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REPORT ON PHASE II
GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS
on the

SPRING PROPERTY

(Spring 1-4, SED 1, CED 1 and 2 Claims)
Victoria and Nanaimo Mining Divisions, B.C.
NTS 92F/2E, 92F/1W
40°09'N Lat., 124°32'W Long.
for

INTERNATIONAL CHEROKEE DEVELOPMENTS LTD.
November 30, 1988
T.M. Naciuk, B.Sc.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18-108

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(i)

SUMMARY

Phase II exploration on the Spring property was successfully completed on the Spring 1-4, Sed, Ced 1, and Ced 2 claims. The 96 unit claim group, situated southeast of Port Alberni in the Victoria and Nanaimo Mining Divisions, is underlain mainly by sediments and volcanoclastics of the Sicker Group. The Phase II results have demonstrated an improvement in gold grades, mineralization potential, and areal extent of anomalous results, compared to results of previous work.

Field work, carried out from July 28 to September 27, 1988 has identified five target areas characterized by VLF-EM anomalies and coincident anomalous zinc \pm gold, copper, and silver soil geochemistry and gold \pm silver, arsenic, copper, lead, and zinc lithochemical anomalies. All target zones are open to the east and west; Target Zone 2 is also open to the south.

The primary target area is a 1100 m by 225 m zone of moderate to strong VLF-EM anomalies and anomalous gold-silver-arsenic-copper-lead-zinc soil geochemistry coincident with one or more quartz veins exposed in four short adits. Rock sampling results from within this zone, which closely parallels and may be related to a Tertiary(?) hornblende-feldspar porphyritic intermediate intrusive, include 3.60 g/t Au across 25 cm (Sample TN2-3) and 18.72 g/t Au across a minimum width of 10 cm (Allen, 1987; Sample 23165).

Target area 2 consists of a 900 m east-west trending strong VLF-EM anomaly paralleling a very well-defined, intensely iron-carbonate altered fault zone (south end of main grid) and local exposures of intermediate intrusive. Silt sample heavy mineral concentrates have proven valuable in this area, returning gold values of 10,000 ppb, 1130 ppb, 240 ppb, and 110 ppb from creeks draining this anomalous zone. The source(s) of these anomalous gold-in-silt results has yet to be established.



(ii)

Target area 3 is characterized by a discontinuous weak to strong VLF-EM anomaly accompanied by coincident strong gold-silver-arsenic-copper-lead-zinc lithogeochemical and moderate copper-lead-arsenic \pm zinc \pm silver soil geochemical anomalies. This 1100 m by 125 m anomalous zone has returned results of 1.23 g/t Au, 2.4 ppm Ag, 2745 ppm Pb (Sample CC05-5) and 2.64 g/t Au, 3.0 ppm Ag, 3957 ppm Pb (Sample CC05-6; both are quartz vein grabs from outcrop).

Target area 4 is a 1000 m by 125 m zone characterized by weak VLF-EM anomalies with a coincident moderate copper-lead-zinc \pm gold soil geochemical anomaly. A road quarry at the east end of this zone exposes a hornblende-feldspar porphyritic dyke flanked by a 2 m wide iron carbonate alteration zone accompanied by quartz veining, suggesting a situation similar to that of the primary target area.

Grid B was established to explore for possible strike extensions of highly anomalous rock and silt results collected from on and near the southwestern part of the Spring 2 claim. Values returned include 1400 ppb Au from a heavy mineral concentrate (Sample TN30-6 HMC) and 1.44 g/t Au (TN31-3; from outcrop). Coincident weak VLF-EM response and moderately anomalous copper-zinc-gold soil geochemistry establish this zone as Target area 5.

Of particular importance in the results of the 1988 exploration program is the broadening of the primary target area and the establishment of four other zones of interest, two of which exhibit characteristics similar to those of the Target 1 area (Zones 2 and 4).

Based on the encouraging results of the 1988 Phase II exploration program, Phase III follow-up geological mapping, soil geochemistry, trenching, VLF-EM geophysics, and diamond drilling is recommended over the Main Grid area. Additional geological mapping and prospecting is recommended in the Target 5 area. Phase III exploration is recommended at a total cost of \$150,000.



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1.0 INTRODUCTION

This report represents the compilation of results of Phase II exploration carried out by MPH Consulting Limited on the Spring Group at the request of International Cherokee Developments Ltd. The field work program, carried out from July 28 to September 27, 1988, was designed to follow up and expand upon favorable Phase I results. Work included geological mapping at 1:2500 and 1:10,000 scales, prospecting, trenching, VLF-EM and soil geochemical surveys, and heavy mineral concentrate analysis of silt samples. All work was performed by MPH Consulting Limited staff.



2.0 PROPERTY LOCATION, ACCESS, TITLE

The Spring property is located on the divide between the Nitinat and Cameron River drainage basins, 22 km east-southeast of the city of Port Alberni, on Vancouver Island, British Columbia. The property is in the Victoria and Nanaimo Mining Divisions, on NTS sheets 92F/2E and 92F/1W and is centred at approximately 49°09'N latitude and 124°32'W longitude (Figures 1 and 2).

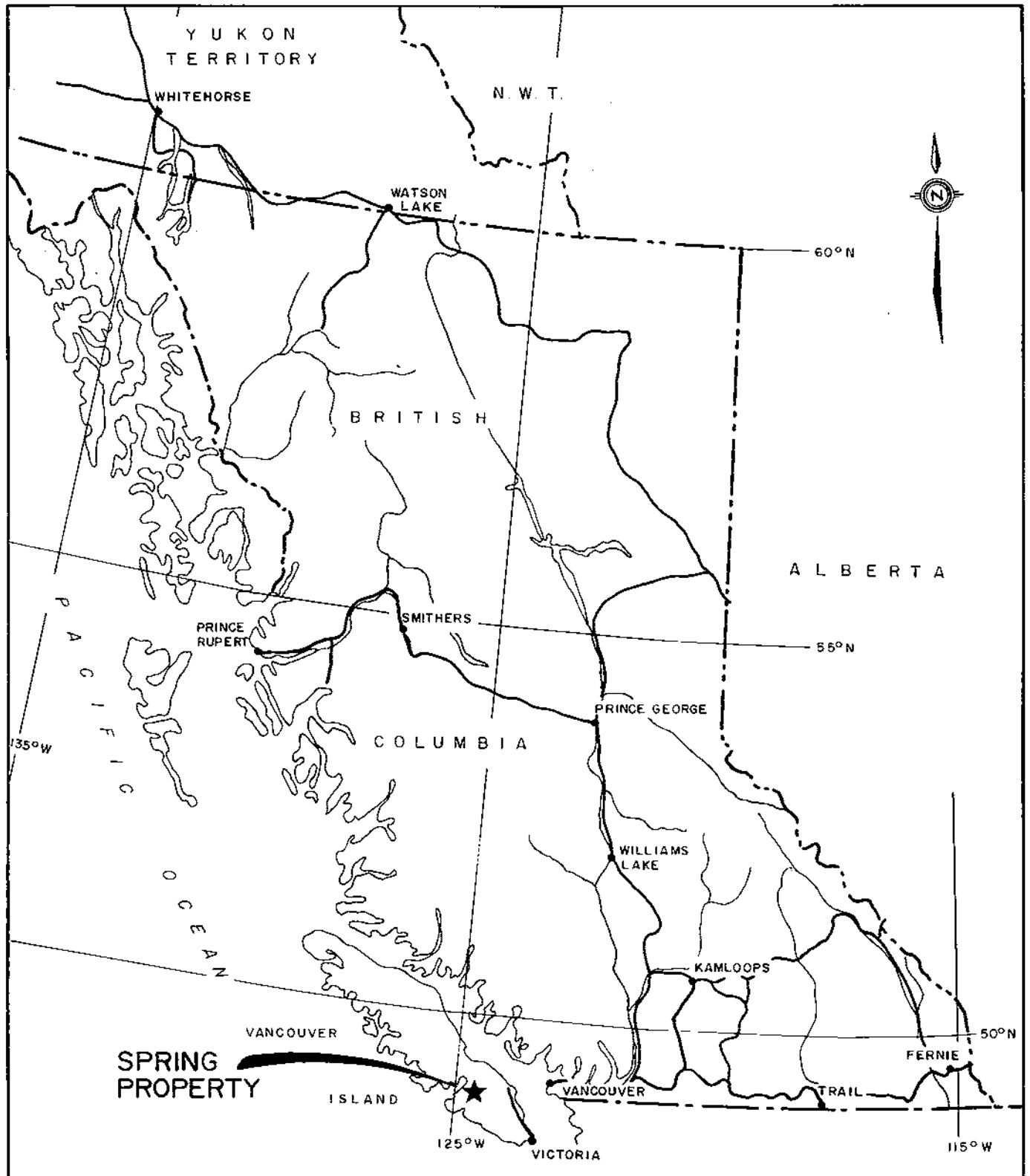
Access to the north part of the property is via MacMillan Bloedel's Cameron Main road. This road can be reached via the Mt. Arrowsmith ski hill road which intersects Highway 4 approximately 8 km east of Port Alberni. The south part of the property is accessed via Crown Forest's Nanaimo Lakes road which intersects Highway 1 near Cassidy. Skidder trails on the property provide good walking access to the north and west sides of the Spring 2 claim.

The Spring property consists of seven mineral claims totalling 96 units, as summarized below:

Claim	Recorded Number	Units	Anniversary Date	Year Registered
Spring 1	2110 (3)	18	March 29, 1990	1985
Spring 2	2111 (3)	18	March 29, 1990	1985
Spring 3	2112 (3)	9	March 29, 1990	1985
Spring 4	2113 (3)	9	March 29, 1990	1985
Sed 1	2704 (6)	12	June 15, 1991	1987
Ced 1	2705 (7)	10	June 15, 1991	1987
Ced 2	2706 (6)	20	June 15, 1991	1987
		Total 96		

Anniversary dates have not been updated to reflect work described in this report.

The Spring 1 - 4 claims are owned by S. Angus of Surrey, B.C. International Cherokee Developments Ltd. has an option on the claims by virtue of an agreement with Angus dated May 12, 1987. International Cherokee Developments Ltd. owns the Sed 1, Ced 1 and Ced 2 claims.



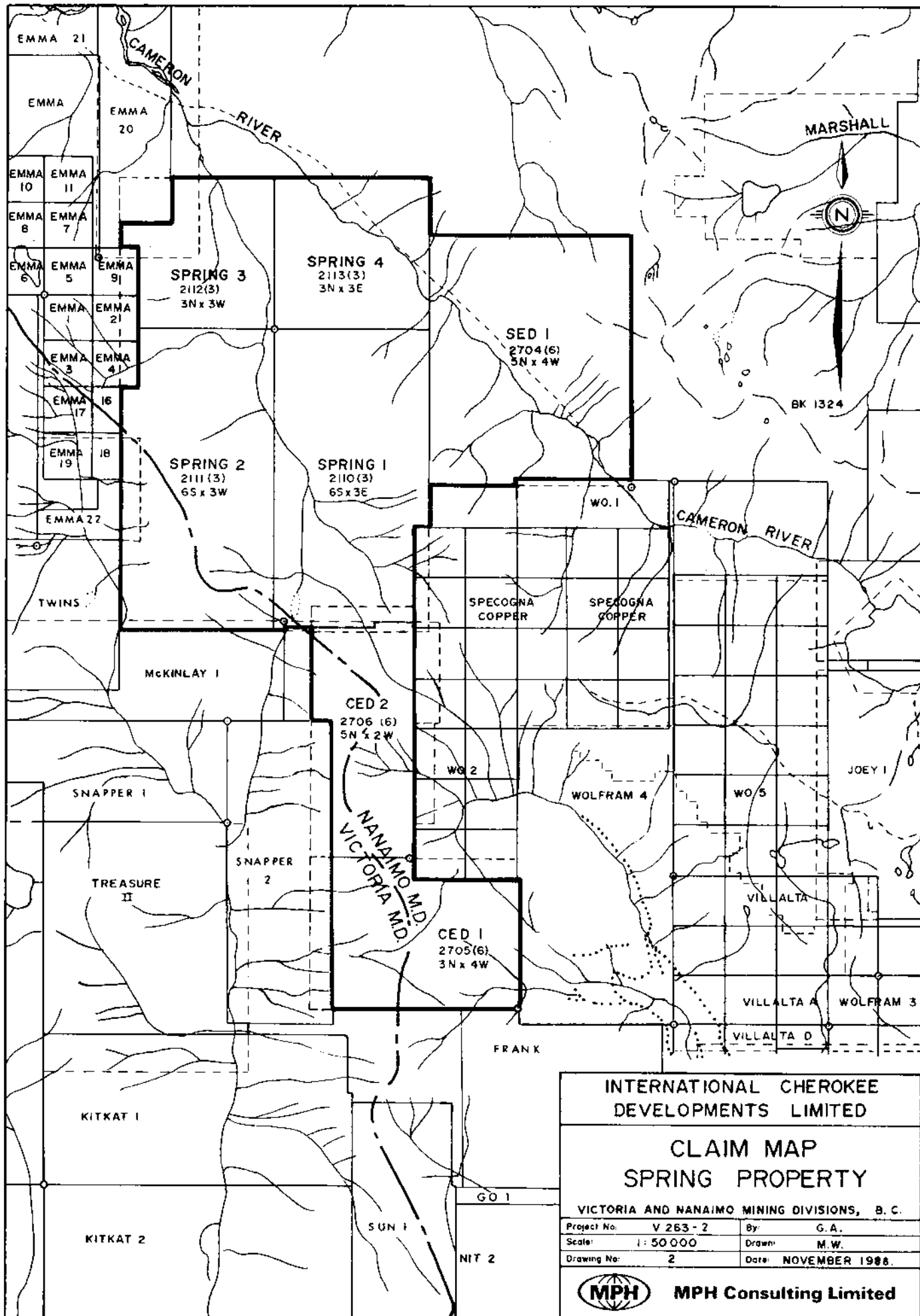
INTERNATIONAL CHEROKEE
DEVELOPMENTS LIMITED

GENERAL LOCATION MAP
SPRING PROPERTY

VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No. V 263-2	By: G. A.
Scale: 1 : 8 000 000	Drawn: J. S.
Drawing No: 1	Date: NOVEMBER 1988.

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INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

**CLAIM MAP
SPRING PROPERTY**

VICTORIA AND NANAIMO MINING DIVISIONS, B. C.

Project No. V 263 - 2	By: G. A.
Scale: 1 : 50 000	Drawn: M. W.
Drawing No: 2	Date: NOVEMBER 1986

MPH Consulting Limited



3.0 PREVIOUS WORK

Government geological work in the property area includes mapping by C.H. Clapp (1912 and 1914); J.E. Muller and D.J.T. Carson (1969); J.E. Muller (1977 and 1980); and A. Sutherland Brown, C.J. Yorath, R.G. Anderson and K. Dom (1986).

The area was included in a regional aeromagnetic survey flown by Hunting Survey Corp. Ltd. in 1962.

Between 1963 and 1966 Gunnex Ltd. carried out a regional mapping program which included part of the area presently covered by the Spring property.

The first documented exploration program focussed specifically on this property (then called the Cameron Group) was conducted by MPH Consulting Limited between March 9 and March 15, 1984 (Neale and Hawkins, 1984). This program consisted of reconnaissance geological mapping and rock and silt sampling. Adits No. 1 and 2 were located on a quartz vein containing pyrite, sphalerite, chalcopryrite, and galena. Samples of the mineralized vein(s) contained up to 7000 ppb Au (0.20 oz/T or 7.0 g/t calculated), 14.0 ppm Ag, 3400 ppm Cu, and 31,000 ppm Zn (3.1% calculated). A 1979 claim post for the Enargite claim was located near the adits, but there is no record of whether the adits were driven in 1979 or earlier, nor is there any record of sampling/production from the adits.

In 1986 a small soil sampling and prospecting program was conducted on the property by S. Angus (Angus, 1987). A total of 3.35 km of grid was established and 143 soil samples were collected on two small grids located over Adits 1 and 2. Soil geochemistry results outline anomalous gold-silver-zinc values centred over the adit areas and trending roughly east-west (on strike with the quartz veins). Anomalous gold values of up to



330, 120, and 105 ppb were collected from the Adit 1 grid area. Adit numbers 3 and 4 were located on the same vein system as Adits 1 and 2.

In 1987 a Phase I exploration program consisting of VLF-EM surveying (6.9 line km), a soil geochemical survey (180 soil samples collected over 4.8 line km), 1:2500 and 1:10,000 scale geological mapping, and prospecting was conducted on the property. Work concentrated on the general area of the adits. This work outlined the known mineralized quartz vein along a strike length of over 400 m through discontinuous outcrop exposure, soil geochemical anomalies and anomalous VLF-EM responses. Indications of additional mineralized quartz veins were also discovered, including gold-bearing quartz vein float (up to 7.41 g/t Au, 90.52 g/t Ag from grab samples) about 400 m to the north of the known vein, a small gold soil geochemical anomaly lying between 0+50E/1+25N and 0+50W/0+75N, and 3 VLF-EM conductors parallel to the vein.

4.0 REGIONAL GEOLOGY

The Port Alberni-Cameron River area lies on the northeast flank of the Cowichan-Horne Lake uplift or geanticline. Paleozoic (mid Devonian to early Permian) Sicker Group and Buttle Lake Group rocks are exposed in the core of the uplift and are flanked by rocks of the late Triassic Vancouver Group. Together with the early Jurassic Bonanza Group, these rocks make up the Wrangellian Terrane on Vancouver Island (Figure 3).

4.1 Stratigraphy

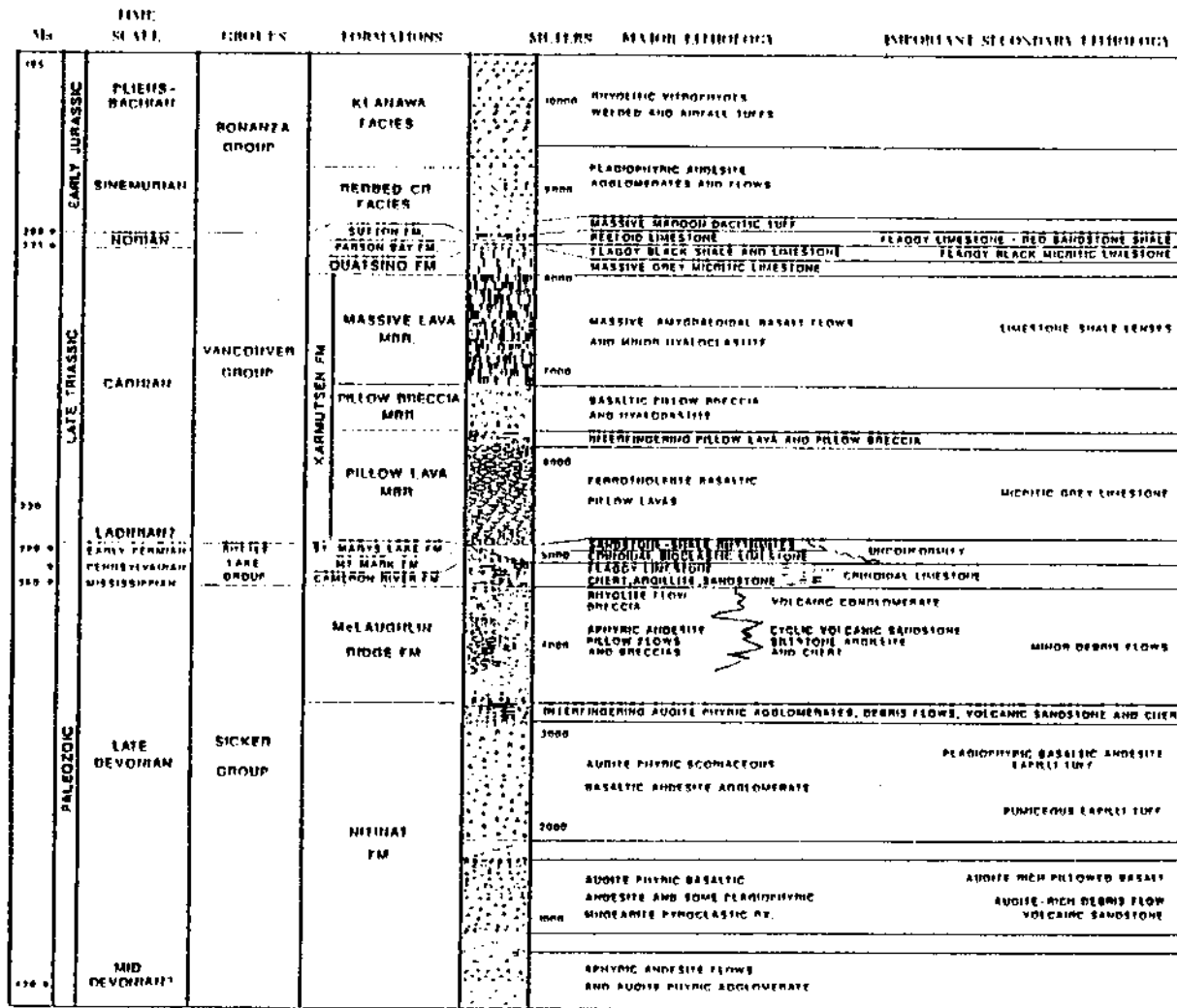
4.1.1 Sicker Group

Muller (1980) divided the Sicker Group into four formations. From oldest to youngest these were: Nitinat Formation, Myra Formation, Sediment-Sill Unit and Buttle Lake Formation. Figure 4 shows the regional geology of the Port Alberni area using this terminology. A recent mapping program conducted in this area (Sutherland Brown et al, 1986; Sutherland Brown and Yorath, 1985) has resulted in the tentative redivision and renaming of rocks of the old Sicker Group into a lower "Sicker Group" and an upper "Buttle Lake Group" (Figure 3). The Nitinat and McLaughlin Ridge (formerly Myra) Formations now comprise the entire Sicker Group.

The Nitinat Formation consists predominantly of basaltic agglomerate, flow breccia, massive flows (rarely pillowed) and fine- to medium-grained tuff.

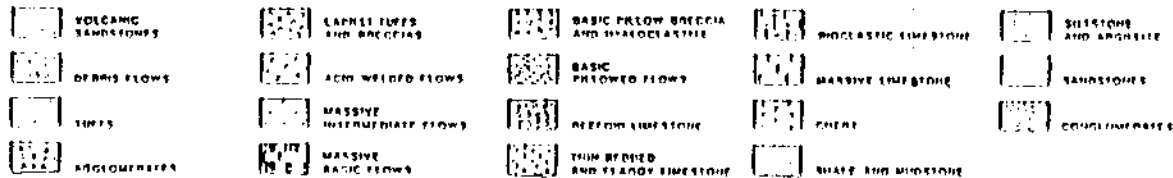
Rocks of the McLaughlin Ridge Formation are predominantly fine- to medium-grained intermediate volcanic sandstone, cherty tuff and lapilli tuff. The contact between the Nitinat and McLaughlin Ridge Formations appears to be conformable and gradational.

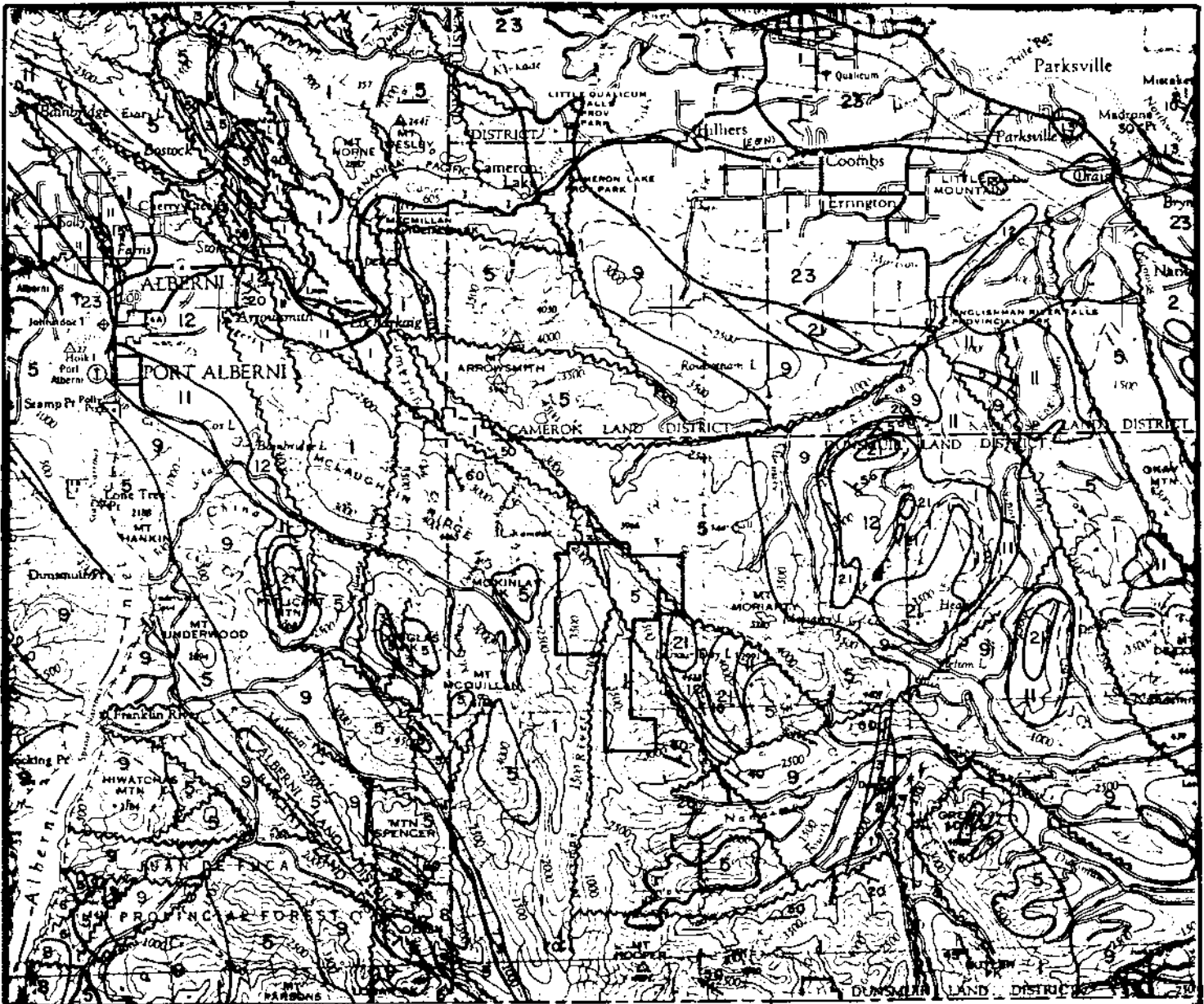
COMPOSITE WRANGELLIAN STRATIGRAPHIC COLUMN, ALBERNI AREA AND PROPOSED NOMENCLATURE



A. Sutherland Brown and C.J. Yorath
In Publication
(1987?)

Figure 3





LEGEND

QUATERNARY

23 Glacial and alluvial deposits

TERTIARY

21 Hornblende quartz diorite, leucoquartz monzonite, porphyritic dacite, breccia.

UPPER CRETACEOUS NANAIMO GROUP

13 EXTENSION-PROTECTION FM.: sandstone, conglomerate, shale, coal.

12 HASLAM FM.: shale, siltstone, fine sandstone.

11 COMOX FM.: sandstone, conglomerate, shale, coal.

MIDDLE TO UPPER JURASSIC

9 ISLAND INTRUSIONS: biotite-hornblende granodiorite, quartz diorite.

LOWER JURASSIC

8 BONANZA GROUP: andesitic to latitic breccia, tuff, and lava; minor greywacke, argillite, and siltstone.

UPPER TRIASSIC

VANCOUVER GROUP

6 QUATSINO FM.: massive to thick bedded limestone, minor thin bedded limestone.

5 KARMUTSEN FM.: pillow-basalt and pillow breccia, massive basalt flows; minor tuff, volcanic breccia; Jasperoid tuff, breccia and conglomerate at base.

TRIASSIC OR PERMIAN

4 Gabbro, periodite, diabase.

LOWER PERMIAN TO PENNSYLVANIAN SICKER GROUP

3 BUTTLE LAKE FM.: limestone, chert.

2 MYRA FM.: lower unit; argillite, greywacke, conglomerate, tuff, minor limestone. Upper unit; rhyodacite to rhyolite tuff, lapilli tuff, breccia lesser siliceous siltstone, argillite, quartz porphyry and mafic flows.

1 NITINAT FM.: basaltic uraltite porphyry, agglomerate, pillow lava; greenschist.

0 5 10 km



INTERNATIONAL CHEROKEE
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REGIONAL GEOLOGY MAP
SPRING PROPERTY

VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No.	V 263-2	By:	G.A.
Scale:	1:250,000	Drawn:	J.S.
Drawing No.	4	Date:	NOVEMBER 1988.



MPH Consulting Limited

REF: GSC PAPER 68-50.

4.1.2 Buttle Lake Group

The Buttle Lake Group consists of the Cameron River (formerly Sediment-Sill Unit), Mount Mark (formerly Buttle Lake) and St. Mary's Lake Formations (Figure 3).

The Cameron River Formation overlies (possibly conformably) the McLaughlin Ridge Formation. It is composed of volcanic sandstone, argillite and chert breccia which grades upwards into interbedded siltstone, argillite and limestone.

Conformably overlying the Cameron River Formation is massive crinoidal limestone of the Mount Mark Formation.

The St. Mary's Lake Formation overlies the Mount Mark Formation and is composed of thinly bedded to laminated (consistently 1 to 2 cm thick) medium-grained sandstone and shale. The Formation has been described as a rhythmite because it was formed by the rhythmic deposition of sandstone and shale. In the property area the St. Mary's Lake Formation is up to about 10 m thick.

4.1.3 Vancouver Group

The Karmutsen Formation unconformably overlies the Mount Mark and St. Mary's Lake Formations, forming the base of the Vancouver Group. Rocks of the Karmutsen Formation are ferrotholeiite basalts which have been divided into three members in the Port Alberni area. These members are: the lower pillow member, the middle pillow breccia member and the upper massive lava member. The Karmutsen Formation is the thickest and most widely distributed sequence of rocks on Vancouver Island. Overlying the Karmutsen Formation are massive micritic limestone and shale of the Quatsino Formation, reefoid limestone of the Parson Bay Formation and massive maroon dacitic tuff of the Sutton Formation (Figure 3).

4.1.4 Bonanza Group

The Bonanza Group stratigraphy varies considerably from place to place, as it represents parts of several different eruptive centres of a volcanic arc. Basaltic, rhyolitic, and lesser andesitic and dacitic lava, tuff, and breccia with intercalated beds and sequences of marine argillite and greywacke make up the Bonanza Group. In the area south of Mount Spencer and south of Corrigan Creek, it consists of light coloured andesite to latite breccia, tuff, and flows with minor greywacke, argillite, and siltstone. The Bonanza volcanics may be extrusive equivalents of the Jurassic Island Intrusions (Massey and Friday, 1987).

4.1.5 Nanaimo Group

Upper Cretaceous Nanaimo Group sedimentary rocks are scattered throughout the area. Extensive exposures occur near Port Alberni. The formations present comprise the basal portions of the Nanaimo Group.

The Comox Formation consists mainly of quartzofeldspathic, cross-bedded beach facies sandstone and polymictic conglomerate. Numerous intercalations of carbonaceous and fossiliferous shale and coal are also characteristic.

The Haslam Formation is a nearshore littoral depositional facies unit characterized by thickly bedded fossiliferous sandy shale or argillite, siltstone and shaly sandstone.

Interbedded coarse clastic conglomerate, pebbly sandstone and arkosic sandstone of the Extension-Protection Formation are beach and deltaic sands. Minor shale and coal are reported.

4.1.6 Intrusive Rocks

Mafic and ultramafic rocks of Triassic or Permian age are scattered throughout the area. A large band is exposed approximately 8 km north of Port Alberni. Although mapped as intrusive, some of these rocks may be basal flow units of the Karmutsen Formation.

Quartz diorite and biotite-hornblende granodiorite stocks of the Jurassic Island Intrusions occur throughout the area.

Sills and stocks of hornblende-quartz diorite, dacitic hornblende-feldspar porphyry and leucocratic quartz monzonite of the Tertiary Catface Intrusions(?) cut Nanaimo and Sicker Group rocks in the Cameron River valley (Muller, 1980). On the Spring property zones of geophysical and/or geochemical anomalies occur in close proximity to the dacitic hornblende-feldspar intrusions (although a direct relationship between the anomalies and intrusions has yet to be proven).

4.2 Structure

The Buttle Lake, Cowichan-Horne Lake and Nanoose uplifts are north-northwesterly trending geanticlines which are believed to be among the oldest structural elements in south central Vancouver Island. Folding and uplift occurred before the late Cretaceous, and possibly before the Mesozoic (Muller and Carson, 1969). More tilting, folding, and uplift occurred after the Late Cretaceous. Sicker Group volcanic and sedimentary rocks occur at the cores of the faults.

Extensive west-northwest trending faulting occurred during late Cretaceous to Tertiary time and is best illustrated by large displacements of Nanaimo Group sediments in some areas, such as the north side of the Chemainus River Valley, placing Sicker Group rocks above Nanaimo Group rocks. These faults have been traced for up to 100 km. Such structures may represent large scale underthrusting from the southwest, in a regime of long-term semicontinual northeast-southwest compression. Nanaimo Group sediments are tilted up to at least 60° from paleohorizontal where they are overlying folded Sicker Group rocks with angular unconformity, such as on the south side of the Chemainus River

Valley. Minor late northeasterly trending tear-faults and block faults offset northwest-trending faults in the Cowichan Valley and Saltspring Island areas. In the Port Alberni area, major northerly trending faults crosscut the uplift, with significant quartz-carbonate alteration and associated auriferous quartz veins along foliated fault zones (Getsinger et al, 1988).

4.3 Economic Setting

Volcanogenic massive sulphide deposits have traditionally been the most economically significant exploration targets within Sicker Group rocks. Known deposits include Westmin Resources' Buttle Lake Mine deposits, 83 km northwest of the Spring Group, where ore minerals include sphalerite, chalcopyrite, galena, tetrahedrite-tennantite, minor bornite and covellite hosted by pyritic rhyolitic to rhyodacitic volcanic and pyroclastic rocks of the Myra Formation. Total reserves of the Lynx and Price deposits are 839,800 t grading 1.00% Cu, 0.91% Pb, 7.79% Zn, 2.22 g/t Au (0.065 oz/ton), 74.52 g/t Ag (2.18 oz/ton) (1983). Mineable ore reserves of the H-W deposit based on a 2700 t/day production rate and \$33 Cdn. cut-off grade, are 13,302,000 tonnes grading 2.02 g/t Au (0.059 oz/ton), 30.38 g/t Ag (0.886 oz/ton), 1.91% Cu, 0.27% Pb, 4.48% Zn (McKnight, 1987).

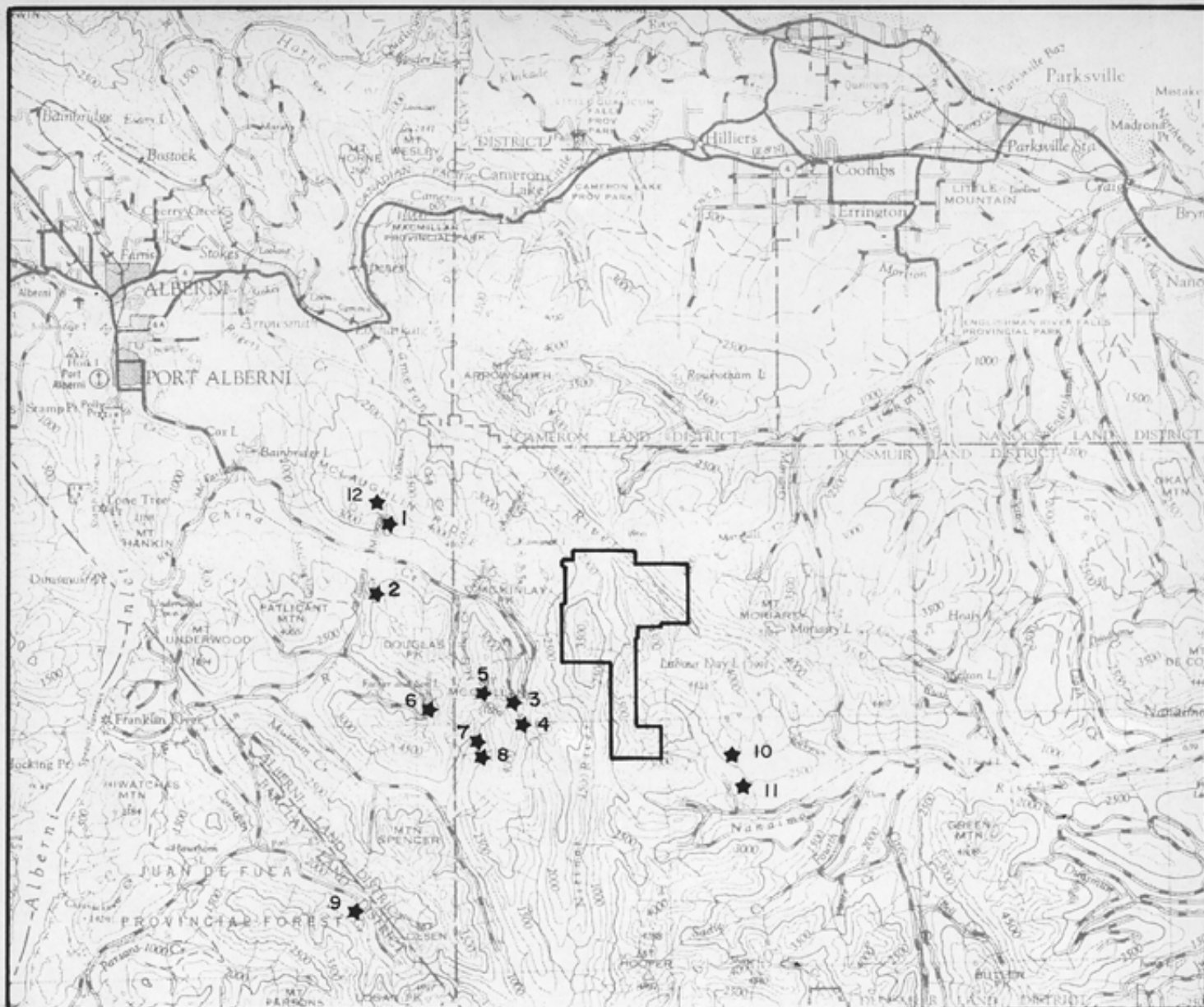
The Twin J Mine volcanogenic massive sulphide orebodies near Duncan on Mt. Sicker, which are approximately 46 m apart, contain pyrite, chalcopyrite, sphalerite and minor galena in a barite-quartz-calcite gangue and chalcopyrite in quartz and occur in schists derived from the Myra Formation. Total production from 1898 to 1964 was 277,400 t producing 1,383,803 g Au, 29,066,440 g Ag, 9,549,590 kg Cu, 20,803,750 kg Zn, 164,590 kg Pb and 4.5 kg Cd.

Recent exploration on Abermin Corp.'s Lara property (56 km south-east of the Spring Group) has traced volcanogenic massive sulphides in the Coronation and Coronation Extension zones along a strike length of 1500 m, over a true width averaging 3.3 m. Published, indicated, and inferred reserves are 1,125,000 tonnes grading 2.88 g/t Au (0.084 oz/ton), 67.9 g/t Ag (1.98 oz/ton), 3.59% Zn, 0.67% Cu, and 0.72% Pb (Vancouver Stockwatch, Feb. 9, 1988). Underground exploration totalling 823 m is scheduled to begin in early 1988 with a decline on the Coronation zone to provide access to the ore zone on three levels. Two kilometres to the north, four diamond drill holes intersected several polymetallic horizons over a strike length in excess of 2.4 km (Northern Miner, January 1987).

Five past producing mines, as well as numerous showings, occur in the Port Alberni area (Figure 5). The Thistle Mine (8 km southwest of the Spring property) contains disseminated and massive sulphide mineralization within pyritic, quartz-sericite schists and at their contact with chlorite altered mafic volcanics of the Sicker Group. Production from 1938 to 1942 totalled 6276 tonnes of ore yielding 85,844 g Au, 65,438 g Ag, and 309,739 kg Cu (13.7 g/t Au, [0.40 oz/T]; 10.5 g/t Ag [0.31 oz/T], 4.92% Cu).

Exploration by Westmin Resources Ltd. on the Thistle property has located 16 Cu and/or Au occurrences over a strike length of 4.6 km grading up to 16.8 g/t Au (0.049 oz/ton) over 2.1 m (Benvenuto, 1984).

The Black Panther Mine is a quartz vein deposit hosted by a shear zone in Sicker Group andesite and Island Intrusions diorite located 7 km southwest of the Spring Group. Production of 1715 t yielded 15,830 g Au (509 oz), 29,640 g Ag (953 oz), 5587 kg Pb and at least 2030 kg Zn and 226 kg Cu.



GOLD DEPOSITS AND OCCURRENCES

1. Vancouver Island Gold Mine (Yellow Property)
2. Regina
3. Golden Eagle
4. B & K
5. Havilah
6. Thistle
7. Black Panther
8. Black Lion
9. 3-W
10. Villalta
11. Skarn Group
12. Debbie - Sicker



**INTERNATIONAL CHEROKEE
DEVELOPMENTS LIMITED**

**MINERAL OCCURRENCE
LOCATION MAP
SPRING PROPERTY**

Project No. V 263-2	By: G.A.
Scale: 1 : 250,000	Drawn: J.S.
Drawing No. 5	Date: NOVEMBER 1988.



MPH Consulting Limited



The 3-W Mine consists of gold-bearing quartz veins in Island Intrusions diorite and granodiorite. Production amounts to 105 t of ore grading 137 g/t Au (4.0 oz/ton), 147.4 g/t Ag (4.3 oz/ton), 0.23% Cu, 1.1% Pb. The 3-W Mine is located 15 km southwest of the Spring property.

The Havilah Mine (950 t produced 8,056 g Au [259 oz], 43,670 g Ag [1,404 oz]) and the Vancouver Island Gold Mine (438 t produced 11,944 g Au [384 oz], 1617 g Ag [52 oz]) are quartz vein deposits hosted by Sicker Group andesite and andesite tuff 5 km and 9 km, respectively, west of the Spring Group. At the Havilah the Sicker Group lithologies have been intruded by diabase dykes and a Tertiary quartz feldspar porphyry dyke, all of which have been subsequently intruded by a body of diorite.

Exploration on the Debbie and Yellow properties, surrounding the old Vancouver Island Gold Mine, has located three zones of gold mineralization. The 900 Zone has provided the best results to date, including 14.36 m (47.1') grading 139.82 g/t Au (4.078 oz/T) and 13.50 m (44.3') of 38.98 g/t Au (1.137 oz/T). At the 900 Zone, the gold occurs in a silicified quartz stockwork zone hosted by a variety of Sicker Group volcanic rocks. The Mineral Creek Zone, which is fault-controlled, has been outlined for about 250 m on the Debbie property and 150 m on the adjacent Yellow property. Gold intersections are lower grade, but generally wider, than in the 900 Zone, and include 21.06 m (69.1') of 3.53 g/t Au (0.103 oz/T). The Linda Zone, which may be an extension of the Vancouver Island Gold Mine, consists of a series of auriferous quartz veins in barren wall rock. Intersections from this zone include 1.40 m (4.6') of 44.91 g/t Au (1.310 oz/T) and 2.00 m (6.6') of 47.35 g/t Au (1.381 oz/T).

