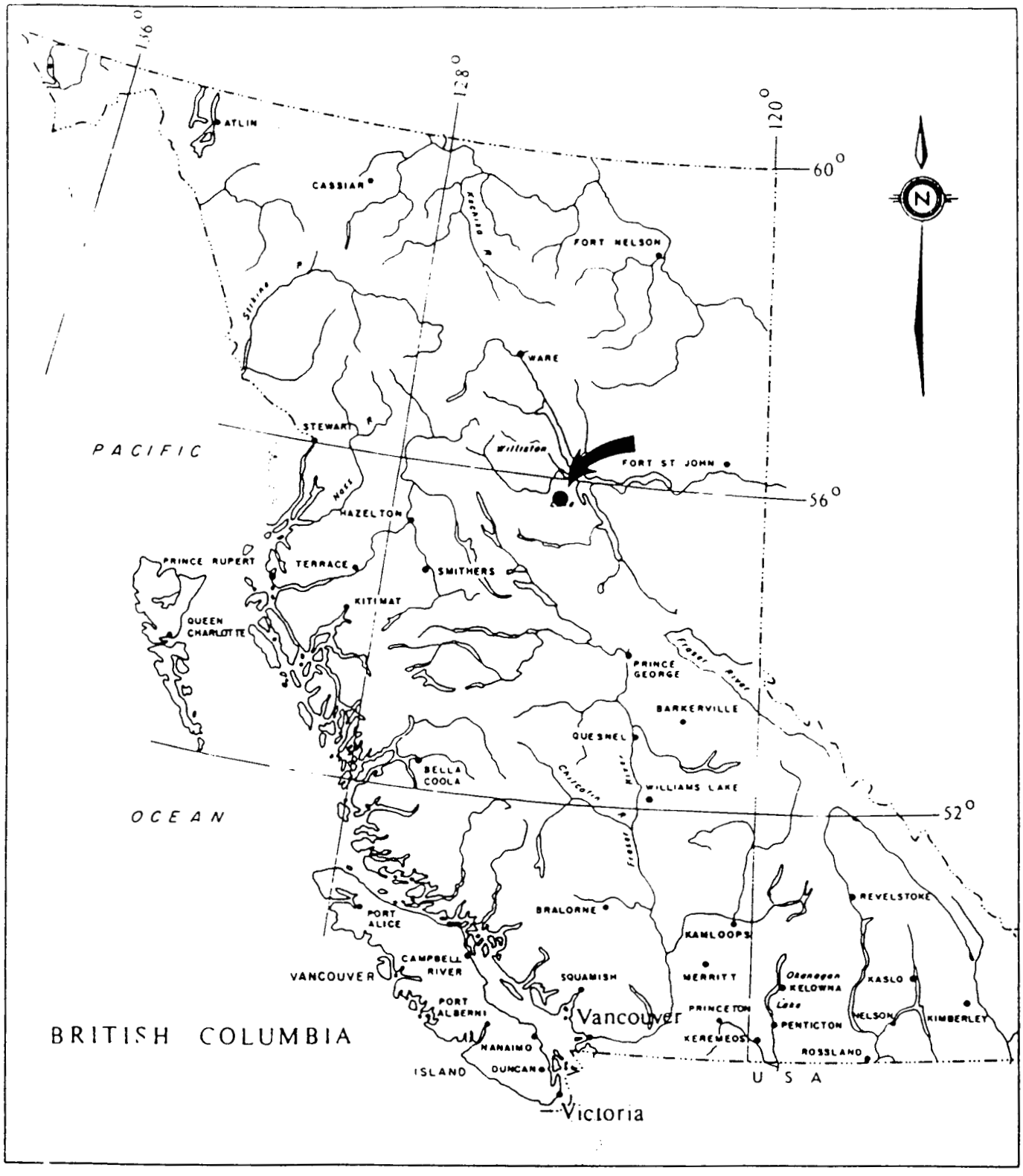
The fault is host to numerous precious metal vein occurrences, one of which (Fairview showing) lies immediately adjacent to the Slate claim group. Quartz stockwork mineralization, hosted by extensive silica-carbonate alteration, occurs immediately west of the Slate claims (QCM claims - Central Zone). A prolonged history of placer mining has also been documented along all major creeks draining the Manson Creek Fault.

Between July 13, 1989 and July 17, 1989 work was carried out on the Slate 1 to 4 mineral claims. The Fairview showing was examined and grab samples were collected in order to illustrate the target mineralization expected to be encountered on the Slate claims. Several quartz veins and alteration zones were examined along the myriad of roadways traversing the property. In addition, soil samples were collected on the Slate 3 claim block to test the northwest extension of the Fairview showing. An attempt was made to access the Discovery Bar occurrence, but it was not located.

PROPERTY, LOCATION AND ACCESS

The Slate claims are located along Slate Creek and lie immediately northwest of the town of Manson Creek (Figures 1 and 2). The property comprises 42 contiguous units. J. Forbes is the registered owner.

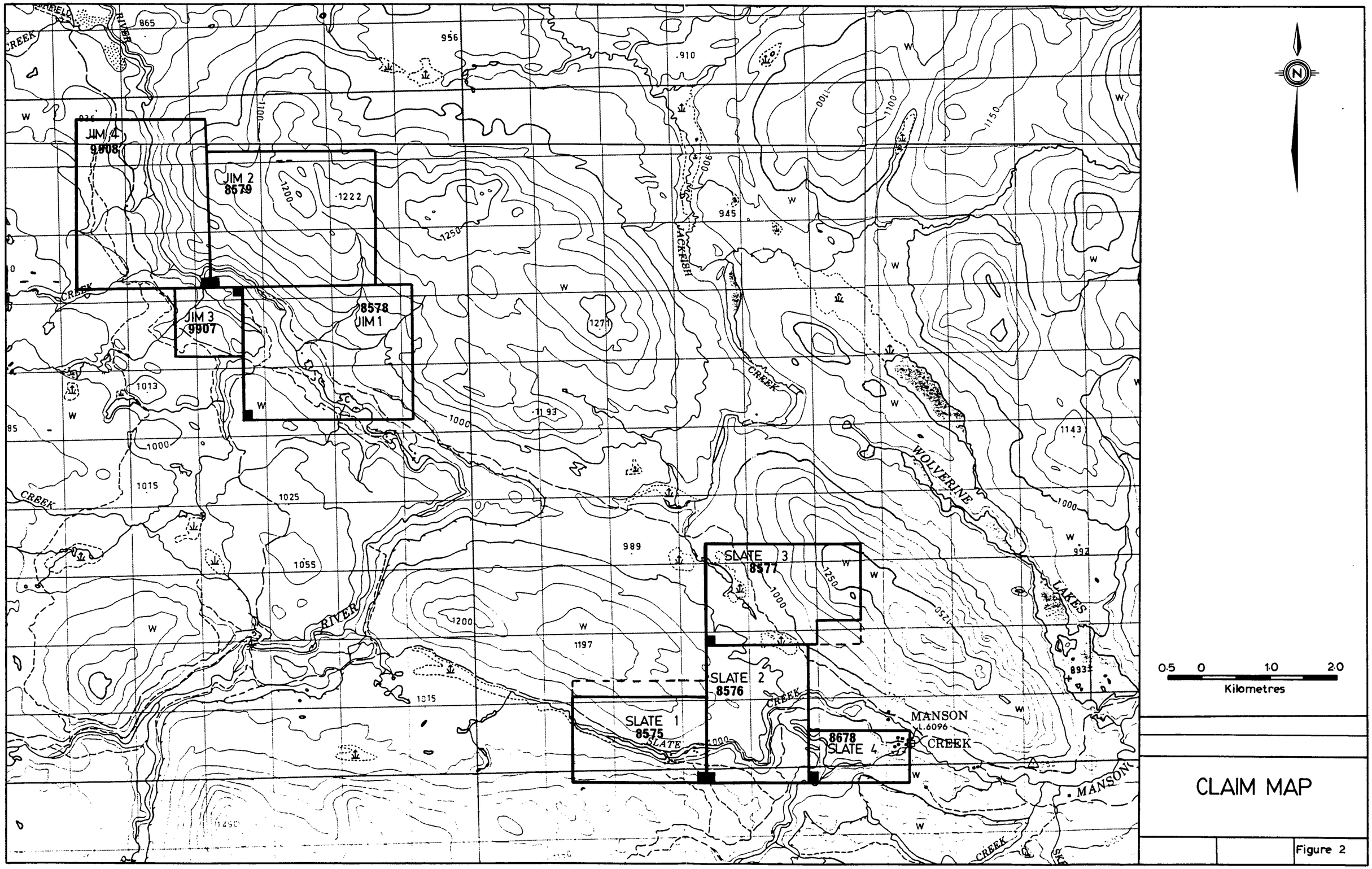
Claim Name	Units	Record #	Expiry
Slate 1	12	8575	July 17, 1990
Slate 2	12	8576	July 17, 1990
Slate 3	15	8577	July 17, 1990
Slate 4	3	8678	July 17, 1990