Drilling in areas away from the known zones has also intersected gold mineralization (18.75 g/t Au [0.547 oz/T] over 1.0 m, 475 m north of the Mineral Creek Zone; and 8.40 g/t Au [0.245 oz/T]



over 0.61 m, 300 m west of the Mineral Creek Zone). A total of 30,580 m of diamond drilling in 163 holes was carried out in the 1987/88 season on the Debbie and Yellow properties. Over \$5 million is to be spent in 1988 on the properties, including the driving of a 1.9 km adit to provide access to the Mineral Creek and Linda zones.

Complete descriptions of the showings located in the area of the Spring Group (Figure 5) are contained in previous reports on the property (Allen, 1987; and Neale and Hawkins, 1984) and are not repeated in this report.

5.0 1988 PHASE II EXPLORATION PROGRAM

5.1 Work Completed

Phase II exploration field work was carried out on the Spring Group between July 28 and September 27, 1988 and included the following work:

- Geological mapping at 1:10,000 scale carried out over approximately 1000 hectares and at 1:2500 scale over approximately 1400 hectares;
- 9.69 line km of grid extensions to the 1987 grid (Main Grid) and the establishment of 1.2 line km of grid in the southwest of Spring 2 (Grid B);
- collection of a total of 471 soil samples from the Main Grid area and Grid B area, 142 rock samples, and 14 heavy mineral concentrate silt samples;
- a VLF-EM survey over 10.975 line km of the Main Grid and Grid B;
- eight hand trenches, totalling 20 m in length.

5.2 Property Geology and Mineralization

Geological mapping has shown the Spring Group to be underlain by rocks of the Paleozoic Sicker and Buttle Lake Groups and by Triassic Karmutsen Formation (Figures 6 and 7). The oldest rocks on the property, Nitinat Formation pyroxene-porphyrific basaltic agglomerate and breccia (Unit 1b), occur in the northwest part of the claim group but are poorly exposed. These rocks are overlain, apparently conformably, by McLaughlin Ridge Formation volcanosedimentary rocks.

The McLaughlin Ridge Formation (Unit 2), in the Spring Group area is exposed over the southwest part of Spring 1, all of Spring 2 and south Spring 3. It consists of an interbedded package of dominantly fine-grained tuff (Unit 2c), argillite

(Unit 2a), and chert/cherty siltstone (Unit 2b) with local interbeds of lapilli tuff (Unit 2e). Bedding is planar to slightly undulatory, and generally thin (less than 30 cm). Bedding planes generally strike east-west with moderate to steep dips to the south. Variability in bedding orientations suggests gentle folding about a south-plunging axis. The widespread exposure and orientation of the McLaughlin Ridge Formation suggests a thick succession of volcanosedimentary rocks.

A south-southeast trending fault juxtaposes Sicker Group with Cameron River Formation (Unit 4) rocks in eastern Spring 3, western Spring 4, and northwestern Spring 1. Exposed Cameron River Formation lithologies include argillite (Unit 4a), massive crinoidal limestone (Unit 4g), chert, cherty siltstone (Unit 4b), and sandstone (Unit 4d). Bedding strikes south-southeast and dips moderately to the northeast.

Massive, mainly crinoidal limestone (Unit 5b) and interbedded siltstone and shale (Unit 5c) of the Mt. Mark Formation (Unit 5) conformably overlie Cameron River Formation rocks. Interbedded sandstone and shale of the St. Mary's Lake Formation (Unit 5d) overlie the Mount Mark Formation. These rocks, trending north-northwest to south-southeast are exposed over the northeast Spring 3, west Spring 4 and central Spring 1 claims.

Unconformably overlying the St. Mary's Lake Formation, and in places the Mount Mark Formation, is massive basalt of the Karmutsen Formation (Unit 6). A thrust fault along the east fork of the Cameron River valley has cut the basalt, apparently thrusting the northeast block over the southwest. On the Spring property basalt is in contact with basalt, but north of the property this thrust places Karmutsen Formation in fault contact with the Mount Mark and Cameron River Formations. Karmutsen Formation rocks are exposed over the west Spring 1, west Spring 4, and Sed 1 claims.

Intermediate hornblende-feldspar porphyritic dykes (Unit 11) (and sills?) crosscut volcanosedimentary rocks on the Spring property. The intrusives are composed of up to 30% white, euhedral feldspar phenocrysts supported in a fine-grained, nearly aphanitic crystalline matrix of feldspar, chlorite, and quartz with up to 15% subtrachytic hornblende phenocrysts up to 4 mm long. The dykes are generally oriented parallel to bedding (east-west), dip steeply north and south, and are up to 15 m wide. Since anomalous geochemical and geophysical zones occur in proximity to known intrusive exposures it is assumed that these intrusives have some role in control of mineralization.

More detailed lithological formation and unit descriptions are contained in the report on Phase I exploration (Allen, 1987).

Faulting on the Spring property includes major northwest trending faults, such as the Cameron River fault, which itself is a regional thrust fault. Northwest trending faulting along the southern branch of the Cameron River as well as the upper Nitinat River may represent splays from the Cameron River fault. Minor northeast to east trending cross-faults mapped or inferred from airphoto lineaments in the central portion of the Spring property also occur. These faults are important in that they appear to localize the hornblende feldspar porphyry dykes and/or mineralized quartz veins and alteration zones.

Mineralization outlined to date on the Spring property includes:

- 1) gold-zinc bearing quartz veins;
- 2) sulphide bearing iron carbonate alteration and shear zones;
- 3) minor sulphide disseminations in hornblende feldspar porphyry dykes;
- 4) disseminated pyrite ± marcasite in argillites.

The quartz veins are up to 50 cm wide and have been traced along strike for up to 400 m. To date, 3 quartz veins have been located. They cut Sicker Group volcanosedimentary rocks of the



McLaughlin Ridge Formation and are spatially associated with hornblende feldspar porphyry dykes. They are generally white, do not contain vugs except where sulphides have been weathered away, and contain up to 15% pyrite, 1 to 3% chalcopyrite, trace to 6% galena, and trace to 2% sphalerite. The iron carbonate alteration and shear zones contain trace to 3% disseminated pyrite, trace chalcopyrite, and sphalerite. They have been found in 2 locations on the property and are up to 15 m in width. Intermediate hornblende-feldspar porphyry dykes locally(?) contain trace to 2% disseminated pyrite and minor chalcopyrite, while McLaughlin Ridge Formation argillite commonly hosts minor amounts of disseminated pyrite or locally, marcasite.

A total of 142 rock samples and 14 heavy mineral concentrate silt samples was collected from the Spring property during the course of mapping and trenching. The samples were all analyzed for gold by AAS at Rossbacher Laboratory Ltd. and for a 30-element suite by ICP at Acme Analytical Laboratories Ltd. Sample locations and selected results are shown on Figures 8 and 9; rock sample descriptions with selected results are contained in Appendix III; and full analytical results are contained in Appendix IV.

The 1988 Phase II exploration program has been successful in broadening known zones of sulphide ± gold enrichment and identifying previously undiscovered zones for future exploration. The best rock sample results were obtained from samples of sulphide bearing quartz veins. Very strongly anomalous heavy mineral concentrate gold values from areas where rock samples yielded no indication of mineralization indicate the usefulness of this technique. Sampling results are presented below by the area in which they occur, in similar fashion to geochemical and geophysical results.

In the area of the adits, quartz veins containing up to 20% pyrite + chalcopyrite + galena + sphalerite were sampled. The results are similar to those obtained during previous work (Allen, 1987; Neale and Hawkins, 1984), confirming the repeatability of gold values. Anomalous Phase II results from this zone are summarized below:

Sample Number	Gold	Other Anomalous Elements (ppm)	Description
TN2-1	0.75 g/t	857 As, 230 Zn	Across 4 cm quartz vein
TN2-3	3.60 g/t	30.5 Ag, 411 As, 537 Cu, 270 Pb, 1283 Zn	Across 12 cm quartz vein
TN2-5	1.51 g/t	14.1 Ag, 455 As, 1887 Cu, 28,544 Zn	Across 17 cm quartz vein
CJCA-1	790 ppb	5.7 Ag, 197 As, 669 Cu, 9235 Zn, 153 Cd	Across 10 cm quartz vein
CJCA-2	510 ppb	9.0 Ag, 143 As, 187 Pb, 1626 Zn	Across 14 cm quartz vein

While Phase I and II mapping has shown the quartz veins of this zone to closely parallel a hornblende-feldspar porphyritic intrusive, sampling of this and other similar intrusives returns background values only. The intrusives may, therefore, be a more important control to ground preparation than actual mineralization. Three 2 to 3 m hand trenches were dug in the Adit 3 area to determine local host lithologies. In all cases Sicker Group volcanosedimentary rocks were encountered. Grab samples of these rocks did not return values above background

Very strongly anomalous gold values have been returned from heavy mineral concentrates (HMC) of silt samples collected from east and west flowing creeks draining the central Spring 2 claim (along the south end of the main grid). Anomalous Phase II values from this structurally-related(?) zone include the following:

Sample Number	Gold	Other Anomalous Elements (ppm)	Description
CC13-2 HMC	10,000 ppb	20 As, 240 Zn	silt
CC14-2 HMC	240 ppb	32 As, 389 Zn	silt
CC19-1 HMC	110 ppb	41 As, 367 Zn	silt
CC19-2 HMC	1130 ppb	37 As, 223 Zn	silt

Follow-up rock sampling from the 15 m wide intensely iron-carbonate altered fault structure along which the creeks run, did not provide results adequately accounting for such high HMC gold values. The highest gold value returned from an outcrop source within this zone is 50 ppb (Sample #20374; a grab sample of marcasite-bearing argillite). Samples of the stockwork quartz-carbonate vein system within this zone did not return anomalous gold values. More work is required to outline the source of the HMC anomalies.

An east-northeast oriented shear/fault zone, lying 200 to 300 m south of and parallel to the main adit zone has returned strongly anomalous gold values from sulphide-bearing quartz and quartz-carbonate veins. The quartz and quartz-carbonate veins, up to 5 cm wide, generally occupy imbricate shears and host pyrite ± chalcopyrite ± sphalerite ± galena mineralization (total sulphide content up to 50%). Anomalous Phase II values from this zone include the following:

Sample Number	Gold	Other Anomalous Elements (ppm)	Description
CC25-1	390 ppb	1.3 Ag, 291 As, 597 Pb, 332 Zn	2 cm wide quartz vein
CC05-5	1.23 g/t	2.4 Ag, 590 As, 245 Cu, 2745 Pb, 1163 Zn	5 cm chip sample including 0.5 cm quartz vein
CC05-6	2.64 g/t	3.0 Ag, 1104 As, 274 Cu, 3957 Pb, 727 Zn	15 cm chip sample including 1.5 cm quartz vein
CJC28-5	1080 ppb	458 As, 133 Pb, 1379 Zn	4 cm quartz vein
TN5-5	80 ppb	393 As	5 cm quartz-carbonate vein



Five hand trenches were excavated in the northern grid area where 1987 Phase I exploration had located strongly anomalous quartz float. Anomalous values from quartz float samples are as follows:

Sample Number	Gold	Other Anomalous Elements (ppm)	Year Sampled
23175	7.41 g/t	90.52 g/t Ag, 343 As, 541 Cu, 233 Pb, 7745 Zn	1987
23184	5.69 g/t	51.43 g/t Ag, 333 As, 90 Pb	1987
20354	310 ppb	5.3 Ag	1988

The float material from this area ranges in size from 5 to 30 cm and contains trace to 3% fine-grained disseminated pyrite. The size, angular habit, location significantly distant from the main adit zone, and characteristic hematitic stain (the quartz veins in the adit zone are generally white) of the quartz float suggest a proximal vein source separate from the main adit zone. The trenches were successful in further delineating a local hornblende-feldspar porphyritic intrusive, however, they did not expose quartz material in outcrop.

Silt and rock samples have returned strongly anomalous values from areas adjacent to and in the southwest part of the Spring 2 claim. Samples from outcrop show anomalous gold + silver + copper + zinc enrichment to be associated with pyrite + sphalerite + chalcopyrite + galena + malachite mineralization (total sulphide content up to 15%) in abundant narrow quartz veins (ie. less than 10 cm). The quartz veins occur within local shear zones and as stratiform veins (similar in this regard to the veins in the main adit zone). Anomalous values from this area include the following:

Sample Number	Gold	Other Anomalous Elements (ppm)	Description
CC02-3	5 ppb	4.0 Ag, 343 As, 896 Cu, 190 Pb, 859 Zn	quartz vein
CC29-2	0.79 g/t	10.8 Ag, 941 As, 891 Pb, 876 Zn	6 cm quartz vein (170 m S of property)

Sample Number	Gold	Other Anomalous Elements (ppm)	Description
TN29-1	220 ppb	9.1 Ag, 500 As, 297 Cu, 111 Pb, 10615 Zn, 425 Cd	6 cm quartz vein (210 m S of property)
TN30-2	1.65 g/t	426 As	1.5 cm quartz vein (210 m S of property)
TN31-3	1.44 g/t	46 As, 124 Sr	3 cm quartz vein (70 m W of property)
TN31-6	2.67 g/t	4.9 Ag, 2842 Cu, 837 Zn	1 cm quartz vein in shear (100 m W of property)
TN31-1 HMC	5 ppb	173 As, 234 Cu, 75 Pb	silt
TN31-2 HMC	5 ppb	3.8 Ag, 311 As, 432 Cu, 210 Pb, 332 Zn	silt
TN30-6 HMC	1400 ppb	3.2 Ag, 581 As, 521 Cu,	silt (120 m S of property)
TN31-4 HMC	10 ppb	406 As, 396 Cu, 206 Pb, 268 Zn	silt (90 m W of property)
TN31-7 HMC	5 ppb	267 As, 361 Cu, 204 Pb, 461 Zn	silt (230 m W of property)

5.3 Soil Geochemical Survey

In order to more fully outline the soil geochemical anomalies discovered during Phase I exploration the main soil geochemical grid was extended a total of 9.175 line-km. A total of 420 B-horizon soil samples was collected at 25 m intervals from the Main Grid extensions and local resampling the 1986 grid. Grid B was established in the southwest part of the Spring 2 claim to determine whether geochemistry could assist in outlining mineralization similar to that indicated by strongly anomalous rock grab samples collected in the area. A total of 51 B-horizon soil samples was collected at 25 m intervals along the 1.2 line-km of this grid.

Compilation of contoured gold, silver, arsenic, copper, lead, and zinc plots (Main Grid: Figures 10 to 12, Grid B: Figures 13, 14) illustrates the presence of at least 5 discrete moderately to



strongly anomalous geochemical zones. For purposes of continuity, estimated anomalous geochemical threshold values used in Phase I contouring have been used in the Phase II program as follows:

	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Threshold:	20	0.6	20	60	20	75
Anomalous:	50	1.0	50	100	50	125
					100	200

Silver geochemistry values less than 1.0 ppm were not contoured on lines 7+00W and 8+00W south of the baseline. Unusually high background values in this area suggest contamination during the silver analysis process.

Geochemical Zone 1 consists of 2 clusters of anomalous gold, silver, arsenic, copper, lead, and zinc values centred over and downslope of the old adits. The overall zone, however, extends from L9+00W, 1+00S to L2+00E, 0+00, roughly parallel to the baseline. It is 1100 m long and open on both ends. The larger cluster of anomalous values is located downslope of Adits 1 and 2 (Adit 3 does not appear to affect the morphology of the anomaly). It is very well defined immediately downslope of Adit 1, weakens in the area of Baseline, 1+00W/Baseline, 0+50W, then strengthens between L0+00 and L1+00E north of baseline. The strengthening between L0+00 and L1+00E may reflect a near surface subcropping of the vein system exposed by Adits 1 to 3 (there is no outcrop exposure in this area). The second cluster occurs in the immediate area of Adit 4. The west-southwest/east-northeast trend of this cluster reflects the orientation of the vein exposed by the adit (071/71°S). Anomalous values to the south (upslope) are likely related to offshoots of the main vein. Anomalous values directly to the north (downslope) are rare and are likely related to downslope dispersion via geochemical processes and/or contamination from the adit. Moderate lead-zinc-arsenic anomalies extend west of Adit 4 to L9+00W. Geochemical highlights from this zone include:



	Gold (ppb)	Anomalous Others (ppm)
0+00, 0+25N	330	0.5 Ag, 187 Cu, 232 Pb, 232 Zn
1+50W, 0+25S	120	1.9 Ag, 235 Zn
1+00W, 0+25S	105	98 Cu, 1076 Zn
0+50E, 0+00	65	105 Pb, 422 Zn
5+00W, 0+55S	60	101 Zn

Geochemical Zone 2 is a narrow zone located at the south end of the main grid. It consists of a coincident arsenic-zinc \pm copper \pm lead \pm silver \pm gold anomaly up to 1000 m long (from L8+00W to L2+00E) and up to 200 m wide, at the west end of the anomaly. Geological mapping has shown this anomalous zone to be underlain locally by intermediate intrusive dykes which, in the area of the adits, are closely associated with mineralized quartz veins. As well, this anomaly is bounded to the south by a local east-west fault zone. Silts from creeks following the fault have returned values of 10,000 ppb Au (Sample CC13-2 HMC), 1130 ppb Au (Sample CC19-2 HMC), and 240 ppb Au (Sample CC14-2 HMC) from heavy mineral concentrates. Geochemical highlights from this zone include:

	Gold (ppb)	Anomalous Others (ppm)
0+00, 6+00S	70	
1+00E, 5+75S	5	0.8 Ag, 66 Cu, 206 Zn
7+00W, 6+50S	5	1.8 Ag, 82 Cu, 175 Zn

Geochemical Zone 3 is a long, narrow zone defined by coincident copper-lead-arsenic \pm zinc \pm silver anomalies extending from L9+00W to L2+00E south of the baseline. The zone, oriented west-southwest/east-northeast, follows an imbricate shear zone observed in outcrop (at L7+00W, 4+25S) and is outlined by the trace of east and west flowing creeks. Continuity of the zone is



uncertain particularly on the upper east side of the mountain, and it has, therefore been identified as Zone 3a, to the west, and Zone 3b, to the east. Geochemical highlights from this zone include:

	Gold (ppb)	Anomalous Others (ppm)
1+00E, 2+00S	20	75 Cu, 34 Pb, 76 Zn
8+00W, 4+75S	5	1.7 Ag, 159 Cu, 92 Pb, 266 Zn
5+00W, 3+25S	5	1.3 Ag, 52 Cu, 31 Pb, 126 Zn

Geochemical Zone 4 is a weakly anomalous zone, consisting of single station highs, mainly to the west, and a diffuse zone of coincident anomalies in the east. The anomaly, as outlined by copper-lead-zinc + gold enrichment, lies approximately from 1+25N to 2+00N, between lines 9+00W and 1+00E. Geological mapping indicates that this zone is dominantly underlain by volcano-sediments of the McLaughlin Ridge Formation, however, a quarry located at 10+50W, 1+00N exposes an east-west trending hornblende-feldspar porphyritic intrusive accompanied by minor shearing and quartz veining (5 to 10 cm wide) crosscutting host lithologies. Limited Phase I sampling of this shear zone returned weakly anomalous silver and copper values (Sample 20163: 1.5 ppm Ag, 274 ppm Cu). Geochemical Zone 4 may represent the westward extension of the geochemically enriched dyke/shear occurrence. Geochemical highlights from this zone include:

	Gold (ppb)	Anomalous Others (ppm)
0+50W, 0+75N	30	144 Zn
0+50E, 1+25N	65	0.8 Ag, 108 Cu
1+00E, 1+50N	55	
2+00E, 1+50N	70	98 Cu, 77 Zn

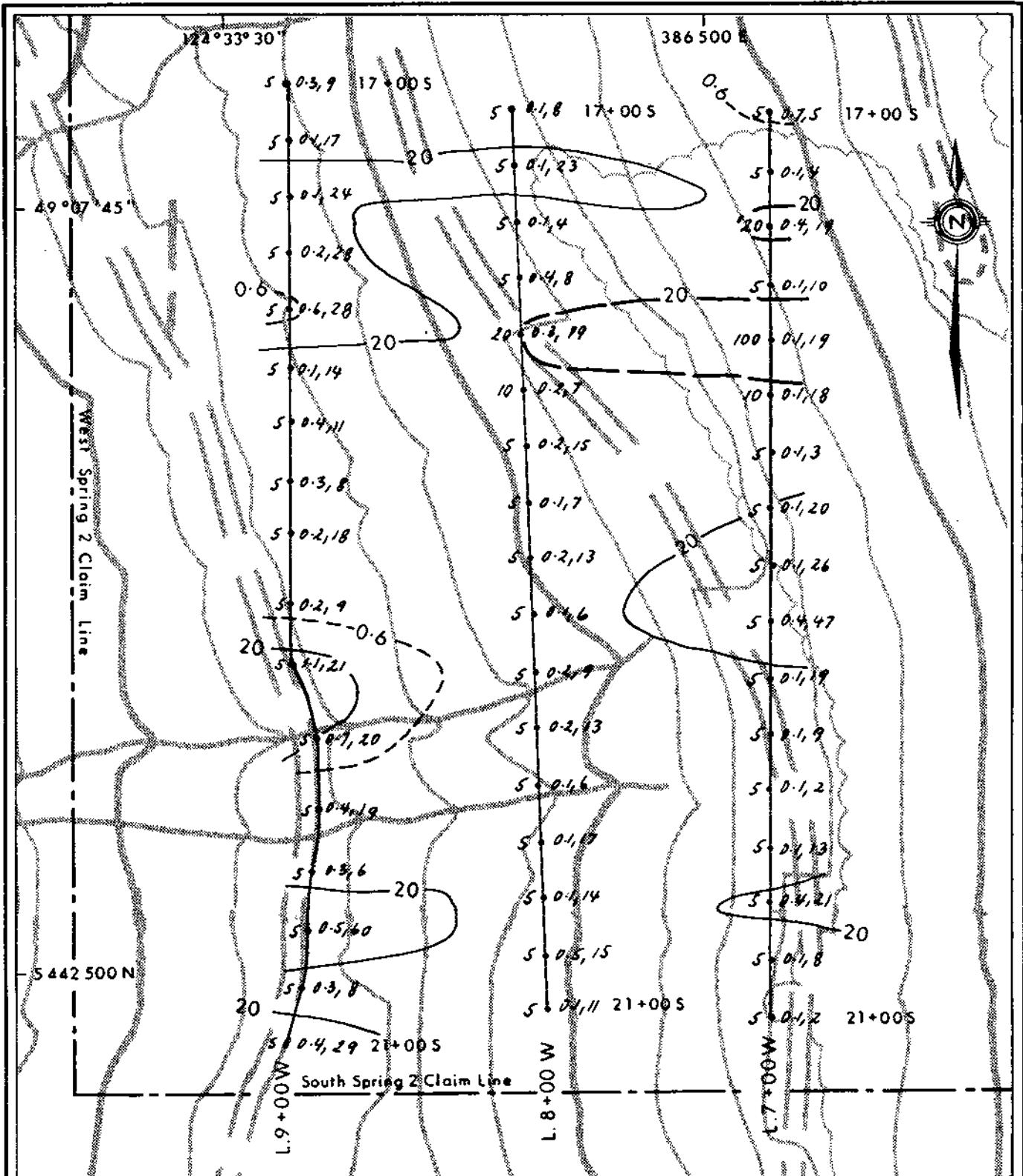
Geochemical Zone 5 consists of coincident copper-zinc-gold anomalies in the north Grid B area. The anomaly lies at 18+00S from L9+00W to L7+00W. Geological mapping has shown this area to be underlain by McLaughlin Ridge Formation volcanosediments crosscut by local small-scale shears (up to 30 cm wide). HMC silt samples collected in creeks north and south of this zone have returned anomalous arsenic-copper-lead-zinc \pm gold \pm silver values (eg. TN30-6 HMC: 1400 ppb Au, 3.2 ppm Ag, 581 ppm As, 521 ppm Cu, 369 ppm Pb, 488 ppm Zn). The linearity of geochemical Zone 5 suggests a structural cause; perhaps a steeply dipping shear zone. Geochemical highlights from this zone include:

	Gold (ppb)	Anomalous Others (ppm)
7+00W, 18+00S	100	144 Zn
7+00W, 17+50S	20	132 Zn

5.4 VLF-EM Geophysical Survey

The Phase II VLF-EM geophysical survey was carried out using a Sabre model 27 VLF-EM receiver which measures the dip angle (in degrees) and the relative horizontal field strength (in percent) of changing local electromagnetic fields. The VLF signal from a transmitter station in Lualualei, Hawaii was used for this survey. The angle between the azimuth of the signal and the grid lines is approximately 121° which provides effective coupling to conductors striking across the grid.

The 1987 programme was successful in outlining four conductive zones believed to be related to stratigraphic and/or structural features. The 1988 programme was designed to extend the strike extent of conductors located previously and to locate new conductors.



LEGEND

Grid line	Au ppb	Ag ppm	As ppm
100	0.1, 19	(---)	(---)
Au (ppb)	20	0.6	20
Ag, As (ppm)			

0 50 100m

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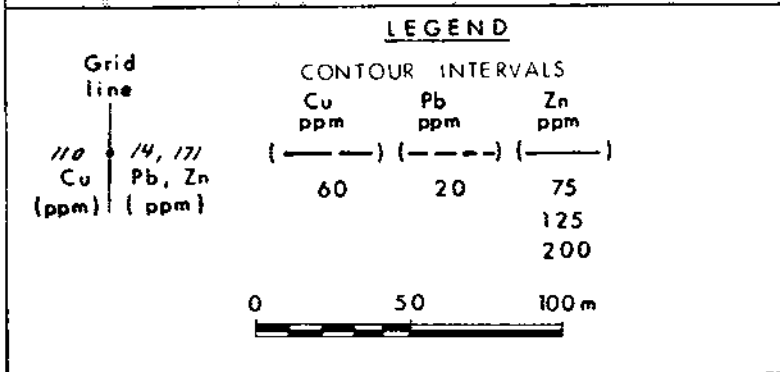
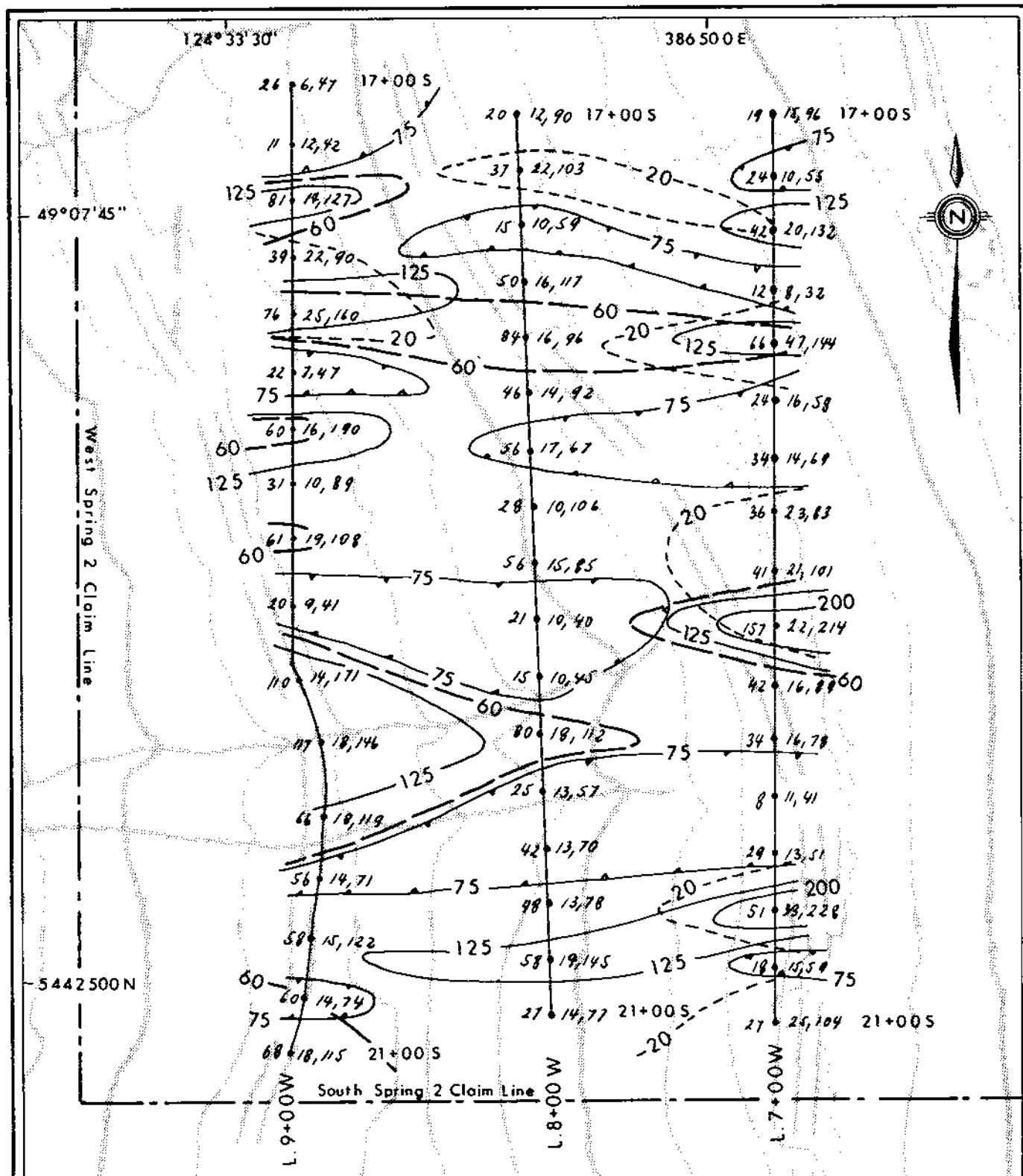
Au, Ag, As SOIL GEOCHEMISTRY GRID B

SPRING PROPERTY

VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No	V 263-2	By	T.M.N.
Scale	1 : 2500	Drawn	J.S.
Drawing No	13	Date	NOVEMBER 1988.

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INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

Cu, Pb, Zn SOIL GEOCHEMISTRY GRID B

SPRING PROPERTY

VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No	V 263-2	By	T. M. N.
Scale	1 : 2500	Drawn	J.S.
Drawing No	14	Date	NOVEMBER 1988

MPH MPH Consulting Limited

The Phase II VLF-EM survey was conducted over a total of 10.975 line km on two grids, including 0.825 line km of resurveying on the Phase I grid, 8.95 line km on the Phase II main grid extensions, and 1.2 line km on Grid B. Data from Phase II was used for the resurveyed grid lines, which are listed on Figures 15 and 16. The results from the 1988 survey have been incorporated with the 1986 results and presented together in two formats. The composite profiles are plotted on Figure 16 (Main Grid) and Figure 17 (Grid B). Fraser filtered dip angles of the main grid are presented in contoured plan map form in Figure 15.

A total of five conductive zones has been outlined by the 1987 and 1988 programmes on the two grid areas. The strike extent of the four conductive zones located in the 1987 programme was extended.

Conductor 1 extends from L1+00W, 0+50S to L9+00W, 3+25S. A number of features occur in the area which may account for this moderate to strong conductor. The conductor runs parallel to the intermediate hornblende-feldspar porphyry dyke that is associated with the main auriferous sulphide bearing quartz vein and is also parallel to a contact between fine cherty tuff and tuffaceous siltstone. This anomaly appears to be open to the west.

Conductor 2 extends from L2+00E, 7+00S to L7+00W, 7+00S. Once again a number of features occur in the area which may be responsible for the anomaly. The conductor is approximately coincident with a contact between argillite and cherty tuff and local exposures of hornblende-feldspar porphyritic intrusive occur in the area. As well, the conductor closely parallels a fault zone exposed in a creek to the south. This strong conductor appears to be open to the east, west, and south.

Conductor 3a extends from L4+00W, 3+40S to L9+00W, 5+00S. This moderate to strong conductor, correlative with a shear zone cutting cherty tuff, is open to the west.

Conductor 3b extends from L1+00W, 3+00S to L9+00W, 5+00S. A weak conductor, correlative with a shear zone cutting cherty tuff, conductor 3b appears to be a projected extension of conductor 3a following an air photo lineament. This anomaly appears to be open to the east.

Conductor 4 extends from L2+00E, 0+25N to L8+00W, 2+00N. It is a weak conductor correlative with weakly anomalous copper-lead-zinc + gold soil geochemical values and a westerly trending intermediate intrusive (exposed at L0+50W, 1+00N). This conductive zone appears to be open to the east.

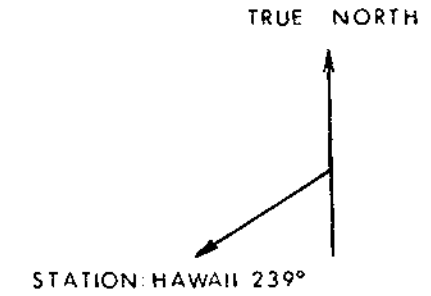
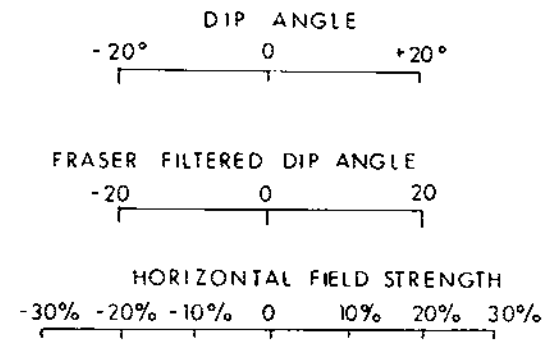
Conductor 5 is located on Grid B, from L7+00W, 18+75S to L9+00W, 18+00S. This is a weak conductor within fine cherty tuff possibly reflecting a shear zone.

5.5 Target Zones

Five target zones for a Phase III follow-up exploration have been outlined on the Spring 2 claim from the compilation of soil geochemical and lithochemical results, geological mapping, and geophysical data. The target zones are described below in order of decreasing significance. Target areas one to four are presented on Figure 18.

Target Zone 1

This 1100 m long, 100 to 225 m wide zone, overlying the adit area, is defined by a strong to moderate VLF-EM conductor coincident with strong gold-silver-arsenic-copper-lead-zinc soil geochemical, and very encouraging lithochemical anomalies. The anomalies are related to gold-enriched quartz vein(s?) exposed by four short adits. Strike length extensions to the vein are suggested by the elongated shape of the geochemical anomalies,



Instrument: Sabre 27

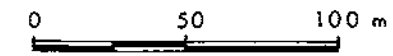
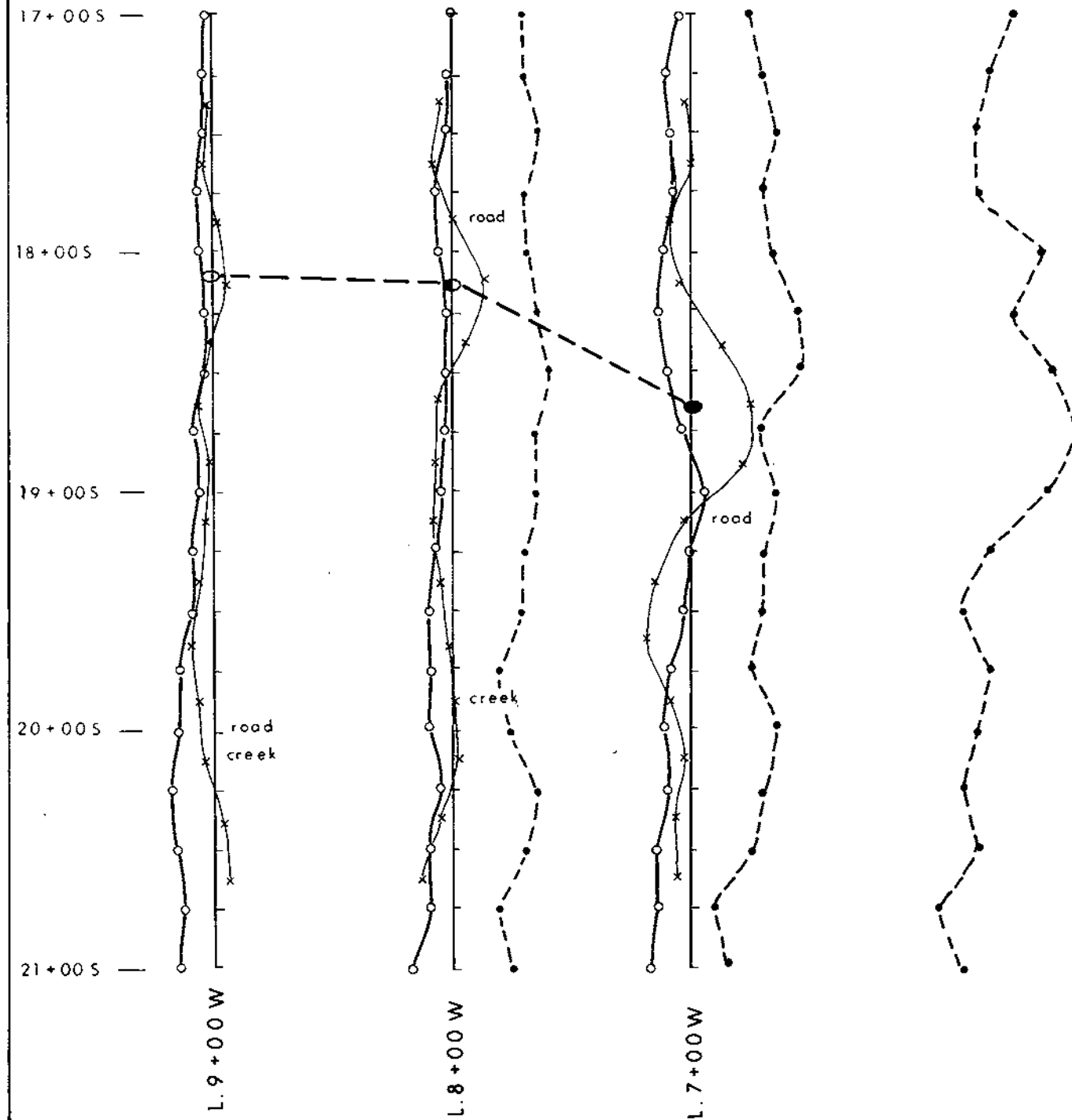
Vertical scale: 1cm = 10°, 10%

LEGEND

- Horizontal Field Strength
- Dip Angle
- ×—×— Fraser Filtered Dip Angle

CONDUCTORS

- Strong - definite
- ◐ Moderate - probable
- Weak - possible
- Possible conductor continuity



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VLF-E M SURVEY PROFILES GRID B SPRING PROPERTY VICTORIA, NANAIMO MINING DIVISION	
Project No: V 263-2	By: J. L.
Scale: 1:2500	Drawn: J. S.
Drawing No: 17	Date: NOVEMBER 1988
MPH Consulting Limited	

although a lack of outcrop exposure limits their direct observation. Highlights from this zone include:

Sample Number	Gold	Anomalous Others (ppm)	Host
<u>1987 samples</u>			
23161	2.28 g/t	32.5 Ag, 397 As, 2897 Cu, 7585 Zn	15 cm quartz vein
23164	2.88 g/t	27.0 Ag, 205 As, 639 Cu, 553 Pb, 3465 Zn	20 cm quartz vein
23165	18.72 g/t	88.5 Ag, 1714 As, 297 Cu, 3493 Zn	quartz float
23166	2.88 g/t	45.2 Ag, 204 As, 1610 Cu, 268 Pb, 12,034 Zn	10 cm quartz vein
0+00, -0+25N	330 ppb	0.5 Ag, 187 Cu, 232 Pb, 232 Zn	soil
<u>1988 samples</u>			
TN2-3	3.60 g/t	30.5 Ag, 411 As, 537 Cu, 270 Pb, 1283 Zn	12 cm quartz vein
TN2-5	1.51 g/t	14.1 Ag, 455 As, 1887 Cu, 28,544 Zn	17 cm quartz vein
CJCA-1	510 ppb	5.7 Ag, 197 As, 669 Cu, 136 Pb, 9235 Zn	10 cm quartz vein
CJCA-2	790 ppb	9.0 Ag, 143 As, 187 Pb, 1626 Zn	14 cm quartz vein

Target Zone 2

Zone 2, 900 m east-west by up to 300 m north-south, occurs along the south end of the Main Grid. It is outlined by coincident moderate to strong VLF-EM and arsenic-zinc + copper + lead + silver + gold soil geochemical anomalies, and very encouraging stream sediment geochemistry. Geological mapping has shown the area to be underlain by McLaughlin Ridge Formation volcanosediments with local bedding-parallel exposures of hornblende-feldspar porphyritic intermediate intrusive.

Sulphide-enriched quartz veining associated with the intrusive is likely the cause of the anomalous soil geochemical, but is not exposed in outcrop. This zone also contains an east-west trending fault zone accompanied by an intense iron-carbonate

alteration zone (up to 15 m wide) and stockwork quartz-carbonate veining. Detailed Phase II rock sampling of the fault returned weakly anomalous silver-arsenic-copper-lead-zinc values. Highlights from this zone include:

Sample Number	Gold	Anomalous Others (ppm)	Host
CC13-2 HMC	10,000 ppb	20 As, 240 Zn	silt
CC14-2 HMC	240 ppb	32 As, 389 Zn	silt
CC19-1 HMC	110 ppb	41 As, 367 Zn	silt
CC19-2 HMC	1130 ppb	37 As, 223 Zn	silt
20366	5 ppb	1.9 Ag, 92 As, 717 Cu	quartz float
20367	5 ppb	1.4 Ag, 968 Cu	quartz float
3+00, 6+00S	70 ppb		soil
7+00W, 6+50S	5 ppb	1.8 Ag, 82 Cu, 175 Zn	soil

Target Zone 3

Target Zone 3 lies between and parallel to Target Zones 1 and 2. It is up to 1100 m long by 150 m wide. The zone, defined by coincident weak to moderate VLF-EM, copper-lead-arsenic \pm zinc \pm silver soil geochemical, and strong lithochemical anomalies, appears to be discontinuous at the centre of the grid. It has, therefore, been divided to Zone 3a (west side) and 3b (east side). Geological mapping has shown this anomalous area to be associated with an east-northeast/west-southwest trending fault. The fault, consisting of imbricate shears, is accompanied by local moderate-intensity iron-carbonate alteration, intensely deformed bedding and sulphide-enriched quartz veins. Highlights from this zone include:

Sample Number	Gold	Anomalous Others (ppm)	Host
<u>Zone 3a</u>			
23181	240 ppb	1.1 Ag, 209 As, 445 Pb, 499 Zn	quartz vein zone
CC05-5	1.23 g/t	2.4 Ag, 590 As, 245 Cu, 2745 Pb, 1163 Zn	quartz vein zone
CC05-6	2.64 g/t	3.0 Ag, 1104 As, 274 Cu, 3957 Pb, 727 Zn	quartz vein zone

Sample Number	Gold	Anomalous Others (ppm)	Host
<u>Zone 3a</u>			
CC25-1	390 ppb	1.3 Ag, 291 As, 597 Pb, 332 Zn	2 cm quartz vein
CC28-5	1080 ppb	458 As, 133 Pb, 1379 Zn	4 cm quartz vein
1+00E, 2+00S	20 ppb	75 Cu, 34 Pb, 76 Zn	soil
<u>Zone 3b</u>			
23185	30 ppb	0.8 Ag	10 cm shear zone
TNS-5	80 ppb	393 As	5 cm quartz-carbonate vein
8+00W, 4+75S	5 ppb	1.7 Ag, 159 Cu, 92 Pb 266 Zn	soil

Target Zone 4

Zone 4 lies parallel to and north of Target Zone 1. It is up to 1000 m long and 125 m wide. The zone is defined by coincident weak VLF-EM and copper-lead-zinc + gold soil geochemical anomalies. An east-west trending hornblende-feldspar porphyritic intrusive with minor shearing and sulphide-enriched quartz veining is exposed at 0+50E 1+00N. A strike continuation of this shear-vein-intrusive occurrence to the west likely accounts for the coincident geophysical-geochemical anomaly. Highlights of this zone include:

Sample Number	Gold	Anomalous Others (ppm)	Host
23183	2.78 g/t	36.1 Ag, 186 Zn	quartz float
0+50W, 0+75N	30 ppb	144 Zn	soil
0+50E, 1+25N	65 ppb	0.8 Ag	soil
2+00E, 1+50N	70 ppb	98 Cu, 77 Zn	soil

Target Zone 5

Zone 5 located in the north Grid B area consists of coincident weak VLF-EM and copper-zinc-gold soil geochemical anomalies. The zone lies between 17+50S and 18+25S on L9+00W and 17+75S and 18+75S on L7+00W. Geological mapping did not find a direct cause for this anomaly due to a lack of adequate outcrop exposure, but it is assumed from the linear form of the gold-copper-zinc geochemical anomaly to be structurally related. Highlights from this zone and areas adjacent include the following:

Sample Number	Gold	Anomalous Others (ppm)	Host
7+00W, 18+00S TN31-3	100 ppb 1.44 g/t	144 Zn 46 As, 124 Sr	soil 3 cm quartz vein (70 m W of property)
TN31-6	2.67 g/t	4.9 Ag, 2842 Cu, 837 Zn	1 cm quartz vein (100 m west of property)
TN30-6 HMC	1400 ppb	3.2 Ag, 581 As, 521 Cu	silt (120 m west of property)

6.0 PROPOSED WORK PROGRAM

Results of the Phase II exploration program are encouraging and warrant the completion of a Phase III follow-up program. This program should encompass the following:

1. The current main grid should be extended to the east and south to carry out further soil geochemical and VLF-EM surveys with the aim of exploring for extensions of the target zones, all of which are currently open to the east, and to test for additional parallel zones to the south.
2. Hand trenching, including blasting where necessary, should be undertaken in Target Zone 2 to expose bedrock in areas of coincident soil geochemical and VLF-EM anomalies in the hope of determining the source(s) of highly anomalous silt samples and to allow sampling of any underlying mineralized zone(s).
3. Geological mapping and prospecting should be continued on the Spring 2 claim as well as the remainder of the property. Test geochemical/geophysical grids should be established over areas of interest outlined during the course of mapping and prospecting.
4. A limited drilling program should be undertaken to test mineralization at depth of the highest priority targets as outlined below. Road rehabilitation work will be required to provide drill access and to avoid helicopter access costs.