0 100 200 300 km

LOCATION MAP

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


JIM 4
9908
JIM 2
8579
JIM 3
9907
8578
JIM 1
SLATE 3
8577
SLATE 2
8576
SLATE 1
8575
8678
SLATE 4
MANSON
L.6096
JACKFISH
CREEK
WOLVERINE
LAKES
RIVER
MANSON
0.5 0 1.0 2.0
Kilometres
CLAIM MAP
Figure 2

Manson Creek lies approximately 230 km north-northwest of Prince George, B.C. 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.

HISTORY

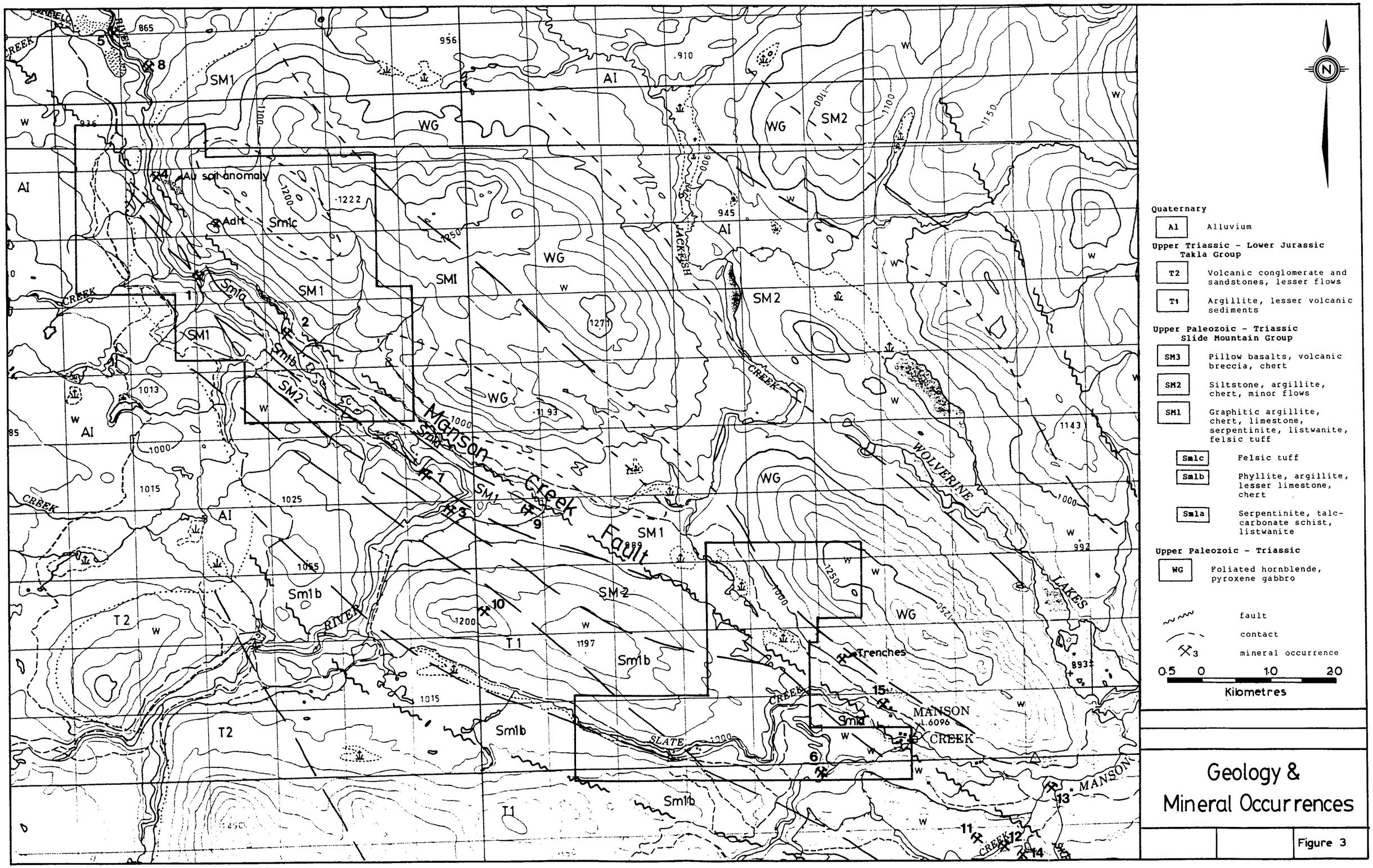
Placer gold was discovered on Germansen River, Manson River and their tributaries in 1870-71. Production was almost continuous from Germansen River and some 24,138 ounces of gold were recovered until 1949. Total recorded production from Slate Creek, Manson River and several tributary streams was an additional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

The Fairview showing, currently held by Chevron Minerals Ltd. (between the Slate 2, Slate 3 and Slate 4 mineral claims), was worked sporadically during the 1900's. Numerous overgrown trenches and pits can be found on the property (B.C.D.M. Assessment Report 16,602).

In 1972, the Ida Claims (currently the QCM Claims of Manson Creek Resources) were worked by Sullivan and Rogers of Toronto. Soil and rock geochemistry revealed significant gold anomalies (B.C.D.M. Assessment Report 4245). This was followed by IP and resistivity surveys, (B.C.D.M. Assessment Report 4246) before the ground was allowed to lapse. The area was re-staked in 1979 by Vital Mines of B.C., but the ground was again dropped.