		Azimuth	Inclination	Length	Estimated Vertical Depth of Intersection
Target Zone 1					
Setup 1: On	DDH1	000°	-45°	100 m	64 m
Skidder trail in area of 0+50E, 1+00S.					
Same	DDH2	000°	-70°	125 m	106 m



	Azimuth	Inclination	Length	Estimated Vertical Depth of Intersection
Target Zone 3				
<u>Setup 2:</u> On road in area of 7+00W, 5+00S	DDH3 325°	-50°	100 m	61 m

Target Zone 2
Setup 3: DDH 4 Location and hole specifications are contingent on trenching results. Should the source of the high silt values found in Target Zone 2 not be located, the remaining funds will be allocated to additional trenching to locate their source(s).

The total drilling length, assuming 3 setups, is 500 m.

6.1 Proposed Phase III Budget

Fieldwork		
Personnel	\$18,050	
Food and Accommodations	3,520	
Equipment Rental	3,855	
Backhoe Rental	3,500	
Drilling	57,500	
Analyses	9,588	
Miscellaneous	3,020	
Administration @ 15%	11,041	
Contingency @ 15%	<u>16,511</u>	\$126,585
Consulting		3,925
Report		<u>19,500</u>
Estimated Phase III cost, say		<u><u>\$150,000</u></u>



6.2 Proposed Phase III Schedule

WEEK	1	2	3	4	5
	_ _ _ _	_ _ _ _	_ _ _ _	_ _ _ _	_ _ _ _
Geology & Prospecting	_____				
Geochemistry Survey	_____				
Geophysics Survey	_____				
Trenching	_____				
Cat Work	_____				
Drilling		_____			
Report				_____	_____

7.0 CONCLUSIONS

1. The Spring Group is underlain by volcanosedimentary rocks of the Paleozoic Sicker and Buttle Lake Groups. These have subsequently been displaced by east trending faults and intruded by Tertiary intermediate dykes.
2. Soil sampling outlined 5 main anomalous trends, all of which are coincident with weak to strong VLF-EM conductors. These trends have been identified as Target Zones 1 to 5 for future follow-up exploration. Target Zone 1 is 1100 m long and up to 225 m wide. It contains gold soil values up to 330 ppb, lithogeochemical values up to 18.72 g/t Au, and is coincident with strong to moderate VLF-EM responses. Target Zone 1 occurs over and along the projected strike of the main Au-Zn-Pb bearing quartz vein outlined by Phase I exploration. Target Zone 2 is 900 m long by up to 300 m wide, occurring over and along strike of exposures of intermediate intrusive located adjacent to an iron-carbonate altered fault zone. It contains gold soil values up to 70 ppb, silt sediment values up to 10,000 ppb Au, and is coincident with moderate to strong VLF-EM responses. Target Zone 3 extends discontinuously along 1100 m, is up to 150 m wide, and follows the surface trace of a east-northeast trending fault. It contains soil values up to 1.7 ppm Ag, 159 ppm Cu, 92 ppm Pb, 266 ppm Zn; lithogeochemical values up to 2.64 g/t Au, and is coincident with weak to moderate VLF-EM responses. Target Zone 4 is up to 1000 m long, 125 m wide, and occurs over and along the projected strike of a hornblende-feldspar porphyritic intrusive. It contains gold soil values up to 65 ppb, lithogeochemical values up to 2.78 g/t Au, and is coincident with weak to moderate VLF-EM responses. Target Zone 5 is 200 m long, up to 100 m wide, and occurs over an assumed shear zone. It contains gold soil values up to 100 ppb, occurs proximal to lithogeochemical values up to 2.67 g/t Au, and is coincident with a weak VLF-EM anomaly.



3. All Target Zones are open to the east and west; Target Zone 2 is also open to the south.
4. Heavy mineral concentrate silts have returned values up to 10,000 ppb Au, the source of which has yet to be determined. The heavy mineral concentrate technique appears to be an effective prospecting tool.
5. Soil geochemistry and VLF-EM surveys are very effective in outlining anomalous zones on the Spring property.
6. Further work is warranted.



8.0 RECOMMENDATIONS

1. Since the Phase II exploration program was successful in delineating 5 significant Target Zones on the Spring 2 claim, and since much of the remainder of the property is as yet unexplored, it is recommended a Phase III exploration program be undertaken to test these encouraging anomalies.
2. It is recommended that the Phase III exploration program consist of additional soil geochemical and VLF-EM surveys along extensions to the existing grid, trenching, geological mapping, prospecting, road rehabilitation, and diamond drilling.
3. It is recommended that Phase III be undertaken at an estimated cost of \$150,000.

Respectfully submitted
MPH CONSULTING LIMITED

A handwritten signature in cursive script that reads 'T.M. Naciuk'.

T.M. Naciuk, B.Sc.

November 30, 1988
Vancouver, B.C.



CERTIFICATE

I, T. Naciuk, do hereby certify:

1. That I am a graduate in geology from the University of Alberta (B.Sc. 1985).
2. That I have practised as a geologist in mineral exploration for four years.
3. That the opinions and conclusions contained herein are based on field work carried out on the Spring Group from July 28, 1988 to September 27, 1988 and supervised by me.
4. That I own no direct, indirect, or contingent interests in the subject property or shares or securities of International Cherokee Developments Limited or associated companies.

A handwritten signature in cursive script that reads 'T.M. Naciuk'.

T.M. Naciuk, B.Sc.

November 30, 1988
Vancouver, B.C.

REFERENCES

- Allen, G.J., 1987. Report on Phase I Geology, Geochemistry, and Geophysics on the Spring Property; Victoria and Nanaimo Mining Divisions; for International Cherokee Developments Ltd., November 30, 1987.
- Angus, S.E., 1987. Geochemical Report on Spring Group; Nanaimo Mining Division; February 25, 1987.
- Benvenuto, G.L., 1984. Thistle Mine - Summary of 1983, 1984 Exploration; for Westmin Resources Ltd.
- Clapp, C.H., 1912. Southern Vancouver Island; GSC Memoir 13.
- Getsinger, J.S., Neale, T., Cope, G.R., and Lund, K.D., 1988. Gold Exploration Success Along Structural Trends in the Sicker Group of Vancouver Island, British Columbia. Presented at 90th Annual General Meeting of CIM. Paper 135.
- Massey, N., 1987. Geology of the Cowichan Lake Area, NTS 92C/16; Province of British Columbia, Ministry of Energy, Mines and Petroleum Resources, Open File 1987/2.
- McKnight, B.K., 1987. The New H-W Orebody - Cutoff Grades and Mine Economics. CIM Bulletin, Vol. 80, No. 899, March, 1987.
- Muller, J.E., 1977. Geology of Vancouver Island (West Half); GSC Open File 463.
- Muller, J.E., 1980a. The Paleozoic Sicker Group of Vancouver Island, British Columbia; GSC Paper 79-30.
- Muller, J.E., 1980b. Geology, Victoria Map Area, Vancouver Island and Gulf Islands, British Columbia; GSC Open File 701.
- Muller, J.E. and Carson, D.J.T., 1969. Geology and Mineral Deposits of Alberni Map-Area, British Columbia (92F); GSC Paper 68-50.



Neale, T., 1984. Compilation of Mineral Occurrences of the Sicker Group, Vancouver Island, British Columbia; for MPH Consulting Limited.

Neale, T. and Hawkins, T.G., 1984. Report on Reconnaissance Geological Mapping and Rock Sampling, Cameron Group, Nanaimo Mining Division; for Sunfield Management Ltd., May 11, 1984.

Northern Miner, January 1987.

Sutherland Brown, A. and Yorath, C.J., 1985. Lithoprobe Profile Across Southern Vancouver Island: Geology and Tectonics, in Field Guides to Geology and Mineral Deposits in the Southern Canadian Cordillera, Geological Society of America, Cordilleran Section Meeting, Vancouver, British Columbia, May 1985.

Sutherland Brown, A., Yorath, C.J., Anderson, R.G., and Dom, K., 1986. Geological Maps of Southern Vancouver Island, Lithoprobe 1. Geological Survey of Canada, Open File 1272.

Vancouver Stockwatch, February 9, 1988.



Appendix I

**List of Personnel and
Statement of Expenditures**



**LIST OF PERSONNEL AND
STATEMENT OF EXPENDITURES**

Field Costs

Personnel:

T. Naciuk, BSc., project geologist 38.5 days @ \$350	\$13,475	
T.G. Hawkins, PGeol. consultant 4 days @ 600	2,400	
C. Clayton, Field Tech. 28.5 days @ 250	7,125	
T. Hayes, Field Supervisor 1 day @ 350	350	
J. Kwa, Field Tech. 5 days @ 175	875	
J. Lang, Field Tech. 15 days @ 175	<u>2,625</u>	
		\$26,850

Equipment Rental:

Field support	87 mandays @ \$55	4,785.00	
Trucks	50 days @ 90	4,500.00	
VLF	5 days @ 35	175.00	
Rocksaw	2 days @ 15	<u>30.00</u>	
			9,490

Disbursements:

Transport	411.14
Fuel	469.04
Communications	226.33
Miscellaneous equipment & supplies	344.02
Map reproduction	34.29
Shipping	171.60
Thin sections	236.50



Disbursements cont.

Lab:

615 geochem (Au) analyses	@ 4.75	2,921.25
615 ICP analyses	@ 7.00	4,305.00
143 assay preparation	@ 3.50	500.50
458 soil preparation	@ 1.00	458.00
458 reject retention	@ .50	229.00
14 Au assay	@ 7.25	101.50
6 heavy liquid concentration	@ 16.00	96.00
7 heavy mineral separation	@ 15.00	105.00
1 heavy mineral concentration	@ 15.00	<u>15.00</u>

\$ 8,731.25

10,624.17

1,593.63

Admin. @ 15%

TOTAL FIELD COSTS

\$48,557.80

Report Costs

Personnel:

T. Naciuk, BSc., project geologist		
5 days @ \$350		1,750.00
T. Neale, BSc., geologist		
5.25 days @ 350		1,837.50
G. Yip, BSc., geol. asst.		
4 hrs @ 35		140.00
G. Lorenzetti, BSc., geologist		
2.75 hrs @ 35		96.25
B. Thomae, BSc., geologist		
1 hr @ 50		50.00
K. Lund, BSc., geophysicist		
1 day @ 350		<u>350.00</u>

4,223.75

Disbursements:

Map reproduction	392.77
Courier	40.32
Drafting, copying	<u>1,496.00</u>

1,929.09

Admin. @ 15%

289.36

TOTAL REPORT COSTS

\$ 6,442.20

TOTAL COSTS

\$55,000.00



Appendix II
Laboratory Methods



ACME ANALYTICAL LABORATORIES LTD.

Analyzing & Trace Analysis
 852 E. Hastings St., Vancouver, B.C. V6A 1R6
 Telephone: 253-3158

BIOCHEMICAL ANALYSES - Rocks and Soils

Group I Digestion

.50 gram sample is digested with 3 ml 1-1-2 HCl-HNO₃-H₂O at 95 deg.C for one hour and is diluted to 10 ml with water. This leach is near total for base metals, partial for rock forming elements and very slight for refractory elements. Solubility limits Ag, Pb, Sb, Bi, W for high grade samples.

Group IA - Analysis by Atomic Absorption.

Element	Detection	Element	Detection	Element	Detection
Antimony*	2 ppm	Copper	1 ppm	Molybdenum	1 ppm
Bismuth*	2 ppm	Iron	0.01 %	Nickel	1 ppm
Cadmium*	0.1 ppm	Lead	2 ppm	Silver	0.1 ppm
Chromium	1 ppm	Lithium	2 ppm	Vanadium	2 ppm
Cobalt	1 ppm	Manganese	5 ppm	Zinc	2 ppm

First Element \$2.25 Subsequent Element \$1.00

Group IB - Hydride generation of volatile elements and analysis by ICP.
 This technique is unsuitable for sample grading over 1% Bi or Cr.

Element	Detection	Price
Arsenic	0.1 ppm	First Element \$4.25 All Elements \$5.50
Antimony	0.1 ppm	
Bismuth	0.1 ppm	
Germanium	0.2 ppm	
Selenium	0.2 ppm	
Tellurium	0.1 ppm	

Group IC - Hg Detection limit - 5 ppb Price \$2.50

Hg in the solutions are determined by cold vapour AA using a P & J scientific Hg assembly. The aliquots of the extract are added to a stannous chloride/hydrochloric acid solution. The reduced Hg is swept out of the solution and passed into the Hg cell where it is measured by AA.

Group ID - ICP Analysis, same digestion

Element	Detection
Ag	0.1 ppm
Cd, Co, Cr, Cu, Mn, Ni, Sr, Zn	1 ppm
As, Au, S, Ba, Bi, La, Pb, Sb, Th, V, W	2 ppm
U	5 ppm
Al, Ca, Fe, K, Mg, Na, P, Ti	0.01 %
Any 2 elements	\$3.25
5 elements	4.50
10 elements	5.50
All 30 elements	6.25

Group IE - Analysis by ICP/MS

Element	Detection	Price
Ga, Ge	1 ppm	All Elements 15.00 (minimum 20 samples per batch or \$15.00 surcharge)
Au, Bi, Cd, Hg, In, Ir, Os, Re, Rh, Sb, Te, Th, Tl, U	0.1 ppm	

Hydro Geochemical Analysis

Natural water for mineral exploration

26 element ICP - Mo, Cu, Pb, Zn, Ag, Co, Ni, Mn, Fe, As, Sr, Cd, V, Ca, P, Li, Cr, Mg, Ti, B, Al, Na, K, Cs, Ba, Bi \$8.00

F by Specific Ion Electrode - detection 20 ppb \$3.75
 U by UAS - detection .01 ppb 5.00
 pH .1 pH 1.50

* Minimum 20 samples or \$5.00 surcharge for ICP or AA and \$15.00 surcharge for ICP/MS. All prices are in Canadian Dollars

1986.

ASSAY PREPARATION PROCEDURE.

Rossbacher Laboratory Ltd.

1. Unpack and sort core or rock samples, put in numerical order, and prepare analytical sheets and pulp bags.
2. Place samples in drying oven to dry.
3. Crush samples using jaw crusher, and cone crusher to approx. 1/8 th inch or finer
4. Using a Jones splitter, split out approx. 300 gram sample for analysis. Rebag the remaining coarse fraction, and store.
5. Dry the coarse assay fraction further if necessary.
6. pulverize assay fraction to - 150 mesh using a Ring Grinder, and forward to Assay room for analysis. Clean Ring Grinder barrel using granite grit after each sample.

1986.

GOLD METALLICS ASSAY

Rosbacher Laboratory Ltd.

NOTE: This procedure is to be used if coarse metallic gold is suspected to be present in samples submitted for gold assay.

PREPARATION:

1. Prepare the sample as per " Assay Preparation Procedure ", clean all equipment using granite grit to prevent contamination.
2. Screen the pulverized assay pulp through a minus 100 mesh stainless steel Tyler sieve.
3. Place the + 100 mesh fraction in a separate pulp envelope, and mix the - 100 mesh fraction by rolling. Place the - 100 mesh fraction in its original bag, and submit both to the Assay room.

ANALYSIS:

1. Weigh both + 100, and - 100 fractions, and note the weights.
2. Analyze the total + 100 mesh (Metallics) fraction, and one Assay Ton of the - 100 mesh fraction according to the standard Analytical Procedure.
3. Calculate the true assay value using the method outlined in the Metallics Calculation procedure.

GOLD ASSAY UNITS & METALLICS CALCULATION.

ROSSBACHER LABORATORY LTD., FEB. 1986

IN CANADA & US REPORTED AS : TROY OZ. PER 2000 POUNDS
AVOIRDUPOIS TON OF ORE.

IN ENGLAND AND AUSTRALIA AS : TROY OZ. PER 2240 LBS. (LONG-
TON.) (1 AT. HERE = 32.666 gm.)

ASSAY TON SYSTEM :

29.166 TROY OZ = 2000 LBS.
THEREFORE : 1 TON AV. : 1 OZ TR. AS 1 ASSAY TON : 1mg.
OR : 29.167 OZ : 1 OZ. AS 29.167 gm : 1mg

1 OUNCE PER TON = 34.3 PARTS PER MILLION (34.2755 PPM.)
1 TROY OUNCE = 31.10 gram.

METALLICS CALCULATION PROCEDURE.

SCREEN SAMPLE THROUGH - 100 MESH SCREEN, WEIGH AND ASSAY THE
+ 100 AND THE - 100 MESH FRACTIONS.
RECORD THE RESULTS.

CALCULATE THE GOLD IN mg IN EACH FRACTION AS FOLLOWS:

$$A = \text{mg Au in } +100 \# = \frac{\text{wt. of } +100 \# \text{ in gm}}{29.167 \text{ gm/AT}} \times \text{reading in OZ/T}$$

$$B = \text{mg Au in } -100 \# = \frac{\text{wt. of } -100 \# \text{ in gm}}{29.167 \text{ gm/AT}} \times \text{reading in OZ/T}$$

$$\text{OZ/T gold in tot. sample} = \frac{(A + B) \text{ mg Au}}{\text{wt of total sample} / 29.167 \text{ g/AT.}}$$

= mg/AT or OZ/T.

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 293-8910
AREA CODE: 604

Jan. 1985

(1)

GEOCHEMICAL ANALYTICAL METHODS CURRENTLY IN USE AT ROSSBACHER LABORATORY LTD.

A. SAMPLE PREPARATION

1. *Geochem. Soil and Silt:* Samples are dried, and sifted to minus 80 Mesh, through stainless steel, or nylon screens.
2. *Geochem. Rock:* Samples are dried, crushed to minus $\frac{1}{8}$ inch, split, and pulverized to minus 100-mesh.

B. METHODS OF ANALYSIS

1. *Multi element:* (Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb, Cd):
0.5 Gram sample is digested for four hours with a 13:35 mixture of Nitric-Perchloric acid.
The resulting extract is analyzed by Atomic Absorption spectroscopy, using Background Correction where appropriate.
2. *Antimony:*
0.50 Gram sample is fused with Ammonium Iodide and dissolved.
The resulting solution is extracted into TOPO/MIBK and analyzed by Atomic Absorption spectroscopy.
3. *Arsenic:*
0.25 Gram sample is digested with Nitric-Perchloric acid.
Arsenic from the solution is converted to arsine, which in turn reacts with silver D.D.C. The resulting solution is analyzed by colorimetry.
4. *Barium:*
0.50 Gram sample is repeatedly digested with $HClO_4$, HNO_3 , and HF.
The solution is analyzed by Atomic Absorption spectroscopy.
5. *Biogeochemical:*
Samples are dried, and ashed at $550^{\circ}C$. and the resulting ash analyzed as in #1, multi-element analysis.
6. *Bismuth:*
0.50 Gram sample is digested with Nitric acid. The solution is analyzed by Atomic Absorption spectroscopy.
7. *Chromium:*
0.25 Gram sample is fused with Sodium Peroxide. The solution is analyzed by Atomic Absorption spectroscopy.

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 298-8810
AREA CODE: 604

(2)

METHOD OF ANALYSIS (CONT.)

8. **Fluorine:** 0.50 Gram sample is fused with a Carbonate Flux, and dissolved.
The resulting solution is analyzed for Fluorine by use of an Ion Selective Electrode.
9. **Gold:** 10.0 Gram sample is roasted at 550°C. and dissolved in Aqua Regia. The resulting solution is subjected to a Methylisobutyl Ketone extraction, which extract is analyzed for Gold using Atomic Absorption spectroscopy.
10. **Mercury:** 1.00 Gram sample is digested with Nitric and Sulfuric acids. The solution is analyzed by Atomic Absorption spectroscopy, using a cold vapor generation technique.
11. **Partial Extraction and Fe/Mn oxides:** 0.50 Gram sample is extracted using one of the following: Hot or cold 0.5 N. HCL, 2.5% E.D.T.A., Ammonium Citrate, or other selected organic acids. The solution is analyzed by use of Atomic Absorption spectroscopy.
12. **pH:** An aqueous suspension of soil, or silt is prepared, and its pH is measured by use of a pH meter.
13. **Rapid Silicate Analysis:** 0.10 Gram sample is fused with Lithium Metaborate, and dissolved in HNO₃.
The solution is analyzed by Atomic Absorption for SiO₂, Al₂O₃, Fe₂O₃, MgO, CaO, Na₂O, K₂O, TiO₂, P₂O₅ and MnO.
14. **Tin:** 0.50 Gram sample is sublimated by fusion with Ammonium Iodide, and dissolved.
The resulting solution is extracted into TOPO/MIBK and analyzed by Atomic Absorption spectroscopy.
15. **Tungsten:** 1.00 Gram sample is sintered with a carbonate flux, and dissolved.
The resulting extract is analyzed colorimetrically, after reduction with Stannous Chloride, by use of Potassium Thiocyanate.



Appendix III

**Rock Sample Descriptions
and Selected Results**



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN29-1	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Quartz vein occurs in a zone of similar veining cross-cutting and subparallel to bedding. Veins are 1 to 6 cm wide and continuous for 3 to 4 m. Zone is approximately 40 m long. Vein contains up to 5% pyrite and 4 to 6% sphalerite in aggregates and disseminated. Vein sampled is oriented 32/24°SE.	220	9.1	297	111	10615	425 Cd
TN30-1	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Altered tuff Tuff (medium-grained) shows intense rusty weathering. Fresh surface is mottled grey-orange with trace bright green sericite (fuchsite?). Sample contains trace fine-grained disseminated pyrite. Intensely altered zone is exposed for 2 m.	5	2.2	47	11	77	
TN30-2	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein A 1.5 cm wide white quartz vein crosscuts interbedded fine-grained tuff and green chert. Host contains 5 to 8% disseminated pyrite. Vein contains 10 to 15% aggregate pyrite. Quartz vein is oriented 162/56°E.	1620 (1.65)	0.9	83	28	187	
TN30-3	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein White quartz vein, exposed 0.5 m, lies in the hanging wall of an intensely altered, 0.5 m wide, shear zone. Vein contains trace pyrite.	5	0.9	37	413	2625	134 Sr



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN30-4	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein White-grey quartz vein, up to 6 cm wide, crosscuts argillite. Trace pyrite occurs along graphitic laminations within the vein. Vein is oriented 153/63°E.	5	0.1	16	11	47	
TN30-5	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Shear zone material Fe-carbonate altered shear zone (oriented 16/76°E) crosscuts fine-grained sedimentary lithologies. Zone contains up to 10% disseminated pyrite. Zone is exposed 1 m by 5 m strike length and contains minor quartz veins.	5	3.5	55	34	95	
TN30-6	Location: S of Spring 2 claim Sample Type: Silt (Heavy Mineral Concentrate)	1400	3.2	521	369	488	
TN30-7	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein zone Quartz-carbonate veins up to 1.5 cm wide and of various orientations crosscut bedded sedimentary rocks (argillite, chert, siltstone) in a zone approximately 10 m wide. Veins contain trace pyrite.	5	0.5	26	63	122	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN30-8	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein White quartz vein, up to 40 cm wide crosscuts argillite. Due to lack of exposure orientation is uncertain. Vein contains trace pyrite.	5	0.8	37	33	118	
TN30-9	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein White quartz vein up to 3 cm wide crosscuts interbedded argillite and siltstone. Vein is oriented 45/35°SE and exposed 1 m. Outcrop has a moderately rusty-weathered surface. Host contains 1 to 3% disseminated pyrite. Vein is oriented 45/35°SE.	5	0.9	97	28	521	
TN31-1	Location: Spring 2 claim Sample Type: Silt (Heavy Mineral Concentrate)	5	0.1	234	75	153	
TN31-2	Location: Spring 2 claim Sample Type: Silt (Heavy Mineral Concentrate)	5	3.8	432	210	332	
TN31-3	Location: W of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Creamy-white quartz-carbonate vein crosscuts interbedded tuff and siltstone. Fe-carbonate alteration envelope occurs on either side of vein (up to 1 m wide). Local sericitic alteration. Host has 2 to 4% disseminated pyrite. Vein is 3 cm wide and is exposed approximately 7 m.	1100 (1.44)	0.5	109	12	43	124 Sr



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN31-4	Location: W of Spring 2 claim Sample Type: Silt (Heavy Mineral Concentrate)	10	0.1	396	206	268	
TN31-5	Location: W of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Altered tuff Disseminated pyrite (1 to 3%) occurs in Fe-carbonate and sericite altered tuff. Minor quartz-carbonate veining occurs within the outcrop. Sulphides appear to be in host only.	120	0.5	254	10	42	
TN31-6	Location: W of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Quartz vein (or vein-filled shear), oriented 122/15°SW, crosscuts fine-grained sedimentary rocks. Vein contains up to 10% pyrite, 1 to 3% malachite, and trace chalcopyrite. Vein is 1 cm wide, exposed 3 m. Sample is taken adjacent to a 3.5 m wide felsic intrusive.	2350 (2.67)	4.9	2842	20	837	
TN31-7	Location: W of Spring 2 claim Sample Type: Silt (Heavy Mineral Concentrate)	5	0.1	361	204	461	
TN31-8	Location: W of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Rusty quartz vein, up to 4 cm wide (exposed 5 m), crosscuts argillite. Vein contains trace to 4% pyrite in aggregates. Vein is oriented 122/45°NE and is parallel to bedding.	30	0.5	99	84	168	



Sample Number	Description	Au pph (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN2-1	Location: N Spring 2 claim (Adit 2) Sample Type: Grab from outcrop Rock Type: Quartz vein Rusty quartz vein, 1 to 4 cm wide (exposed 50 cm), occurs 40 cm true distance from main vein (footwall side). No apparent sulphides. Vein is hosted by argillite and is parallel to main vein.	570 (0.75)	0.5	82	79	230	
TN2-2	Location: N Spring 2 claim (Adit 2) Sample Type: Grab from outcrop Rock Type: Quartz vein Rusty quartz vein, 2 cm wide, occurs 7 cm true distance from main vein (hanging wall side). Vein is of irregular thickness and is oriented parallel to the main vein (103/60°S).	50	10.5	602	1471	2562	
TN2-3	Location: N Spring 2 claim (between Adits 2 & 3) Sample Type: Grab from outcrop Rock Type: Quartz vein Rusty quartz vein, 8 to 12 cm wide, contains 5% pyrite, trace galena, and trace arsenopyrite. Sample, located between Adits 2 and 3, likely correlates with the main vein seen in the adits. Vein is oriented 71/70°S.	3450 (3.60)	30.5	537	270	1283	
TN2-4	Location: N Spring 2 claim Sample Type: Grab from float Rock Type: Quartz vein Rusty quartz float material, 30 x 30 x 20 cm (angular), contains trace pyrite. Float occurs in the creek upstream of Adit 3. Sample contains trace pyrite.	5	1.1	59	12	71	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN2-5	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein A 17 cm wide quartz vein is exposed in the portal of Adit 4. Vein, oriented 71/70°S, contains 3 to 5% pyrite, 1 to 3% galena, 1 to 3% chalcopyrite, trace malachite, and trace sphalerite(?). Vein is oriented parallel to main vein.	1220 (1.51)	14.1	1887	38	28544	
TN3-1	Location: N Spring 2 claim Sample Type: Silt (Heavy Mineral Concentrate)	5	4.3	62	37	67	235 Sr
TN3-2	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Quartz-carbonate vein, 8 cm wide (exposed 2 m), follows a 30 cm wide shear zone (locally Fe-carbonate altered). Shear zone crosscuts interbedded coarse-grained tuff, siltstone, chert, and minor argillite. Shear is oriented 90/85°S. Vein contains trace pyrite along selvages.	5	0.4	35	10	33	
TN3-3	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Quartz vein, with trace pyrite along selvages, occurs in a shear zone crosscutting interbedded coarse-grained tuff, siltstone, chert, and argillite. A 1 m zone of Fe-carbonate alteration envelopes the shear. Trace pyrite is disseminated throughout. Zone is exposed approximately 10 m (strike length).	5	0.1	66	7	53	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN5-1	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Yellow-white quartz vein, with 1 to 3% disseminated pyrite. Veins, up to 3 cm wide, are exposed up to 1 m. Stockwork orientation.	5	0.1	97	6	53	
TN5-2	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff Fine-grained green tuff hosts 2 to 4% disseminated and fracture-filled pyrite. Weathered surface has intense Fe-oxidation. Bedding is up to 5 cm. Occurrence is exposed 40 cm.	5	0.1	103	2	73	
TN5-3	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Altered fine-grained sediments Quartz-carbonate-sericite alteration occurs adjacent to a shear oriented 23/78°E. Altered zone is 3 m wide and exposed 15 m. Outcrop has 1 to 3% bright green sericite (fuchsite?) and trace fine-grained disseminated pyrite. Weathered surface is rust-orange.	5	0.4	282	5	72	
TN5-4	Location: N Spring 2 claim Sample Type: Grab from float Rock Type: Quartz vein Quartz vein, 2 to 6 cm wide, crosscuts fine-grained green tuff. Trace fine-grained pyrite occurs throughout the vein. Float piece is 40 x 40 x 30 cm, sub-angular.	5	0.1	66	9	52	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN5-5	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Quartz-carbonate vein, 3 to 5 cm wide (exposed 3 m) occurs parallel to interbedded siltstone, argillite, and chert. Vein contains 3 to 5% pyrite disseminated along selvages.	80	0.7	71	18	62	
TN15-1	Location: Central Spring 2 claim Sample Type: Grab from float Rock Type: Rusty quartz vein Float clast, 40 x 30 x 20 cm (angular), contains rusty quartz vein crosscutting interbedded argillite and siltstone. Abundant similar float occurs in area.	5	0.1	16	10	21	
TN18-1	Location: Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Rusty stockwork quartz-carbonate vein system crosscuts argillite. System, exposed 0.5 by 1.0 m, contains trace pyrite. Local bedding is 50/36°SW.	5	0.3	55	34	97	151 As
TN30-1A	Location: S Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Quartz-carbonate stockwork vein system, approximately 3 m wide, is accompanied by Fe-carbonate alteration. Disseminated pyrite (1 to 3%) occurs disseminated in host very fine-grained tuff and chert.	5	0.1	37	10	56	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
TN30-2A	Location: Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Quartz-carbonate stockwork vein system crosscuts argillite. Veins contain trace to 3% pyrite. System is exposed 10 cm by 3 m.	5	0.2	32	7	50	
TN31-1A	Location: SE Spring 2 claim Sample Type: Grab from outcrop Rock Type: Shear zone Fe-carbonate altered shear zone, 2 m wide (exposed 7 m) crosscuts silty tuff. Zone hosts a 6 cm wide quartz vein containing trace pyrite. Zone is oriented 62/74°NW.	20	0.3	9	8	49	375 Sr
20351	Location: S Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Rusty quartz vein, up to 8 cm wide (exposed 4 m), crosscuts argillaceous sediments. Veining is stockwork and subparallel to bedding (bedding is highly undulatory). Vein contains trace pyrite.	5	0.4	35	8	37	
20352	Location: W Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Quartz vein crosscuts argillite. Sample vein as sample CC28-2. Sample contains 2 to 4% disseminated and fracture fill pyrite.	5	1.3	92	114	57	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20353	Location: NW Spring 2 claim Sample Type: Chip across 30 cm Rock Type: Intermediate felsic intrusive Felsic dyke crosscuts very fine-grained volcanoclastic rocks. Dyke contains trace to 2% pyrite. Matrix is light green-grey, aphanitic, and hosts 15 to 20% feldspar laths and 15 to 20% mafic crystals (hornblende?). Dyke is silicified. No apparent veining.	5	0.1	18	4	52	
20354	Location: Spring 2 claim Sample Type: Grab from float Rock Type: Quartz vein Sample is a composite of quartz vein float dug from 0.5 m trench in road bed. From same location as sample 23184.	310	5.3	22	33	42	
20355	Location: Spring 2 claim Sample Type: Grab from outcrop Rock Type: Lapilli tuff Lapilli tuff, chert and very fine-grained tuff clasts to 1 cm within an aphanitic homogeneous matrix occurs interbedded with very fine-grained tuff and silty tuff. Clasts and matrix are silicified. Sample contains trace to 3% pyrite. Massive exposure (cliff face). Local bedding is oriented 61/70°SE.	5	0.1	48	9	64	
20356	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein White quartz vein, up to 10 cm wide, occurs in a fault zone up to 5 m wide (hosting other similar quartz veins). Vein contains up to 10% pyrite + galena + sphalerite. Zone is oriented 323/90°.	40	2.6	1356	2	6382	316 Cd 14 W



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20357	Location: Lake Road, Spring 4 claim Sample Type: Grab from float Rock Type: Basalt Stockwork quartz veinlets, up to 3 cm wide, occur in a dark green-grey basaltic matrix. Veins, exposed up to 5 m contain trace to 2% pyrite. Host is chlorite and, locally, epidote altered.	5	0.1	80	4	26	15247 B
20358	Location: W Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz veinlet Very fine-grained pyrite occurs in quartz veinlets crosscutting interbedded siltstone and argillite. Sedimentary lithologies are highly deformed; the sample location is proximal to a probable fault.	5	0.4	81	11	34	
20359	Location: W Spring 2 claim Sample Type: Grab from float Rock Type: Quartz vein White vuggy quartz vein occurs crosscutting pale green silty tuff. Float clast is approximately 50 x 30 x 40 cm, angular. Vein contains trace pyrite. Similar float is seen approximately 200 m upstream.	5	0.1	49	7	56	
20360	Location: W Spring 2 claim Sample Type: Grab from outcrop Rock Type: Cherty tuff Dark grey to black cherty tuff, contains sparse clasts to 7 mm. Some of these clasts are sericite-altered and contain up to 7% pyrite. Local bedding is oriented 73/44°S.	5	0.1	31	9	57	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20361	Location: W Spring 2 claim Sample Type: Grab from float Rock Type: Altered volcanic Fe-carbonate altered pale green-grey volcanic rock is of uncertain protolith. Sample contains trace very fine-grained pyrite. Float clast is 20 x 20 x 15 cm, subangular. No local outcrop exposure.	5	0.1	7	2	52	
20362	Location: W Spring 2 claim Sample Type: Grab from float Rock Type: Cherty tuff Medium grey cherty tuff has a heavy rust stain. Quartz veins up to 5 cm wide crosscutting the tuff contains pyrite. Float clast 40 x 30 x 20 cm, angular. Similar float occurs in the area.	5	0.1	35	4	50	
20363	Location: W Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz veinlets Stockwork quartz veinlets occur in a 20 cm wide zone in the footwall of an Fe-carbonate altered zone. Fe-carbonate altered zone is up to 2 m wide. Veinlets contain 1-3% pyrite. Vein zone is oriented 53/72°SE.	5	0.1	89	2	39	
20364	Location: W Spring 2 claim Sample Type: Silt for heavy mineral concentrate		0.1	19	78	13	142



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20365	Location: W Spring 2 claim Sample Type: Grab from outcrop Rock Type: Shear zone Sample is a 30 cm chip across a shear zone (oriented 102/51°S), crosscutting fine-grained volcanisediments.	5	0.1	49	7	56	1174 Mn 116 V
20366	Location: E Spring 2 claim Sample Type: Grab from float Rock Type: Quartz veins Quartz stockwork system crosscuts interlaminated argillite and fine-grained siltstone. Float clast 1 m x 50 cm x 50 cm. Sample contains 1-3% pyrite and trace chalcopyrite(?).	5	1.9	717	10	15	92 As
20367	Location: E Spring 2 claim Sample Type: Grab from float Rock Type: Quartz veins Quartz stockwork system crosscuts interlaminated argillite and fine-grained siltstone. Sample contains trace to 2% pyrite.	5	1.4	968	2	28	
20368	Location: E Spring 2 claim Sample Type: Grab from outcrop(?) Rock Type: Quartz veins Quartz stockwork zone is possible source of samples 20366 and 20367. Sample is a 1.5 m chip across the true thickness of the vein zone. The stockwork system crosscuts argillite in an E-W gully occupied by a fault.	5	0.2	173	46	672	



Sample Number	Description	Au ppm (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20369	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Quartz-carbonate veins occur parallel to bedding planes (interbedded argillite and siltstone) adjacent to a fault. Veins contain trace pyrite.	5	0.1	10	5	32	1750 Mn
20370	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein A 4 cm wide quartz-carbonate vein (exposed 2 m) contains trace pyrite. The vein is oriented parallel to bedding (110/90°).	5	0.1	8	2	132	4472 Mn
20371	Location: E Spring 2 claim Sample Type: Grab from float Rock Type: Interbedded siltstone/argillite Interbedded siltstone and argillite contains strataform fine-grained disseminated pyrite and pyrite modules up to 1 cm wide. Float boulder is 1 x 1 x 1 m, angular.	5	0.2	27	14	41	
20372	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Quartz-carbonate veins occur in a Fe-carbonate alteration zone associated with regional faulting. The veins, up to 4 cm wide, occur in a altered zone, locally 3 m wide. Trace to 2% pyrite occurs throughout.	5	0.1	15	9	24	2258 Mn



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20373	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Fault breccia A 4 cm wide breccia zone, silicified, occurs within a fault zone. (Fault zone and associated alteration envelope is up to 4 m wide.) The fault breccia contains up to 5% fine-grained disseminated pyrite.	5	0.1	29	30	233	4283 Mn
20374	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite Marcasite nodules occur up to 2 cm in diameter along argillite bedding planes in footwall of regional fault zone. Argillite is unaltered. Local bedding is oriented 85/65°S.	50	1.2	48	26	48	24 Sb 127 As
20375	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Altered volcanic Intense Fe-carbonate and sericite alteration has rendered protolith indeterminate. Intensely altered horizon, up to 10 cm thick, occurs parallel to local bedding (107/75°S) within a regional fault zone. Sample contains trace pyrite.	5	0.1	11	2	19	
20376	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein A 2-8 cm wide quartz vein occurs in the hanging wall of a regional fault zone with accompanying intense Fe-carbonate alteration (sample #20375). Vein is exposed up to 3 m, is oriented 105/63°S, and contains trace pyrite.	5	0.1	28	6	65	2118 Mn



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20377	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Fault breccia Argillite and siltstone breccia fragments up to 6 mm in diameter occur in a quartz-carbonate matrix. Fault zone at this location is up to 4 m wide. Sample contains trace to 2% fine-grained disseminated pyrite.	5	0.1	10	2	30	2941 Mn 398 Sr
20378	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate veinlets Stockwork quartz-carbonate veinlets crosscut argillite in the hanging wall of a regional fault. Zone is exposed 30 cm x 20 m. Veinlets contain trace pyrite.	5	0.2	8	7	14	
20379	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Foliated intrusive(?) Phyllitic schist (probable intrusive protolith) occurs within a fault zone. Schist is exposed 1.5 x 5.0 m. Sample contains no apparent sulphides.	5	0.1	47	11	74	140 Ni 1526 Mn 251 La
20380	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Six quartz-carbonate veins occur in a zone exposed 2 x 2 m; veins are up to 6 cm wide. The zone cross-cuts local siltstone/argillite horizons. Veins contain trace fine-grained disseminated pyrite.	5	0.1	4	3	10	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20381	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz-carbonate vein Stockwork quartz-carbonate veins (rusty weathered surface) crosscut argillite in a Fe-carbonate altered fault zone. Veins contain 1-3% pyrite along selvages. Fault zone at this location is 3 m wide.	5	0.1	3	5	26	2712 Mn
20382	Location: E Spring 2 claim Sample Type: Grab from float Rock Type: Quartz vein White quartz vein, up to 4 cm wide, crosscuts argillite. Vein contains trace pyrite. Float clast is 20 x 15 x 5 cm, angular (abundant similar float).	5	0.1	27	4	30	2912 Mn 432 Sr
20383	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Fault gouge Sample consists of a 30 cm chip across a fault gouge horizon. No apparent sulphides. The fault, with associated alteration, is up to 5 m wide at this location.	5	0.1	54	11	65	1562 Mn
20384	Location: E Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein A 3 cm wide quartz vein occurs parallel to a fault gouge zone (sample #20383). The vein is exposed 2.5 m along strike and contains trace to 3% pyrite along into selvages.	5	0.1	10	2	46	4523 Mn 479 Sr



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-29-1	Location: 100 m W of sample #23184, Spring 2 claim Sample Type: Grab from float Rock Type: Quartz vein Small quartz float pieces less than 10 cm containing subangular trace pyrite. No prominent outcrop in area.	80	0.6	30	7	27	
CC-29-2	Location: S of SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Quartz vein occurs in a zone of similar veins cross-cutting and subparallel to bedding. Veins are 1-6 cm wide and continuous for 3-4 m. Zone is approximately 40 m long. Vein contains up to 5% pyrite and 4-6% galena in aggregates and disseminated. Vein sampled is oriented 32/24°SE.	670 (0.79)	10.8	157	891	876	941 As 33 Bi
CC-31-1	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite Aphanitic, homogeneous, dark grey to black argillite is interbedded with siltstone. Trace disseminated pyrite in argillite horizons. Some pyrite occurs in cubes up to 0.5 cm. Possible marcasite present (nodules to 1.5 cm diameter in outcrop).	5	0.1	67	12	88	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
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CC-31-2	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite	5	0.4	42	28	75	
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Aphanitic, homogeneous, dark grey to black argillite has light grey, creamy siltstone laminae (to 2.5 cm thick). Outcrop has weathered surface. Ankeritized, pyritized; trace disseminated pyrite within argillite (some pyrite cubes to 0.5 cm). Pervasive small scale fracturing.

CC-31-3	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite	5	0.4	49	14	88	
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Aphanitic, homogeneous, black argillite has gossanous weathered surface. Outcrop is ankeritized, weakly carbonatized and contains trace disseminated pyrite. Pervasive small scale fracturing.