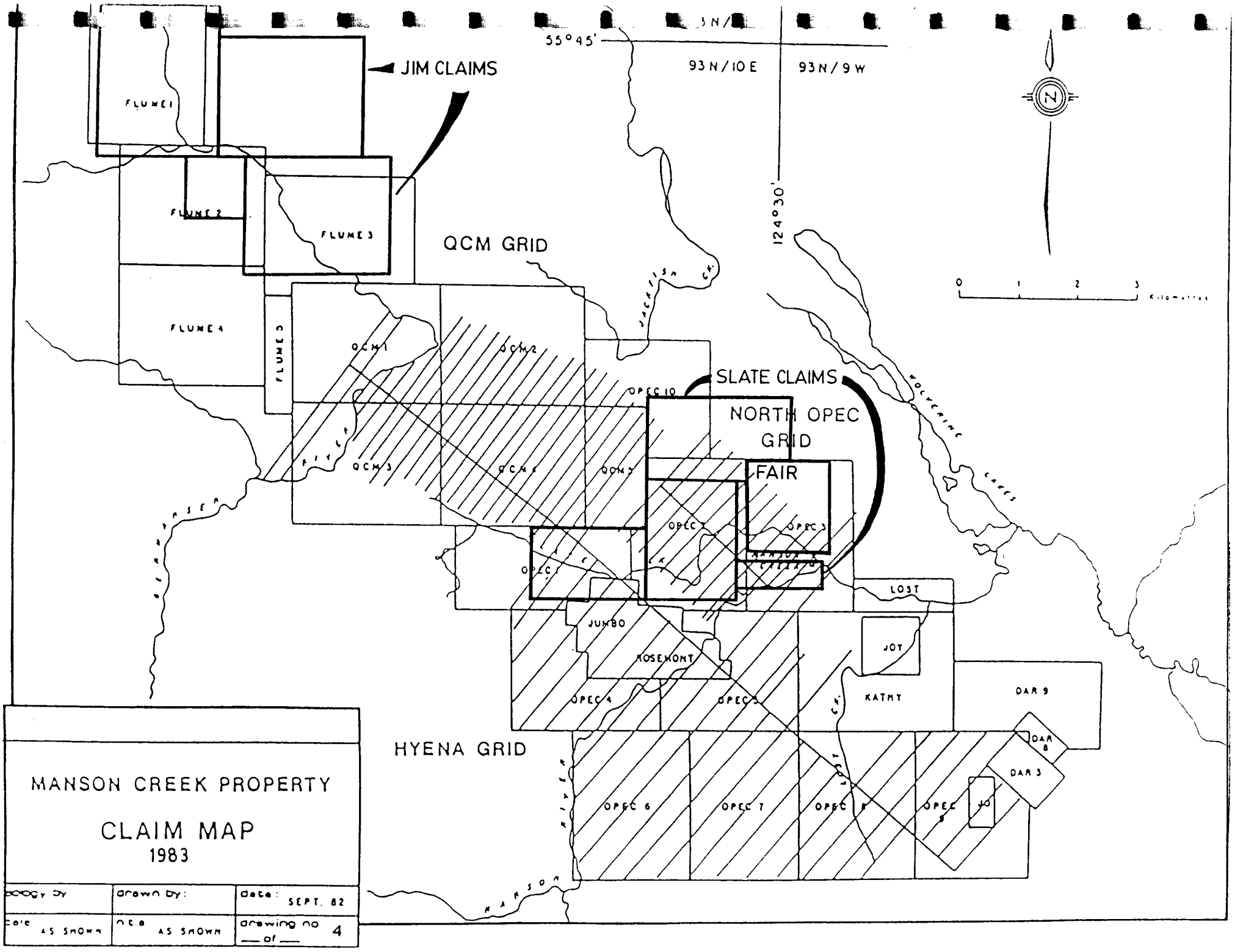
Geology & Mineral Occurrences

Figure 3

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 (the Jim 1 to 4 claims cover the Flume 1, 2, 3, 6, and 7) claims (Figure 4) in 1980. Geological, geochemical, magnetometer and VLF surveys were carried out along a 28 km grid on the Opec claims (B.C.D.M. Assessment Report 8956). Several polymetallic geochemical anomalies with coincident geophysical signatures were outlined. Grab samples collected from the Farrell and Fairview showing 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 and ground VLF/EM and magnetic geophysical surveying was 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 along the Germansen River.

In 1981, Golden Rule Resources Ltd. conducted geological, geochemical, magnetometer and VLF/EM surveys (B.C.D.M. Assessment Report 9944) over 31.3 km of grid on the QCM 1 to 5 mineral claims (located along the Manson Creek Fault between the Jim and Slate claims - see Figure 4). Two strong (to 2850 ppb Au) northwest trending soil gold anomalies 900m apart, each up to 3000m long and 50m to 300m wide, were found to be associated with silica-carbonate alteration zones. One anomaly contained an area of anomalous gold-in-rock values from 100 ppb Au to 3500 ppb Au. Trench sampling of the old Flagstaff-Motherlode occurrence returned values to 0.054 oz/t Au and 8.6 oz/t Ag. Outcrops along the north slope of Germansen River combined with VLF/EM suggest a strike length of approximately 400m for the Flagstaff-Motherlode zone.

Anaconda Canada Exploration Ltd. optioned the QCM and Opec claims from Golden Rule Resources Ltd. in 1982. In that year a total of 78.2 line km of grid were added to the existing grids on both claim groups (see Figure 4) and geological mapping, soil and rock sampling, VLF/EM and magnetometer surveys and trenching were carried out (B.D.C.M. Assessment Report 10746). Two extensive zones of intense ankerite-sericite-albite-quartz+/-pyrite alteration host anomalous gold values in rocks (up to 1200 ppb Au - Flag zone and up to 4200 ppb Au - Central zone). No soil anomaly was found to be associated with the Flag zone, but geology and IP suggest the alteration extends for up to 3,000m to the southeast. In 1983, 32 percussion (2424m), 3 diamond drill (422m) holes (Anaconda unpublished company report) and 4 reverse circulation (414m) holes (B.C.D.M. Assessment Report 11627) tested the Flag and Central zones . Five percussion holes across the Flag zone returned anomalous gold values between 50 and 167 ppb Au. The Central zone (130m by 300m) returned up to 0.169 oz/t Au over 1.5m in percussion holes, up to 0.070 oz/t Au over 3.0m in reverse circulation and up to 0.247 oz/t Au over 0.5m in diamond drilling. One 76.5m percussion drill interval averaged



MANSON CREEK PROPERTY

CLAIM MAP
1983

Geology by	Drawn by:	Date: SEPT. 82
Scale AS SHOWN	N.T.S. AS SHOWN	Drawing no 4 of ___

0.031 oz/t Au. The zone is open to the southeast along a soil geochemical anomaly. Anaconda favoured the model of an economic bulk tonnage, low grade deposit. Regional tungsten anomalies were outlined in the southern portion of the Opec claims.

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. The drill spacing and locations may not however, have been sufficient in order to adequately test this structure. Continued work on the remaining untested soil anomalies was recommended.

Chevron Minerals Ltd. staked the Fair claim, surrounding the Fairview showing, in 1987. A limited program consisting of geological mapping as well as soil and rock geochemical sampling was carried out (B.C.D.M. Assessment Report 16,602). A grab sample from the vein returned 0.524 oz/t Au. Exposures in the Fairview showing combined with old trenches and soil gold anomalies along the strike of the main quartz vein suggest the vein system has a possible extension of up to 850m.

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.

MINERALIZATION

Most mineral prospects in the area are spatially distributed along the Manson Creek fault (see Figure 3 and Table 1). Exceptions to this include a few copper showings in the Takla volcanics (Ferri and Melville, 1989) and moblydenite, chalcopyrite and scheelite occurrences within and marginal to the Germansen batholith.

Precious metals have been noted in three modes of occurrence. These include:

1) Sulphide bearing quartz-carbonate veins along or within the Manson Creek fault zone.

2) Disseminated mineralization in altered rocks of the Takla and Slide Mountain groups.

3) Quartz-carbonate alteration zones, including listwanite, developed along the fault.

Figure 3 illustrates the strong spatial association between precious metal showings and the Manson Creek fault. Two gold (Farrell and Ah-Hoo) and one asbestos showings occur within the boundaries of the Jim claims and one gold showing (Discovery Bar) is located on the Slate claims. Several other prospects (Fairview, Sunset, Discovery Bar, Kathy, Lost Creek and other unnamed showings) occur immediately along strike (northwest-southeast) from the Jim and Slate claims. These are described briefly in Table 1.

The Motherlode (Flagstaff) and QCM showings, formerly worked by Anaconda Canada Exploration Ltd., occur to the southwest of the Manson Creek fault. Gold is associated with disseminated pyrite, quartz vein stockwork, quartz veining or shears within silica-carbonate altered Takla volcaniclastics and/or Slide Mountain sediments. These alteration zones trend northwesterly, sub-parallel to the Manson Creek Fault, and may be associated with subsidiary splays off the main fault system.

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.

Significant gold concentrations have been documented at the Farrell (Jim claims) and Fairview (on strike from the Slate claims) showings. These vein type occurrences have undergone several examinations and are summarized below.

The Farrell showing consists of a northerly trending quartz-carbonate vein, varying in width from 0.5 to 5.0m. Associated gold soil anomalies with values greater than 160 ppb Au extend for 400m to the southeast, along regional strike from the Farrell trench. Mineralogy of the showing comprises tetrahedrite, chalcopyrite, azurite, malachite and native gold. The host rocks are talc schist and mafic volcanics, located 10m - 20m north of a serpentinized ultramafic. Trench sampling (B.C.D.M. Assessment Report 12,362) returned the following:

Across the vein

Sample width metres	oz/t Au	Avg. oz/t Au	oz/t Ag
0 - 1	0.046		0.44
1 - 2	0.038		0.38
2 - 3	0.950		0.54
3 - 4	0.274	0.511	0.84
4 - 5	0.308		0.22

Along the vein

Sample width metres	oz/t Au	Avg. oz/t Au	oz/t Ag
0 - 1	0.596	0.459	1.02
1 - 2	0.322		0.62
2 - 3	0.028		0.08

Eight 1.0m wide samples collected in 1984 (B.C.D.M. Assessment Report 12,130 and Ferri and Melville, 1989) returned values from 0.04 oz/t Au to 1.01 oz/t Au, confirming earlier sampling. A limited diamond drill program (304.8m in 4 holes) had discouraging results and the Farrell showing was interpreted to lack vertical and/or lateral continuity (B.C.D.M. Assessment Report 12,130). The drill spacing and locations may not however, have been sufficient in order to adequately test this structure. This would have been particularly important in the case of a plunge controlled body (see Mineralization Model section). Additional soil gold anomalies have yet to be tested and a recently discovered adit, located 1.1 km southeast of the Farrell trench (pers. comm. F. Ferri, 1988), has no record of being sampled. The potential of this showing has not been exhausted.

The Fairview showing, located to the south and east of the Slate claims, was worked by Chevron in 1987 (B.C.D.M. Assessment Report 16,602). A 1.0m wide, northwest trending, quartz vein with tetrahedrite, chalcopyrite and pyrite is exposed in trenches for 50m along strike. The vein occupies a silicified and slightly carbonatized fault zone separating gabbros to the northeast from ultramafics to the southwest. One grab sample from a trench returned 0.524 oz/t Au. Armstrong and Thurber (1949) reported values to 0.28 oz/t Au and 22.3 oz/t Ag. Chevron concluded that a possible extension of the vein was located in old trenches, 850m along strike to the northwest of the main showing, and recommended further evaluation of the property. The Slate claims lie immediately northwest of the strike continuity of this structure.

Quartz stockwork mineralization has been documented on the QCM claims, worked primarily by Anaconda Canada Exploration Ltd. in 1982 and 1983 (B.C.D.M. Assessment Reports 10746 and 11627). Slide Mountain group sediments, volcanics and ultramafics and Takla Group epiclastic rocks have been affected by quartz-carbonate alteration containing the assemblage albite-muscovite-quartz-ankerite-pyrite. Soil geochemistry located two anomalous gold zones, each approximately 3000m long by 50m to 300m wide, with gold values up to 2950 ppb Au (B.C.D.M. Assessment Report 8957 and Ferri and Melville, 1989). Anaconda delineated two zones, the Flag and Central. The larger Central zone is 200m by 300m and is open to the southeast, with gold in soils ranging from less than 10 ppb Au to 4200 ppb Au. Rocks around the Central zone returned up to 1800 ppb Au and 3700 ppb Au from two consecutive 1m chip trench samples (B.C.D.M. Assessment Report 10746). Later reverse circulation drilling (B.C.D.M. Assessment Report 11627) resulted in all four holes penetrating quartz-carbonate altered Takla Group volcanic sandstones with accompanying quartz veining. One 5m section averaged 0.06 oz/t Au, with a 1.0m interval of 0.10 oz/t Au. A percussion drill hole intersection of 76.5m averaged 0.031 oz/t Au, suggesting the potential for economic bulk tonnage, low grade gold mineralization (B.C.D.M. Assessment Report 10746 and Anaconda unpublished company report). Gold values appear to coincide with pyrite concentrations within the country rock and with quartz veinlets, suggesting stockwork mineralization (Ferri and Melville, 1989).

Quartz-carbonate altered basic volcanics and ultramafics (listwaenites) are developed along the Manson Creek Fault and its associated splays. Listwanite alteration is characterized by disseminated and/or porphyroblastic ankerite and pyrite with accompanying sericitization and silicification of the host rocks. An example of the progressive alteration of mafic volcanics is exposed approximately 3 km north of the confluence of the South Germansen and Germansen rivers. Here chloritized mafic volcanics are progressively altered to mariposite-pyrite-muscovite-quartz-carbonate schist over 20m. The carbonate rock is strongly foliated. Although no significant mineralization has been

reported from these alteration zones along the Manson Creek Fault, Armstrong and Thurber (1949) reported values to 0.01 oz/t Au and 0.69 oz/t Ag. In addition, precious metals are found in sulphide bearing quartz-carbonate veins associated with listwaenites along the fault zone (Ferri and Melville, 1989).

PROPERTY GEOLOGY

The Slate claims are predominantly underlain by a northwest trending series of variably serpentinized ultramafics and mafic volcanics and a thick sequence of Slide Mountain Group slate with minor marble. 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.

The slates are highly folded and well foliated. Numerous bull white quartz veins are developed along joints and shears within the slates.

Quartz veins hosting precious metals occur within the altered ultramafics and volcanics, marginal to the Manson Creek fault.

Exposures on the Slate claims are limited to roadcuts and river valleys. This adds to the difficulty in tracing units and in particular, in trying to follow significant structures and/or mineralized zones along strike.