CC-31-4	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite	5	0.3	86	13	123	
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Aphanitic, homogeneous, black argillite has a gossanous weathered surface (Fe-stained). Outcrop is ankeritized and locally sericitized. Sample contains trace pyrite.

CC-31-5	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite	5	0.2	60	8	91	
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Aphanitic, homogeneous, black argillite has a gossanous weathered surface (Fe-stained). Outcrop is ankeritized and locally sericitized. Sample contains trace pyrite.



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-31-6	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff Phaneritic (<2 mm), greenish grey volcanoclastic has less than 1% mafic minerals. Sample is chloritized and strongly carbonatized. Sample contains trace disseminated pyrite and arsenopyrite(?).	5	0.1	63	11	74	
CC-31-7	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite Aphanitic, homogeneous, black argillite has a gossanous weathered surface (Fe-stained). Outcrop is ankeritized and locally sericitized. Sample contains trace pyrite. Sample taken from argillite at contact of argillite and tuff.	5	0.1	41	8	109	
CC-31-8	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff Phaneritic (<2 mm), greenish grey volcanoclastic tuff. Outcrop is chloritized and moderately carbonatized, containing trace disseminated pyrite. Sample taken south of contact between argillite and tuff.	5	0.2	97	8	72	
CC-31-9	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite Aphanitic, homogeneous, black argillite has a gossanous weathered surface (Fe-stained). Outcrop is ankeritized and locally sericitized. Sample contains trace pyrite.	5	0.6	55	17	64	375 As



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-31-10	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite Aphanitic, homogeneous, black argillite has a gossanous weathered surface (Fe-stained). Outcrop is ankeritized and locally sericitized. Sample contains trace pyrite. Sample taken at small scale anticlinal axis.	5	0.4	35	10	72	
CC-01-1	Location: N of Spring 3 claim; quarry at junction between Cameron Main and Cameron East Sample Type: Grab from outcrop Rock Type: Quartz carbonate vein in argillite This white, 2 cm quartz carbonate vein is hosted by black aphanitic homogeneous argillite. The argillite has a weak foliation that roughly parallels the vein orientation. Iron staining occurs along vein selvages and minor chloritic alteration is present. Pyrite in trace amounts also occurs along vein selvages. Vein is exposed 6 m and oriented 79/76°N.	5	0.1	9	3	27	
CC-02-1	Location: S of Spring 2 claim Sample Type: Grab from outcrop exposed over 4 m Rock Type: Tuff This sample was taken at the contact between interbedded siltstone/argillite and tuff. This phaneritic, dark grey tuff is weakly chloritized, carbonatized and sericitized. It contains trace amounts of disseminated pyrite and chalcopyrite with occurrences up to 3% locally. Outcrop has minor fracturing throughout.	5	0.2	33	11	59	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
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CC-02-2	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite	5	0.2	33	11	59	
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This aphanitic, homogeneous, black argillite was taken from the contact between tuff and interbedded argillite/siltstone. The argillite is massive with a gossany weathered appearance. Alteration includes ankeritization along fractures and pyritization with trace amounts of pyrite within the host rock and up to 5% along fractures.

CC-02-3	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Interbedded siltstone/argillite	5	0.2	36	6	66	
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Homogeneous, aphanitic, black, massive argillite with minor small scale fracturing. Lenses of vuggy quartz up to 7 cm in dimension. Ankeritization present as is pyritization in amounts to 1%. Pyrite occurs disseminated and as aggregates up to 1 mm, along fractures.

CC-02-4	Location: S of Spring 2 claim Sample Type: Grab from outcrop, exposed over approx. 25 m Rock Type: Argillite	5	0.1	49	13	96	
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This aphanitic, homogeneous, massive, dark grey to black argillite has small scale fracturing in random orientations. Ankeritization is present along fractures and pyritization is pervasive in the host. Trace disseminated pyrite and chalcopyrite is present.

Sample
Number

Description

Au
ppb
(g/t)

Ag
ppm

Cu
ppm

Pb
ppm

Zn
ppm

Other
ppm



CC-02-5 Location: S of Spring 2 claim
Sample Type: Grab from outcrop
Rock Type: Argillite

5 0.2 58 11 85

Small interbed of aphanitic, homogeneous, black argillite (1.0 by 3.0 m) within siltstone/tuff. The sample has a cherty appearance with concoidal fractures along which ankeritization and pyritization have occurred. Trace amounts of disseminated pyrite are present within the host. In some instances pyrite forms euhedral crystals up to 1 mm. Aggregates of pyrite form up to 2 cm.

CC-02-6 Location: S of Spring 2 claim
Sample Type: Grab from outcrop
Rock Type: Quartz/carbonate vein in tuff

5 0.3 105 11 62

This quartz/carbonate vein (2.5 cm by 2.0 m exposed) is contained within a light grey, fine-grained tuff. Vein selvages have iron staining (ankeritization is not present). There has been minor chloritic and sericitic alteration, as well as carbonatization. Trace amounts of pyrite and chalcopyrite are present.

CC-02-7 Location: S of Spring 2 claim
Sample Type: Grab from outcrop
Rock Type: Quartz/carbonate vein in tuff

5 0.1 35 5 20

This white quartz/carbonate vein (2.5 cm thick) is contained within dark grey, fine-grained tuff. There is no alteration along vein selvages but possibly minor chloritic alteration of host. Trace amounts of pyrite are contained within the vein.



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-02-8	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein(?) This reddish brown massive, fractured quartz vein (1 cm by 3 m exposed) is contained within dark grey to black aphanitic homogeneous argillite. Iron staining occurs on fractured surfaces and ankerite alteration is present both along fracture surfaces of host, and within fractured quartz vein. Trace amounts of disseminated pyrite are present within the host but there is no apparent mineralization within the vein.	10	2.0	104	28	222	
CC-02-9	Location: S of Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein in argillite This greyish white to white massive quartz vein (1 cm by 3 m exposed) is contained within aphanitic, homogeneous black argillite. There is minor Fe-staining along selvages and fractures. Pyrite occurs in trace amounts to 1% within the wall rock forming euhedral cubes in some instances. Trace amounts of pyrite are also found in the vein materials.	5	4.0	896	190	859	343 As
CC-03-1	Location: N central Spring 2 claim Sample Type: Grab from float Rock Type: Tuff This massive aphanitic dark grey with greenish tint ovoid sample has a rusty coloured weathered outer surface. Fractured inner surface has manganese oxide staining. The sample contains quartz clasts up to 0.5 cm in dimension. Trace amounts of pyrite, chalcopyrite and galena(?) are disseminated throughout, as well as being associated with the quartz clasts.	5	0.2	194	2	61	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-03-2	Location: N Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff This sample is fine-grained, light greenish grey and homogeneous. The weathered surfaces are rusty brown with iron and MnO ₂ staining on fractured surfaces. Minor chloritic alteration is present. Trace amounts of pyrite disseminated within wall rock are present.	5	0.1	110	5	70	
CC-03-3	Location: N central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuffaceous siltstone This finely laminated, fine-grained homogeneous greenish grey tuffaceous siltstone has laminae on the order of 2 cm thickness. The weathered surface is light brown in colour. Minor sericitic and chloritic alteration. Trace amounts of finely disseminated pyrite and galena(?) occur.	5	0.1	78	8	58	21 Cd
CC-03-4	Location: Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff The sample is greenish grey, fine-grained homogeneous tuff. Minor carbonate and chloritic alteration. Trace amounts of disseminated pyrite occur.	5	0.1	78	10	58	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-03-5	Location: Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff This sample is a light greenish-grey, fine to medium-grained homogeneous massive tuff. Alteration is minor chloritic and sericitic, finely disseminated pyrite is present in trace amounts. Weak carbonate alteration is also present.	5	0.1	95	7	61	
CC-03-6	Location: Central Spring 2 claim Sample Type: Grab from float Rock Type: Tuff Sample is a black, fine-grained, massive homogeneous tuff. Alteration is sericitic with minor ankeritization along fractures and minor carbonatization. Fracture filling quartz veins of random orientation up to 0.5 cm thick are present. Pyrite and chalcopyrite occur as fine disseminations in trace amounts.	5	0.1	60	4	60	
CC-03-7	Location: N Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff Sample is a greenish-grey, fine to medium-grained, homogeneous tuff. The weathered surfaces are brownish in colour, and the sample has been weakly carbonatized and sericitized. Pyrite is present in trace amounts.	5	0.1	83	9	77	1279 Mn



Sample Number	Description	Au ppt ₁ (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-03-8	Location: S Spring 3 claim Sample Type: Grab from float Rock Type: Tuff	5	0.2	56	3	61	152 Sr

The sample is a light grey, fine-grained, homogeneous tuff. Randomly oriented quartz veins up to 0.5 cm are abundant. Sericitic (Fuchsite?) alteration is present and pyrite is present in trace amounts disseminated within the wall rock and associated with the veins.

CC-04-1	Location: Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Silty tuff	5	0.1	39	2	77	
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The sample is a greenish-grey, fine to medium-grained silty tuff. Minor ankeritization has occurred along fractured surfaces and sericitization of the tuff has occurred. Pyrite is present in trace amounts.

CC-04-2	Location: Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Silty tuff	5	0.1	94	3	70	
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The sample is a greenish-grey, fine to medium-grained silty tuff. Sericitic alteration and minor ankeritization occur along fractures. Pyrite is present, finely disseminated in trace amounts.



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-04-3	Location: Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Silty tuff The sample is a dark grey, fine-grained silty tuff. The outcrop has silty horizons up to 3 cm in thickness with orientation 068/68°S. Fractures are strongly ankeritized. Pyrite occurs finely disseminated within the host up to 1%. As well, fine-grained aggregates of pyrite form lenses up to 3 cm dimension. Trace chalcopyrite and arsenopyrite(?) are also present.	5	0.1	97	9	85	
CC-04-4	Location: Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff The sample is a greenish-grey, medium-grained tuff containing quartz clasts up to 1.5 cm. The sample has been sericitized and weakly carbonatized. Pyrite is finely disseminated and present in trace amounts.	5	0.1	57	10	72	
CC-04-5	Location: Central Spring 2 claim Sample Type: Grab from outcrop Rock Type: Cherty siltstone and tuff This sample is a dark grey, fine-grained cherty siltstone and tuff. The siltstone laminae are up to 5 cm thick with orientation 070/60°S. Sericitization has occurred with minor ankeritic alteration along fractures. Pyrite is disseminated and present in trace amounts. Small lenses of pyrite occur up to 1 cm dimension.	5	0.1	42	14	48	

Sample
Number

Description

Au
ppb
(g/t)

Ag
ppm

Cu
ppm

Pb
ppm

Zn
ppm

Other
ppm



CC-04-6 Location: Central Spring 2 claim
Sample Type: Grab from outcrop
Rock Type: Tuff

150 0.7 18 19 58

This white quartz vein float is intensely fractured with ankerite alteration along fractures. The dimensions are 5 cm thickness by 14 cm length.

CC-04-7 Location: Central Spring 2 claim
Sample Type: Grab from outcrop
Rock Type: Tuff

5 0.1 78 12 76 1013 Mn

This sample is a dark grey, fine to medium-grained tuff. Sericitic alteration and minor ankerite alteration occurs along fractures. Pyrite is present in trace amounts as fine disseminations.

CC-05-1 Location: Central Spring 2 claim
Sample Type: Grab from outcrop
Rock Type: Cherty siltstone and tuff

5 0.1 74 13 60

Sample is black, fine-grained homogeneous, cherty siltstone and tuff. Siltstone laminae occur on the millimetre scale and up to 5 cm thick. Fractured surfaces show minor ankeritic alteration. Disseminated pyrite is present in trace amounts.

CC-05-2 Location: Central Spring 2 claim
Sample Type: Grab from outcrop
Rock Type: Cherty siltstone and tuff
approx. 15 m long x 5 m wide

5 0.3 55 11 78

This sample is a dark grey to black, fine-grained cherty siltstone and tuff. The siltstone horizons are up to 5 cm thick with separations up to 10 cm. Strong ankeritic alteration is present along fractures. Disseminated pyrite is present in trace amounts and up to 3% (locally forming lenses up to 3 cm). Chalcopyrite is also present in trace amounts.



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-05-3	Location: SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Cherty siltstone and tuff	5	0.5	187	17	71	20 Mo

This sample is a dark grey to black, fine-grained cherty siltstone and tuff. Taken from a 0.5 m wide zone of alteration exposed for 1 m. Very strong ankeritic alteration occurs along fractures. Chalcopyrite and pyrite occur disseminated and along fractures in amounts up to 10%. Possibly fault zone trending 162°.

CC-05-4	Location: SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein in tuff	5	0.1	45	8	42	
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This sample is a white, massive quartz vein hosted in dark grey, medium-grained tuff. Alteration is primarily sericitic and chloritic. The vein is up to 4 cm wide and exposed for 4 m with orientation parallel to bedding (070/50°S). Trace amounts of disseminated pyrite occur within the host.

CC-05-5	Location: SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein in tuff (approx. 70% vein, 30% wall rock)	900 (1.23)	2.4	245	2745	1163	590 As 15 Cd
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This white quartz vein with reddish-brown iron staining along fractures is hosted by dark grey to black, fine-grained tuff. The sample was taken from a highly altered gossan zone approximately 2 to 3 m wide and exposed over approximately 6 m. Mineralization in the host rock is minimal (trace pyrite), however mineralization within the vein itself is extensive (up to 5%). The vein is approximately 0.5 cm in thickness. Strong ankeritic alteration occurs through this zone. The vein parallels bedding (064/38°S) roughly, and also roughly parallels (sample no. CC-05-6), another vein approximately 0.5 m away. Pyrite and chalcopyrite are both found within the quartz vein.



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-05-6	Location: SW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein in tuff (approx. 85% vein, 15% wall rock)	740 (2.64)	3.0	274	3957	727	1104 As 13 Cd

Refer to sample no. CC-05-5 for zone and sample description. Orientation 056/40°S, up to 1.5 cm thick for 6 m. Vein is somewhat vuggy in appearance, quartz crystals are occasionally euhedral growing inward from wall rock.

CC-13-3	Location: NW Spring 2 claim; L6W/410 S Sample Type: Grab from outcrop Rock Type: Cherty siltstone	5	0.4	61	8	91	
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The sample is a black aphanitic homogeneous cherty siltstone. Conchoidal fractures are strongly ankeritized and pyrite is present in trace amounts. The sample was taken near a conformable contact between sandy tuff and cherty siltstone with bedding orientation 064/58°S.

CC-14-1	Location: NW Spring 2 claim; L6W/0+30 N Sample Type: Grab from float Rock Type: Quartz vein	570	24.3	245	836	5901	453 As 103 Cd 48 Bi
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The sample is a white massive piece of quartz vein float. It is approximately 10 cm wide. Minor ankerite alteration occurs along fractured surfaces. Pyrite is present as subhedral crystals up to 60%, of rock volume, with galena present to 10%, and sphalerite(?) is present in minor trace amounts.



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CC-18-1	Location: NW Spring 2 claim; L0+00/7+00S Sample Type: Grab from float Rock Type: Cherty siltstone	5	0.1	19	6	52	
	<p>This sample is a black aphanitic homogeneous cherty siltstone with minor ankerite alteration along conchoidal fractures. Pyrite is present in very finely disseminated trace amounts.</p>						
CC-25-1	Location: NW Spring 2 claim; L8W/4+75S Sample Type: Grab from outcrop Rock Type: Quartz vein	390	1.3	58	597	332	291 As
	<p>The sample is a white massive quartz vein hosted by dark grey to black aphanitic homogeneous argillite. Fractures have minor iron staining and ankeritization. The vein is 2 cm wide with orientation 086/48°S parallel to bedding. Pyrite is present in trace amounts.</p>						
CJC-28-1	Location: NW Spring 2 claim; L7W/4+20 m S Sample Type: Grab from outcrop Rock Type: Quartz vein	5	0.1	26	9	55	
	<p>This sample is a stockwork fractured white quartz vein hosted by black aphanitic homogeneous somewhat cherty argillite. Fractures have strong iron staining and ankeritization. The vein measures up to 10 cm in width in one area and is visible for 1 m with orientation 064/48°S. There is no visible mineralization within the vein material.</p>						



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
CJC-28-2	Location: NW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein	5	0.1	37	4	50	

This sample is a massive white heterogeneous quartz vein 5 cm wide and visible for 1 m with orientation 066/28°S. Within the vein are lenses of black cherty siltstone or argillite. There is minor limonitic staining. No mineralization occurs within the vein.

CJC-28-3	Location: NW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Argillite	5	0.2	61	7	103	
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The sample is a black aphanitic homogeneous argillite that has been strongly ankeritized along fractures. Pyrite occurs as finely disseminated grains up to 1% throughout host rock, and as platey coatings along fracture surfaces. Minor sericitic alteration is also present.

CJC-28-4	Location: NW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein	30	0.2	12	28	27	
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The sample is of a white to pinkish-white, massive to vuggy quartz vein up to 3 cm wide and exposed for 20 cm. The host rock is argillite with minor trace amounts of finely disseminated pyrite. Euhedral quartz crystals up to 2 mm in length and 1 mm width occur in the vugs. Minor ankeritic alteration occurs along fractures. No mineralization occurs within vein material.

Sample
Number

Description

Au
ppb
(g/t)

Ag
ppm

Cu
ppm

Pb
ppm

Zn
ppm

Other
ppm



CJC-28-5	Location: NW Spring 2 claim Sample Type: Grab from outcrop Rock Type: Quartz vein	1080	0.6	36	133	1379	458 As
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The sample is a white quartz vein ranging in width from 1 to 4 cm and visible for 25 cm with orientation 044/46°E. The host is argillite. Minor iron staining occurs along fractures. The quartz vein is vuggy in areas. Pyrite also occurs within the vein material up to 1% as euhedral to subhedral crystals up to 0.5 mm.

CJC-A-1	Location: NW Spring 2 claim, Adit #4 Sample Type: Grab from outcrop Rock Type: Quartz vein	510	5.7	669	136	9235	197 As 153 Cd
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This white massive quartz vein is 10 cm wide with orientation 060/66°S. It has been moderately fractured with ankeritic alteration along fracture surfaces. Pyrite occurs as podiform crystal aggregates up to 0.5 cm dimension. Trace galena present.

CJC-A-2	Location: NW Spring 2 claim, Adit #4 Sample Type: Grab from outcrop Rock Type: Quartz vein	790	9.0	57	187	1626	143 As
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The sample is a white massive quartz vein 14 cm in width and visible for 1 m with orientation 070/52°S. The vein is moderately fractured with minor ankeritic alteration. Pyrite forms crystals up to 1 mm in dimension and occurs in podiform aggregates. Galena(?) is present in trace amounts.




Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
JL-15-1	Location: L3W, 0+25S; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Felsic dyke Light green-grey intermediate felsic intrusive.	5	0.1	7	9	108	
JL-15-2	Location: L3W, 0+25S; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Felsic dyke Light green-grey intermediate felsic dyke contains trace disseminated pyrite.	5	0.1	4	9	104	
JL-15-3	Location: L3W, 0+25S; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Felsic dyke Light green-grey intermediate felsic dyke contains trace disseminated pyrite.	5	0.1	13	16	68	
JL-15-4	Location: L3W, 0+50S; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Chert Dark green-brown chert contains trace disseminated pyrite. Sample has a rusty weathered surface.	5	0.1	62	12	64	
JL-15-5	Location: L3W, 0+25S; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Felsic dyke Light grey-green intermediate felsic intrusive contains trace disseminated pyrite.	5	0.1	17	20	69	



Sample Number	Description	Au pph (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20401	Location: L4W, 0+75S; Spring 2 claim Sample Type: Grab from float Rock Type: Argillite/siltstone Argillite and siltstone are interlaminated to thicknesses up to 8 mm. Sample contains trace fine-grained disseminated pyrite.	5	0.3	51	8	198	
20402	Location: L4W, 0+75S; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Tuff Very fine-grained tuff is interlaminated with argillite. Sample is weakly silicified.	5	0.1	50	16	80	
20403	Location: L4W, 0+75S; Spring 2 claim Sample Type: Grab from float Rock Type: Tuff Olive green fine-grained tuff.	5	0.1	73	10	57	
20404	Location: L4W, 4+25N; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Felsic dyke Light grey-green intermediate felsic intrusive contains trace pyrite.	5	0.2	18	287	52	
20405	Location: L4W, 4+25N; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Chert Dark grey chert contains trace pyrite.	5	0.1	55	10	64	



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20406	Location: Between L6W, L5W; Spring 2 claim Sample Type: Grab from outcrop Rock Type: Felsic dyke Light green-grey intermediate felsic intrusive contains trace pyrite.	5	0.1	11	11	51	
20407	Location: Between L6W/L5W, 4+25N; Spring 2 claim Sample Type: Grab from float Rock Type: Lapilli tuff Highly altered lapilli tuff contains quartz stringers to 5 mm and trace pyrite.	5	0.1	173	7	62	
20408	Location: Between L6W, L5W, 4+25N; Spring 2 claim Sample Type: Grab from float Rock Type: Fine-grained tuff Dark green fine-grained tuff is slightly silicified and chloritized. Sample contains quartz-carbonate stringer veins with trace pyrite.	5	0.1	66	8	75	
20409	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Silty tuff Medium green silty tuff hosts stringer quartz containing trace pyrite. Local bedding is oriented 160/50°W.	5	0.1	423	11	64	
20410	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Quartz vein White quartz vein containing trace pyrite crosscuts silty tuff(?). Vein is up to 2 cm wide.	5	0.1	267	9	85	

Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm	
20411	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Quartz veinlets Stockwork quartz veinlets up to 3 mm thick crosscut dark green-grey silty tuff. No apparent sulphides.	5	0.1	111	9	79		
20412	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Altered tuff Lapilli tuff, angular silicified clasts up to 7 mm, has a hematitic (maroon) altered matrix. Sample contains trace pyrite.	5	0.1	198	3	49		
20413	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Cherty tuff White quartz-carbonate vein crosscuts light green-grey cherty tuff. Vein contains no apparent sulphides.	5	0.1	108	9	111		
20414	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Siltstone/argillite Siltstone and argillite are interlaminated in horizons up to 7 mm thick. Rock has a very rusty weathered surface.	5	0.1	149	9	73		
20415	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Rusty quartz vein containing trace pyrite crosscuts interlaminated siltstone and argillite (sample #20414).	5	0.1	135	8	77		



Sample Number	Description	Au ppb (g/t)	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Other ppm
20416	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Silty tuff Dark grey-green silicified silty tuff contains trace very fine-grained pyrite. Weathered surface is rusty.	5	0.1	236	7	116	
20417	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Argillite Rusty argillite, bedding to 1 cm thick, hosts stringer quartz veins, up to 3 mm thick, containing trace pyrite.	5	0.2	41	13	105	
20418	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Siltstone/argillite Rusty siltstone and argillite are interlaminated in thicknesses to 7 mm. Sample contains trace fine-grained disseminated pyrite.	5	0.3	39	8	70	
20419	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Quartz vein Grey-white quartz vein up to 6 cm wide crosscuts siltstone/argillite. Sample contains trace to 3% pyrite.	5	0.1	133	7	69	
20420	Location: NW Spring 4 claim Sample Type: Grab from outcrop Rock Type: Argillite Rusty argillite, bedding to 1 cm thick, hosts stringer quartz veins, up to 2 mm thick, containing trace pyrite.	5	0.1	39	12	142	



Appendix IV
Certificates of Analysis
and Assay

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3M1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

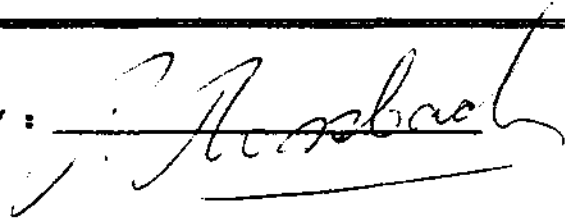
PROJECT : V 263
TYPE OF ANALYSIS : ASSAY

CERTIFICATE # : 88151.A
INVOICE # : 80524
DATE ENTERED : 88-08-18
FILE NAME : MPH88151.A
PAGE # : 1

RE IX	SAMPLE NAME	oz/t Au
A	TN 2-1	0.022
A	TN 2-3	0.105
A	TN 2-5	0.044
A	TN 30-2	0.048
A	TN 31-3	0.042
A	TN 31-6	0.078
A	CC 29-2	0.023

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CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

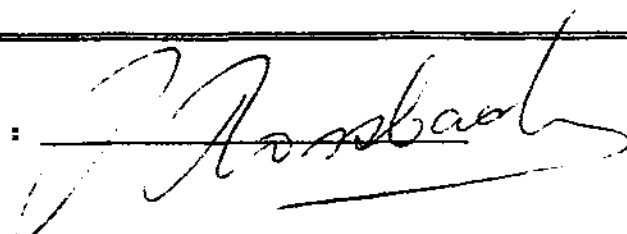
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

PROJECT : V 263
TYPE OF ANALYSIS : ASSAY

CERTIFICATE # : 88231
INVOICE # : 80610
DATE ENTERED : 88-09-09
FILE NAME : MPH88231.A
PAGE # : 1

PRE FIX	SAMPLE NAME	oz/t Au
A	CC 14-1	0.021
A	CC 25-1	0.013
A	CJC A-1	0.015
A	CJC A-2	0.027
A	CJC 28-5	0.034

CERTIFIED BY :



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ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

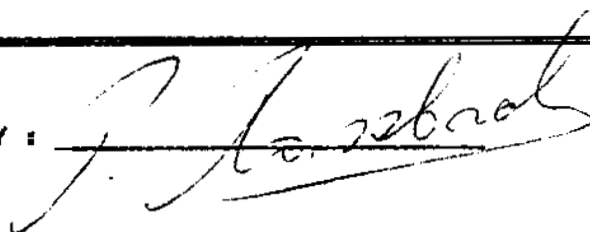
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INVOICE # : 80486
DATE ENTERED : 88-08-10
FILE NAME : MPH88151
PAGE # : 1

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

REFIX	SAMPLE NAME	FPB Au
A	TN 2-1	570
A	TN 2-2	50
A	TN 2-3	3450
A	TN 2-4	5
A	TN 2-5	1220
A	TN 29-1	220
A	TN 30-1	5
A	TN 30-2	1620
A	TN 30-3	5
A	TN 30-4	5
A	TN 30-5	5
A	TN 30-7	5
A	TN 30-8	5
A	TN 30-9	5
A	TN 31-3	1100
A	TN 31-5	120
A	TN 31-6	2350
A	TN 31-8	30
A	CC 29-1	90
A	CC 29-2	670
A	CC 31-1	5
A	CC 31-2	5
A	CC 31-3	5
A	CC 31-4	5
A	CC 31-5	5
A	CC 31-6	5
A	CC 31-7	5
A	CC 31-8	5
A	CC 31-9	5
A	CC 31-10	5
A	CC 31-11	5
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A	CC 02-1	5
A	CC 02-2	5
A	CC 02-3	5
A	CC 02-4	5
A	CC 02-5	5
A	CC 02-6	5
A	CC 02-7	5

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2225 S. Springer Ave., Burnaby,
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CERTIFICATE OF ANALYSIS

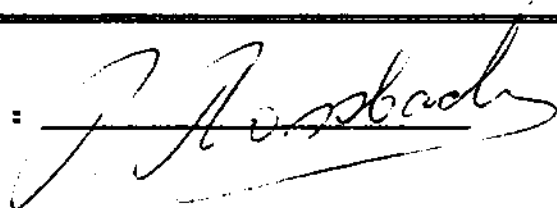
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.
PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88151
INVOICE # : 80486
DATE ENTERED : 88-08-10
FILE NAME : MPH88151
PAGE # : 2

RE FIX	SAMPLE NAME	PPB Au
A	CC 02-8	10
A	CC 02-9	5
L	TN 30-6	1400
L	TN 31-1	5
L	TN 31-2	5
L	TN 31-4	10
L	TN 31-7	5
L	CC02-SILT 1+MC	900

RECEIVED AUG 26 1988

CERTIFIED BY :



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 NH FE SR CA F LA CR MG BA YI B W AND LIMITED FOR NA K AND AL. AD DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: AUG 9 1988 DATE REPORT MAILED: Aug 15/88 ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88151 File # 88-3412 Page 1 V263

SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	YI	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
AP TH 2-1	1	82	79	230	.5	15	4	132	2.04	857	5	ND	1	4	4	2	2	5	.06	.031	2	150	.02	66	.01	2	.17	.01	.05	1
AP TH 2-2	7	682	1471	2562	10.5	22	8	114	6.53	234	5	ND	1	6	41	5	9	15	.17	.061	4	83	.22	10	.03	4	.50	.01	.13	1
AP TH 2-3	1	532	270	1203	30.5	2	1	22	3.06	411	5	2	1	1	22	2	2	8	.02	.026	2	164	.01	32	.03	3	.05	.01	.03	2
AP TH 2-4	1	59	12	71	1.1	4	1	39	1.04	30	5	ND	1	1	1	2	2	1	.01	.001	2	209	.01	17	.01	4	.04	.01	.01	2
AP TH 2-5	1	1001	30	20544	14.1	6	10	111	8.33	455	5	2	1	1	323	6	2	1	.02	.001	2	93	.01	6	.01	4	.03	.01	.03	1
AP TH 29-1	1	297	111	10625	9.1	7	13	1197	8.06	500	5	ND	1	12	425	2	49	4	.99	.030	2	74	.30	9	.01	2	.20	.01	.09	1
AP TH 30-1	1	47	11	77	2.2	9	13	1573	6.30	20	5	ND	1	94	1	3	2	11	0.01	.072	7	20	1.60	34	.03	3	.29	.01	.15	1
AP TH 30-2	1	83	20	107	.9	20	20	548	7.25	246	5	ND	1	18	5	2	5	12	.72	.060	4	50	.65	16	.01	2	.99	.01	.13	1
AP TH 30-3	1	37	413	1625	.9	16	7	2317	5.01	52	5	ND	1	134	20	3	2	13	10.01	.029	5	40	1.25	51	.03	3	.14	.01	.08	13
AP TH 30-4	1	16	11	47	.1	14	5	1041	1.99	22	5	ND	1	220	1	2	2	13	11.34	.025	4	67	.56	16	.01	2	.56	.01	.04	2
AP TH 30-5	1	55	34	95	3.5	10	8	2756	4.43	30	5	ND	1	80	1	6	2	6	7.61	.032	3	53	1.90	27	.01	4	.19	.01	.10	1
AP TH 30-7	1	26	63	122	.5	14	12	1702	4.20	41	5	ND	1	90	3	2	2	10	5.16	.056	3	48	1.00	63	.01	3	.45	.01	.14	1
AP TH 30-8	1	37	33	110	.8	6	2	344	.90	6	5	ND	1	21	2	3	2	2	1.21	.007	2	117	.35	24	.01	4	.11	.01	.06	1
AP TH 30-9	1	97	20	521	.9	9	7	2095	3.21	47	5	ND	1	74	16	2	2	4	3.63	.035	3	60	.94	77	.01	2	.10	.01	.10	1
AP TH 31-3	1	109	12	43	.5	10	16	1642	4.69	46	5	ND	1	124	1	2	2	19	11.00	.067	4	33	2.05	67	.01	3	.62	.01	.13	2
AP TH 31-5	1	254	10	42	.5	44	21	1752	4.41	61	5	ND	1	96	1	2	2	21	5.97	.047	4	33	1.00	62	.01	2	.39	.01	.19	1
AP TH 31-6	3	2042	20	837	4.9	31	27	716	5.31	33	5	2	1	23	10	2	2	39	.76	.045	2	52	1.00	55	.06	3	2.10	.05	.00	1
AP TH 31-8	1	99	84	160	.5	30	17	339	5.75	99	5	ND	1	7	2	3	2	69	.33	.060	5	72	1.11	24	.05	5	1.53	.01	.06	1
AP CC 29-1	1	30	7	27	.6	4	1	37	.51	14	5	ND	1	1	1	2	3	3	.03	.001	2	101	.02	4	.01	2	.07	.01	.01	2
AP CC 29-2	1	157	891	676	10.8	9	11	414	0.92	941	5	ND	1	3	13	2	33	7	.03	.037	2	66	.04	22	.01	1	.31	.01	.11	1
AP CC 31-1	1	67	12	80	.1	10	12	425	3.86	12	5	ND	1	27	1	2	2	45	.57	.045	5	83	.90	377	.01	2	1.57	.01	.05	1
AP CC 31-2	3	42	28	75	.4	12	4	115	4.03	107	5	ND	1	2	1	2	2	23	.02	.010	4	94	.26	40	.03	2	.57	.01	.06	1
AP CC 31-3	1	49	14	80	.4	23	5	293	3.33	10	5	ND	1	5	1	2	2	55	.09	.055	5	71	.71	121	.03	4	1.20	.01	.06	1
AP CC 31-4	2	86	13	123	.3	29	6	295	4.43	24	5	ND	1	7	1	2	2	81	.13	.006	7	81	1.01	132	.01	3	1.73	.01	.07	1
AP CC 31-5	2	60	8	91	.2	22	6	232	4.45	22	5	ND	1	7	1	2	2	76	.19	.100	9	59	.97	102	.01	3	1.79	.01	.08	1
AP CC 31-6	1	63	11	74	.1	62	29	974	5.13	5	5	ND	1	37	1	3	2	93	1.17	.133	6	122	3.33	69	.13	2	3.00	.01	.01	1
AP CC 31-7	1	41	8	109	.1	25	4	119	2.67	14	5	ND	1	6	1	2	2	35	.14	.068	6	72	.40	119	.01	2	1.05	.01	.07	1
AP CC 31-8	1	97	8	72	.2	13	15	339	5.20	7	5	ND	1	35	1	2	2	41	3.04	.090	4	26	1.12	126	.01	7	2.23	.01	.14	1
AP CC 31-9	8	55	17	64	.6	21	4	101	4.74	375	5	ND	1	12	1	3	2	60	.43	.201	6	93	.67	40	.03	2	1.32	.01	.07	1
AP CC 31-10	3	35	10	72	.4	21	3	110	2.75	16	5	ND	1	12	1	2	2	46	.43	.103	5	111	.33	45	.01	2	.60	.01	.07	1
AP CC 31-11	2	45	12	70	.2	19	5	277	3.50	6	5	ND	1	4	1	2	2	52	.19	.040	4	91	.66	44	.07	3	1.22	.01	.05	1
AP CC 01-1	1	9	3	27	.1	0	2	964	1.00	3	5	ND	1	621	1	2	2	6	21.91	.004	9	23	.34	13	.03	2	.32	.01	.02	2
AP CC 02-1	1	60	10	77	.2	21	10	1751	5.70	6	5	ND	1	39	1	2	3	92	1.01	.093	6	60	2.13	199	.15	2	2.90	.01	.00	1
AP CC 02-2	2	33	11	59	.2	14	2	140	2.60	7	5	ND	1	22	1	2	2	64	.03	.352	13	107	.50	69	.03	3	.09	.01	.00	1
AP CC 02-3	1	34	6	66	.2	19	3	260	3.85	10	5	ND	1	5	1	2	2	53	.13	.053	6	101	.04	71	.01	2	1.42	.01	.07	1
AP CC 02-4	1	89	13	96	.1	31	15	305	4.34	4	5	ND	1	14	1	2	3	139	2.04	.070	5	75	1.45	54	.21	9	2.57	.01	.01	1
AP CC 02-5	1	51	11	85	.2	36	8	864	4.05	7	5	ND	1	6	1	3	2	97	.23	.071	5	71	1.35	46	.01	3	1.65	.01	.03	1
AP CC 02-6	1	105	11	62	.3	19	15	1020	5.23	10	5	ND	1	171	2	3	2	60	7.42	.004	11	36	2.46	73	.01	6	2.34	.01	.12	1
AP CC 02-7	1	35	5	20	.1	9	4	345	1.39	7	5	ND	1	212	1	2	2	19	21.37	.013	17	35	.67	40	.01	2	.79	.01	.04	1
STD C	10	50	39	120	7.2	67	20	1031	4.12	30	19	8	37	47	10	16	20	56	.40	.092	39	60	.91	173	.07	30	1.97	.06	.13	13

SAMPLE	Mo	Cu	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Nb	Ba	Ti	B	Al	Na	K	M	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	
AP CC 02-8	3	104	28	222	2.0	9	4	139	3.66	66	5	ND	1	4	2	2	3	23	.12	.052	4	97	.13	109	.01	2	.44	.01	.05	1
AP CC 02-9	2	696	190	859	4.0	235	140	26366	44.27	343	5	ND	2	630	3	2	29	206	17.10	.660	49	612	7.94	1503	.01	3	11.39	.06	2.29	1
L YH 30-6	8	523	369	408	3.2	162	96	911	28.84	581	5	ND	3	31	2	10	2	151	.95	.061	7	65	.67	063	.12	2	1.32	.01	.06	2
L YH 31-1	7	234	75	153	.1	74	35	339	9.80	173	5	ND	1	9	1	7	15	84	.51	.020	6	32	.34	77	.20	5	.50	.01	.03	2
L YH 31-2	9	432	210	332	3.8	141	88	733	26.36	311	5	ND	3	30	1	20	2	212	1.63	.046	7	68	.95	194	.47	3	1.81	.01	.03	2
L YH 31-4	3	397	206	260	.1	113	99	802	18.09	406	5	ND	1	31	1	6	29	246	1.30	.050	17	106	1.45	146	.75	4	2.06	.01	.03	1
L YH 31-7	7	361	204	461	.1	99	60	619	16.19	267	5	ND	3	33	1	7	2	159	1.17	.050	11	87	.89	82	.24	3	1.81	.01	.03	6
L CC 02-8149-1-MMC	1	69	31	65	.7	27	10	333	3.11	232	5	ND	1	3	1	2	2	4	.06	.008	3	8	.03	75	.01	4	.00	.01	.01	1
STD C	19	61	81	136	6.8	71	30	1044	4.14	43	19	8	39	50	19	20	20	61	.50	.008	40	64	.95	183	.08	38	1.95	.06	.15	12

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ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Barnaby,
British Columbia, Can. V5B 3W1
Ph: (604)299-6810 Fax: 299-6252

CERTIFICATE OF ANALYSIS

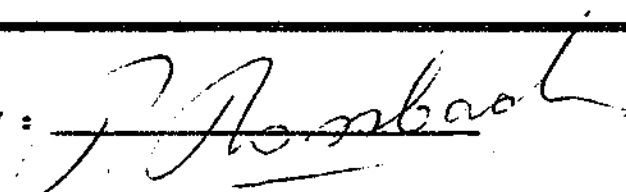
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.
PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88166
INVOICE # : 80502
DATE ENTERED : 88-08-12
FILE NAME : MPH88166
PAGE # : 1

RE FIX	SAMPLE NAME	FPB Au
A	TN 3-2	5
A	TN 3-3	5
A	TN 5-1	5
A	TN 5-2	5
A	TN 5-3	5
A	TN 5-4	5
A	TN 5-5	80
A	0003-1	5
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A	0003-4	5
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A	0003-6	5
A	0003-7	5
A	0003-8	5
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A	0004-2	5
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A	0004-6	150
A	0004-7	5
A	0005-1	5
A	0005-2	5
A	0005-3	5
A	0005-4	5
A	0005-5	900
A	0005-6	740

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CERTIFIED BY :



GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH JML 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 NH FE SR CR P LA CB MC BA TI R V AND LIMITED FOR NA K AND AL. AN DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: AUG 12 1988

DATE REPORT MAILED: Aug 16/88

ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88166 File # 88-3530 V 263

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	H	Au	Tb	Sr	CD	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	V
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
AP TH 3-2	2	51	10	33	.4	20	8	694	3.31	35	5	ND	1	86	1	2	2	15	5.86	.075	5	54	.91	23	.01	5	.25	.01	.16	2
AP TH 3-1	1	66	7	53	.1	12	4	519	2.05	21	5	ND	1	71	1	2	2	7	3.73	.015	4	110	.97	11	.01	3	.13	.01	.05	2
AP TH 5-1	1	97	6	55	.1	23	13	528	3.69	2	5	ND	2	13	1	2	2	102	2.52	.098	7	39	2.04	23	.17	9	3.13	.01	.02	1
AP TH 5-2	1	103	2	73	.1	29	22	451	5.75	2	5	ND	1	29	1	2	2	122	1.90	.065	5	25	1.78	15	.26	6	2.29	.09	.11	1
AP TH 5-3	1	282	5	72	.4	47	24	875	1.60	98	5	ND	1	113	1	2	2	13	5.48	.102	6	21	.41	48	.01	7	.36	.01	.14	1
AP TH 5-4	1	66	5	52	.1	16	7	358	2.56	3	5	ND	1	13	1	2	2	60	1.93	.059	4	101	1.80	33	.11	2	1.94	.01	.02	1
AP TH 5-5	1	71	10	62	.7	12	8	1693	3.77	393	5	ND	1	261	1	2	2	26	8.48	.054	5	56	.60	65	.01	4	1.18	.01	.08	2
AP CC03-1	1	194	2	61	.2	43	19	536	4.95	2	5	ND	1	7	1	2	2	116	2.51	.039	3	41	1.31	26	.47	9	2.51	.02	.01	1
AP CC03-2	1	110	5	70	.1	19	16	852	5.56	2	5	ND	2	23	1	2	2	153	1.60	.092	6	38	1.90	16	.36	7	2.93	.01	.03	1
AP CC03-3	1	78	8	58	.1	35	19	926	4.96	5	5	ND	1	14	21	2	2	145	1.88	.076	7	100	2.29	7	.22	5	3.22	.02	.01	1
AP CC03-4	1	70	10	58	.1	18	12	712	4.16	4	5	ND	1	20	1	2	2	104	2.65	.054	5	63	1.73	14	.13	8	2.93	.02	.02	1
AP CC03-5	1	95	7	61	.1	22	17	938	5.00	2	5	ND	2	21	1	2	2	100	1.38	.119	5	29	3.61	19	.32	6	3.29	.01	.03	1
AP CC03-6	2	60	4	60	.1	22	13	636	6.89	7	5	ND	1	18	1	2	2	93	1.43	.080	5	49	1.63	7	.18	3	2.09	.02	.02	1
AP CC03-7	1	83	9	77	.1	32	18	1279	5.50	2	5	ND	1	66	1	2	2	88	3.35	.100	13	68	2.29	26	.03	9	2.28	.01	.36	1
AP CC03-8	1	56	3	61	.2	17	14	998	4.37	43	5	ND	1	162	1	2	3	15	6.68	.071	5	26	2.20	28	.01	4	.30	.01	.16	1
AP CC04-1	1	39	2	77	.1	15	15	752	3.93	2	5	ND	1	26	1	2	2	41	.75	.101	5	40	1.93	9	.16	4	2.05	.02	.03	1
AP CC04-2	1	94	3	70	.1	20	18	1364	5.17	2	5	ND	1	35	2	2	2	102	3.06	.115	4	51	2.04	18	.32	6	2.71	.02	.02	1
AP CC04-3	1	97	9	85	.1	13	17	945	6.76	2	5	ND	1	25	2	2	2	122	1.18	.096	5	31	1.71	23	.20	5	2.51	.02	.04	1
AP CC04-4	1	57	10	72	.1	8	10	767	4.64	2	5	ND	1	14	1	2	2	69	1.59	.073	7	29	1.48	104	.12	5	2.79	.01	.11	1
AP CC04-5	1	42	14	46	.1	11	15	626	3.95	2	5	ND	1	12	1	2	2	71	1.23	.069	7	59	1.52	33	.12	4	2.33	.01	.05	1
AP CC04-6	1	18	19	58	.7	3	1	38	.58	42	5	ND	1	1	1	2	2	3	.03	.002	2	105	.03	9	.01	5	.08	.01	.01	2
AP CC04-7	1	78	12	76	.1	10	15	1013	5.91	9	5	ND	1	20	1	2	2	129	.51	.056	4	38	1.01	20	.34	3	2.49	.02	.04	1
AP CC05-1	2	74	13	68	.1	49	16	619	4.51	3	5	ND	1	11	2	2	2	80	.79	.047	3	155	1.48	62	.11	6	1.08	.01	.01	1
AP CC05-2	8	38	11	78	.3	12	12	633	4.38	15	5	ND	1	8	1	2	2	96	.70	.072	5	43	1.46	36	.08	2	1.85	.02	.03	1
AP CC05-3	20	187	17	71	.5	36	26	782	9.70	2	5	ND	1	17	1	2	2	271	2.64	.107	4	50	2.03	22	.31	6	3.67	.01	.02	1
AP CC05-4	1	46	8	42	.1	21	10	688	2.66	5	5	ND	1	12	1	2	2	57	1.88	.027	2	89	1.21	66	.11	5	2.17	.01	.01	1
AP CC05-5	1	245	2745	1163	2.4	19	2	47	5.89	598	5	ND	1	9	15	6	4	22	.10	.078	4	76	.89	26	.01	2	.33	.01	.08	1
AP CC05-6	1	274	3957	727	3.0	10	2	26	7.71	1194	5	ND	1	5	13	4	2	9	.02	.034	3	48	.01	9	.01	3	.12	.01	.05	1
STD C	17	58	39	132	7.1	68	28	1040	4.07	31	18	8	37	47	18	17	19	56	.47	.092	11	61	.92	176	.07	33	1.98	.06	.14	12