ROCK GEOCHEMISTRY

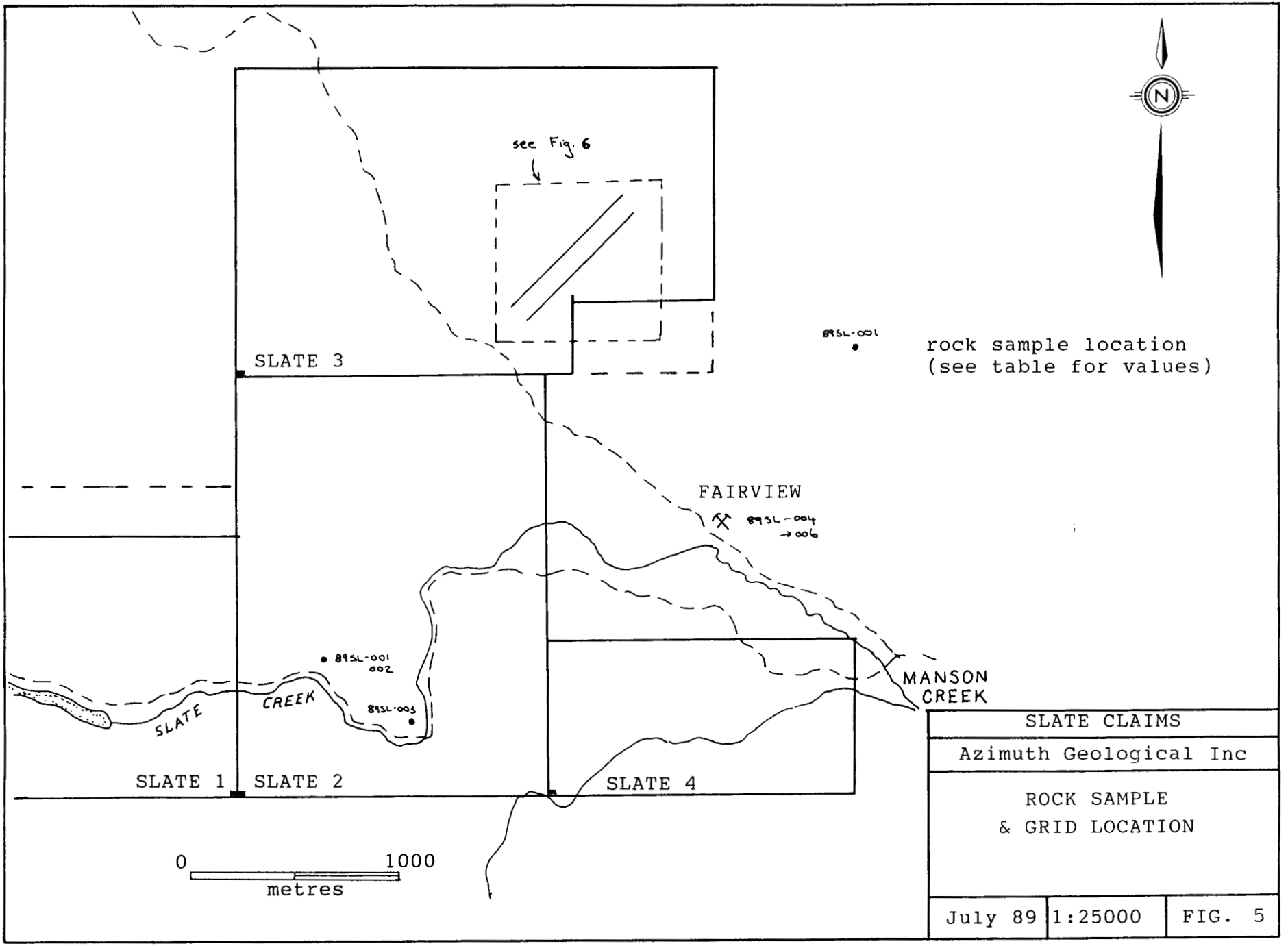
A total of 6 samples were collected from various locations on the Slate claims. These samples are described in Table 2 and their locations are shown on Figures 5 and 6.

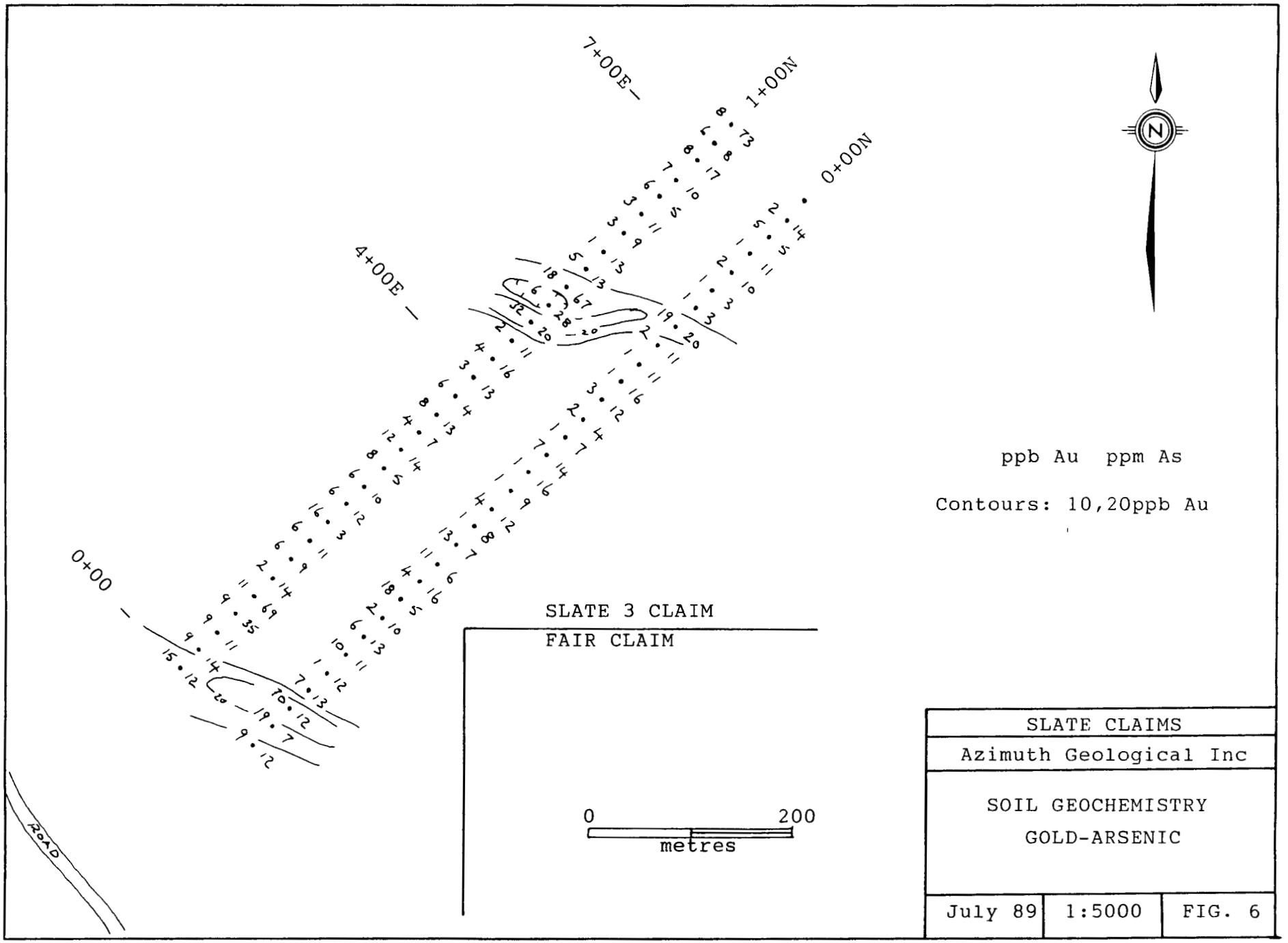
The examination of the Fairview showing was limited. Several grab samples were collected in order to characterize the type of mineralization that might be expected on the Slate claims. Values of up to 851 ppb Au - 248.4 ppm Ag and 982 ppb Au - 83.9 ppm Ag were returned from samples 89SL-005 and 89SL-006 respectively. Values of 13824 ppm Cu and 7538 ppm Cu were also associated with these samples. High arsenic and antimony were also characteristic of these chalcopyrite, tetrahedrite and/or stibnite (?) bearing quartz veins.

Trenching conducted by Chevron traced this mineralized system for several hundred metres to the northwest. An attempt was made to follow the zone onto the Slate 3 mineral claim, but extensive overburden prohibited this.

Table 2
Rock Sample Descriptions

Sample	Description	Au ppb
89SL-001	1m chip, quartz vein with rusty patches, locally vuggy, minor sericite, limonitic seams and patches, cuts graphitic slate	3
89SL-002	as 89SL-001	1
89SL-003	0.4m chip, bull white quartz vein in marble, limonitic patches, trace galena	5
89SL-004	Fairview - ankeritized ultramafic, cut by quartz veinlets, abundant fuchsite	6
89SL-005	Fairview - White, smokey quartz veining, trace chalcopyrite and patches of an unknown fine grained silver sulphide (tetrahedrite?)	851
89SL-006	Fairview - milky white quartz vein, chlorite, sericite, hematite patches, minor fuchsite, 3 - 5% chalcopyrite patches to 1cm, tetrahedrite (?) to 1%	982


see Fig. 6
SLATE 3
89SL-001
rock sample location
(see table for values)
FAIRVIEW
89SL-004
→006
89SL-001
002
89SL-003
SLATE
CREEK
MANSON
CREEK
SLATE 1
SLATE 2
SLATE 4
0
1000
metres
SLATE CLAIMS
Azimuth Geological Inc
ROCK SAMPLE
& GRID LOCATION
July 89
1:25000
FIG. 5



SLATE CLAIMS		
Azimuth Geological Inc		
SOIL GEOCHEMISTRY GOLD-ARSENIC		
July 89	1:5000	FIG. 6

Quartz veins developed in slates and marbles on the Slate 2 mineral claim were sampled. Trace galena was associated with the carbonate hosted vein. These samples did not return any anomalous values.

An attempt was made to access the Discovery Bar occurrence, but the access road could not be found and time constraints did not allow for an on-foot evaluation.

All rock samples collected were analyzed geochemically for gold and 30 element ICP at Acme Analytical Labs. Analytical Certificates are included in Appendix 2.

SOIL GEOCHEMISTRY

A soil grid was established near the southern boundary of the Slate 3 mineral claim. The lines were oriented at 045°, sub-perpendicular to the trend of the Fairview system (Figures 5 and 6). A total of 61 soil samples were collected and analyzed geochemically for gold and 30 element ICP at Acme Analytical Labs. Analytical Certificates are included in Appendix 3.

All soil samples were collected from the B horizon. Depths ranged from 15 to 35 cm and averaged 20 cm.

A weak gold anomaly (values to 32 ppb Au) extends across both sample lines in the vicinity of 5+00E. This would be crudely coincidental with the on-strike continuation of the Fairview showings. A second, weaker gold anomaly was outlined at the western margin of the sample lines.

CONCLUSIONS AND RECOMMENDATIONS

Lode gold mineralization has been documented in three modes of occurrence in the Manson Creek area. These include high grade quartz tensional veins, quartz stockwork hosted by extensive areas of quartz-carbonate alteration and quartz-carbonate alteration zones and listwaenites developed along the Manson Creek Fault. All are spatially related to the Manson Creek Fault and its splays. The strike slip fault zone has been traced for over 65 km along strike and varies in width from a few hundred meters to over a kilometre.

One significant high grade vein system lies immediately southeast of the Slate 3 mineral claim. The Fairview prospect has reported values of 0.524 oz/t Au. Recent sampling has confirmed high grade gold and silver (values to 982 ppb Au - 248.4 ppm Ag) to be associated with chalcopyrite and tetrahedrite and/or stibnite bearing quartz veins. These systems were traced for several hundred meters to the northwest, marginal to the Slate 3 mineral claim.

Two test soil lines were sampled across the suspected strike continuation of the Fairview structure onto the Slate claims. Two weak gold soil anomalies were detected. Further work will be required to validate these anomalies.

Quartz veins developed in slates and marbles elsewhere on the property returned only background values.

Further work is recommended on the Slate claims. Geological mapping and prospecting should be conducted along the length of the fault. Detailed soil sampling should be undertaken to the northwest of the Fairview showing. In addition, the Discovery Bar showing should be examined in detail.

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

I, GREGORY G. CROWE, 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 Calgary, November, 1091 and a Bachelor of Science in Geology from Carleton University in Ottawa, June, 1977.

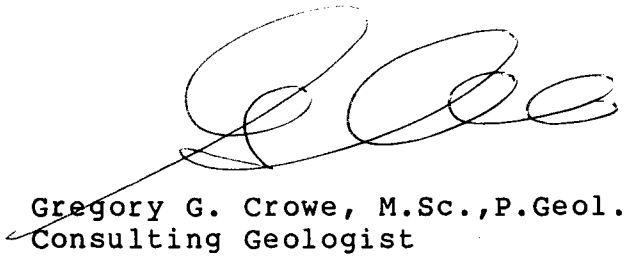
3) I am a member of the Association fo Professional Engineers, Geologists and Geophysicists of Alberta.

4) 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 a field examination conducted by me, between July 13 and July 17, 1989.

Dated on this 12th day of October, 1989 at Vancouver, B.C.



Gregory G. Crowe, M.Sc.,P.Geol.
Consulting Geologist

APPENDIX I

COSTS INCURRED

Costs Incurred
Slate Claims

Mob/Demob		$ 250.00
Geologist	4 @ 350/day	1,400.00
Assistant	3 @ 200/day	600.00
Food/Accom	7 @ 50/day	350.00
Truck Rental	3 @ 65/day	195.00
Fuel		75.00
Equipment		50.00
Geochemistry		
Rock	6 @ 17/sample	102.00
Soil	61 @ 15/sample	915.00
Shipping		50.00
Report		
Geologist	1 @ 350/day	350.00
Drafting		30.00
Secretary		50.00
Reproductions		35.00
Total		**$ 4,452.00**

APPENDIX II

ROCK GEOCHEMISTRY

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
89-SL-001	2	28	3	32	.1	11	2	266	1.08	15	5	ND	1	26	1	2	2	1	.54	.023	2	29	.10	13	.01	2	.04	.01	.02	1	3
89-SL-002	2	5	2	5	.1	8	1	169	.38	3	5	ND	1	8	1	2	2	1	.11	.003	2	6	.03	4	.01	4	.02	.01	.01	1	1
89-SL-003	3	4	50	9	.1	10	1	35	.27	3	5	ND	1	4	1	2	2	1	.10	.001	2	10	.02	4	.01	4	.01	.01	.01	1	5
89-SL-004	1	10	2	19	.1	467	45	842	3.34	469	5	ND	1	154	1	2	2	8	7.60	.005	2	293	11.62	30	.01	2	.09	.01	.02	1	6
89-SL-005	1	13824✓	2	1132	248.4✓	53	8	295	1.56	619	5	ND	1	167	8	6176✓	5	8	2.95	.009	2	69	1.69	15	.01	2	.02	.01	.01	4	851
89-SL-006	1	7538	2	220	83.9✓	30	4	338	1.88	120	5	ND	1	145	1	928	2	15	3.09	.006	2	10	1.62	23	.01	7	.03	.01	.02	4	982
STD C/AU-R	17	58	43	133	6.5	68	30	957	3.96	44	21	7	36	49	19	14	21	60	.45	.095	39	56	.92	178	.07	35	1.87	.06	.13	12	520