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ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3W1
Ph: (604)299-6910 Fax: 299-6252

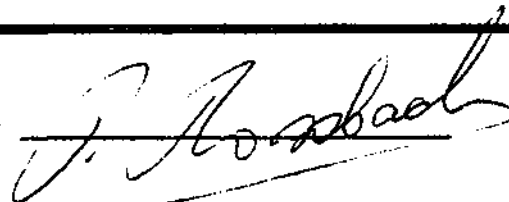
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.
PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88166.B
INVOICE # : 80544
DATE ENTERED : 88-08-23
FILE NAME : MPH88166.B
PAGE # : 1

REF NO	SAMPLE NAME	PPB AN
A	TN 3-1	5

CERTIFIED BY :



RECEIVED AUG 26 1988

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 NH PK SR CA P LA CR NG BA TI B V AND LIMITED FOR NA K AND AL. NO DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: AUG 24 1988 DATE REPORT MAILED: Aug 26/88 ASSAYER: *C. Leong* D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88166.B File # 88-3874 V263

SAMPLES	NO	Co	Pb	Zn	Ag	Mn	Co	Ba	Fe	As	U	Au	Ta	Sr	Cd	Sb	Bi	V	Ca	P	La	Ct	Mg	Ba	Ti	V	Al	Na	K	N
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	%	PPM
TN 3-1	1	62	37	67	4.3	33	23	691	6.70	19	5	ND	5	235	1	2	2	151	3.49	.043	11	106	1.42	25	.20	10	3.99	.02	.06	1

10-4-88 TUE 14:03 ROSSBACHER LABS

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3H1
Ph: (604)298-6910 Fax:298-6252

CERTIFICATE OF ANALYSIS

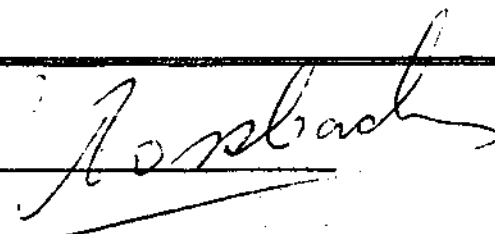
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88231
INVOICE # : 80618
DATE ENTERED : 88-09-15
FILE NAME : MPH88231.G1
PAGE # : 1

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

RE IX	SAMPLE NAME	PPB AU
A	CC 13-1 HMC	10
A	CC 13-2 HMC	10000
A	CC 14-2 HMC	240
A	CC 19-1 HMC	110
A	CC 19-2 HMC	1130
A	CC 21-1 HMC	10

CERTIFIED BY :



RECEIVED SEP 21 1988

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 NA FE SR CA P LA CR MG BA YI B V AND LIMITED FOR NA & AND AL. AS DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: SEP 13 1988

DATE REPORT MAILED: Sept 15/88

ASSAYER: *C. Leong* D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88231 File # 88-4446 V263

SAMPLE#	NO	Cu	Pb	Ta	Ag	Ni	Co	Mn	Fe	Zn	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Ce	Hg	Ba	YI	B	Al	Na	K	M
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	PPM	
CC 13-1	1	61	58	137	.2	30	18	870	6.57	22	5	ND	1	10	1	2	2	89	.43	.050	7	30	1.16	166	.09	2	2.32	.01	.02	1
CC 13-2	1	74	28	240	.1	36	21	1814	6.55	20	5	ND	1	12	1	2	2	91	.51	.061	10	46	1.34	144	.09	3	3.03	.01	.03	1
CC 14-2	1	61	29	349	.1	29	15	1047	6.67	32	5	ND	1	11	1	2	2	65	.41	.046	9	30	.91	175	.06	2	1.80	.01	.03	1
CC 19-1	1	101	34	367	.1	31	18	1077	6.06	41	5	ND	1	12	1	2	2	62	.41	.062	12	37	.95	291	.04	2	1.69	.01	.03	2
CC 19-2	1	119	32	223	.1	36	20	1876	5.38	57	5	ND	1	14	1	2	2	50	.37	.076	17	34	.70	520	.01	3	1.51	.01	.04	1
CC 21-1	1	55	16	375	.1	35	20	735	6.25	8	5	ND	1	19	2	2	2	99	.66	.049	5	79	2.09	48	.16	2	2.50	.01	.04	2
STD C	19	60	41	132	6.6	70	31	1044	6.18	40	21	8	36	49	10	17	19	61	.49	.093	40	57	.93	180	.07	33	1.56	.06	.14	13

RECEIVED SEP 22 1988

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3H1
Ph: (604)299-6910 Fax:299-6252

CERTIFICATE OF ANALYSIS

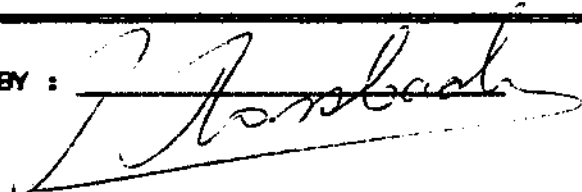
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88261
INVOICE # : 80650
DATE ENTERED : 88-09-27
FILE NAME : MPH88261.G
PAGE # : 1

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE IX	SAMPLE NAME	FPB Au
A	20351	5
A	20352	5
A	20353	5
A	20354	310
A	20355	5
A	20356	40
A	JL 15-1	5
A	JL 15-2	5
A	JL 15-3	5
A	JL 15-4	5
A	JL 15-5	5
A	TN 15-1	5
A	TN 18-1	5
A	TN 30-1	5
A	TN 30-2	5
A	TN 31-1	20
A	20401	5
A	20402	5
A	20403	5
A	20404	5
A	20405	5
A	20406	5
A	20407	5
A	20408	5
A	20409	5
A	20410	5
A	20411	5
A	20412	5
A	20413	5
A	20414	5
A	20415	5
A	20416	5
A	20417	5
A	20418	5
A	20419	5
A	20420	5

CERTIFIED BY :



RECEIVED OCT 6 - 1988

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 NH 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: SOLUTION

DATE RECEIVED: SEP 26 1988

DATE REPORT MAILED: *Sept 29/88*

ASSAYER: *C. Long* D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88261 File # 88-4783 *V263*

SAMPLE#	NO	Cu	Pb	Zn	Ag	Bi	Co	Mn	Fe	As	U	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	Li	Cr	Hg	Ba	Ti	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM
AP 20351	5	35	8	67	.4	21	5	590	2.39	18	5	ND	1	1	2	2	17	.05	.022	6	134	.34	111	.01	2	.66	.01	.04	1	
AP 20352	1	92	114	57	1.3	10	3	949	4.25	27	5	ND	1	20	1	23	2	78	2.73	.083	4	35	1.25	86	.21	2	3.23	.01	.03	1
AP 20353	1	18	4	52	.1	4	6	441	2.46	3	5	ND	1	36	1	3	2	35	.74	.047	10	56	.69	27	.20	5	1.45	.03	.08	1
AP 20354	1	22	33	42	5.3	7	3	217	1.59	50	5	ND	1	21	1	3	2	44	1.55	.018	2	152	.31	19	.03	2	1.37	.01	.05	1
AP 20355	1	48	9	64	.1	29	19	766	4.16	8	5	ND	1	32	1	2	2	109	2.21	.457	7	75	2.39	33	.28	2	2.56	.02	.05	1
AP 20356	1	1356	2	6302	2.6	1	1	607	.91	11	5	ND	1	131	316	2	3	2	6.35	.002	2	95	.42	4	.01	2	.04	.01	.01	14
AP JL 15-1	1	7	9	104	.1	4	8	888	2.56	2	5	ND	1	64	1	2	2	20	1.78	.059	9	25	.95	161	.07	4	1.91	.04	.13	1
AP JL 15-2	1	4	9	104	.1	4	7	625	2.39	3	5	ND	1	67	1	2	2	21	1.43	.065	11	33	1.00	90	.03	2	1.64	.02	.12	1
AP JL 15-3	1	13	16	68	.1	3	8	648	3.01	12	5	ND	1	42	1	2	2	43	1.80	.063	10	20	1.09	141	.13	2	1.90	.04	.06	1
AP JL 15-4	1	62	12	64	.1	24	11	476	2.97	15	5	ND	1	18	1	2	2	56	1.64	.043	9	113	.45	86	.12	5	1.75	.03	.01	1
AP JL 15-5	1	17	20	69	.1	6	8	759	2.91	5	5	ND	1	33	1	2	2	33	1.69	.065	12	20	1.08	120	.09	5	1.80	.03	.13	1
AP TN 15-1	1	16	10	21	.1	3	2	47	1.30	16	5	ND	1	2	1	3	2	8	.05	.027	3	120	.02	45	.01	2	.22	.01	.08	1
AP TN 18-1	1	55	34	97	.3	16	5	163	3.50	151	5	ND	1	11	1	2	2	19	.25	.131	7	85	.02	74	.01	2	.36	.01	.11	1
AP TN 30-1	1	37	10	56	.1	9	8	891	2.91	16	5	ND	1	57	1	2	3	35	3.34	.064	12	65	.80	99	.01	2	1.27	.01	.11	1
AP TN 30-2	1	32	7	50	.2	19	3	618	2.32	38	5	ND	1	4	1	3	2	16	.06	.014	6	186	.21	144	.01	2	.54	.01	.06	1
AP TN 31-1	1	9	8	49	.3	2	5	2117	5.69	25	5	ND	1	375	2	2	2	12	15.89	.019	10	8	3.40	193	.01	2	.17	.01	.06	1
AP 20401	3	51	8	198	.3	33	9	327	2.50	12	5	ND	1	11	5	3	2	278	1.58	.040	7	47	.60	34	.16	2	1.77	.02	.03	1
AP 20402	1	50	16	80	.1	14	16	716	4.80	11	5	ND	1	14	1	3	2	114	1.38	.073	9	66	1.76	74	.22	4	2.43	.02	.02	1
AP 20403	1	73	10	57	.1	19	15	600	3.71	7	5	ND	1	22	1	2	3	106	3.13	.063	1	53	1.69	27	.27	8	3.96	.01	.02	1
AP 20404	1	14	287	52	.2	2	6	481	2.42	7	5	ND	1	34	1	2	2	29	.63	.049	10	38	.75	24	.17	4	1.43	.03	.09	1
AP 20405	1	55	10	64	.1	20	13	684	4.13	9	5	ND	1	18	1	2	2	119	.77	.063	9	66	1.53	19	.24	3	1.97	.03	.01	1
AP 20406	1	11	11	51	.1	3	6	459	2.35	2	5	ND	1	42	1	2	2	29	.67	.049	9	44	.76	25	.17	3	1.39	.03	.00	1
AP 20407	1	173	7	62	.1	40	10	606	4.60	4	5	ND	1	34	1	2	2	146	3.24	.043	5	46	1.62	24	.65	3	3.43	.11	.04	1
AP 20408	1	66	8	75	.1	17	18	951	4.70	4	5	ND	1	43	1	2	2	113	2.04	.085	8	53	2.22	11	.24	3	2.61	.03	.01	1
AP 20409	1	423	11	64	.1	36	21	633	5.21	9	5	ND	2	16	1	2	2	177	6.74	.031	4	47	1.53	32	.45	20	5.18	.01	.01	1
AP 20410	1	267	9	85	.1	38	23	894	5.17	10	5	ND	1	23	1	2	2	177	2.38	.024	5	73	2.19	17	.41	7	3.31	.01	.02	1
AP 20411	1	211	9	79	.1	31	23	667	5.54	8	5	ND	1	4	1	3	2	149	2.45	.042	5	35	1.55	34	.62	3	2.86	.02	.01	1
AP 20412	1	190	3	49	.1	24	16	296	5.94	5	5	ND	1	32	1	2	2	152	6.64	.034	5	27	.42	27	.45	30	3.85	.02	.01	1
AP 20413	1	188	9	111	.1	23	13	483	3.17	4	5	ND	1	8	1	2	2	94	3.79	.019	2	41	.02	7	.32	6	3.29	.01	.03	1
AP 20414	2	149	9	73	.1	19	14	502	5.94	18	5	ND	1	17	1	2	2	164	2.11	.047	7	41	1.06	27	.70	5	2.56	.04	.02	1
AP 20415	1	135	8	77	.1	44	23	696	5.54	10	5	ND	1	6	1	2	2	157	3.59	.033	4	66	1.59	12	.56	4	4.95	.01	.01	1
AP 20416	1	236	7	116	.1	35	18	751	7.07	13	5	ND	1	22	1	2	2	243	1.87	.070	12	39	1.79	41	1.21	8	2.93	.07	.02	1
AP 20417	1	41	13	105	.2	8	8	566	5.95	27	5	ND	1	3	1	2	2	79	1.95	.059	4	34	.97	12	.29	2	2.05	.02	.01	1
AP 20418	5	39	8	70	.3	6	4	459	6.42	38	5	ND	1	3	1	2	2	96	.33	.063	1	40	.67	19	.34	2	1.13	.04	.02	1
AP 20419	1	133	7	69	.1	28	20	738	5.18	16	5	ND	1	6	1	2	2	185	3.57	.033	9	63	1.32	43	.75	3	4.02	.01	.01	1
AP 20420	3	39	12	142	.1	7	8	589	4.70	6	5	ND	1	7	1	2	2	49	2.81	.044	1	40	.94	6	.23	2	3.18	.01	.02	1
STD C	13	59	43	132	6.8	67	30	1050	4.14	44	21	8	38	48	18	16	19	59	.47	.088	40	57	.94	181	.07	33	2.03	.06	.13	12

RECEIVED OCT 6 - 10AM

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

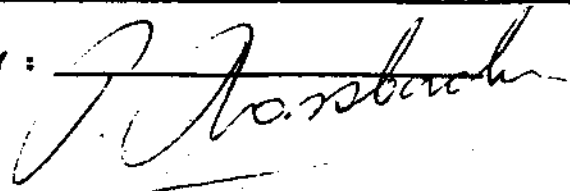
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88269
INVOICE # : 80662
DATE ENTERED : 88-10-03
FILE NAME : MPH88269.G
PAGE # : 1

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB AU
A	20357	5
A	20358	5
A	20359	5
A	20360	5
A	20361	5
A	20362	5
A	20363	5
A	20365	5
A	20366	5
A	20367	5
A	20368	5
A	20369	5
A	20370	5
A	20371	5
A	20372	5
A	20373	5
A	20374	50
A	20375	5
A	20376	5
A	20377	5
A	20378	5
A	20379	5
A	20380	5
A	20381	5
A	20382	5
A	20383	5
A	20384	5

CERTIFIED BY :



RECEIVED OCT 14 1988

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 NH PK SR SB CA P LA CE MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: SEP 30 1988

DATE REPORT MAILED: Oct 4/88

ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88269 File # 88-4922 V263

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Zr	As	U	Au	Tb	Sr	Cd	SD	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	PPM	
AP 20357	1	80	4	26	.1	33	8	224	2.04	6	5	ND	1	13	2	2	2	62	9.60	.016	3	33	.07	1	.17	15247	1.15	.02	.01	3
AP 20358	5	81	31	34	.4	33	5	221	3.74	56	5	ND	3	10	1	2	2	54	.15	.044	4	92	.56	136	.07	25	1.28	.01	.06	8
AP 20359	1	69	7	56	.1	9	10	525	3.15	6	5	ND	1	25	1	2	2	79	1.73	.070	9	50	1.24	49	.14	56	2.35	.02	.01	1
AP 20360	1	31	9	57	.1	11	5	861	1.01	5	5	ND	1	31	1	2	2	15	1.16	.000	14	80	.32	474	.01	26	.58	.01	.11	1
AP 20361	1	7	2	52	.3	6	9	456	2.02	10	5	ND	1	27	1	2	3	7	2.09	.043	14	8	.23	80	.01	23	.42	.02	.15	1
AP 20362	1	35	4	50	.1	10	9	830	3.30	14	5	ND	1	227	1	2	2	49	5.10	.101	12	22	1.49	80	.01	17	1.56	.01	.11	2
AP 20363	1	89	2	39	.1	10	8	385	2.45	35	5	ND	1	7	1	2	2	11	.15	.039	10	53	.03	94	.01	38	.22	.01	.09	1
AP 20365	1	111	14	70	.3	47	24	1174	5.57	10	5	ND	1	16	1	2	2	116	.40	.033	7	79	2.10	1211	.19	14	3.01	.01	.13	2
AP 20366	2	717	10	15	1.9	11	5	166	2.29	92	5	ND	1	2	1	2	2	6	.03	.011	4	93	.02	51	.01	15	.10	.01	.03	1
AP 20367	1	968	2	28	1.4	4	4	417	1.51	5	5	ND	1	26	1	2	2	6	.93	.018	7	43	.21	132	.01	12	.51	.01	.12	2
AP 20368	1	173	46	672	.2	5	3	455	1.52	7	5	ND	1	17	5	2	2	2	.74	.018	8	67	.15	112	.01	12	.22	.01	.11	1
AP 20369	1	10	5	32	.1	8	3	1750	1.93	4	5	ND	1	159	1	2	2	17	6.23	.012	10	59	.51	91	.01	9	.60	.01	.02	2
AP 20370	1	8	2	132	.1	11	6	4472	3.35	7	6	ND	1	234	1	2	2	21	7.89	.030	13	30	.94	1201	.01	7	.67	.01	.05	1
AP 20371	1	27	14	41	.2	8	10	399	3.05	53	5	ND	1	56	1	2	2	31	3.09	.025	2	53	.34	36	.05	10	1.42	.01	.07	2
AP 20372	1	15	9	24	.3	11	6	2256	4.67	34	5	ND	1	281	1	2	2	11	11.37	.022	4	25	2.00	240	.01	8	.13	.01	.07	1
AP 20373	1	29	30	233	.1	15	8	4203	5.83	57	5	ND	1	245	1	2	2	13	11.52	.031	13	23	1.56	33	.01	8	.16	.01	.04	1
AP 20374	5	48	26	43	1.2	29	15	639	6.37	127	5	ND	1	13	1	24	2	29	.45	.023	4	45	.43	14	.01	8	.74	.01	.05	1
AP 20375	1	11	2	19	.1	8	8	798	2.49	15	5	ND	1	61	1	2	2	7	3.34	.035	7	6	.50	164	.01	9	.38	.01	.19	1
AP 20376	1	20	6	65	.1	6	3	2118	2.27	14	5	ND	1	197	1	2	3	9	10.75	.035	9	35	.83	646	.01	7	.19	.01	.04	1
AP 20377	1	10	2	30	.3	6	7	2941	6.11	23	7	ND	1	390	1	2	3	14	16.78	.019	8	9	3.43	148	.01	6	.12	.01	.05	1
AP 20378	1	8	7	14	.2	13	4	909	2.60	25	6	ND	1	95	1	2	2	8	4.00	.009	2	60	1.02	92	.01	6	.13	.01	.04	1
AP 20379	1	87	11	74	.1	140	26	1526	4.76	59	5	ND	1	304	1	2	2	83	10.11	.020	3	251	3.65	119	.01	6	3.51	.01	.03	2
AP 20380	1	4	3	10	.3	14	2	802	.66	7	5	ND	1	360	1	2	2	9	15.71	.003	2	54	.49	67	.01	11	.45	.01	.03	1
AP 20381	1	3	5	26	.1	1	3	2712	6.94	11	6	ND	1	378	1	2	2	9	16.55	.010	7	1	3.50	45	.01	2	.07	.01	.03	1
AP 20382	1	27	4	30	.3	3	3	2912	1.11	11	8	ND	1	432	1	2	2	6	22.01	.011	19	20	.30	1040	.01	5	.36	.01	.03	2
AP 20383	1	54	11	65	.1	13	9	1562	3.63	28	5	ND	1	97	1	2	3	12	4.66	.079	11	17	1.00	188	.01	7	.41	.01	.16	1
AP 20384	1	10	2	46	.1	3	4	8523	4.42	13	5	ND	1	479	1	2	2	6	20.44	.029	14	4	2.13	134	.01	3	.10	.01	.06	1
STD C	18	63	42	133	7.2	71	31	1028	4.21	42	21	8	40	51	19	19	22	61	.48	.091	39	57	.95	175	.07	32	2.03	.06	.14	12

RECEIVED OCT 14 1988

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3W1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

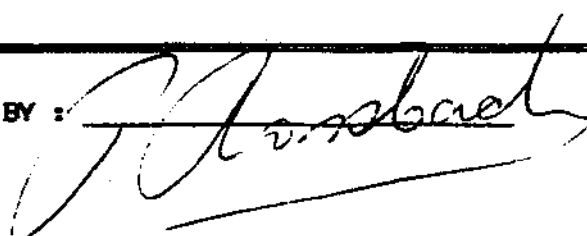
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88269
INVOICE # : 80662
DATE ENTERED : 88-10-11
FILE NAME : MPH88269.HE
PAGE # : 1

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB AU
A	HE 20364	5

CERTIFIED BY :



RECEIVED OCT 14 1988

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 NH FX SR CA P LA CR NG BA YI B V AND LIMITED FOR NA K AND AL. AN DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: OCT 4 1988 DATE REPORT MAILED: *Oct 5/88* ASSAYER: *C. Long* D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88269 File # 88-4978 *V263*

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Bi	Co	Mn	Pb	As	W	Am	Th	Sr	Co	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	V
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
20364	1	78	13	142	.1	33	21	737	4.09	19	5	ND	1	11	1	2	2	120	.69	.052	4	50	1.60	106	.21	4	3.53	.01	.02	2

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3M1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88231
INVOICE # : 80599
DATE ENTERED : 88-09-07
FILE NAME : MPH88231.G
PAGE # : 1

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

RE IX	SAMPLE NAME	PPB AU
A	CC 13-3	5
A	CC 14-1	570
A	CC 18-1	5
A	CC 25-1	390
A	CJC A-1	510
A	CJC A-2	790
A	CJC 28-1	5
A	CJC 28-2	5
A	CJC 28-3	5
A	CJC 28-4	30
A	CJC 28-5	1080
S	L OW 500N	5
S	L OW 475N	5
S	L OW 450N	10
S	L OW 425N	5
S	L OW 400N	5
S	L OW 375N	5
S	L OW 350N	5
S	L OW 325N	5
S	L OW 300N	5
S	L OW 275N	5
S	L OW 250N	5
S	L OW 225N	5
S	L OW 200N	5
S	L OW 175N	5
S	L OW 150N	5
S	L OW 125N	5
S	L OW 100N	5
S	L OW 075N	5
S	L OW 050N	5
S	L OW 025N	140
S	L OW 000EL	80
S	L OW 025S	5
S	L 7W 1700S	5
S	L 7W 1725S	5
S	L 7W 1750S	20
S	L 7W 1775S	5
S	L 7W 1800S	100
S	L 7W 1825S	10

CERTIFIED BY :

J. Rossbach

RECEIVED ULI 6 - 1988

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

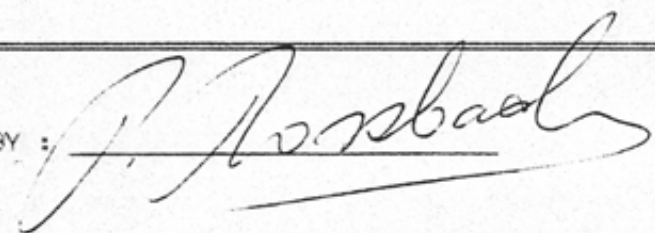
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88231
INVOICE # : 80599
DATE ENTERED : 88-09-07
FILE NAME : MPH88231.G
PAGE # : 2

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

WRE PIX	SAMPLE NAME	PPB Au
S	L 7W 1850S	5
S	L 7W 1875S	5
S	L 7W 1900S	5
S	L 7W 1925S	5
S	L 7W 1950S	5
S	L 7W 1975S	5
S	L 7W 2000S	5
S	L 7W 2025S	5
S	L 7W 2050S	5
S	L 7W 2075S	5
S	L 7W 2100S	5
S	L 8W 1700S	5
S	L 8W 1725S	5
S	L 8W 1750S	5
S	L 8W 1775S	5
S	L 8W 1800S	20
S	L 8W 1825S	10
S	L 8W 1850S	5
S	L 8W 1875S	5
S	L 8W 1900S	5
S	L 8W 1925S	5
S	L 8W 1950S	5
S	L 8W 1975S	5
S	L 8W 2000S	5
S	L 8W 2025S	5
S	L 8W 2050S	5
S	L 8W 2075S	5
S	L 8W 2100S	5
S	L 9W 325N	5
S	L 9W 300N	5
S	L 9W 275N	5
S	L 9W 250N	5
S	L 9W 225N	5
S	L 9W 200N	5
S	L 9W 175N	5
S	L 9W 150N	5
S	L 9W 125N	20
S	L 9W 100N	5
S	L 9W 075N	5

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

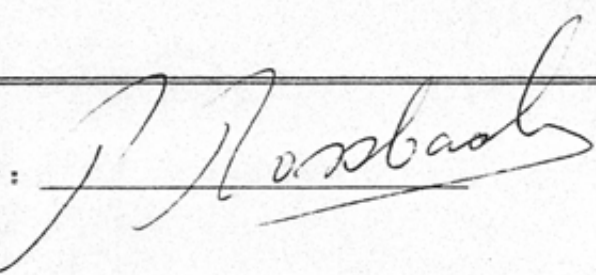
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88231
INVOICE # : 60599
DATE ENTERED : 88-09-07
FILE NAME : MPH88231.G
PAGE # : 3

RE FIX	SAMPLE NAME	PPB Au
S	L 9W 050N	5
S	L 9W 025N	5
S	L 9W 000EL	5
S	L 9W 025N	5
S	L 9W 050N	5
S	L 9W 075N	5
S	L 9W 100N	20
S	L 9W 125N	5
S	L 9W 150N	5
S	L 9W 175N	5
S	L 9W 200N	5
S	L 9W 225N	5
S	L 9W 250N	5
S	L 9W 275N	5
S	L 9W 300N	5
S	L 9W 325N	5
S	L 9W 350N	5
S	L 9W 375N	5
S	L 9W 400N	5
S	L 9W 425N	5
S	L 9W 450N	5
S	L 9W 475N	5
S	L 9W 500N	5
S	L 9W 525N	5
S	L 9W 550N	5
S	L 9W 575N	5
S	L 9W 600N	5
S	L 9W 625N	5
S	L 9W 650N	5
S	L 9W 675N	5
S	L 9W 700N	5
S	L 9W 725N	40
S	L 9W 1700S	5
S	L 9W 1725S	5
S	L 9W 1750S	5
S	L 9W 1775S	5
S	L 9W 1800S	5
S	L 9W 1825S	5
S	L 9W 1850S	5

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

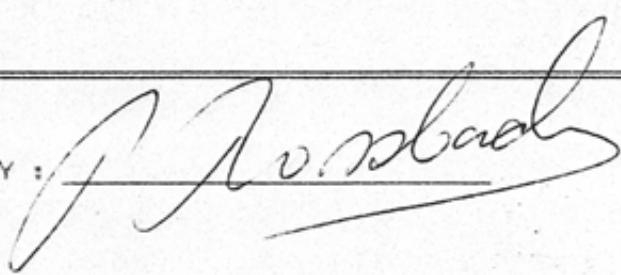
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88231
INVOICE # : 80599
DATE ENTERED : 88-09-07
FILE NAME : MPH88231.G
PAGE # : 4

REF NO	SAMPLE NAME	FFB AN
5	L 9W 1875S	S
5	L 9W 1900S	S
5	L 9W 1925S	S
5	L 9W 1950S	S
5	L 9W 1975S	S
5	L 9W 2000S	S
5	L 9W 2025S	S
5	L 9W 2050S	S
5	L 9W 2075S	S
5	L 9W 2100S	S

CERTIFIED BY : 

RECEIVED SEP 19 1988

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 HM PB SR CA P LA CR KG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: SOLUTION

DATE RECEIVED: SEP 6 1988

DATE REPORT MAILED: Sept 9/88

ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88231 File # 88-4264 Page 1 1263

Table with columns: SAMPLE#, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, F, Na, Cl, K, Mg, Ba, Tl, B, Al, Na, K, W. Rows include various sample IDs like AP CC 13-3, AP CJC A-2, S LOW 5+00N, etc.

RECEIVED SEP 19 1988

SAMPLE#	NO	Cu	Pb	Zn	Ag	NI	Co	Mn	Fe	As	U	Au	Tb	Sr	Cd	SD	BI	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	M
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
S 17W 19+50S	1	34	14	65	.1	16	8	705	5.54	3	5	ND	1	9	1	2	3	132	.63	.060	5	43	.77	117	.15	2	2.84	.01	.04	1
S 17W 19+75S	1	36	23	83	.1	10	10	629	5.19	20	5	ND	1	15	1	2	2	126	.65	.072	10	31	.31	69	.11	2	2.21	.01	.03	1
S 17W 19+00S	2	41	21	101	.1	13	8	297	5.54	26	5	ND	1	5	1	2	2	82	.13	.079	10	28	.19	128	.02	2	1.73	.01	.02	1
S 17W 19+25S	3	157	22	214	.4	44	20	1756	5.99	47	5	ND	1	11	2	2	2	105	.66	.099	16	43	1.32	170	.09	2	3.01	.01	.04	1
S 17W 19+52S	1	42	16	89	.1	13	8	1010	2.72	19	5	ND	1	34	1	2	2	59	1.66	.078	6	26	.13	191	.05	3	1.55	.01	.05	1
S 17W 19+75S	1	34	16	78	.1	13	7	309	5.83	9	5	ND	1	9	1	2	3	116	.50	.056	6	45	.60	68	.13	2	3.44	.01	.04	1
S 17W 20+00S	1	8	11	41	.1	3	2	17	.65	2	5	ND	1	23	1	2	2	13	1.04	.091	2	6	.08	92	.02	2	.36	.03	.04	2
S 17W 20+25S	1	29	13	51	.1	11	5	230	4.95	13	5	ND	1	8	1	2	2	114	.35	.069	6	33	.50	75	.09	2	1.84	.01	.04	1
S 17W 20+50S	2	51	33	228	.4	19	21	3365	5.63	21	5	ND	1	12	3	2	3	122	.51	.087	14	59	.83	292	.07	2	3.91	.01	.07	1
S 17W 20+75S	1	18	15	59	.1	6	4	580	1.65	8	5	ND	1	15	1	2	2	57	1.20	.087	3	19	.20	288	.04	3	.73	.01	.06	1
S 17W 21+00S	2	27	25	104	.1	7	4	4061	.45	2	5	ND	1	67	3	2	3	19	3.97	.085	2	8	.20	499	.01	7	.49	.01	.04	1
S 18W 17+00S	1	20	12	90	.1	6	6	534	3.73	8	5	ND	1	16	1	2	2	66	.49	.048	12	23	.19	96	.03	2	1.46	.01	.04	1
S 18W 17+25S	1	37	22	103	.1	13	12	438	6.01	23	5	ND	1	7	1	2	2	106	.34	.048	9	42	.48	109	.06	2	2.86	.01	.03	1
S 18W 17+50S	1	15	10	59	.1	5	5	339	2.65	4	5	ND	1	18	1	2	2	53	.71	.057	6	15	.18	96	.03	2	1.17	.01	.05	1
S 18W 17+75S	1	50	16	117	.4	14	14	3118	3.81	8	5	ND	1	34	1	2	2	62	1.52	.060	23	45	.60	208	.03	2	2.57	.01	.04	1
S 18W 18+00S	1	84	16	96	.3	29	18	1123	4.73	19	5	ND	1	19	1	3	2	112	1.37	.078	11	48	1.48	160	.16	3	3.09	.01	.07	2
S 18W 18+25S	1	46	14	92	.2	19	11	435	6.39	7	5	ND	1	6	1	2	2	146	.53	.052	6	55	.90	60	.20	2	4.38	.01	.03	1
S 18W 18+50S	1	56	17	67	.2	15	10	456	5.30	15	5	ND	1	8	1	2	2	134	.62	.074	6	55	.66	70	.17	2	4.70	.01	.04	1
S 18W 18+75S	1	28	10	106	.1	12	10	1224	4.07	7	5	ND	1	18	1	2	2	95	.98	.070	5	31	.60	131	.10	2	1.90	.01	.04	1
S 18W 19+00S	2	56	15	85	.2	17	11	396	5.56	13	5	ND	2	6	1	2	2	123	.45	.081	8	50	.80	82	.15	2	4.27	.01	.06	1
S 18W 19+25S	1	21	10	60	.1	6	5	144	5.63	6	5	ND	1	5	1	2	2	158	.30	.048	6	31	.28	76	.14	2	1.95	.01	.03	1
S 18W 19+50S	1	15	10	45	.2	5	3	80	3.42	9	5	ND	1	8	1	2	2	99	.43	.049	4	20	.13	47	.09	2	1.04	.01	.03	2
S 18W 19+75S	1	80	18	112	.2	26	12	432	5.98	13	5	ND	1	6	1	2	2	132	.41	.043	6	55	1.23	120	.15	2	4.31	.01	.05	1
S 18W 20+00S	1	25	13	57	.1	8	4	173	3.16	5	5	ND	1	8	1	2	2	102	.46	.059	4	28	.35	51	.11	2	1.29	.01	.03	1
S 18W 20+25S	1	42	13	70	.1	11	7	239	6.26	17	5	ND	1	6	1	2	2	161	.42	.053	6	43	.43	59	.15	2	3.49	.01	.03	1
S 18W 20+50S	1	48	13	78	.1	11	7	256	6.16	14	5	ND	1	7	1	2	2	151	.40	.047	10	47	.50	60	.16	2	4.11	.01	.04	1
S 18W 20+75S	1	58	14	145	.5	19	17	1371	4.42	15	5	ND	1	24	2	2	2	81	1.19	.071	13	39	.35	232	.06	2	3.16	.01	.05	1
S 18W 21+00S	1	27	14	77	.1	8	6	235	4.33	11	5	ND	1	12	1	2	2	95	.49	.044	5	26	.26	143	.04	2	1.71	.01	.05	1
S 19W 3+25W	1	50	7	59	.1	28	14	677	4.26	2	5	ND	1	32	1	2	2	113	.91	.063	5	89	1.91	26	.20	2	2.99	.01	.04	1
S 19W 3+00W	1	55	12	108	.2	27	18	1023	4.92	3	5	ND	1	27	1	3	2	128	.76	.053	7	85	1.47	47	.18	2	3.19	.01	.07	1
S 19W 2+75W	1	65	12	119	.1	23	18	1139	4.77	2	5	ND	1	22	1	2	2	113	.77	.063	6	72	1.59	51	.17	2	3.22	.01	.05	1
S 19W 2+50W	2	62	27	115	.5	17	75	5701	3.97	2	5	ND	1	29	1	2	2	101	.95	.085	9	55	.71	92	.12	2	3.47	.01	.05	1
S 19W 2+25W	1	32	13	94	.3	13	12	2723	2.21	4	5	ND	1	41	1	2	2	56	1.75	.090	8	33	.58	88	.07	4	2.00	.01	.04	1
S 19W 2+00W	4	26	7	58	.5	4	4	2723	.75	2	5	ND	1	69	1	2	2	34	3.47	.082	1	15	.09	93	.03	4	.91	.01	.03	1
S 19W 1+75W	1	4	5	39	.1	2	1	68	.08	9	5	ND	1	14	1	2	2	2	.67	.059	2	2	.08	15	.01	2	.13	.01	.02	1
S 19W 1+50W	1	63	10	74	.1	29	19	909	4.53	3	5	ND	1	25	1	3	2	108	.96	.062	6	74	2.06	42	.20	3	3.21	.01	.07	1
S 19W 1+25W	1	23	9	54	.2	14	9	269	3.88	3	5	ND	1	28	1	2	2	105	.79	.046	6	50	.70	81	.15	2	2.12	.01	.05	1
S 19W 1+00W	1	7	9	28	.1	4	1	2	.09	7	5	ND	1	13	1	2	2	2	.50	.064	2	3	.07	13	.01	2	.11	.01	.04	1
S 19W 0+75W	1	25	15	109	.2	11	9	1621	4.31	6	5	ND	1	37	1	2	2	101	1.42	.071	7	52	.46	80	.14	3	2.19	.01	.06	1
STD C	10	57	42	132	6.7	68	29	965	4.12	43	19	7	37	47	18	17	20	58	.50	.092	38	56	.95	173	.06	32	2.02	.06	.14	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Al PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Tl %	B PPM	Al %	Na %	K %	W PPM
S 19W 0+50M	1	55	7	72	.1	28	15	363	5.55	10	5	ND	1	17	1	2	3	131	.55	.071	9	85	.99	36	.21	2	4.19	.01	.02	1
S 19W 0+25M	1	32	15	61	.1	15	21	1225	4.19	2	5	ND	1	25	1	2	2	133	.48	.057	8	54	.33	37	.16	2	1.98	.01	.01	1
S 19W 0+00	1	64	7	73	.2	26	18	625	4.81	5	5	ND	1	34	1	2	2	116	1.05	.067	6	70	1.16	50	.14	2	3.35	.01	.02	1
S 19W 0+25S	1	57	16	127	.1	29	19	5637	4.09	5	5	ND	1	31	1	2	3	115	.89	.075	8	42	.72	106	.13	2	2.92	.01	.04	1
S 19W 0+50S	2	48	8	104	.1	13	12	415	5.39	14	5	ND	1	11	1	2	3	139	.27	.083	5	39	.51	40	.13	2	2.83	.01	.03	1
S 19W 0+75S	1	52	13	98	.1	13	13	364	4.11	13	5	ND	1	13	1	2	2	150	.28	.047	4	59	1.07	53	.13	2	3.60	.01	.02	1
S 19W 1+00S	1	43	9	140	.1	12	12	771	4.67	17	5	ND	1	31	1	2	2	135	.99	.072	10	39	.46	78	.11	2	2.41	.01	.03	1
S 19W 1+25S	1	10	8	27	.1	6	5	168	3.33	2	5	ND	1	11	1	2	2	171	.32	.053	2	28	.20	44	.14	2	1.34	.01	.04	1
S 19W 1+50S	1	10	11	48	.1	5	1	167	.36	2	5	ND	1	23	1	2	3	6	.51	.085	2	3	.09	34	.01	2	.14	.01	.02	1
S 19W 1+75S	1	15	8	30	.1	6	4	118	3.97	2	5	ND	1	13	1	2	2	175	.31	.054	3	27	.32	26	.20	2	1.47	.01	.02	1
S 19W 2+00S	1	22	11	36	.1	10	10	363	1.35	16	5	ND	1	50	1	2	3	21	1.64	.069	3	10	.20	120	.02	3	.57	.01	.02	1
S 19W 2+25S	1	22	10	53	.1	12	8	307	5.02	9	5	ND	1	13	1	2	2	138	.38	.064	6	46	.57	51	.21	2	2.21	.01	.04	1
S 19W 2+50S	1	11	7	36	.1	4	2	156	.51	2	5	ND	1	16	1	2	2	33	.70	.074	2	10	.10	67	.05	2	.40	.01	.02	1
S 19W 2+75S	1	69	13	61	.1	21	74	3105	2.05	5	5	ND	1	32	1	2	3	65	.76	.127	12	22	.20	202	.04	3	2.33	.01	.02	1
S 19W 3+00S	1	29	19	76	.1	17	31	4855	1.68	18	5	ND	1	62	1	2	3	36	1.73	.111	7	23	.12	140	.03	5	2.58	.01	.03	2
S 19W 3+25S	1	8	9	35	.1	5	3	188	2.16	2	5	ND	1	15	1	2	2	90	.18	.065	2	19	.15	33	.11	2	.69	.01	.03	1
S 19W 3+50S	1	34	15	59	.1	15	14	2456	1.24	11	5	ND	1	16	1	2	3	131	.62	.175	4	41	.49	71	.19	2	2.68	.01	.04	1
S 19W 3+75S	1	31	8	57	.1	16	10	642	5.78	5	5	ND	1	9	1	2	3	177	.37	.074	4	54	.79	38	.24	2	2.76	.01	.02	1
S 19W 4+00S	1	66	17	56	.3	17	10	342	4.77	14	5	ND	1	6	1	2	2	111	.26	.178	6	53	.82	30	.20	2	4.65	.01	.02	1
S 19W 4+25S	1	19	7	48	.1	8	4	179	5.06	6	5	ND	1	13	1	2	2	154	.50	.199	3	38	.34	114	.25	2	1.54	.01	.02	1
S 19W 4+50S	1	8	11	23	.1	3	3	149	3.08	2	5	ND	1	14	1	2	2	152	.50	.051	3	20	.14	98	.25	2	.89	.01	.01	1
S 19W 4+75S	1	29	10	43	.1	9	7	215	4.89	12	5	ND	1	8	1	2	2	187	.39	.043	3	36	.37	59	.18	2	2.30	.01	.01	1
S 19W 5+00S	2	113	40	170	.3	26	24	1148	5.99	49	5	ND	1	10	1	3	2	122	.35	.149	8	43	.66	76	.09	2	2.31	.01	.02	1
S 19W 5+25S	1	59	17	92	.2	13	34	1695	6.30	10	5	ND	1	13	1	2	2	196	.50	.118	5	38	.63	106	.27	2	2.72	.01	.03	1
S 19W 5+50S	1	44	16	74	.2	12	20	981	6.55	7	5	ND	1	11	1	2	2	181	.50	.110	4	39	.46	65	.22	2	2.00	.01	.02	1
S 19W 5+75S	1	13	9	33	.1	6	5	252	3.51	2	5	ND	1	9	1	2	2	191	.43	.047	4	20	.19	50	.30	2	1.20	.01	.03	1
S 19W 6+00S	2	51	9	60	.1	8	9	417	7.12	7	5	ND	1	14	1	2	2	240	.40	.089	6	32	.24	98	.31	2	1.82	.01	.03	1
S 19W 6+25S	2	53	13	74	.2	17	12	343	6.55	19	5	ND	1	3	1	2	2	191	.11	.051	5	62	.74	94	.22	2	3.32	.01	.01	1
S 19W 6+50S	1	34	9	69	.1	5	5	990	.82	2	5	ND	1	81	1	2	3	27	2.75	.129	4	8	.14	119	.02	8	.71	.01	.02	1
S 19W 6+75S	1	20	7	35	.1	7	4	231	3.28	2	5	ND	1	18	1	2	2	128	.61	.067	2	21	.22	64	.16	2	.92	.01	.04	1
S 19W 7+00S	1	20	8	48	.1	10	7	390	4.73	3	5	ND	1	11	1	2	2	170	.43	.051	5	36	.42	102	.18	2	2.46	.01	.01	1
S 19W 7+25S	1	46	25	75	.1	11	17	5059	4.60	11	5	ND	1	38	1	2	2	90	.66	.101	15	29	.75	123	.10	2	2.59	.01	.03	1
S 19W 7+00S	1	26	6	47	.3	7	5	580	1.55	9	5	ND	1	68	1	2	3	26	2.57	.049	6	18	.25	138	.02	2	1.85	.01	.02	2
S 19W 7+25S	1	11	12	42	.1	4	3	260	3.32	17	5	ND	1	8	1	2	4	37	.23	.037	14	9	.09	109	.01	2	1.69	.01	.02	1
S 19W 7+50S	2	81	14	127	.1	29	18	1273	4.36	24	5	ND	1	16	1	2	2	97	.98	.080	12	39	1.22	227	.11	2	2.58	.01	.04	1
S 19W 7+75S	2	39	22	90	.2	13	8	446	5.51	28	5	ND	1	12	1	3	2	113	.44	.062	11	34	.36	133	.03	2	2.22	.01	.03	1
S 19W 8+00S	1	76	25	160	.6	27	20	3360	5.35	28	5	ND	1	19	2	2	3	107	.56	.077	20	56	.73	322	.05	2	3.48	.01	.03	1
S 19W 8+25S	2	22	7	47	.1	8	5	200	3.21	14	5	ND	1	17	1	2	3	108	.53	.047	5	26	.22	88	.06	2	1.23	.01	.02	2
S 19W 8+50S	1	60	16	190	.4	18	10	3819	2.24	11	5	ND	1	59	5	2	3	46	2.28	.124	13	28	.51	222	.03	6	1.93	.01	.03	1
STD C	18	58	43	132	6.9	65	38	1020	3.72	36	21	7	37	47	18	17	22	58	.46	.093	39	55	.88	176	.07	31	1.89	.06	.14	13

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Tl PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
S LSW 18+75S	1	31	10	85	.3	10	9	544	4.94	8	5	ND	1	17	1	2	2	118	.63	.076	9	32	.37	140	.10	2	2.30	.01	.03	1
S LSW 19+00S	2	61	19	108	.2	20	13	739	5.04	18	5	ND	1	9	1	2	2	105	.45	.080	9	37	.76	35	.11	2	2.88	.01	.05	1
S LSW 19+25S	1	20	9	41	.2	5	6	275	3.23	9	5	ND	1	13	1	2	2	96	.38	.067	6	16	.27	130	.05	2	1.44	.01	.05	1
S LSW 19+50S	2	110	14	171	1.3	29	26	626	5.37	23	5	ND	1	8	1	2	2	102	.41	.107	16	45	.83	108	.10	2	4.15	.01	.05	1
S LSW 19+75S	1	117	18	146	.7	40	37	982	4.42	20	5	ND	1	12	1	2	2	75	.63	.085	18	47	1.11	120	.09	2	4.23	.01	.04	1
S LSW 20+00S	2	66	18	119	.4	20	18	975	5.69	19	5	ND	1	10	1	2	2	106	.42	.065	12	42	.76	112	.04	2	3.29	.01	.06	1
S LSW 20+25S	1	56	14	71	.3	16	10	432	1.74	6	5	ND	1	5	1	2	2	115	.42	.139	8	41	.83	53	.16	2	4.24	.01	.03	1
S LSW 20+50S	1	58	15	122	.5	17	15	1844	4.33	60	5	ND	1	20	2	2	2	101	.96	.072	12	37	.66	221	.10	2	3.42	.01	.03	1
S LSW 20+75S	1	60	14	74	.3	17	14	545	1.98	8	5	ND	1	7	1	2	2	122	.50	.066	9	39	.92	75	.16	2	3.45	.01	.03	1
S LSW 21+00S	1	63	18	115	.4	33	31	1349	5.13	29	5	ND	1	16	1	2	2	103	.30	.030	13	45	1.04	160	.14	2	4.34	.01	.05	1
STD C	18	59	39	133	7.1	67	30	1023	4.21	39	22	7	38	49	18	18	60	60	.50	.094	46	53	.94	180	.07	32	2.00	.06	.17	12

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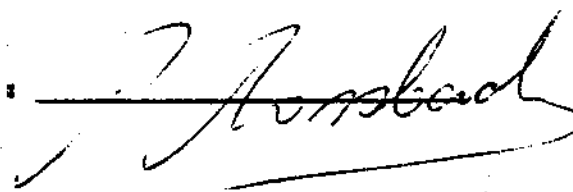
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 1

PROJECT : Y 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB AU
S	L 2E 500N	5
S	L 2E 475N	5
S	L 2E 450N	5
S	L 2E 425N	5
S	L 2E 400N	5
S	L 2E 375N	5
S	L 2E 250N	5
S	L 2E 225N	5
S	L 2E 200N	5
S	L 2E 175N	5
S	L 2E 150N	70
S	L 2E 125N	5
S	L 2E 100N	5
S	L 2E 075N	5
S	L 2E 050N	5
S	L 2E 025N	5
S	L 2E 025S	5
S	L 2E 050S	5
S	L 2E 075S	140
S	L 2E 100S	5
S	L 2E 125S	5
S	L 2E 150S	5
S	L 2E 175S	5
S	L 2E 200S	5
S	L 2E 225S	5
S	L 2E 250S	5
S	L 2E 275S	5
S	L 2E 300S	5
S	L 2E 325S	5
S	L 2E 350S	5
S	L 2E 375S	5
S	L 2E 400S	5
S	L 2E 425S	5
S	L 2E 450S	5
S	L 2E 475S	5
S	L 2E 500S	5
S	L 2E 525S	5
S	L 2E 550S	5
S	L 2E 575S	5

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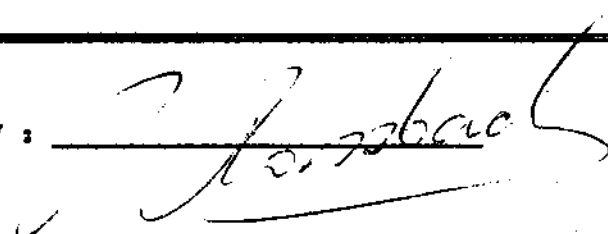
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CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 2

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

REF IX	SAMPLE NAME	PPB AU
5	L 2E 600S	5
5	L 2E 625S	5
5	L 2E 650S	5
5	L 2E 675S	20
5	L 2E 700S	5
5	L 2E 725S	5
5	L 1E 500N	5
5	L 1E 475N	5
5	L 1E 450N	5
5	L 1E 425N	5
5	L 1E 400N	5
5	L 1E 375N	5
5	L 1E 350N	5
5	L 1E 325N	5
5	L 1E 300N	5
5	L 1E 275N	5
5	L 1E 250N	5
5	L 1E 225N	70
5	L 1E 200N	5
5	L 1E 175N	5
5	L 1E 150N	5
5	L 1E 125N	5
5	L 1E 100N	5
5	L 1E 075N	5
5	L 1E 050N	5
5	L 1E 025N	40
5	L 1E 000N	50
5	L 1E 025S	5
5	L 1E 050S	5
5	L 1E 075S	5
5	L 1E 100S	5
5	L 1E 125S	5
5	L 1E 150S	5
5	L 1E 175S	5
5	L 1E 200S	20
5	L 1E 225S	5
5	L 1E 250S	5

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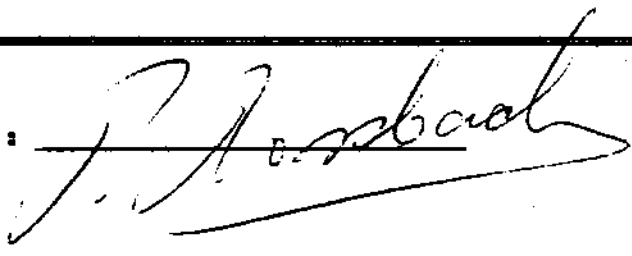
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TO : MPH CONSULTING LTD.
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VANCOUVER, B.C.
PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 3

REF PIX	SAMPLE NAME	PPB Au
S	L 1E 275S	5
S	L 1E 300S	5
S	L 1E 325S	5
S	L 1E 350S	5
S	L 1E 400S	5
S	L 1E 425S	5
S	L 1E 450S	5
S	L 1E 500S	5
S	L 1E 525S	5
S	L 1E 550S	5
S	L 1E 575S	5
S	L 1E 600S	5
S	L 1E 625S	5
S	L 1E 650S	5
S	L 1E 675S	5
S	L 1E 700S	5
S	L 1E 725S	5
S	L OW 050S	5
S	L OW 075S	5
S	L OW 100S	5
S	L OW 125S	10
S	L OW 150S	5
S	L OW 175S	5
S	L OW 200S	5
S	L OW 225S	5
S	L OW 250S	5
S	L OW 275S	5
S	L OW 300S	5
S	L OW 325S	5
S	L OW 350S	5
S	L OW 375S	5
S	L OW 400S	5
S	L OW 425S	5
S	L OW 475S	5
S	L OW 500S	5
S	L OW 525S	5
S	L OW 550S	5
S	L OW 575S	5
S	L OW 600S	70

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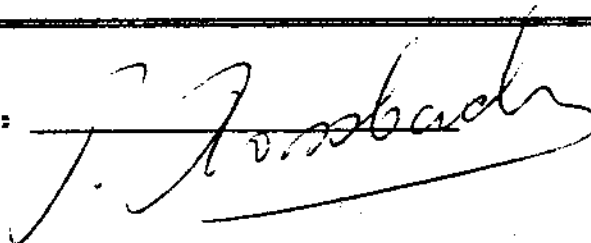
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CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 4

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB AU
0	L 0W 625S	0
0	L 0W 650S	0
0	L 0W 675S	0
0	L 1W 500N	0
0	L 1W 475N	0
0	L 1W 450N	0
0	L 1W 425N	0
0	L 1W 400N	0
0	L 1W 375N	0
0	L 1W 350N	0
0	L 1W 325N	0
0	L 1W 300N	0
0	L 1W 275N	40
0	L 1W 250N	0
0	L 1W 225N	0
0	L 1W 200N	0
0	L 1W 175N	0
0	L 1W 150N	0
0	L 1W 125N	0
0	L 1W 100N	0
0	L 1W 075N	0
0	L 1W 050N	0
0	L 1W 025N	0
0	L 1W 000N	0
0	L 1W 025S	120
0	L 1W 050S	0
0	L 1W 075S	0
0	L 1W 100S	0
0	L 1W 125S	0
0	L 1W 150S	0
0	L 1W 175S	0
0	L 1W 200S	0
0	L 1W 225S	0
0	L 1W 250S	0
0	L 1W 275S	0
0	L 1W 300S	0
0	L 1W 325S	0
0	L 1W 350S	0
0	L 1W 375S	0

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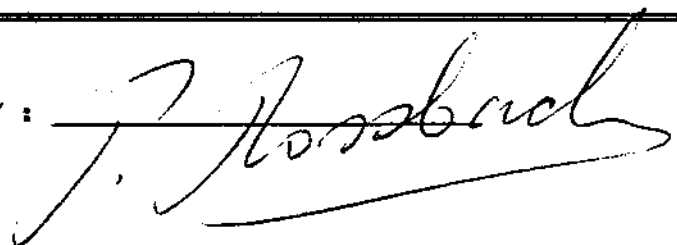
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CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 5

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE FIX	SAMPLE NAME	FPB AU
S	L 1W 400S	5
S	L 1W 425S	5
S	L 1W 450S	5
S	L 1W 475S	5
S	L 1W 500S	5
S	L 1W 525S	5
S	L 1W 550S	5
S	L 1W 575S	5
S	L 1W 600S	5
S	L 1W 625S	5
S	L 1W 650S	5
S	L 1W 675S	5
S	L 1W 700S	5
S	L 6W 550N	5
S	L 6W 525N	5
S	L 6W 500N	5
S	L 6W 475N	5
S	L 6W 450N	10
S	L 6W 425N	5
S	L 6W 400N	5
S	L 6W 375N	5
S	L 6W 350N	5
S	L 6W 325N	5
S	L 6W 300N	5
S	L 6W 275N	5
S	L 6W 250N	5
S	L 6W 225N	30
S	L 6W 200N	5
S	L 6W 175N	5
S	L 6W 150N	5
S	L 6W 125N	5
S	L 6W 100N	5
S	L 6W 075N	5
S	L 6W 050N	5
S	L 6W 025N	5
S	L 6W 000N	5
S	L 6W 025S	5
S	L 6W 050S	5
S	L 6W 075S	5

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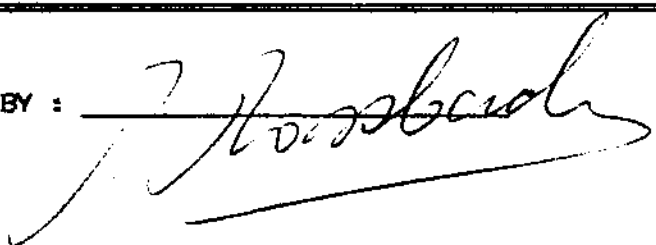
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CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 6

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE FIX	SAMPLE NAME	FPB Au
S	L 6W 100S	S
S	L 6W 125S	S
S	L 6W 150S	S
S	L 6W 175S	S
S	L 6W 200S	S
S	L 6W 225S	S
S	L 6W 250S	S
S	L 6W 275S	S
S	L 6W 300S	S
S	L 6W 325S	S
S	L 6W 350S	S
S	L 6W 375S	S
S	L 6W 400S	S
S	L 6W 425S	S
S	L 6W 450S	S
S	L 6W 475S	S
S	L 6W 500S	S
S	L 6W 525S	S
S	L 6W 550S	S
S	L 6W 575S	S
S	L 6W 600S	S
S	L 6W 625S	S
S	L 6W 650S	S
S	L 6W 675S	S
S	L 6W 700S	S
S	L 6W 725S	S
S	L 6W 750S	S
S	L 6W 775S	S
S	L 6W 795S	S
S	L 7W 475N	S
S	L 7W 450N	S
S	L 7W 425N	S
S	L 7W 400N	S
S	L 7W 375N	S
S	L 7W 350N	S
S	L 7W 325N	S
S	L 7W 300N	S
S	L 7W 275N	S
S	L 7W 250N	S

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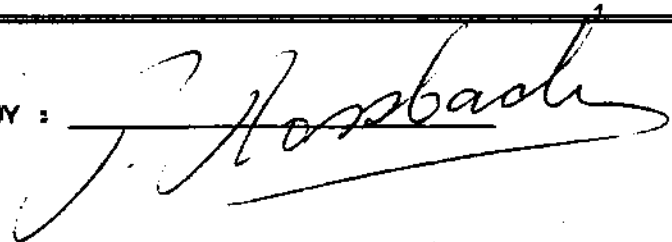
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.
PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 7

PRE FIX	SAMPLE NAME	PPB AL
S	L 7W 225N	S
S	L 7W 200N	S
S	L 7W 175N	S
S	L 7W 150N	S
S	L 7W 125N	S
S	L 7W 100N	S
S	L 7W 075N	S
S	L 7W 050N	S
S	L 7W 025N	S
S	L 7W 000N	S
S	L 7W 025S	S
S	L 7W 050S	S
S	L 7W 075S	S
S	L 7W 100S	S
S	L 7W 125S	S
S	L 7W 150S	S
S	L 7W 175S	S
S	L 7W 200S	S
S	L 7W 225S	S
S	L 7W 250S	S
S	L 7W 275S	S
S	L 7W 300S	S
S	L 7W 325S	S
S	L 7W 350S	S
S	L 7W 375S	S
S	L 7W 400S	S
S	L 7W 425S	S
S	L 7W 450S	S
S	L 7W 475S	S
S	L 7W 500S	S
S	L 7W 525S	S
S	L 7W 550S	S
S	L 7W 575S	S
S	L 7W 600S	S
S	L 7W 625S	S
S	L 7W 650S	S
S	L 7W 675S	S
S	L 7W 700S	S
S	L 7W 725S	S

CERTIFIED BY :



CERTIFICATE OF ANALYSIS

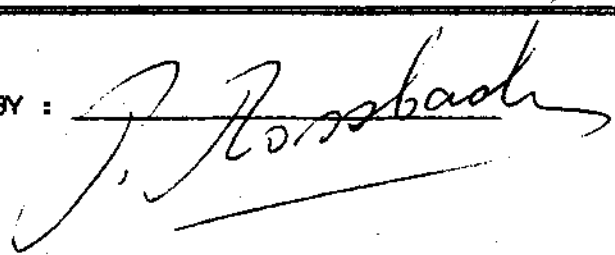
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MPH88222
PAGE # : 8

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE ETX	SAMPLE NAME	PPB Au
S	L 7W 750S	20
S	L BW 425N	5
S	L BW 400N	5
S	L BW 375N	5
S	L BW 350N	5
S	L BW 325N	5
S	L BW 300N	5
S	L BW 275N	5
S	L BW 250N	5
S	L BW 225N	5
S	L BW 200N	5
S	L BW 175N	5
S	L BW 150N	5
S	L BW 125N	5
S	L BW 100N	5
S	L BW 075N	5
S	L BW 050N	5
S	L BW 025N	80
S	L BW 000N	5
S	L BW 025S	5
S	L BW 050S	5
S	L BW 075S	5
S	L BW 100S	5
S	L BW 125S	5
S	L BW 150S	5
S	L BW 175S	5
S	L BW 200S	5
S	L BW 225S	5
S	L BW 250S	5
S	L BW 275S	5
S	L BW 300S	5
S	L BW 325S	5
S	L BW 350S	5
S	L BW 375S	5
S	L BW 400S	5
S	L BW 425S	5
S	L BW 450S	5
S	L BW 475S	5
S	L BW 500S	5

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3W1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

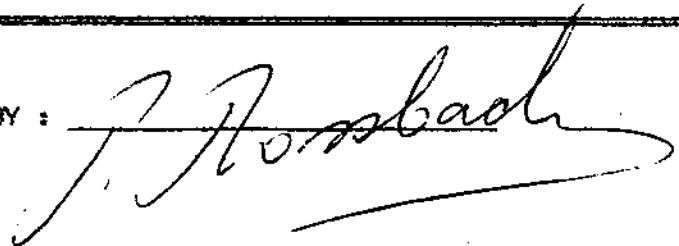
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88222
INVOICE # : 80577
DATE ENTERED : 88-09-02
FILE NAME : MFH88222
PAGE # : 9

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB AU
S	L BW 525S	S
S	L BW 550S	S
S	L BW 575S	S
S	L BW 600S	S
S	L BW 625S	S
S	L BW 650S	S
S	L BW 675S	S
S	L BW 700S	S

CERTIFIED BY :



RECEIVED SEP 1 2 1988

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 1-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS GRAB 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: SOLUTION

DATE RECEIVED: SEP 1 1988 DATE REPORT MAILED: Sept 7/88 ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88222 File # 88-4190 Page 1 V263

Table with columns: SAMPLE#, NO, CO, PD, DE, Ag, NI, CO, MN, Fe, AS, U, AL, TO, Sr, CD, SB, Se, P, Cs, Rb, Cr, Hg, Ba, TI, S, AL, Na, K, W. Rows list various sample numbers and their corresponding element concentrations in PPM.

RECEIVED SEP 1 2 1988

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Se	Tb	Er	Cd	Sb	Bi	V	Cr	P	La	Ce	Hg	Ba	Ti	B	Al	Na	K	W	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
S 118 6+008	1	20	17	31	.2	12	7	1035	3.27	2	5	ND	3	16	1	2	2	175	1.30	.052	5	45	.26	48	.25	5	1.47	.01	.37	2	
S 118 6+153	1	15	5	24	.2	6	3	136	2.70	9	3	ND	3	7	1	3	3	145	.45	.051	4	27	.39	25	.15	5	.63	.01	.07	1	
S 118 6+508	1	9	5	17	.3	4	1	32	.27	3	5	ND	1	12	1	2	2	6	.53	.047	2	7	.04	44	.01	5	.12	.01	.06	1	
S 118 6+758	2	12	11	13	.2	9	3	76	4.00	9	7	ND	2	7	1	3	2	234	.23	.024	5	31	.06	46	.23	2	.38	.01	.04	1	
S 118 7-008	1	10	9	13	.2	6	2	77	2.05	5	6	ND	3	4	1	1	2	100	.26	.022	12	14	.05	12	.05	3	.72	.01	.06	1	
S 118 7+258	4	145	25	150	.1	23	16	2845	19.93	110	5	ND	5	3	1	2	3	93	.13	.166	18	42	.18	72	.33	2	2.42	.01	.07	1	
S 118 8+008	1	25	14	29	.5	9	4	145	6.40	4	5	ND	4	9	1	1	2	3	195	.46	.097	5	57	.38	37	.26	3	2.33	.01	.08	1
S 118 8+258	1	48	19	50	.3	13	5	295	5.08	3	5	ND	4	6	1	3	2	170	.66	.083	7	55	1.02	23	.23	3	4.57	.01	.13	1	
S 118 8+508	1	17	15	43	.1	5	6	275	5.06	6	5	ND	1	9	1	2	2	176	.62	.075	7	46	.56	39	.24	3	2.42	.01	.02	1	
S 118 8+758	2	23	14	34	.2	12	4	173	5.63	6	7	ND	4	6	1	3	2	215	.52	.083	6	49	.32	27	.29	2	2.15	.01	.04	1	
S 118 8+008	2	56	22	45	.1	20	8	320	4.29	9	5	ND	4	5	1	3	2	133	.56	.092	5	76	.81	26	.21	4	7.66	.01	.04	1	
S 118 8+258	2	55	17	50	.2	16	9	236	5.08	12	5	ND	4	8	1	2	2	151	.51	.083	5	60	.61	57	.21	2	4.66	.01	.06	1	
S 118 8+508	1	74	17	54	.2	26	11	455	4.02	16	5	ND	4	6	1	3	2	123	.65	.056	6	64	1.31	31	.24	5	4.99	.01	.06	1	
S 118 8+758	3	59	15	54	.3	20	11	458	5.42	9	7	ND	4	7	1	2	3	140	.63	.055	9	72	.55	29	.22	4	6.16	.01	.03	1	
S 118 8+008	3	50	23	41	.4	14	5	258	3.93	13	6	ND	5	4	1	3	2	189	.38	.117	7	80	.46	25	.25	2	6.63	.01	.06	1	
S 118 8+258	1	34	15	35	.3	12	5	272	5.23	9	7	ND	4	5	1	2	2	159	.49	.059	5	60	.53	27	.23	2	4.21	.01	.03	1	
S 118 8+508	1	50	15	36	.3	12	6	366	5.83	9	5	ND	4	7	1	2	2	162	.47	.043	5	66	.64	26	.23	2	4.34	.01	.07	1	
S 118 8+758	2	13	24	57	.3	10	5	327	10.13	12	5	ND	5	5	1	1	1	171	.27	.140	5	120	.43	31	.27	2	5.91	.01	.06	1	
S 118 8+008	1	35	16	34	.3	8	4	154	7.60	5	5	ND	4	7	1	1	2	239	.46	.104	5	55	.30	30	.30	2	3.82	.01	.02	1	
S 118 8+258	2	54	23	52	.7	15	5	304	5.53	15	5	ND	5	6	1	5	1	166	.56	.140	6	73	.54	28	.22	3	6.49	.01	.05	1	
S 118 8+508	1	26	12	36	.3	7	4	150	4.50	7	5	ND	3	3	1	3	2	179	.46	.063	6	39	.24	27	.24	2	2.50	.01	.03	1	
S 118 8+758	2	58	16	56	.4	20	10	414	4.34	8	5	ND	4	7	1	2	2	147	.66	.071	5	63	.90	38	.23	3	5.55	.01	.04	1	
S 118 8+008	2	56	10	57	.6	22	12	395	4.77	9	6	ND	3	6	1	3	2	134	.66	.062	11	52	.94	27	.21	4	4.46	.01	.05	1	
S 118 8+258	1	30	14	30	.3	9	4	164	6.14	7	5	ND	4	5	1	2	2	238	.37	.037	5	54	.32	44	.24	2	3.91	.01	.03	1	
S 118 8+508	3	42	48	336	.3	17	14	2319	4.18	15	5	ND	2	17	3	1	2	123	.71	.051	12	42	.36	33	.13	2	3.00	.01	.05	1	
S 118 8+758	3	106	63	591	.9	27	47	1442	5.67	37	6	ND	5	21	6	4	2	51	.73	.147	14	92	.37	84	.37	4	6.73	.01	.05	1	
S 118 8+008	3	60	75	391	.9	19	14	387	7.30	51	5	ND	4	9	3	7	2	128	.23	.111	12	79	.55	54	.38	2	4.62	.01	.06	2	
S 118 8+258	1	30	15	60	.3	9	13	413	7.35	13	5	ND	2	10	1	3	2	139	.37	.111	5	54	.34	59	.23	2	3.40	.01	.05	1	
S 118 8+508	1	30	15	51	.3	12	6	238	3.94	12	5	ND	3	11	1	3	2	201	.45	.045	6	38	.24	83	.16	2	1.99	.01	.05	2	
S 118 8+758	1	22	15	30	.4	21	5	175	5.35	10	5	ND	2	7	1	3	2	154	.30	.057	5	92	.41	41	.25	2	2.38	.01	.04	1	
S 118 1+008	1	8	7	14	.1	2	1	26	.07	2	5	ND	1	14	1	3	2	3	.56	.051	2	3	.02	18	.01	5	.07	.01	.05	1	
S 118 1+258	1	8	4	14	.1	2	1	90	.09	4	5	ND	1	30	1	2	2	2	.99	.054	1	4	.06	21	.03	6	.11	.01	.06	1	
S 118 1+508	2	48	33	122	.1	10	11	547	5.51	16	5	ND	1	7	1	1	1	137	.24	.060	6	56	.84	70	.69	2	3.37	.01	.03	1	
S 118 1+758	3	57	23	120	.7	13	13	748	5.03	14	5	ND	2	16	1	2	3	113	.46	.055	3	35	.24	101	.05	2	2.37	.01	.08	1	
S 118 2+008	2	75	34	76	.2	21	19	1276	4.33	22	5	ND	3	10	1	2	2	184	.55	.090	6	40	1.04	52	.14	3	2.91	.01	.07	1	
S 118 2+258	1	23	16	30	.3	7	4	175	4.65	6	5	ND	2	18	1	3	2	172	.54	.068	4	35	.21	63	.21	2	1.74	.01	.03	1	
S 118 2+508	1	33	15	40	.3	11	6	220	4.65	9	5	ND	2	10	1	2	2	146	.44	.075	5	41	.35	42	.19	3	2.50	.01	.04	2	
STD C	19	63	41	132	7.8	73	33	1193	4.04	43	17	9	40	52	13	17	13	61	.49	.036	49	61	.91	179	.07	38	1.95	.06	.16	11	

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Hg	Co	Ni	Fe	As	U	Ku	Pb	Sc	Cd	Sb	Si	V	Cr	P	La	Cr	Mg	Ba	Ti	E	Al	Na	E	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	%	PPM
S L12 2-75S	1	58	12	51	.1	32	11	458	0.06	10	5	ND	2	6	1	2	2	203	.17	.054	5	87	1.54	64	.15	2	3.37	.01	.03	1
S L12 2-10S	1	115	15	105	.1	29	23	2051	1.70	7	5	ND	1	35	1	2	2	155	.34	.037	5	63	.40	155	.11	2	2.55	.01	.01	1
S L12 3-25S	1	17	10	21	.1	6	2	51	.55	2	5	ND	1	21	1	2	2	26	.25	.065	6	15	.11	104	.04	3	.49	.01	.01	1
S L12 3-50S	1	9	6	11	.1	5	1	15	.10	5	5	ND	1	13	1	2	2	4	.35	.077	2	8	.05	10	.01	4	.24	.01	.01	1
S L12 4-00S	1	25	10	24	.1	3	4	65	1.20	4	5	ND	1	16	1	2	2	20	.09	.097	3	10	.10	84	.02	3	.65	.01	.02	1
S L12 4-25S	1	11	3	18	.1	6	1	13	.20	3	5	ND	1	10	1	2	2	4	.29	.060	2	9	.05	22	.01	3	.22	.01	.01	1
S L12 4-50S	1	45	14	75	.1	15	8	430	6.03	17	5	ND	2	6	1	2	2	204	.40	.047	7	69	.34	125	.10	2	2.20	.01	.03	1
S L12 5-00S	1	20	15	84	.1	11	13	2301	7.60	7	5	ND	4	5	1	2	2	205	.50	.053	5	51	.34	85	.07	2	2.19	.01	.05	1
S L12 5-25S	1	35	14	75	.3	21	195	7209	4.07	6	5	ND	1	13	1	2	2	117	.50	.055	5	67	.34	205	.08	2	1.86	.01	.04	1
S L12 5-50S	1	40	10	60	.1	12	5	324	1.93	15	5	ND	2	3	1	2	2	175	.50	.053	5	45	.37	93	.23	2	2.34	.01	.02	1
S L12 5-75S	1	65	27	106	.2	25	15	408	5.15	35	5	ND	3	5	1	2	2	105	.24	.034	14	86	.57	135	.10	2	5.73	.01	.04	1
S L12 6-00S	1	47	24	183	.3	19	15	2640	6.72	19	5	ND	3	19	1	3	2	151	.75	.034	10	50	.25	203	.11	2	2.69	.01	.05	1
S L12 6-25S	2	30	20	77	.1	17	10	744	5.95	16	5	ND	2	9	1	2	2	187	.54	.052	5	62	.41	134	.25	2	2.11	.01	.05	1
S L12 6-50S	2	15	7	20	.1	12	5	90	2.63	20	5	ND	1	3	1	2	2	140	.07	.016	11	11	.03	29	.08	2	.46	.01	.01	1
S L12 6-75S	1	27	15	59	.1	6	4	141	7.35	9	5	ND	2	7	1	2	2	230	.21	.036	5	57	.16	59	.25	2	2.10	.01	.02	1
S L12 7-00S	1	7	3	10	.1	7	1	43	.43	6	5	ND	1	5	1	2	2	22	.13	.030	3	11	.03	26	.01	6	.25	.01	.05	1
S L12 7-25S	2	100	30	100	.5	20	10	754	7.01	19	5	ND	2	4	1	2	2	100	.25	.030	16	47	.56	86	.06	2	3.22	.01	.04	1
S L12 7-50S	1	45	10	77	.1	20	10	313	5.73	7	5	ND	2	10	1	2	2	154	.33	.021	5	87	.70	38	.22	2	5.94	.01	.01	1
S L12 8-75S	1	74	10	55	.1	34	14	415	4.56	10	5	ND	3	9	1	2	2	114	.50	.070	6	74	1.32	37	.20	4	5.55	.01	.02	1
S L12 1-00S	1	59	23	73	.1	14	8	357	6.35	25	5	ND	5	7	1	2	2	163	.37	.080	7	67	.52	35	.15	2	5.30	.01	.02	1
S L12 1-25S	1	91	29	90	.4	31	12	457	6.46	26	5	ND	5	8	1	2	2	136	.45	.075	7	88	1.25	35	.22	3	6.53	.01	.04	1
S L12 1-50S	1	49	13	55	.7	23	11	387	5.72	17	5	ND	4	16	1	2	3	123	.55	.070	5	70	.95	33	.21	5	5.20	.01	.05	1
S L12 1-75S	1	40	25	200	.5	15	21	996	6.64	17	5	ND	3	42	1	2	2	205	1.20	.062	7	56	.58	66	.22	2	5.62	.01	.04	1
S L12 2-00S	1	54	17	60	.5	14	9	303	7.33	15	5	ND	3	10	1	2	2	151	.34	.070	5	55	.67	32	.23	3	5.20	.01	.03	1
S L12 2-25S	1	28	12	35	.1	10	7	373	5.40	5	5	ND	3	8	1	2	2	169	.84	.075	3	47	.54	17	.23	4	2.14	.01	.02	1
S L12 2-50S	1	19	24	50	.4	20	30	4730	3.92	20	5	ND	1	12	1	2	2	101	.37	.110	10	30	.62	241	.05	3	2.25	.01	.07	1
S L12 2-75S	1	47	16	105	.1	10	11	725	9.83	14	5	ND	4	6	1	3	2	184	.20	.166	6	60	.51	43	.27	2	4.67	.01	.04	1
S L12 3-00S	1	20	10	23	.1	6	3	135	2.45	5	5	ND	2	5	1	2	2	153	.48	.033	4	26	.17	23	.22	2	1.13	.01	.02	1
S L12 3-25S	2	70	17	90	.5	17	20	469	5.24	30	5	ND	2	10	1	2	2	154	.31	.076	15	44	.30	137	.04	2	4.13	.01	.04	1
S L12 3-50S	1	45	17	54	.1	18	14	327	3.15	11	5	ND	3	12	1	2	2	89	.53	.103	6	37	.52	119	.06	6	1.58	.01	.05	1
S L12 3-75S	1	75	15	50	.1	21	10	619	6.54	4	5	ND	3	7	1	2	2	193	.36	.063	5	69	.84	80	.21	2	3.12	.01	.03	1
S L12 4-00S	2	49	15	38	.1	15	8	329	6.17	18	5	ND	4	21	1	2	2	196	.76	.040	4	67	.73	50	.24	4	2.47	.01	.06	2
S L12 4-25S	2	60	15	45	.2	28	13	402	3.17	8	5	ND	2	27	1	2	2	78	.53	.035	7	56	.58	134	.08	3	1.58	.01	.04	2
S L12 4-75S	3	64	16	92	.4	17	18	3376	5.25	17	5	ND	1	7	1	2	2	120	.34	.060	10	41	.42	133	.05	2	2.17	.01	.03	1
S L12 5-00S	1	35	12	23	.1	11	7	819	2.96	6	5	ND	1	13	1	2	2	97	.40	.066	4	31	.21	60	.09	3	.91	.01	.04	1
S L12 5-25S	1	26	24	57	.5	9	16	6157	1.84	4	5	ND	3	13	1	2	2	48	.65	.110	3	17	.20	154	.05	6	.77	.01	.12	1
S L12 5-50S	1	20	11	84	.1	9	4	166	3.12	13	5	ND	1	4	1	2	2	140	.17	.045	10	17	.08	66	.03	2	.99	.01	.05	1
S L12 5-75S	2	14	14	57	.1	7	2	127	1.22	10	5	ND	1	9	1	2	2	45	.35	.055	3	11	.07	51	.03	4	.36	.01	.06	1
S L12 6-00S	1	10	10	31	.1	4	3	264	4.32	20	5	ND	1	3	1	2	2	55	.05	.035	14	12	.06	84	.03	2	1.78	.01	.05	1
STD C	15	51	42	123	7.4	70	31	1120	4.05	43	21	8	40	52	19	15	60	50	.035	41	50	.93	173	.06	37	2.00	.06	.17	13	

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Mn	Co	Ni	Fe	As	U	Ku	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	%	PPM
S LW 5-255	1	54	16	61	.4	13	6	473	7.97	13	5	ND	4	5	1	2	2	136	.32	.007	6	59	.46	54	.11	2	3.15	.01	.06	1
S LW 5-505	1	8	7	14	.1	3	1	58	.71	2	5	ND	1	5	1	2	4	41	.21	.019	3	9	.04	61	.05	2	.56	.01	.01	1
S LW 5-755	1	46	18	60	.2	15	7	272	6.03	12	5	ND	4	7	1	2	4	123	.35	.040	7	62	.66	67	.14	2	4.49	.01	.03	1
S LW 5-900	1	38	11	37	.1	13	6	259	3.51	3	5	ND	4	12	1	2	2	137	.42	.081	5	64	.49	19	.20	2	3.47	.01	.02	2
S LW 5-150	1	36	10	45	.1	14	10	396	4.56	4	5	ND	3	13	1	2	2	134	.54	.059	4	50	.73	27	.22	2	2.83	.01	.02	2
S LW 4-500	1	52	11	50	.1	20	12	496	5.13	9	5	ND	3	14	1	2	6	118	.53	.093	5	65	.97	25	.23	2	4.20	.01	.03	2
S LW 4-255	1	14	12	36	.2	8	5	223	3.31	2	5	ND	4	16	1	3	1	202	.50	.059	4	49	.37	16	.06	2	1.56	.01	.01	1
S LW 4-000	1	32	13	52	.2	13	3	1413	4.49	5	5	ND	3	21	1	2	3	124	.69	.116	6	43	.53	61	.13	2	2.67	.01	.04	1
S LW 3-755	2	69	21	52	.3	9	7	265	6.16	5	5	ND	2	6	1	2	2	143	.12	.054	11	72	.32	19	.20	2	9.21	.02	.02	1
S LW 3-500	1	27	10	35	.2	5	6	150	4.83	4	5	ND	3	19	2	2	2	159	.39	.124	5	35	.21	20	.21	2	2.55	.02	.02	2
S LW 2-255	2	29	11	37	.1	10	6	231	4.07	7	5	ND	3	11	1	2	3	118	.46	.065	5	45	.47	28	.19	2	2.65	.01	.02	2
S LW 2-000	1	49	11	41	.1	15	3	401	6.45	8	5	ND	4	9	1	2	2	170	.48	.141	5	75	.78	25	.25	2	4.95	.01	.03	1
S LW 2-755	1	42	12	65	.1	17	11	359	5.25	7	6	ND	4	9	1	2	2	126	.36	.110	6	63	.62	34	.15	3	6.11	.01	.02	1
S LW 2-500	1	12	12	40	.1	10	14	566	6.83	5	5	ND	4	16	1	2	2	215	.53	.093	6	59	.36	40	.17	2	3.41	.01	.02	1
S LW 2-150	1	25	11	34	.1	11	5	245	4.65	7	5	ND	3	15	1	3	2	176	.37	.057	4	49	.57	35	.24	2	2.65	.02	.02	2
S LW 1-000	1	33	14	55	.2	12	12	432	5.27	10	5	ND	4	12	1	2	2	179	.30	.053	6	42	.44	51	.24	2	3.10	.01	.04	1
S LW 1-755	1	15	14	28	.1	10	6	220	3.41	6	5	ND	3	13	1	2	2	164	.46	.045	4	37	.48	26	.23	2	1.83	.02	.04	1
S LW 1-505	1	45	16	65	.3	13	13	421	5.91	12	5	ND	3	12	1	2	2	174	.45	.052	7	64	.55	48	.22	2	3.43	.01	.04	1
S LW 1-255	1	32	15	36	.3	16	13	182	6.66	8	5	ND	4	10	1	2	3	293	.46	.055	7	68	.74	41	.23	2	4.34	.01	.02	1
S LW 1-000	1	29	15	60	.1	10	10	360	6.25	3	5	ND	4	11	1	2	2	155	.42	.064	7	36	.49	54	.15	2	3.39	.01	.02	1
S LW 0-755	1	74	15	109	.3	19	17	520	6.54	25	5	ND	3	11	1	2	2	153	.56	.052	12	42	.48	102	.06	2	3.72	.01	.04	1
S LW 0-500	1	13	11	44	.1	9	8	429	3.19	3	5	ND	3	16	1	2	2	92	.52	.043	4	31	.34	52	.14	3	1.56	.01	.02	1
S LW 0-255	1	32	17	112	.8	16	143	5473	4.52	12	5	ND	3	25	2	2	2	125	.85	.092	12	37	.46	142	.18	2	2.40	.01	.03	1
S LW 0-000	1	44	27	94	.2	20	6	236	5.39	23	5	ND	3	11	1	2	3	152	.35	.066	7	44	.27	90	.11	2	2.35	.01	.03	1
S LW 6-255	4	338	214	1076	2.7	51	56	3724	6.26	177	5	ND	7	13	15	3	2	77	.30	.150	18	45	.56	165	.02	2	2.63	.01	.03	1
S LW 0-505	1	20	12	40	.2	9	5	177	5.22	6	5	ND	2	9	1	2	2	167	.23	.065	4	42	.29	38	.22	2	2.17	.01	.01	1
S LW 0-755	2	88	18	73	.3	21	11	370	7.71	54	5	ND	4	9	1	2	2	193	.34	.059	6	63	.64	80	.11	2	4.13	.01	.04	1
S LW 1-005	1	42	13	59	.3	13	3	297	4.47	24	5	ND	3	13	1	2	3	141	.45	.044	9	51	.38	70	.13	2	3.91	.01	.01	1
S LW 1-255	1	25	12	35	.4	8	19	692	2.53	7	5	ND	2	65	1	2	2	73	1.56	.045	6	25	.19	76	.10	4	1.42	.01	.01	1
S LW 1-505	1	36	16	74	.4	14	10	252	7.86	22	5	ND	4	36	1	2	2	273	.92	.036	6	56	.59	104	.24	2	3.50	.01	.03	1
S LW 1-755	1	32	15	69	.2	15	10	239	6.92	19	5	ND	3	34	1	3	2	243	.85	.032	7	59	.61	95	.21	2	3.35	.01	.02	1
S LW 2-005	1	16	9	24	.1	8	4	109	3.15	5	5	ND	2	32	1	2	2	238	.87	.025	3	27	.17	65	.26	2	1.03	.01	.01	1
S LW 2-255	1	69	29	131	.6	21	17	893	6.14	40	5	ND	3	9	1	2	2	134	.37	.064	12	43	.81	134	.05	2	3.06	.01	.05	1
S LW 2-505	1	50	20	55	.4	16	11	313	7.15	10	5	ND	4	7	1	2	2	207	.31	.047	10	55	.41	78	.15	2	3.25	.01	.02	1
S LW 2-755	2	61	27	90	.4	19	9	333	7.81	41	5	ND	3	5	1	3	2	162	.18	.091	9	40	.15	59	.04	2	2.89	.01	.03	1
S LW 3-005	1	58	12	53	.1	18	10	402	7.45	35	5	ND	4	6	1	2	2	201	.31	.133	6	52	.46	74	.09	2	2.87	.01	.04	2
S LW 3-255	1	51	14	62	.3	16	14	886	7.75	14	5	ND	4	8	1	2	2	190	.33	.159	5	66	.57	100	.10	2	3.79	.01	.04	1
S LW 3-505	1	35	11	33	.2	10	6	192	3.75	17	5	ND	2	6	1	2	2	135	.29	.057	5	29	.20	56	.07	3	1.73	.01	.04	1
S LW 3-755	1	102	20	70	.5	21	20	395	7.16	21	5	ND	4	13	1	2	3	189	.59	.097	5	45	.94	154	.16	2	3.34	.01	.06	1
STD C	15	61	42	122	7.2	72	33	1025	4.04	13	20	8	39	52	19	18	20	60	.48	.092	11	60	.50	174	.06	36	1.93	.06	.13	12