/ - ASSAY REQUIRED FOR CORRECT RESULT -

APPENDIX III

SOIL GEOCHEMISTRY

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-P4 SOIL P5 ROCK AU** ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 19 1989 DATE REPORT MAILED: July 26/89 SIGNED BY ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

AZIMUTH GEOLOGICAL INC. File # 89-2275 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPB	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU** PPB
SL 1+00N 0+00E	1	26	11	30	.1	101	13	288	3.43	12	5	ND	2	26	1	2	2	75	.56	.034	9	95	.99	60	.11	3	1.62	.01	.03	1	15
SL 1+00N 0+25E	2	19	10	56	.1	88	15	300	3.67	14	5	ND	2	19	1	2	2	69	.45	.035	9	93	.85	90	.08	4	1.67	.01	.05	1	9
SL 1+00N 0+50E	1	15	5	43	.1	99	13	276	3.42	11	5	ND	2	23	1	2	2	78	.63	.027	6	108	.89	107	.11	4	1.76	.01	.05	1	9
SL 1+00N 0+75E	1	13	7	61	.1	86	22	1041	5.43	35	5	ND	2	25	1	2	2	91	.66	.031	8	101	.61	155	.05	3	2.06	.01	.05	1	9
SL 1+00N 1+00E	1	33	8	51	.1	98	23	698	6.35	69	5	ND	2	19	1	2	2	92	.46	.043	7	104	.62	151	.03	3	1.84	.01	.06	1	11
SL 1+00N 1+25E	1	12	2	45	.1	90	12	233	4.01	14	5	ND	2	18	1	3	2	81	.46	.048	8	123	.66	100	.07	2	1.60	.01	.01	2	1
SL 1+00N 1+50E	1	23	12	53	.1	154	19	631	3.97	9	5	ND	2	29	1	2	2	76	.71	.061	8	149	1.47	141	.11	8	2.03	.01	.04	1	6
SL 1+00N 1+75E	1	23	12	55	.2	111	18	623	3.90	11	5	ND	2	29	1	2	2	68	.92	.032	9	120	.97	129	.09	4	2.02	.01	.05	1	6
SL 1+00N 2+00E	1	55	12	45	.2	139	19	1491	3.79	3	5	ND	2	32	1	2	2	57	1.22	.042	10	125	1.08	183	.07	9	1.97	.01	.04	1	16
SL 1+00N 2+25E	1	15	2	46	.1	122	18	790	3.80	12	5	ND	1	27	1	2	2	72	.75	.047	8	132	.82	150	.10	3	1.61	.01	.05	1	6
SL 1+00N 2+50E	1	18	4	47	.1	112	16	355	3.54	10	5	ND	2	23	1	2	2	63	.54	.094	10	119	1.06	81	.09	6	1.45	.01	.05	1	6
SL 1+00N 2+75E	1	35	6	99	.1	423	19	1703	3.34	5	5	ND	1	44	1	2	3	65	1.46	.067	16	154	.95	169	.06	3	2.30	.01	.04	1	9
SL 1+00N 3+00E	1	38	7	53	.1	197	20	415	4.06	14	5	ND	3	25	1	2	2	69	.56	.045	12	169	1.76	87	.12	6	1.69	.01	.06	1	12
SL 1+00N 3+25E	1	21	5	97	.1	95	19	823	4.34	7	5	ND	2	30	1	2	2	85	.30	.048	8	106	.79	192	.10	2	2.27	.01	.07	1	4
SL 1+00N 3+50E	1	45	12	72	.1	107	22	640	4.53	13	5	ND	2	33	1	2	2	81	1.26	.035	12	130	1.29	166	.09	5	2.77	.01	.05	1	8
SL 1+00N 3+75E	1	28	2	60	.1	82	19	344	4.06	4	5	ND	2	22	1	2	2	83	.97	.022	7	94	.82	187	.10	4	2.37	.01	.06	1	6
SL 1+00N 4+00E	1	28	6	57	.1	71	16	410	3.68	13	5	ND	2	25	1	2	2	84	.70	.034	7	82	1.09	85	.13	3	2.03	.01	.07	1	3
SL 1+00N 4+25E	1	16	4	53	.1	68	15	375	3.75	16	5	ND	2	17	1	2	2	77	.49	.034	8	91	.73	90	.10	2	1.67	.01	.05	1	4
SL 1+00N 4+50E	1	39	4	53	.1	62	17	405	4.60	11	5	ND	1	16	1	2	2	91	.51	.083	6	74	.84	113	.08	2	1.84	.01	.07	1	2
SL 1+00N 4+75E	1	47	5	62	.1	86	22	575	4.21	20	5	ND	2	22	1	2	2	79	.57	.031	11	83	1.11	159	.09	4	1.98	.01	.06	1	32
SL 1+00N 5+00E	1	35	6	56	.1	102	25	866	4.19	28	5	ND	1	23	1	2	2	74	.78	.048	9	87	.92	135	.06	3	1.90	.01	.06	1	6
SL 1+00N 5+25E	1	42	10	59	.1	166	22	448	4.46	67	5	ND	2	20	1	4	2	67	.48	.055	10	113	1.49	111	.08	4	1.79	.01	.06	1	18
SL 1+00N 5+50E	1	21	3	80	.1	59	15	302	4.07	13	5	ND	2	16	1	2	2	82	.37	.060	9	72	.78	150	.08	2	1.81	.01	.05	1	5
SL 1+00N 5+75E	1	33	2	72	.1	70	17	618	4.25	13	5	ND	2	19	1	2	2	81	.47	.066	8	81	1.06	147	.09	3	1.94	.01	.08	1	1
SL 1+00N 6+00E	1	14	7	52	.1	70	14	293	3.76	9	5	ND	2	18	1	2	2	78	.45	.043	10	92	.90	107	.08	2	1.63	.01	.05	1	3
SL 1+00N 6+25E	1	18	6	54	.1	103	13	240	3.39	11	5	ND	2	28	1	2	2	68	.66	.093	10	103	.98	100	.08	5	1.61	.01	.05	1	3
SL 1+00N 6+50E	1	97	8	76	.1	111	29	739	6.60	5	5	ND	1	17	1	2	2	109	.47	.132	6	97	1.17	111	.04	3	2.37	.01	.05	1	6
SL 1+00N 6+75E	1	14	6	49	.1	55	10	206	3.36	10	5	ND	1	15	1	2	2	73	.33	.060	9	73	.62	118	.07	2	1.63	.01	.04	1	7
SL 1+00N 7+00E	1	26	5	59	.1	91	14	255	3.98	17	5	ND	3	17	1	2	3	76	.34	.054	11	98	.94	108	.09	2	1.90	.01	.04	1	8
SL 1+00N 7+25E	1	19	3	61	.1	65	14	339	3.95	8	5	ND	1	19	1	2	2	84	.38	.085	7	68	.54	130	.07	2	1.56	.01	.04	1	6
SL 1+00N 7+50E	1	30	4	55	.1	90	23	475	6.08	73	5	ND	1	16	1	2	2	87	.39	.034	8	102	.62	124	.04	2	1.89	.01	.04	1	8
SL 0+00N 0+00E	1	43	10	44	.1	167	18	614	3.73	12	5	ND	2	37	1	2	2	71	1.00	.063	12	130	1.31	125	.10	4	1.65	.01	.05	2	9
SL 0+00N 0+25E	1	37	6	41	.1	163	16	536	3.48	7	5	ND	2	50	1	4	2	63	1.53	.084	10	131	1.45	110	.08	7	1.39	.01	.05	1	19
SL 0+00N 0+50E	1	28	9	42	.1	157	19	439	3.62	12	5	ND	3	35	1	3	2	66	.90	.109	12	131	1.52	109	.09	6	1.42	.01	.06	2	70
SL 0+00N 0+75E	1	48	3	53	.1	194	17	529	3.24	13	5	ND	2	69	1	3	2	62	2.44	.115	11	117	2.15	70	.10	8	1.28	.02	.07	1	7
SL 0+00N 1+00E	1	19	7	40	.1	144	15	501	3.43	12	5	ND	2	33	1	2	2	63	.97	.040	9	136	1.13	126	.08	5	1.53	.01	.04	2	1
STD C/AU-S	18	57	44	132	6.7	67	30	1020	3.99	42	20	7	36	47	18	15	24	60	.47	.099	38	52	.93	175	.07	35	2.02	.06	.14	12	51