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	NI PPM	CO PPM	NO PPM	Fe %	As PPM	S PPM	AL PPM	Th PPM	Sr PPM	CD PPM	SD PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
S L1W 4-00S	1	85	20	53	.4	20	37	1685	3.85	22	5	ND	2	19	1	2	2	95	.40	.098	11	29	.54	167	.06	2	1.85	.01	.09	1
S L1W 4-15S	1	62	17	68	.5	21	47	2540	6.02	9	5	ND	3	22	1	1	1	207	.30	.061	8	52	1.15	155	.03	2	3.10	.01	.06	1
S L1W 4-30S	1	57	17	52	.3	16	14	777	6.98	9	5	ND	3	10	1	2	2	244	.74	.070	5	63	.78	63	.02	2	2.97	.01	.05	1
S L1W 4-75S	1	43	15	52	.3	21	36	2732	5.15	7	5	ND	3	15	1	2	2	191	.53	.071	11	50	.82	179	.25	2	2.34	.01	.09	1
S L1W 5-00S	1	26	16	27	.1	8	5	451	3.42	4	5	ND	3	6	1	2	2	207	1.25	.062	4	36	.29	43	.09	2	1.58	.01	.06	1
S L1W 5-25S	5	76	17	123	1.1	23	18	2633	5.63	30	5	ND	2	7	1	2	2	122	.30	.097	16	37	.25	183	.02	2	2.54	.01	.09	1
S L1W 5-50S	11	93	14	59	.5	21	7	395	8.03	56	5	ND	3	2	1	4	2	115	.09	.122	10	33	.16	45	.01	2	1.95	.01	.10	1
S L1W 5-75S	5	77	21	115	.7	24	7	327	5.62	54	5	ND	1	2	1	3	2	102	.03	.075	13	22	.06	54	.01	2	1.35	.01	.07	1
S L1W 5-90S	1	55	14	79	.4	25	9	504	5.12	24	5	ND	4	7	1	2	2	154	.50	.122	5	76	.75	59	.13	2	3.37	.01	.06	1
S L1W 6-30S	1	33	14	67	.5	15	10	631	7.70	13	5	ND	4	5	1	1	3	196	.55	.110	9	66	.26	77	.13	2	3.13	.01	.10	1
S L1W 6-50S	1	29	5	29	.2	8	4	131	3.94	23	5	ND	1	5	1	2	4	126	.99	.039	15	17	.04	36	.04	2	.77	.01	.06	1
S L1W 6-75S	2	36	14	39	.3	14	6	214	4.73	22	5	ND	3	7	1	2	2	134	.32	.031	10	41	.41	60	.10	2	2.39	.01	.08	1
S L1W 7-00S	1	15	7	21	.1	7	2	71	1.12	10	5	ND	1	6	1	2	2	54	.21	.033	11	7	.04	85	.04	2	.56	.01	.07	1
S L1W 8-30W	1	76	15	112	.3	40	24	1235	6.09	12	5	ND	3	25	1	3	1	147	.69	.039	8	106	2.23	66	.25	2	4.25	.01	.08	1
S L1W 8-50W	1	66	14	114	.2	35	22	1547	4.55	8	5	SC	2	50	1	2	2	131	.87	.036	9	84	1.62	71	.16	2	3.43	.01	.06	1
S L6W 5-00N	1	198	13	113	.2	48	27	1341	5.15	11	5	ND	2	35	1	3	2	143	.55	.074	10	119	2.55	33	.24	2	4.35	.01	.10	2
S L6W 4-75N	1	56	15	105	.4	31	21	750	5.25	5	5	ND	5	51	1	2	3	152	.60	.056	9	84	1.47	75	.27	2	3.67	.01	.09	1
S L6W 4-50N	1	128	17	145	.4	41	22	1123	5.25	21	5	ND	2	24	1	2	3	134	.75	.035	10	79	2.34	82	.23	2	4.22	.01	.05	1
S L6W 4-25N	1	35	14	102	.1	22	10	529	5.15	8	5	ND	5	26	1	2	2	174	.71	.045	5	83	.95	68	.12	2	2.84	.01	.09	1
S L6W 4-00N	1	56	15	264	.6	25	18	764	5.78	5	5	ND	4	25	2	2	2	138	.63	.059	9	78	1.01	69	.21	2	5.74	.01	.08	1
S L6W 3-75N	1	29	16	109	.2	13	9	719	5.09	6	5	ND	1	21	1	2	2	144	.40	.049	7	46	.57	73	.16	2	2.14	.01	.07	1
S L6W 3-50N	1	37	13	93	.4	17	13	631	5.32	8	5	ND	3	25	1	2	2	152	.65	.053	5	61	.71	70	.21	2	2.79	.01	.06	1
S L6W 3-25N	1	12	11	44	.1	8	5	178	3.66	5	5	ND	1	13	1	2	2	182	.25	.042	4	32	.21	19	.25	2	1.41	.01	.04	1
S L6W 3-00N	1	65	15	190	.2	13	12	394	6.47	4	5	ND	2	13	1	2	2	161	.26	.074	5	72	.79	30	.25	2	3.63	.01	.03	1
S L6W 2-75N	1	46	21	151	.3	13	9	471	6.57	10	5	ND	2	10	1	2	2	158	.51	.070	6	57	.51	42	.17	2	2.77	.01	.02	1
S L6W 2-50N	1	32	12	62	.3	12	7	283	6.03	5	5	ND	2	14	1	2	2	193	.29	.051	8	48	.36	31	.19	2	2.50	.01	.03	1
S L6W 2-25N	1	26	9	31	.1	9	5	193	4.96	4	5	ND	1	14	1	2	2	231	.27	.070	7	38	.20	35	.12	2	1.70	.01	.03	1
S L6W 2-00N	1	55	15	69	.2	15	13	1029	5.55	3	5	ND	1	12	1	2	2	167	.26	.106	8	62	.49	32	.14	2	3.40	.01	.02	1
S L6W 1-75N	1	50	13	55	.2	13	17	675	6.67	6	5	ND	1	14	1	2	2	159	.31	.089	7	58	.53	34	.24	2	3.29	.01	.01	1
S L6W 1-50N	1	53	12	47	.5	15	10	544	6.03	6	5	ND	2	12	1	2	2	173	.21	.067	7	41	.45	50	.13	2	2.66	.01	.05	2
S L6W 1-25N	1	27	10	23	.1	5	4	115	6.11	7	5	ND	1	10	1	2	3	215	.18	.028	4	33	.20	25	.23	2	1.66	.01	.01	1
S L6W 1-00N	1	47	11	33	.1	9	7	359	5.39	2	5	ND	1	9	1	2	2	155	.19	.049	5	26	.49	57	.13	2	2.48	.01	.01	1
S L6W 0-75N	3	45	10	23	.1	9	4	162	6.43	2	5	ND	1	6	1	2	2	191	.14	.053	3	31	.15	18	.25	2	1.50	.01	.01	1
S L6W 0-50N	1	43	22	60	.4	14	59	3363	4.45	10	5	ND	1	9	1	2	2	105	.13	.057	10	36	.31	144	.10	2	2.34	.01	.03	1
S L6W 0-25N	1	34	17	41	.1	13	24	1544	2.96	6	5	ND	1	16	1	2	2	93	.36	.050	5	32	.22	53	.13	2	1.19	.01	.01	2
S L6W 0-00N	1	12	8	14	.1	5	4	177	1.91	12	5	ND	1	10	1	2	2	121	.17	.025	6	15	.06	25	.15	2	.72	.01	.01	1
S L6W 0-25S	1	30	13	72	.1	15	5	1218	5.30	12	5	ND	1	8	1	2	3	135	.25	.048	8	50	.26	109	.05	2	2.77	.01	.04	1
S L6W 0-50S	1	33	15	49	.1	12	7	536	5.45	28	5	ND	1	6	1	2	3	123	.18	.032	7	47	.36	52	.06	2	3.24	.01	.03	1
S L6W 0-75S	1	38	12	35	.2	10	7	516	4.84	15	5	ND	1	7	1	2	3	126	.19	.057	7	30	.34	83	.01	2	2.45	.01	.04	2
STD C	20	62	39	131	7.7	71	30	1655	3.33	44	15	?	35	53	20	17	25	53	.43	.190	46	61	.95	180	.07	22	1.34	.06	.17	12

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	M
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
S LGW 1+00S	2	30	19	52	.6	17	8	312	7.55	43	7	ND	2	6	2	2	2	142	.19	.069	7	51	.40	38	.05	4	3.26	.01	.03	1
S LGW 1+25S	1	54	17	74	.4	19	9	665	6.63	46	6	ND	2	5	2	2	2	111	.14	.100	8	32	.31	50	.03	5	2.93	.01	.03	1
S LGW 1+50S	3	66	10	88	.5	33	11	282	7.29	116	5	ND	2	2	2	3	2	117	.04	.086	6	88	.53	60	.01	2	2.61	.01	.03	1
S LGW 1+75S	5	48	22	15	.2	12	6	150	8.56	11	5	ND	1	4	1	2	2	305	.13	.139	3	53	.27	19	.34	2	1.77	.01	.03	2
S LGW 2+00S	1	30	11	30	.2	8	4	147	2.46	3	5	ND	1	8	1	2	2	97	.31	.055	4	22	.18	56	.12	2	1.06	.01	.04	1
S LGW 2+25S	1	15	17	22	.2	9	5	148	4.20	7	5	ND	1	9	1	2	2	184	.42	.049	4	35	.34	20	.20	4	1.43	.01	.02	1
S LGW 2+50S	2	22	18	25	.1	8	4	225	8.80	5	5	ND	1	5	1	2	2	254	.33	.116	2	57	.29	19	.32	2	1.75	.01	.02	1
S LGW 2+75S	1	25	10	37	.7	10	5	182	4.48	12	5	ND	1	3	1	2	2	189	.10	.074	4	32	.31	27	.08	3	1.90	.01	.03	1
S LGW 3+00S	2	23	19	30	.3	12	6	453	6.84	3	5	ND	2	1	1	2	4	281	.33	.094	3	46	.56	25	.42	2	2.03	.01	.03	1
S LGW 3+25S	2	34	15	50	.4	13	7	389	10.04	17	5	ND	3	4	2	4	3	235	.39	.213	3	61	.68	26	.47	2	2.92	.01	.04	1
S LGW 3+50S	2	39	20	67	.4	14	10	905	6.62	9	5	ND	2	2	1	2	4	206	.13	.171	4	53	.61	32	.34	2	2.95	.01	.03	1
S LGW 3+75S	2	49	14	36	.4	8	5	323	4.86	5	5	ND	1	8	1	2	2	162	.23	.066	4	21	.41	73	.13	3	2.48	.01	.04	2
S LGW 4+00S	2	29	14	47	.6	10	3	154	5.45	15	5	ND	1	6	1	2	2	151	.14	.080	3	23	.17	39	.15	2	1.33	.01	.03	1
S LGW 4+25S	3	62	18	36	.3	9	13	586	10.23	5	5	ND	4	3	3	2	2	156	.20	.280	5	61	.34	29	.18	3	5.31	.01	.03	1
S LGW 4+50S	2	42	21	41	.2	12	7	296	6.80	8	5	ND	2	4	1	2	3	155	.19	.204	5	45	.56	26	.22	2	3.27	.01	.03	1
S LGW 4+75S	2	51	21	43	.2	15	6	280	7.87	10	5	ND	2	4	1	2	4	191	.32	.100	3	72	.74	25	.31	2	2.84	.01	.02	1
S LGW 5+00S	2	37	15	40	.3	14	7	424	6.56	6	5	ND	2	5	1	2	2	208	.41	.128	4	59	.75	29	.30	3	2.64	.01	.03	1
S LGW 5+25S	2	45	28	49	.3	12	7	261	7.41	4	5	ND	3	3	2	2	2	221	.21	.142	4	51	.63	29	.32	3	3.33	.01	.03	1
S LGW 5+50S	2	33	17	38	.2	11	6	253	5.29	3	5	ND	2	5	1	2	4	177	.30	.111	4	41	.54	50	.21	6	2.38	.01	.03	1
S LGW 5+75S	3	51	25	134	.7	21	20	1036	4.65	7	5	ND	2	8	2	2	2	107	.35	.075	9	43	.83	153	.17	3	3.01	.01	.04	1
S LGW 6+00S	7	63	19	73	.5	23	8	252	8.44	62	5	ND	3	2	4	2	3	151	.07	.153	19	37	.09	66	.02	5	1.57	.01	.04	1
S LGW 6+25S	7	63	24	180	.5	22	17	7068	3.11	11	5	ND	1	28	3	2	2	46	1.10	.142	23	34	.20	266	.01	3	3.64	.01	.03	1
S LGW 6+50S	1	6	2	19	.1	2	1	137	.68	2	5	ND	1	8	1	2	2	37	.26	.028	5	6	.06	45	.01	3	.62	.01	.03	1
S LGW 6+75S	4	9	7	25	.3	5	3	123	1.48	6	5	ND	2	5	2	2	2	66	.17	.016	13	4	.03	35	.02	10	.68	.01	.02	1
S LGW 7+00S	1	9	17	34	.3	4	1	358	.25	2	5	ND	2	13	2	2	2	5	.57	.068	2	5	.07	49	.01	12	.28	.01	.07	1
S LGW 7+25S	2	14	11	31	.3	6	4	164	3.12	14	8	ND	2	4	3	2	2	95	.11	.037	11	12	.05	50	.04	7	.91	.01	.03	1
S LGW 7+50S	3	58	20	102	.9	25	12	457	5.21	14	5	ND	3	9	3	2	3	117	.45	.058	12	52	.90	109	.14	7	3.48	.01	.03	1
S LGW 7+75S	1	15	4	30	.3	6	2	98	2.33	8	5	ND	2	11	1	2	2	86	.13	.066	4	14	.09	33	.10	9	.69	.01	.03	1
S LGW 7+95S	3	98	18	107	.4	28	13	659	5.78	21	5	ND	3	5	2	2	2	125	.35	.088	7	66	1.23	58	.15	5	3.87	.01	.04	1
S L7W 4+75N	2	84	9	97	.5	36	18	489	5.24	6	5	ND	2	12	2	2	2	114	.38	.093	8	98	1.67	50	.18	4	4.48	.01	.05	1
S L7W 4+50N	1	27	13	44	.3	11	9	108	1.43	2	5	ND	1	29	2	2	2	44	.72	.088	10	17	.18	132	.05	4	1.64	.01	.05	1
S L7W 4+25N	2	117	18	106	.1	35	22	1001	5.14	8	5	ND	3	16	2	2	2	109	.55	.091	9	69	2.05	68	.18	5	3.72	.01	.06	1
S L7W 4+00N	2	42	11	79	.3	13	12	396	5.96	4	5	ND	4	7	3	2	2	149	.20	.043	9	52	.57	45	.14	7	3.28	.01	.03	1
S L7W 3+75N	2	31	13	41	.8	12	8	223	7.80	2	6	ND	1	8	3	2	5	179	.25	.119	5	83	.70	22	.24	4	3.47	.01	.03	1
S L7W 3+50N	2	195	17	108	.1	29	19	860	5.67	13	5	ND	2	10	1	2	2	118	.36	.116	8	67	1.62	46	.17	2	3.79	.01	.05	1
S L7W 3+25N	2	55	13	61	.6	21	14	483	5.14	8	5	ND	2	11	1	2	2	129	.35	.084	7	76	1.15	34	.19	2	3.45	.01	.03	1
S L7W 3+00N	1	22	15	46	.1	7	8	759	2.76	2	5	ND	1	31	1	2	2	88	1.15	.049	4	26	.25	60	.09	4	1.29	.01	.03	1
S L7W 2+75N	2	108	16	123	.1	29	13	492	6.20	15	5	ND	3	6	2	2	3	115	.23	.117	9	78	1.38	51	.19	3	5.24	.01	.05	1
S L7W 2+50N	1	28	13	47	.2	13	12	531	4.58	2	5	ND	1	11	1	2	2	144	.28	.065	6	47	.57	58	.15	2	2.16	.01	.03	1
STD C	19	62	17	131	7.1	72	31	1025	3.93	40	19	8	39	50	19	16	19	61	.51	.090	39	60	.96	178	.07	34	2.06	.06	.16	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mi PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Tb 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 %	H PPM
S L7M 2+25M	1	36	22	49	.5	14	9	549	6.68	5	5	ND	2	9	4	2	2	151	.26	.091	5	60	.67	39	.21	5	2.66	.01	.03	1
S L7M 2+00M	1	9	9	56	.1	6	6	17	.29	3	5	ND	1	31	1	2	2	6	.38	.080	2	5	.07	116	.01	2	.38	.01	.01	1
S L7M 1+75M	1	4	13	41	.1	2	1	418	.05	3	5	ND	1	6	1	2	2	1	.42	.070	2	2	.04	7	.01	3	.13	.01	.05	1
S L7M 1+50M	1	26	13	48	.3	8	7	522	2.90	3	5	ND	1	9	2	2	2	94	.21	.062	4	28	.24	35	.12	3	1.02	.01	.03	1
S L7M 1+25M	1	59	13	52	.4	20	10	512	5.47	6	5	ND	2	8	3	2	2	105	.21	.046	6	58	1.01	34	.15	5	2.78	.01	.03	1
S L7M 1+00M	1	75	18	71	.6	16	14	3536	.96	6	5	ND	2	31	2	2	2	22	.92	.104	20	14	.30	130	.01	4	2.60	.01	.04	1
S L7M 0+75M	1	39	11	45	.5	11	8	576	7.07	7	5	ND	2	7	4	2	2	176	.23	.095	7	43	.71	36	.14	5	2.52	.01	.07	1
S L7M 0+50M	1	51	17	48	.6	6	7	227	6.95	13	5	ND	2	7	4	2	2	183	.16	.076	7	28	.15	35	.13	4	2.56	.01	.03	1
S L7M 0+25M	2	73	24	80	.8	12	13	334	7.66	22	6	ND	3	5	4	2	2	150	.13	.076	10	41	.38	28	.11	5	4.40	.01	.03	1
S L7M 0+00M	1	39	18	48	.6	6	10	500	4.74	16	5	ND	2	7	3	2	2	126	.16	.056	13	21	.23	69	.05	3	2.55	.01	.03	1
S L7M 0+25S	1	52	23	84	.6	12	35	2104	5.86	10	5	ND	3	8	3	2	2	114	.24	.077	9	44	.48	77	.11	4	3.32	.01	.04	1
S L7M 0+50S	1	53	72	78	.5	11	97	19581	4.40	11	5	ND	4	8	3	2	2	92	.18	.148	8	27	.17	117	.04	3	1.70	.01	.04	2
S L7M 0+75S	1	28	16	63	.5	16	12	582	6.70	7	5	ND	3	11	4	2	2	146	.35	.060	7	55	.94	65	.22	5	2.74	.01	.03	1
S L7M 1+00S	1	30	18	147	.4	16	9	351	7.30	20	5	ND	3	7	4	2	3	151	.25	.039	7	59	.81	35	.13	5	3.48	.01	.02	1
S L7M 1+25S	1	21	16	61	.6	7	28	2924	4.18	10	5	ND	3	6	2	2	2	87	.35	.064	7	16	.24	118	.07	3	2.41	.01	.04	1
S L7M 1+50S	1	28	18	83	.7	11	12	13296	6.56	12	5	ND	5	10	4	2	2	134	.38	.128	7	39	.41	119	.21	4	2.56	.01	.05	2
S L7M 1+75S	1	19	12	34	.5	6	5	425	3.80	13	5	ND	2	6	2	2	2	127	.24	.053	8	19	.11	60	.08	3	1.28	.01	.03	1
S L7M 2+00S	1	60	20	104	.8	19	11	538	7.91	17	5	ND	2	4	4	2	2	140	.07	.172	10	69	.35	81	.03	6	2.83	.01	.02	1
S L7M 2+25S	1	69	16	93	1.4	16	15	619	7.28	9	5	ND	2	4	4	2	2	158	.15	.087	6	53	.76	107	.13	5	4.78	.01	.02	1
S L7M 2+50S	1	25	13	33	.5	12	6	233	4.65	5	5	ND	3	8	2	2	2	213	.40	.035	5	43	.60	33	.24	4	2.46	.01	.03	1
S L7M 2+75S	1	46	20	62	.5	18	10	512	8.05	8	5	ND	4	8	4	2	2	185	.56	.099	7	64	.94	31	.31	6	3.72	.01	.03	1
S L7M 3+00S	1	55	14	49	.4	24	11	467	6.68	7	5	ND	3	8	4	2	2	129	.47	.069	6	71	1.55	20	.28	6	3.89	.01	.01	1
S L7M 3+25S	1	32	14	40	.5	11	7	383	5.81	5	5	ND	3	6	3	2	2	193	.33	.065	6	35	.22	53	.21	4	1.88	.01	.01	1
S L7M 3+50S	1	22	14	34	.4	10	7	686	5.46	4	5	ND	3	12	3	2	2	192	.44	.076	5	34	.41	430	.27	6	1.68	.01	.02	2
S L7M 3+75S	1	58	16	52	.6	21	17	835	6.26	6	5	ND	4	8	3	2	2	132	.43	.088	8	63	1.22	40	.25	6	4.07	.01	.03	2
S L7M 4+00S	1	54	22	73	.8	20	12	482	7.38	15	5	ND	4	7	4	2	2	154	.36	.092	8	65	1.02	28	.25	6	4.85	.01	.03	1
S L7M 4+25S	1	30	17	42	.9	11	5	186	5.10	30	5	ND	3	7	3	2	3	78	.13	.088	15	20	.19	71	.01	4	1.54	.01	.04	1
S L7M 4+50S	1	49	17	64	.6	20	13	643	7.75	14	5	ND	3	8	4	2	2	167	.36	.127	8	54	1.06	40	.27	6	3.48	.01	.03	1
S L7M 4+75S	2	60	26	77	.7	16	8	378	8.12	20	10	ND	5	6	5	3	2	177	.22	.222	9	73	.70	34	.26	6	6.80	.01	.03	1
S L7M 5+00S	1	96	18	78	.6	19	12	453	7.65	11	6	ND	4	5	4	2	2	167	.30	.187	8	54	.93	46	.28	6	4.62	.01	.03	1
S L7M 5+25S	1	67	19	51	.6	13	7	298	6.00	5	5	ND	4	4	3	2	2	141	.21	.117	8	55	.67	38	.28	5	5.40	.01	.02	3
S L7M 5+50S	1	55	19	53	.7	17	10	533	6.75	12	8	ND	5	7	4	2	2	183	.48	.109	8	53	.92	58	.28	6	3.17	.01	.04	2
S L7M 5+75S	1	44	20	45	.7	16	8	336	7.72	10	5	ND	4	7	4	2	2	153	.37	.113	8	62	1.02	33	.32	6	3.53	.01	.02	3
S L7M 6+00S	1	54	22	50	.7	13	7	286	8.58	9	7	ND	4	5	5	2	2	212	.38	.144	8	65	.72	31	.33	6	4.30	.01	.03	2
S L7M 6+25S	1	80	18	55	.6	21	10	414	5.93	9	5	ND	3	5	3	2	2	156	.44	.090	10	71	1.25	37	.25	5	5.09	.01	.01	3
S L7M 6+50S	2	82	20	175	1.8	37	12	449	6.11	24	5	ND	3	15	4	2	2	110	.67	.069	11	54	1.27	112	.13	5	4.29	.01	.03	1
S L7M 6+75S	1	66	22	87	1.1	21	8	373	7.27	27	5	ND	3	6	4	2	2	136	.26	.089	12	55	.81	48	.17	6	4.09	.01	.03	1
S L7M 7+00S	4	34	14	139	.9	15	8	359	5.10	15	5	ND	4	19	3	2	2	81	.68	.068	11	35	.56	103	.08	3	2.61	.01	.05	1
S L7M 7+25S	2	81	32	152	.6	38	16	720	6.60	31	5	ND	3	10	4	2	2	96	.33	.054	12	52	1.33	118	.08	5	3.88	.01	.03	2
STD C	21	60	45	132	7.5	70	30	1114	4.14	42	22	8	40	51	19	17	19	59	.48	.084	39	59	.96	180	.06	32	1.93	.06	.14	13

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Na PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Tb PPM	Sc PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Ce PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Mg %	K %	W PPM
S LBW 7+50S	2	125	57	207	.8	43	26	3868	7.01	51	6	ND	5	9	4	2	4	98	.28	.064	20	53	.99	148	.07	4	3.87	.01	.04	1
S LBW 4+25N	1	71	19	72	.6	24	18	2075	4.45	12	5	ND	3	20	3	2	2	113	.71	.058	10	77	1.30	52	.16	4	3.42	.01	.04	1
S LBW 4+00W	1	61	37	84	.4	28	17	1327	4.80	12	5	ND	4	21	3	2	2	119	.67	.058	9	83	1.57	53	.18	4	3.30	.01	.03	1
S LBW 3+75N	1	63	14	88	.6	10	17	1364	4.40	13	5	ND	3	18	3	2	3	104	.62	.054	9	83	1.50	47	.15	4	3.56	.01	.03	2
S LBW 3+50W	1	28	15	55	.4	15	7	270	6.35	12	5	ND	3	13	4	2	2	170	.32	.071	6	78	.81	33	.24	4	2.93	.01	.03	1
S LBW 3+25N	1	24	15	75	.8	14	7	332	5.59	9	5	ND	4	19	3	2	2	135	.56	.068	8	57	.52	48	.16	3	2.27	.01	.04	1
S LBW 3+00N	1	58	14	85	.4	24	15	937	5.01	13	5	ND	4	15	3	2	2	106	.47	.063	7	62	1.44	43	.15	4	3.02	.01	.04	1
S LBW 2+75N	1	7	7	52	.1	2	1	23	.10	2	5	ND	1	13	1	2	2	4	.49	.057	2	2	.01	14	.01	2	.13	.01	.01	1
S LBW 2+50W	1	96	19	102	.5	27	17	761	6.20	18	5	ND	3	9	4	2	2	105	.26	.065	10	65	1.74	54	.14	4	4.44	.01	.04	1
S LBW 2+25N	1	51	15	124	.7	27	20	859	6.46	17	5	ND	1	24	4	2	2	119	.72	.069	8	81	1.61	77	.16	5	3.45	.01	.04	1
S LBW 2+00N	1	79	26	285	.7	20	21	6442	4.36	18	5	ND	3	33	6	2	2	82	1.00	.097	15	48	.79	141	.07	3	3.67	.01	.03	1
S LBW 1+75N	1	65	17	120	.5	29	18	1236	5.11	12	5	ND	3	25	4	2	2	97	.76	.071	11	74	1.17	78	.10	4	3.55	.01	.03	1
S LBW 1+50N	1	37	28	137	.6	15	20	1735	5.43	8	5	ND	4	17	4	2	2	115	.43	.084	9	56	.68	72	.15	4	2.54	.01	.03	2
S LBW 1+25N	1	30	16	52	.7	15	11	512	5.73	8	5	ND	3	14	3	2	2	133	.34	.091	7	72	.72	57	.17	4	2.81	.01	.05	3
S LBW 1+00N	1	37	16	58	1.2	13	9	464	6.18	8	5	ND	3	11	4	2	2	126	.23	.065	7	53	.66	48	.14	4	2.32	.01	.04	1
S LBW 0+75B	1	32	15	44	.6	12	8	405	7.08	8	5	ND	3	11	4	2	2	193	.20	.061	7	59	.54	43	.21	4	2.55	.01	.02	1
S LBW 0+50N	1	80	20	66	.6	17	67	8334	5.15	9	5	ND	3	10	3	2	2	106	.20	.090	8	53	.68	93	.08	3	3.43	.01	.02	1
S LBW 0+25N	1	33	16	49	.6	15	9	368	7.23	8	5	ND	4	11	4	2	2	159	.28	.055	7	72	.77	29	.24	4	3.10	.01	.03	2
S LBW 0+00N	1	32	13	53	.6	11	9	523	6.09	9	5	ND	3	12	3	2	2	167	.31	.070	7	48	.47	29	.23	4	2.47	.01	.03	1
S LBW 0+25S	1	44	14	55	.6	8	15	1390	6.93	8	5	ND	1	8	4	2	2	160	.18	.068	9	34	.30	49	.18	4	2.07	.01	.03	1
S LBW 0+50S	1	49	17	101	.7	14	26	789	5.92	15	7	ND	4	36	4	2	2	124	1.19	.061	10	40	.29	77	.10	4	4.06	.01	.04	1
S LBW 0+75S	1	40	35	147	.6	13	28	1627	4.63	8	5	ND	3	21	4	2	2	108	.65	.069	10	35	.43	66	.09	3	2.49	.01	.04	1
S LBW 1+00S	1	41	19	112	.6	16	17	693	5.98	10	5	ND	3	12	4	2	3	135	.36	.067	8	52	.84	74	.15	4	2.73	.01	.05	1
S LBW 1+25S	1	33	20	118	.6	17	44	1186	5.86	8	5	ND	4	17	4	2	2	129	.58	.053	7	46	.97	76	.17	4	2.82	.01	.06	2
S LBW 1+50S	1	26	21	67	.6	10	7	254	7.55	45	5	ND	4	7	4	2	2	172	.26	.033	7	60	.46	36	.24	5	3.68	.01	.03	1
S LBW 1+75S	1	17	20	44	.6	6	5	171	5.31	50	6	ND	3	4	3	3	3	104	.14	.028	8	22	.18	54	.05	3	2.92	.01	.04	2
S LBW 2+00S	1	20	20	48	.6	9	5	298	6.51	17	5	ND	4	6	4	2	2	158	.30	.054	7	33	.29	28	.19	4	2.03	.01	.03	2
S LBW 2+25S	2	36	22	153	.8	13	10	476	8.07	32	7	ND	4	6	5	3	4	134	.18	.050	11	36	.44	116	.03	5	3.03	.01	.05	1
S LBW 2+50S	1	101	17	107	1.0	19	29	4721	1.49	11	5	ND	4	71	2	2	2	35	1.80	.164	20	25	.13	122	.02	5	3.83	.01	.03	1
S LBW 2+75S	1	14	15	47	.7	13	6	277	4.84	8	5	ND	1	10	3	2	2	98	.26	.099	8	36	.46	54	.11	4	2.81	.01	.04	3
S LBW 3+00S	1	82	19	170	.8	47	32	1172	6.35	10	5	ND	4	13	4	2	2	109	.44	.058	9	87	2.08	77	.14	5	4.98	.01	.05	1
S LBW 3+25S	1	36	16	67	.6	19	10	424	6.84	14	6	ND	4	10	4	2	2	142	.37	.057	7	65	1.06	32	.21	5	3.63	.01	.04	1
S LBW 3+50S	1	21	9	30	.6	8	5	198	2.33	6	5	ND	3	7	2	2	2	103	.21	.034	6	19	.12	38	.16	2	1.02	.01	.04	1
S LBW 3+75S	1	57	17	69	.8	21	9	352	6.82	16	9	ND	5	7	4	2	2	160	.32	.087	6	73	.98	28	.25	5	4.28	.01	.06	3
S LBW 4+00S	1	30	17	52	.7	17	8	443	6.61	11	5	ND	4	8	4	2	2	165	.42	.090	6	56	.88	44	.25	5	2.83	.01	.04	3
S LBW 4+25S	1	13	12	25	.7	7	4	154	4.75	8	5	ND	4	7	3	2	2	215	.45	.048	5	28	.24	29	.30	3	1.39	.01	.02	1
S LBW 4+50S	1	41	16	44	.5	14	7	306	5.97	16	5	ND	3	8	3	2	2	174	.34	.093	5	43	.63	66	.19	4	2.12	.01	.03	1
S LBW 4+75S	2	159	92	266	1.7	34	53	6793	7.86	70	5	ND	4	9	6	5	2	81	.24	.182	17	37	.45	85	.02	5	2.95	.01	.05	2
S LBW 5+00S	1	55	18	48	.9	9	5	579	7.00	8	9	ND	6	6	4	3	2	249	.49	.104	7	22	.41	89	.32	5	2.45	.01	.06	2
STD C	20	60	40	132	7.2	70	29	1056	4.12	41	17	7	39	50	20	17	23	59	.48	.091	42	58	.91	178	.06	12	1.94	.06	.14	13

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Co PPM	Ni PPM	Fe %	As PPM	U PPM	Au PPM	Tl 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
S L6W 5+25S	1	9	11	1	.2	6	5	231	2.81	4	5	ND	1	6	1	2	2	143	.46	.047	3	17	.39	45	.25	4	1.41	.01	.02	1
S L6W 5+50S	1	71	13	53	.1	20	17	333	6.31	9	5	ND	2	11	1	2	1	161	.13	.123	3	73	1.34	115	.12	3	3.39	.01	.05	1
S L6W 5+75S	1	34	14	17	.2	10	10	192	5.68	8	5	ND	1	6	1	2	2	173	.20	.066	5	26	.32	56	.25	3	2.24	.01	.03	1
S L6W 6+00S	1	43	12	17	.2	12	11	298	7.22	12	5	ND	1	6	1	2	11	193	.26	.085	3	38	.63	44	.41	2	3.04	.01	.02	1
S L6W 6+25S	1	6	1	1	.1	3	3	73	2.04	2	5	ND	1	7	1	2	2	128	.23	.032	2	9	.09	36	.27	3	.83	.01	.01	1
S L8W 6+50S	1	23	10	1	.1	3	9	155	5.57	10	5	ND	1	5	1	2	2	216	.31	.039	3	33	.39	35	.36	2	2.05	.01	.01	1
S L6W 6+75S	2	56	9	33	.5	9	9	4895	1.50	4	5	ND	1	74	1	2	3	54	3.16	.076	19	29	.09	192	.02	6	2.12	.01	.02	1
S L3W 7+00S	1	43	14	53	.2	19	16	853	0.17	15	5	ND	1	41	1	3	3	105	1.46	.036	8	45	.97	149	.13	7	3.27	.01	.01	1

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

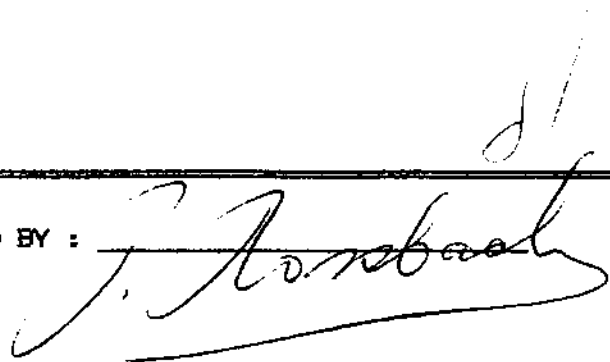
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE # : 88256
INVOICE # : 80639
DATE ENTERED : 88-09-21
FILE NAME : MPH88256.G
PAGE # : 1

PROJECT : V 263
TYPE OF ANALYSIS : GEOCHEMICAL

RE IX	SAMPLE NAME	PPB Au
S	L 2W 200N	5
S	L 2W 225N	5
S	L 2W 250N	5
S	L 2W 275N	5
S	L 2W 300N	5
S	L 2W 325N	5
S	L 2W 350N	5
S	L 2W 375N	5
S	L 2W 400N	5
S	L 2W 425N	5
S	L 2W 450N	5
S	L 2W 475N	5
S	L 2W 500N	5
S	L 2W 525N	5
S	L 2W 550N	5
S	L 2W 575N	5
S	L 2W 600N	5
S	L 2W 625N	5
S	L 2W 650N	5
S	L 3W 0255	5
S	L 3W 0505	5
S	L 4W 0755-A	5
S	L 4W 0755-B	10
S	L 4W 0755-C	5

RECEIVED SEP 22 1988

CERTIFIED BY : 

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 NH FB SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AD DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: SOLUTION

DATE RECEIVED: SEP 20 1988

DATE REPORT MAILED: Sept 22/88

ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

ROSSBACHER LABS LTD. PROJECT 88256 File # 88-4657 263

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Mn	Co	Ni	Fe	As	U	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
S L2W 2+00M	1	57	20	66	.2	14	26	809	3.71	5	5	ND	1	11	1	2	2	79	.41	.128	7	35	.63	61	.11	3	3.54	.01	.04	1
S L2W 2+25M	1	38	20	54	.2	19	17	686	6.33	5	5	ND	1	16	1	2	2	193	.46	.081	4	53	1.31	51	.23	2	3.61	.01	.03	1
S L2W 2+50M	1	24	23	47	.2	9	6	187	5.36	5	5	ND	2	8	1	3	2	142	.25	.083	3	31	.57	25	.18	2	1.98	.01	.03	2
S L2W 2+75M	1	47	12	61	.2	5	4	308	2.66	2	5	ND	1	9	1	2	2	80	.48	.065	3	12	.23	43	.15	2	.98	.01	.03	2
S L2W 3+00M	1	50	15	59	.1	9	74	2290	3.65	3	5	ND	1	10	8	2	2	88	.31	.126	7	24	.20	78	.12	2	2.85	.01	.02	1
S L2W 3+25M	1	18	21	25	.2	8	15	1087	3.25	6	5	ND	1	10	1	2	2	89	.41	.109	4	22	.27	34	.11	2	1.39	.01	.05	2
S L2W 3+50M	1	18	18	45	.1	8	5	290	5.26	7	5	ND	1	10	1	2	2	134	.44	.111	4	38	.32	24	.18	2	2.30	.01	.02	1
S L2W 3+75M	1	19	14	30	.1	5	5	217	4.82	6	5	ND	1	7	1	2	2	161	.41	.084	4	31	.19	13	.32	2	2.04	.01	.01	1
S L2W 4+00M	1	27	15	39	.2	11	7	450	4.44	4	5	ND	1	8	1	2	2	133	.36	.090	4	45	.55	25	.19	2	2.71	.01	.02	1
S L2W 4+25M	1	30	21	44	.2	11	7	873	3.32	7	5	ND	1	10	1	2	3	85	.36	.085	3	32	.56	33	.13	2	1.96	.01	.03	2
S L2W 4+50M	1	16	11	22	.2	7	7	411	3.25	5	5	ND	1	14	1	2	2	115	.42	.065	3	25	.42	18	.22	2	1.66	.01	.02	1
S L2W 4+75M	1	48	10	41	.1	16	8	299	4.83	2	5	ND	1	8	1	2	3	119	.31	.110	4	57	.79	24	.18	2	3.80	.01	.02	1
S L2W 5+00M	2	33	8	28	.1	8	5	201	3.89	2	5	ND	1	6	1	2	2	94	.21	.123	3	38	.43	13	.15	2	3.57	.01	.02	1
S L2W 5+25M	1	30	13	33	.1	11	7	529	4.48	6	5	ND	1	10	1	2	3	130	.34	.129	3	42	.62	23	.22	2	2.52	.01	.02	1
S L2W 5+50M	1	12	11	18	.1	6	3	139	3.86	4	5	ND	1	8	1	2	2	149	.28	.032	4	29	.18	18	.20	2	1.35	.01	.01	2
S L2W 5+75M	1	20	11	29	.1	8	5	225	4.25	8	5	ND	1	10	1	3	2	158	.36	.083	3	44	.42	19	.23	2	1.60	.01	.01	2
S L2W 6+00M	1	35	15	47	.1	16	8	288	5.28	8	5	ND	1	9	1	2	2	151	.33	.083	4	68	.75	26	.20	2	3.58	.01	.02	1
S L2W 6+25M	1	45	15	58	.1	31	14	529	4.70	10	5	ND	1	10	1	2	2	124	.50	.088	4	71	1.67	32	.20	2	3.59	.01	.03	2
S L2W 6+50M	1	58	14	55	.1	24	12	458	5.49	4	5	ND	1	9	1	2	2	150	.34	.097	4	76	1.21	39	.21	2	4.12	.01	.02	1
S L3W 0+25S	1	36	23	76	.1	16	8	299	6.55	15	5	ND	1	9	1	2	3	158	.30	.059	3	45	1.05	37	.24	2	3.32	.01	.01	1
S L3W 0+50S	1	48	28	103	.1	17	8	311	8.74	149	5	ND	1	5	1	3	2	237	.15	.084	4	62	.47	84	.30	2	2.57	.01	.02	1
S L4W 0+75SA	1	7	18	23	.1	5	2	69	1.32	15	5	ND	1	6	1	2	2	77	.14	.038	2	9	.06	21	.13	2	.36	.01	.02	2
S L4W 0+75SB	1	43	25	105	.1	16	8	308	7.29	31	5	ND	2	6	1	2	2	143	.22	.094	5	59	.76	27	.28	2	4.92	.01	.01	1
S L4W 0+75SC	1	63	26	96	.1	18	9	330	6.25	111	5	ND	2	6	1	2	2	122	.22	.075	7	62	.91	24	.30	2	5.21	.01	.02	1
STD C	10	60	45	132	7.1	69	30	1032	4.20	45	17	7	38	49	18	18	23	60	.51	.095	40	55	.96	179	.07	33	1.92	.06	.13	11

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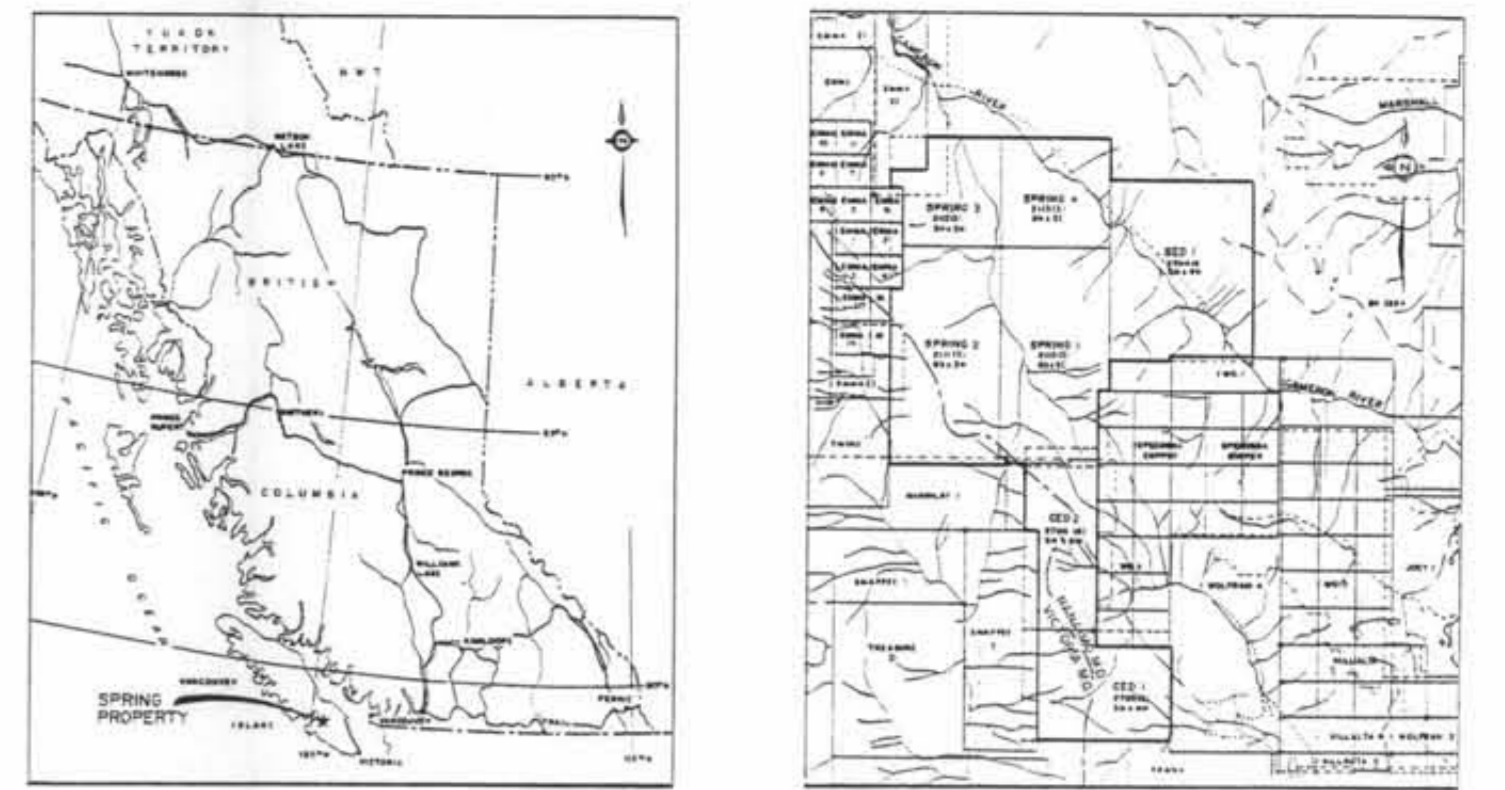
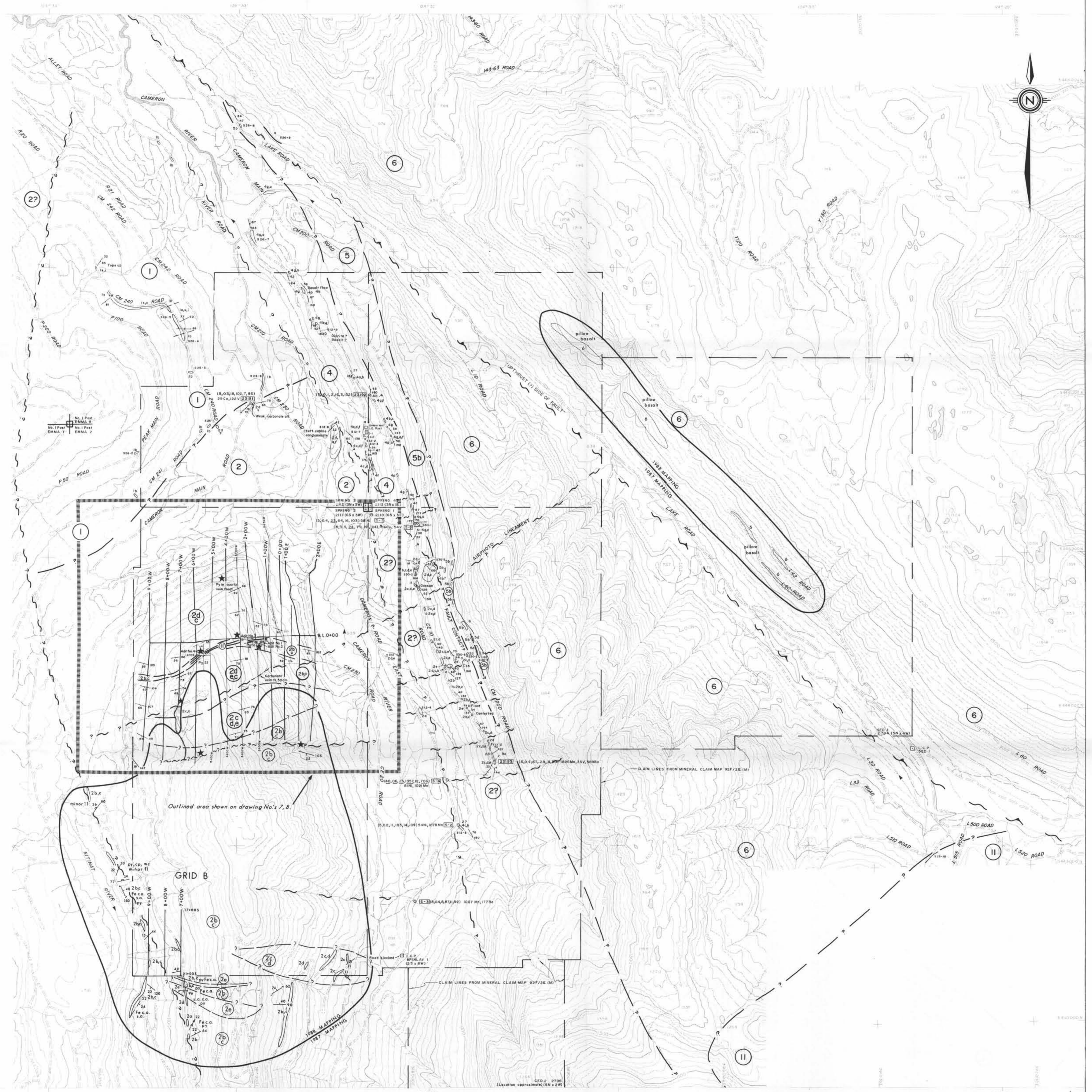
Appendix V

**Conversion Factors
for Metric Units**



CONVERSION FACTORS FOR METRIC UNITS

1 inch	= 25.4 millimetres	(mm)
	or 2.54 centimetres	(cm)
1 cm	= 0.394 inch	
1 foot	= 0.3048 metre	(m)
1 m	= 3.281 feet	
1 mile	= 1.609 kilometres	(km)
1 km	= 0.621 miles	
1 acre	= 0.4047 hectares	(ha)
1 ha	= 2.471 acres	
1 ha	= 100 m x 100 m = 10,000 m ²	
1 km ²	= 100 ha	
1 troy ounce	= 31.103 grams	(g)
1 pennyweight/ton		
(dwt/ton)	= 1.7143 grams/tonne	
1 g	= 0.032 troy oz	
1 pound (lb)	= 0.454 kilogram	(kg)
1 kg	= 2.20 lb	
1 ton (2000 lb)	= 0.907 tonne (0.9072)	(t)
1 tonne	= 1.102 ton = 2205 lb	
1 troy ounce/ton (oz/T)	= 34.286 grams/tonne	(g/t)
1 pennyweight	= 1.555 grams	
1 g/t	= 0.0292 oz/ton	
1 g/t	= 1 part per million	(ppm)
1 ppm	= 1000 parts per billion	(ppb)
10,000 g/t	= 1%	



LEGEND

GEOLOGY

CENOZOIC
TERTIARY (EOCENE ?)
 [Symbol] GRANODIORITE - hornstone - felsic porphyry

MESOZOIC
TRIASSIC
 [Symbol] KAMUTSEN FORMATION - basalt flows, pillow breccia and hydrothermal

PALEOZOIC
UPPER SILURIAN TO LOWER PERMIAN
SICKER GROUP
 [Symbol] MOUNT MARK FORMATION
 5c massive crystalline limestone
 5d crystalline limestone
 5e argillaceous limestone, argillite
 5f ultrabasic argillite and sandstone, rhyolite (St. Mary's Lava Formation)
 [Symbol] CAMERON RIVER FORMATION (formerly mapped as Sediment - S50 Unit)
 4a argillite
 4b cherty, cherty siltstone, cherty tuff (?)
 4c siltstone
 4d sandstone
 4e tuffaceous sediment
 4f metamorphic conglomerate and sedimentary breccia
 4g crystalline limestone, massive crystalline limestone
 4h massive basalt flow
 [Symbol] MCLAUGHLIN RIDGE FORMATION (formerly mapped as Mays Formation)
 2c argillite
 2d cherty tuff, cherty siltstone, cherty
 2e fine-grained tuff, tuffaceous siltstone, siltstone
 2f medium to coarse-grained tuff, tuffaceous sandstone
 2g siltstone tuff, tuff agglutinate
 2h conglomerate
 2i agglomerate
 [Symbol] NITINAT FORMATION
 1a pyroxene crystal tuff, siltstone tuff
 1b porphyry - rock volcanic breccia, agglomerate
 1c reddish crystal tuff, siltstone tuff
 1d lamprophyre tuff, cherty tuff
 1e massive tuff, tuffaceous sandstone

NOTE: Legend based in part on Messers, BC/MMP, of 1987/2; and Muller, 1980, 4, SSC Paper 79-30.