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU** PPB
SL 0+00N 1+25E	1	98	5	59	.1	302	16	537	3.45	11	5	ND	1	52	1	3	2	57	1.69	.059	14	152	1.30	171	.07	5	1.84	.01	.04	1	10
SL 0+00N 1+50E	1	42	12	46	.1	246	18	424	4.12	13	5	ND	2	38	1	2	2	66	1.21	.044	13	197	1.56	157	.07	4	1.74	.01	.05	1	6
SL 0+00N 1+75E	1	10	3	47	.1	90	15	375	3.43	10	5	ND	2	27	1	2	2	75	.66	.051	7	125	.72	141	.09	2	1.59	.01	.03	1	2
SL 0+00N 2+00E	2	18	16	40	.1	117	16	708	3.62	5	5	ND	2	31	1	2	2	62	.96	.022	8	138	.84	215	.08	2	1.83	.01	.03	1	18
SL 0+00N 2+25E	1	65	7	51	.1	212	19	487	3.99	16	5	ND	2	32	1	2	2	65	1.04	.074	11	154	1.92	114	.08	5	1.60	.01	.04	1	4
SL 0+00N 2+50E	1	29	10	44	.1	176	20	949	4.06	6	5	ND	2	31	1	2	2	67	1.35	.041	9	137	1.20	150	.08	9	1.23	.01	.05	2	11
SL 0+00N 2+75E	1	33	19	49	.3	160	21	2031	3.60	7	5	ND	1	29	1	3	2	59	1.49	.029	9	120	.89	196	.07	7	2.02	.01	.04	1	15
SL 0+00N 3+00E	1	20	8	50	.1	84	15	438	4.03	8	5	ND	1	23	1	2	2	90	.74	.025	7	105	.70	173	.10	2	1.39	.01	.02	1	1
SL 0+00N 3+25E	1	19	14	51	.1	67	15	601	3.43	12	5	ND	2	22	1	2	2	76	.60	.033	7	75	.82	94	.10	4	1.52	.01	.07	1	4
SL 0+00N 3+50E	2	34	12	58	.1	82	21	582	4.27	9	5	ND	1	17	1	2	2	83	.48	.033	6	96	1.17	135	.08	2	2.09	.01	.06	1	1
SL 0+00N 3+75E	2	18	16	62	.1	74	19	881	4.00	16	5	ND	2	20	1	2	2	87	.65	.037	7	91	.88	155	.11	2	1.98	.01	.06	2	1
SL 0+00N 4+00E	1	83	17	73	.1	76	26	1225	5.37	14	5	ND	1	19	1	2	2	99	.61	.049	8	82	1.07	206	.07	2	2.44	.01	.05	1	7
SL 0+00N 4+25E	1	29	11	54	.1	55	23	833	4.54	7	5	ND	1	20	1	2	2	102	.69	.030	6	76	.79	160	.12	3	2.03	.01	.05	1	1
SL 0+00N 4+50E	1	17	5	50	.1	74	16	403	3.59	4	5	ND	1	16	1	2	2	72	.60	.025	7	97	.79	98	.13	2	1.65	.01	.05	1	2
SL 0+00N 4+75E	1	25	12	74	.1	50	24	720	4.60	12	5	ND	2	15	1	2	2	98	.46	.042	6	62	.80	138	.09	2	1.97	.01	.04	1	3
SL 0+00N 5+00E	1	26	6	68	.1	58	20	634	4.32	16	5	ND	1	16	1	2	2	101	.52	.049	6	75	.69	164	.07	2	1.96	.01	.05	1	1
SL 0+00N 5+25E	1	30	7	73	.1	57	29	1279	6.87	11	5	ND	1	15	1	2	2	126	.54	.060	3	67	.63	375	.02	3	2.16	.01	.08	1	1
SL 0+00N 5+50E	1	26	10	105	.1	78	24	464	5.41	11	5	ND	2	13	1	3	2	96	.33	.045	9	95	.58	129	.06	3	1.94	.01	.05	1	2
SL 0+00N 5+75E	1	36	4	79	.1	75	20	638	4.99	10	5	ND	2	16	1	2	2	96	.43	.062	9	87	.80	155	.05	2	1.97	.01	.05	1	19
SL 0+00N 6+00E	1	45	3	87	.1	49	27	871	5.41	3	5	ND	1	14	1	2	4	98	.40	.112	7	55	.71	351	.03	2	1.90	.01	.06	1	1
SL 0+00N 6+25E	1	65	12	96	.1	47	20	420	5.89	3	5	ND	2	16	1	4	2	113	.38	.097	7	54	.61	178	.03	2	1.90	.01	.04	1	1
SL 0+00N 6+50E	1	9	12	64	.1	55	18	556	2.96	10	5	ND	2	21	1	2	2	65	.49	.131	10	99	.72	135	.07	2	1.69	.01	.05	1	2
SL 0+00N 6+75E	1	9	11	67	.1	65	15	727	2.96	11	5	ND	2	17	1	2	2	66	.45	.096	9	88	.57	103	.08	2	1.32	.01	.03	1	1
SL 0+00N 7+00E	1	8	16	54	.1	57	10	315	2.97	5	5	ND	2	16	1	2	2	70	.38	.065	9	75	.63	80	.09	2	1.29	.01	.03	1	5
SL 0+00N 7+25E	1	33	9	67	.1	91	18	273	4.46	14	5	ND	2	13	1	2	2	76	.33	.053	9	105	1.11	177	.07	2	1.99	.01	.03	1	2
STD C/AU-S	19	57	39	132	6.7	67	30	1021	3.89	43	22	7	36	47	18	15	20	60	.46	.096	38	52	.91	183	.07	35	1.95	.06	.13	12	51