1987 Sampling (1988 sampling on Drawing No. 9)

[Symbol] Rock outcrop
 [Symbol] Rock float
 [Symbol] Silt or soil
 ★ Outstanding anomalous analysis [see Drawing No. 8 for results]
 (5.0, 4.23, 6.4, 10.3) Au, Ag, As, Cu, Pb, Zn results; anomalous values underlined; additional anomalous elements also listed; results in ppm for Au, ppm for all other elements, unless otherwise specified.

SYMBOLS

— 1987 grid line
 — 1988 grid line
 - - - Claim boundary
 = 4wd road
 - - - Road presently inaccessible to vehicles
 - - - Geologic contact (defined, approximate, assumed)
 - - - Fault (approximate, assumed)
 ~ Vein
 Trench
 Adit
 Bedding
 Joint
 Shear
 Dyke
 [Symbol] Outcrop, with field note number (1987) and lithology
 → Fold

ABBREVIATIONS

cp	chalcopryite	mc	malachite
py	pyrite	Fe c.a.	iron-carbonate alteration
sl	sphalerite	s.a.	sericitic alteration
frct'd	fractured	c.a.	carbonate alteration
alt	alteration		

GEOLOGICAL BRANCH ASSESSMENT REPORT

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

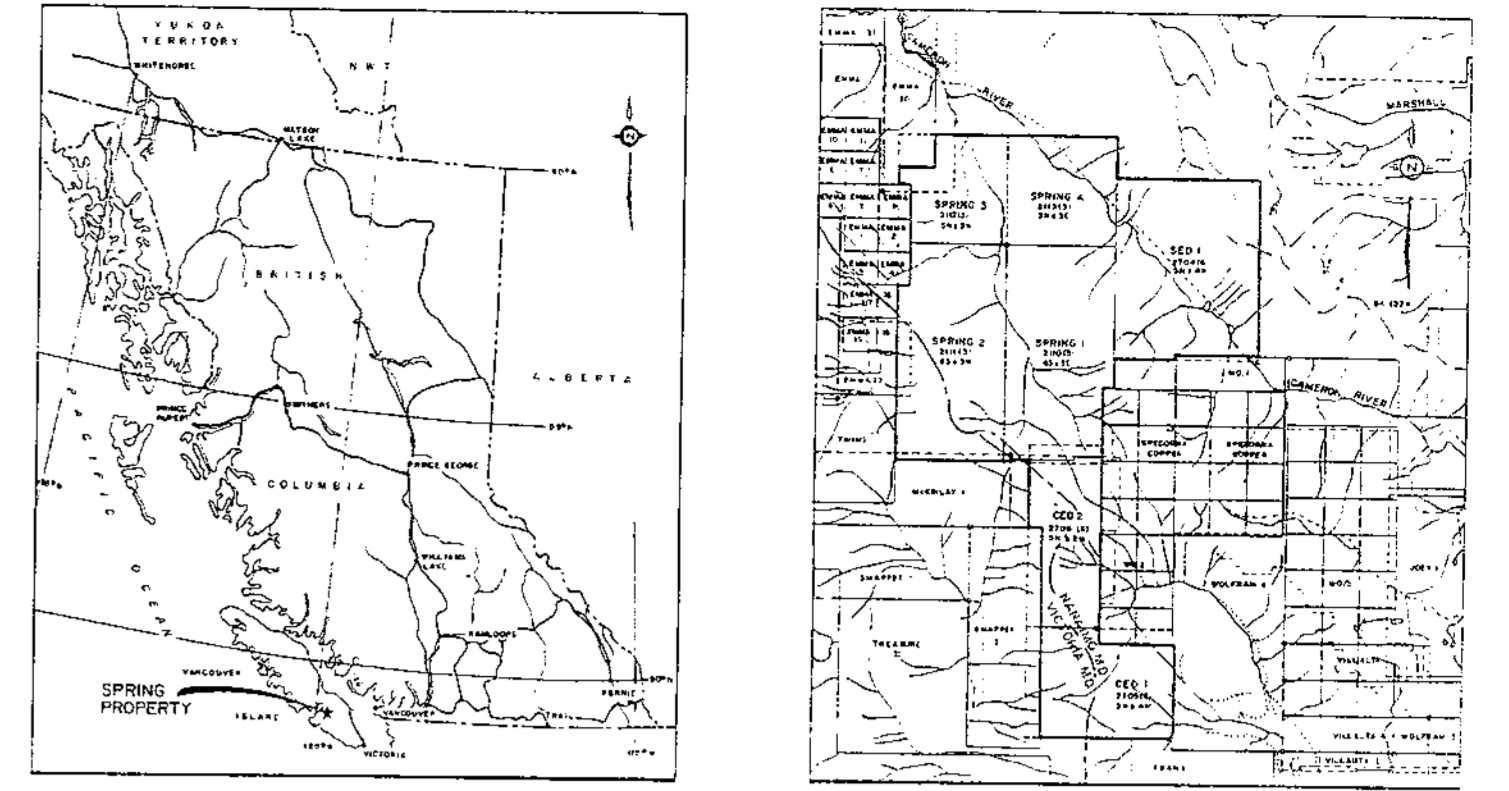
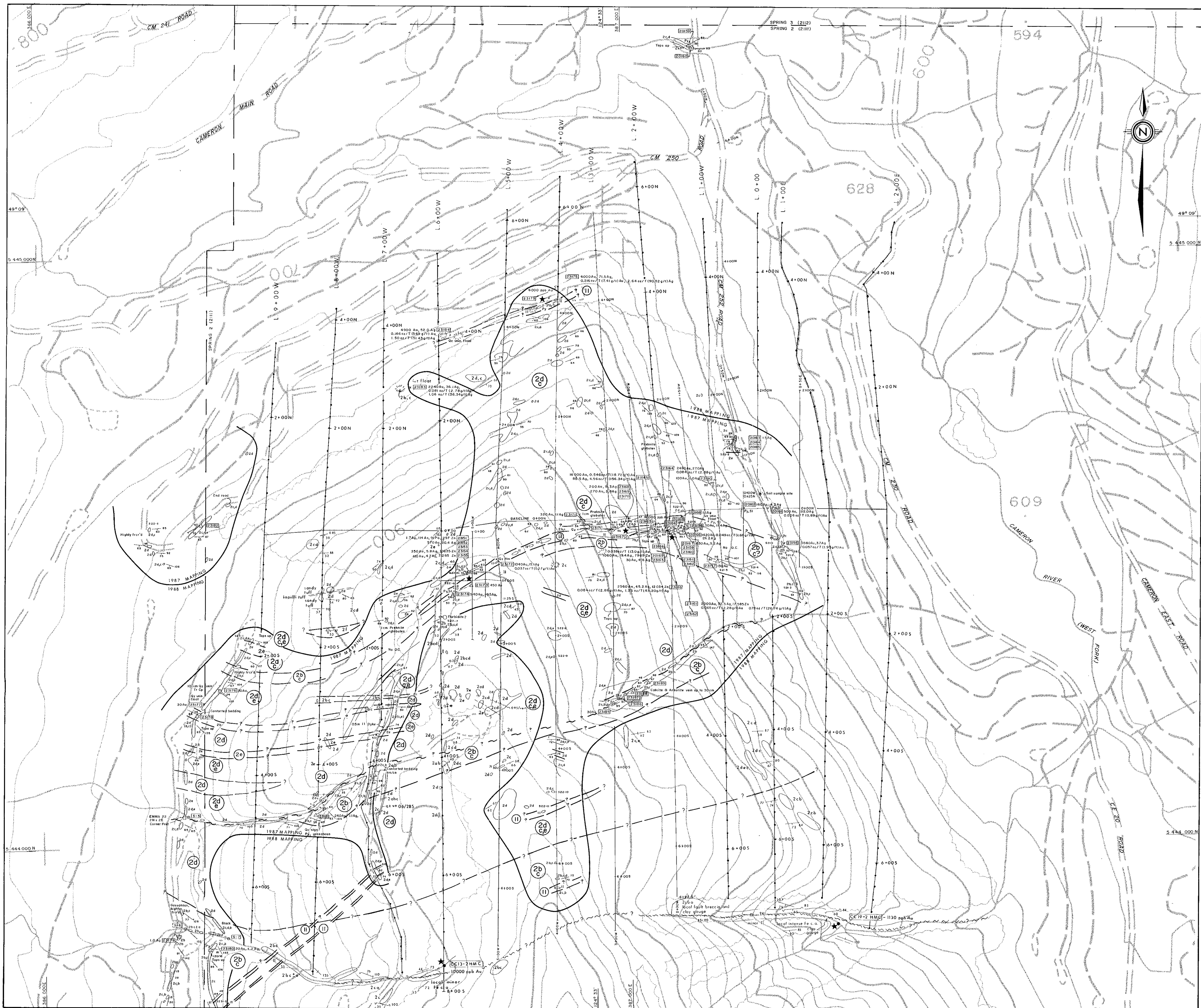
18,108

GEOLOGY

NORTH PART OF SPRING PROPERTY
 VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No: V 263-2	By: G. A. T.M.N.
Scale: 1 : 10,000	Drawn: M. W. J.S.
Drawing No: 6	Date: NOVEMBER 1988

MPH Consulting Limited



- GEOLOGY**
- CENOZOIC**
- TERTIARY (EOCENE ?)
- 11 GRANODIORITE - brecciated - felsic porphyry
- MESOZOIC**
- TRIASSIC
- 2 KARLSTADT FORMATION: sandstone, siltstone and shale
- PALEOZOIC**
- UPPER SILURIAN TO LOWER PERMIAN
- SOURCE GROUP
- 2 MELAMUNHIDE MIDDLE FORMATION (formerly mapped as Myra Formation)
 - 2a argillite
 - 2b cherty silt, cherty siltstone, chert
 - 2c fine-grained silt, silty-sandstone, siltstone
 - 2d medium to coarse grained silt, siltstone, sandstone
 - 2e siltstone, silt, siltstone
 - 2f conglomerate
 - 2g argillite

NOTE: Legend based in part on Mackay, BCMEPR, 04-1087/2; and Mather, 1990, GSC Paper 79-30.

- 1987 Sampling [1988 sampling on Drawing No. 8]**
- 23173 Δ Rock outcrop
 - 23184 x Rock floor
 - 5-7 ○ Silt or soil
 - CC13-2 HMC ● Heavy mineral silt concentrate
 - ★ Outstanding anomalous analysis

- SYMBOLS**
- 1987 grid line
 - 1988 grid line
 - - - Claim boundary
 - == 4wd road
 - Road presently inaccessible to vehicles
 - - - Geologic contact (defined, approximate, assumed)
 - - - Fault (approximate, assumed)
 - Vein
 - Trench
 - Adit
 - Bedding
 - Joint
 - Shear
 - Dyke
 - 2e Outcrop, with field note number (1987) and lithology

- ABBREVIATIONS**
- | | | | |
|-----|--------------|---------|---------------------------|
| cp | chalcopyrite | frct'd | fractured |
| hm | hematite | stg | stringer(s) |
| py | pyrite | oc | outcrop |
| qtz | quartz | Fe c.a. | iron-carbonate alteration |
| sl | sphalerite | S.A. | sericitic alteration |

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

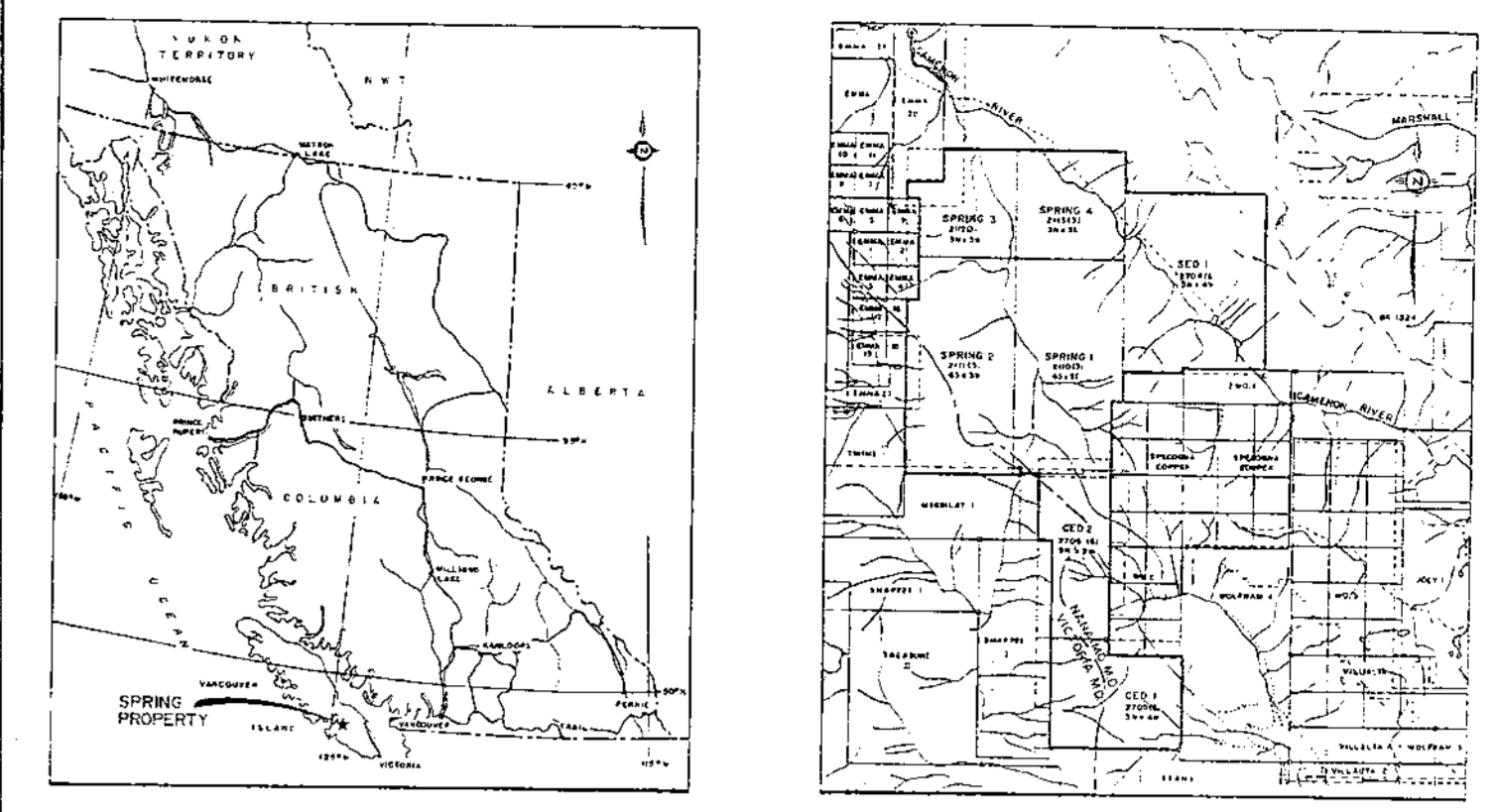
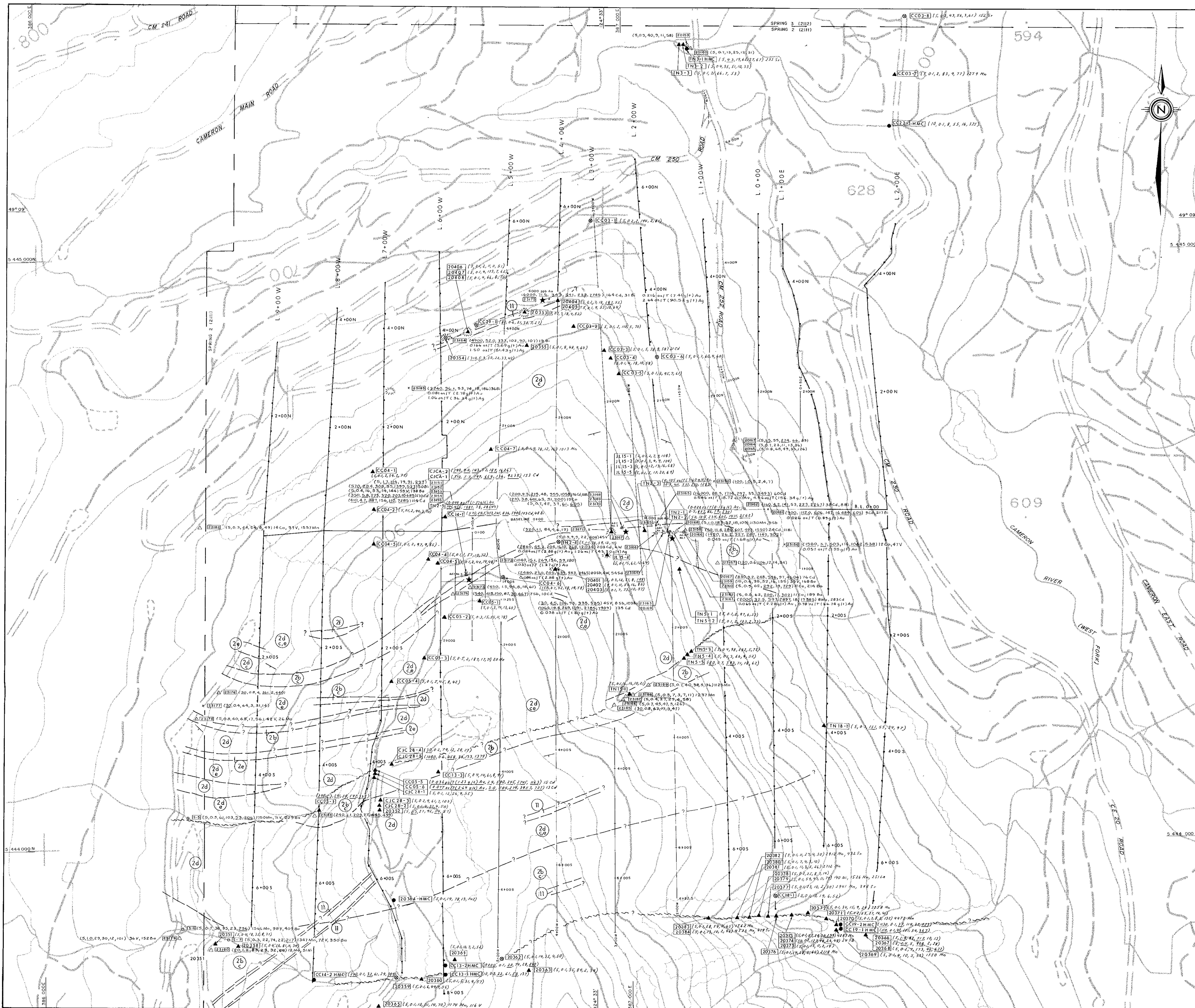
18-108

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

GEOLOGY
NORTHWEST PART OF SPRING 2 CLAIM
SPRING PROPERTY
VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No:	V 263-2	By:	G. A., T.M.N.
Scale:	1 : 2500	Drawn:	M.W., J.S.
Drawing No:	7	Date:	NOVEMBER 1988.

MPH **MPH Consulting Limited**



LEGEND

GEOLOGY

CEANOZOIC

TERTIARY (EOCENE ?)

1a GRANODIORITE: hornblende - feldspar porphyry

PALEOZOIC

UPPER SILURIAN TO LOWER PERMIAN

SICKER GROUP

2 McLAURIN RIDGE FORMATION (formerly mapped as Myra Formation)

2a argillite
 2b shaly silt, cherty silstone, chert
 2c fine-grained silt, rufaceous silstone, silstone
 2d medium to coarse-grained silt, rufaceous sandstone
 2e lignite, silt, ruf. siltstone
 2f conglomerate
 2g siltstone

NOTE: Legend based in part on Miller, BCMMPR, of 1987/2; and Miller, 1990 a, CSC Paper 79-30

Values considered anomalous in rock	Values considered anomalous in stream sediment
Au 20 ppb	Au 20 ppb
Ag 10 ppm	Ag 20 ppm
As 100 ppm	As 20 ppm
Cu 2000 ppm	Cu 200 ppm
Pb 50 ppm	Pb 50 ppm
Zn 200 ppm	Zn 200 ppm
Co 10 ppm	Co 10 ppm
V 35 ppm	V 200 ppm
Mo 5 ppm	Mo 5 ppm
W 100 ppm	W 100 ppm
Mn 8 ppm	Mn 8 ppm
Fe 6 ppm	Fe 6 ppm
Ni 100 ppm	Ni 100 ppm
Cd 9 ppm	Cd 9 ppm
Hg 1 ppm	Hg 1 ppm
Bi 3 ppm	Bi 3 ppm

SAMPLING

23121 Rock - outcrop (1987, 1988)

23182 Rock - float (1987, 1988)

23170 Silt or soil (1987)

CC13-21HMC Heavy mineral silt concentrate (1988)

★ Outstanding anomalous analysis (1987)

(594 23, 64, 103)

Au, Ag, As, Cu, Pb, Zn results; anomalous values underlined; additional anomalous elements also listed; results in ppb for Au, ppm for all other elements, unless otherwise specified.

SYMBOLS

— 1987 grid line

— 1988 grid line

--- Claim boundary

== 4 wd road

--- Road presently inaccessible to vehicles

--- Geologic contact (defined, approximate, assumed)

--- Fault (approximate, assumed)

--- Vein

--- Trench

--- Adit

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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0 50 100 150 200m

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

ROCK AND SILT SAMPLE LOCATIONS AND ANALYSES

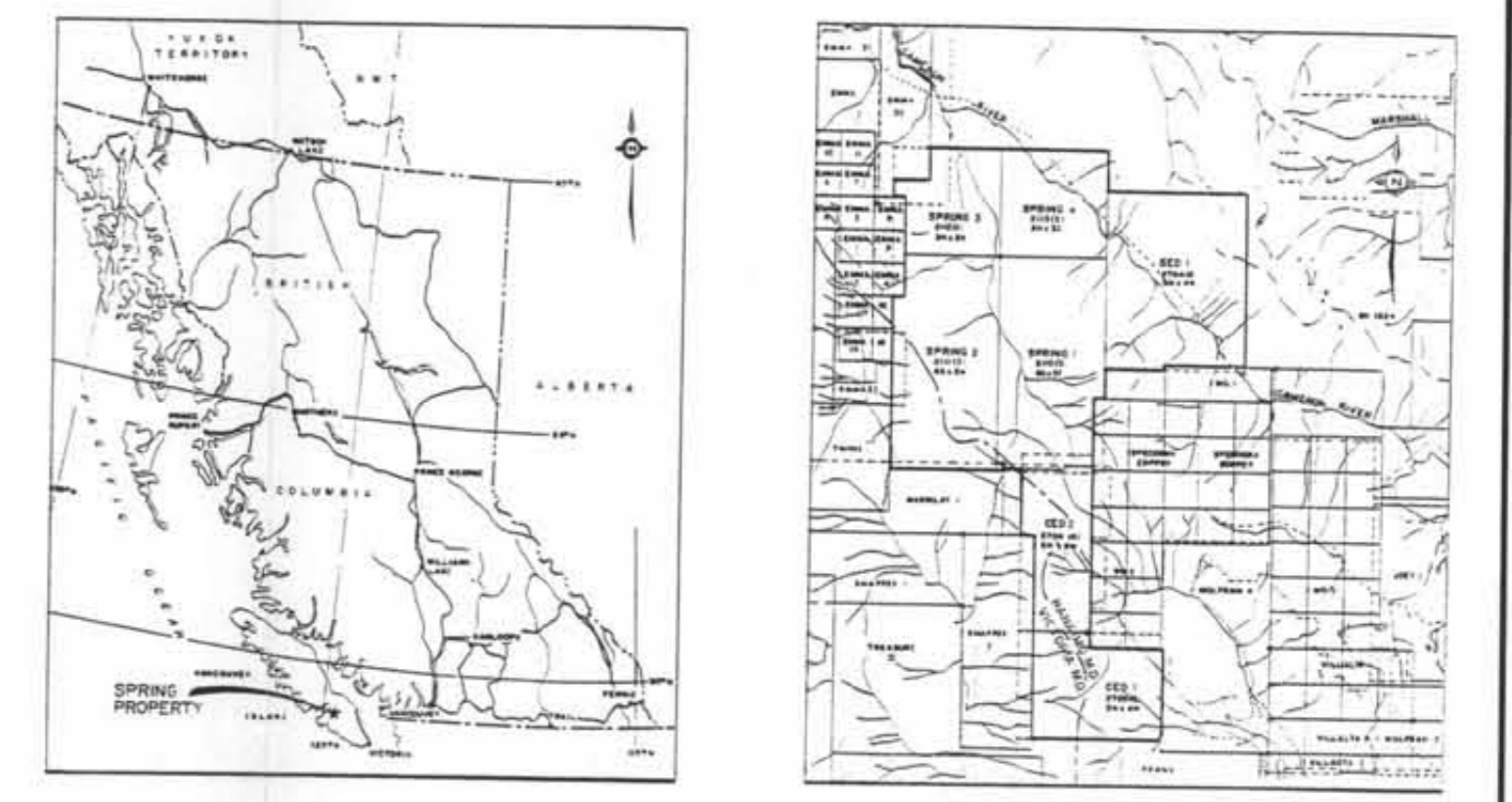
NORTHWEST PART OF SPRING 2 CLAIM

SPRING PROPERTY

VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No:	V 263 - 2	By:	G. A. T.M.N.
Scale:	1 : 2500	Drawn:	M. W. J.S.
Drawing No:	8	Date:	NOVEMBER 1988

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LEGEND

- GEOLOGY**
- CENOZOIC**
- TERTIARY (EOCENE ?)**
- II GRANODIORITE - hornblende - feldspar porphyry
- MESOZOIC**
- TRIASSIC**
- 4 KARNUTSEN FORMATION: basalt flows, pillow breccia and hydrothermal
- PALEOZOIC**
- UPPER SILURIAN TO LOWER PERMIAN**
- SICKER GROUP**
- 1 MOUNT MARK FORMATION
 - 1a massive crystalline limestone
 - 1b granular limestone
 - 1c argillaceous limestone, argillite
 - 1d interbedded argillite and sandstone, rhythmic (St. Mary's Lake Formation)
 - 4 CAMERON RIVER FORMATION (formerly mapped as Sediment - Soil Unit)
 - 4a argillite
 - 4b cherty, cherty siltstone, cherty silt (?)
 - 4c siltstone
 - 4d siltstone
 - 4e siltstone
 - 4f interbedded conglomerate and sedimentary breccia
 - 4g crystalline limestone, massive crystalline limestone
 - 4h massive basalt flow
 - 2 MCLAUGHLIN RIDGE FORMATION (formerly mapped as Myra Formation)
 - 2a argillite
 - 2b cherty silt, cherty siltstone, chert
 - 2c fine-grained silt, siltstone, siltstone
 - 2d medium to coarse-grained silt, siltstone sandstone
 - 2e siltite silt, silt siltstone
 - 2f conglomerate
 - 2g agglomerate
 - 1 NITINAT FORMATION
 - 1a pyroxene crystal tuff, siltite tuff
 - 1b pyroxene - rich volcanic breccia, agglomerate
 - 1c rhyolite crystal tuff, siltite tuff
 - 1d limestone tuff, cherty silt
 - 1e massive tuff, siltstone sandstone
- NOTE: Legend based in part on Messers, BCMEPM, D.F. 1987/2, and Miller, 1990-2, GSC Paper 79-30.

- SAMPLING**
- 23173 Δ Rock-outcrop (1987, 1988)
 - 23174 * Rock-Float (1987, 1988)
 - 5-7 ○ Silt or soil (1987)
 - CC13-2HMC ● Heavy mineral silt concentrate (1988)
 - ★ Outstanding anomalous analysis (1988)
- (5, 8, 23, 44, 103)
- Au, Ag, As, Cu, Pb, Zn results; anomalous values underlined; additional anomalous elements also listed; results in ppb for Au, ppm for all other elements, unless otherwise specified.

- SYMBOLS**
- 1987 grid line
 - 1988 grid line
 - Claim boundary
 - 4 wd road
 - Road presently inaccessible to vehicles
 - Geologic contact [defined, approximate, assumed]
 - Fault [approximate, assumed]
 - Vein
 - Adit
 - Bedding
 - Joint
 - Shear
 - 23173 Δ Outcrop, with field note number (1987) and lithology

- ABBREVIATIONS**
- | | | | |
|----|--------------|------|------------|
| cp | chalcopyrite | frcd | fractured |
| py | pyrite | alt | alteration |
| sl | sphalerite | | |

GEOLOGICAL BRANCH ASSESSMENT REPORT

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INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

ROCK AND SILT SAMPLE LOCATIONS AND ANALYSES
NORTH PART OF
SPRING PROPERTY
VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No:	V 263-2	By:	G. A. T. M. N.
Scale:	1:10,000	Drawn:	M. W. J. S.
Drawing No:	9	Date:	NOVEMBER 1988

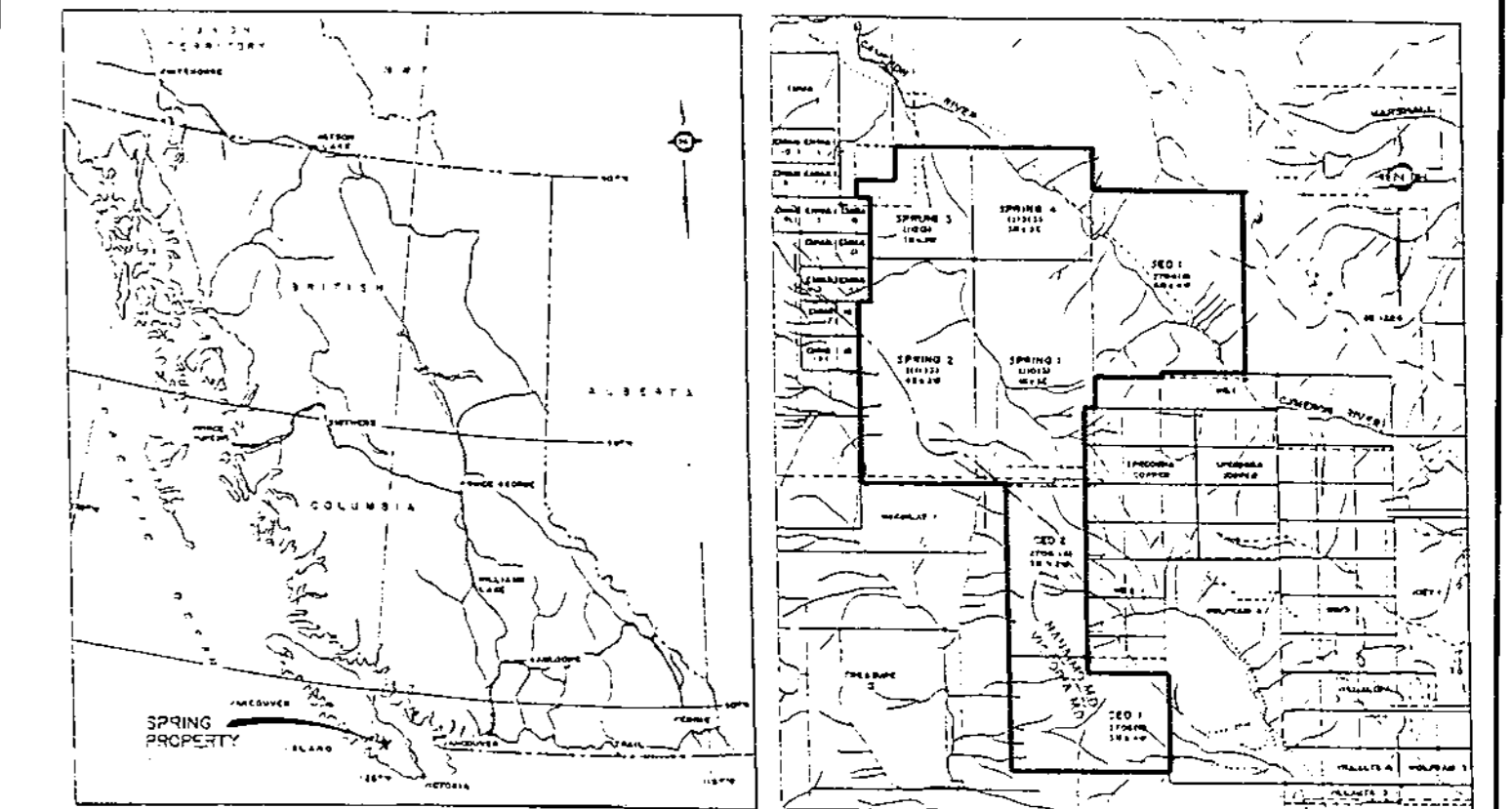
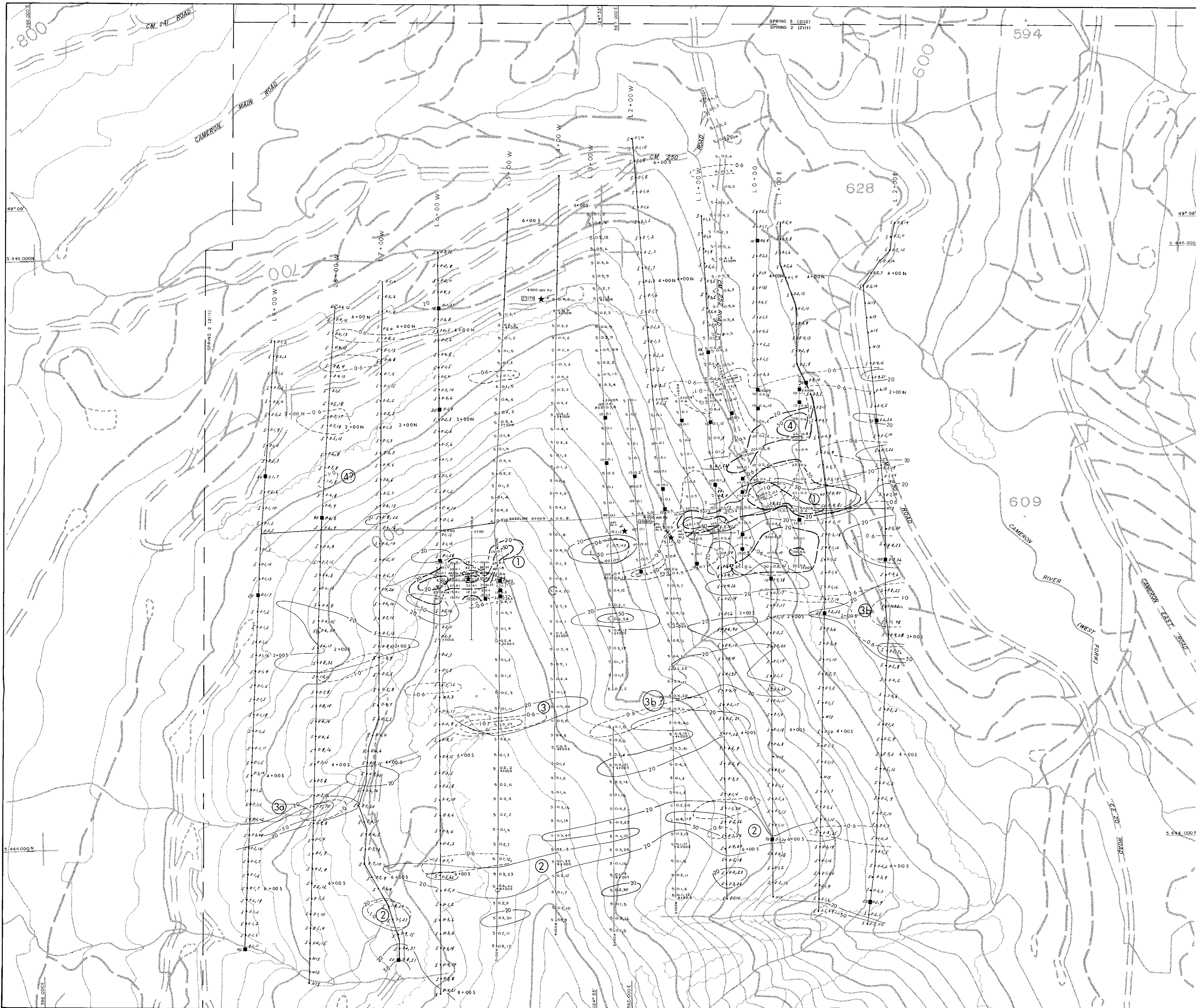
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PRELIMINARY RECONNAISSANCE TYPING

SCALE 1:10000

SCALE BAR



LOCATION MAP CLAIM MAP

LEGEND

Au (ppb) As (ppm), As (ppm)
 20 0.1, 2.3
 RS - Resample
 ND - None detected
 NS - No sample

CONTOUR INTERVALS

Au (ppb) Ag (ppm) As (ppm)
 20 0.6 20
 50 1.0 50

1 Soil geochemical anomaly discussed in text.

SYMBOLS

- Single sample Au high (10 ppb)
- Outstanding mineralization with sample number and analyses (Au, Ag, As, ppm)
- Adit
- Trench
- Grid line (1987)
- Grid line (1988)
- Claim boundary
- Recess
- 2WD accessible, all weather
- 4WD accessible
- Road presently accessible to vehicles

1988 GRID EXTENSIONS

Line	1988 Stations	1987 Stations Resampled in 1988*
L2+00E	7+25S-5+00W	
L1+00E	7+25S-5+00W	
L0+00E	6+75S-1+00E, 2+00N-5+00W	1+00S-2+00N
L1-00W	7+00S-1+00E, 3+00N-5+00W	1+00S-3+00N
L2+00W	2+00N-5+50E	
L3+00W		0+25S-0+50E
L4+00W		0+75S
L5+00W		
L6+00W	7+55S-1+30E, 0+70S-5+50E	1+00S
L7+00W	7+50S-4+75E	
L8+00W	7+00S-4+25E	
L9+00W	7+25S-3+25E	

* 1987 values plotted unless RS specified

NOTE: 20 metre topographic contour interval.
 Claim lines from L.C.P.'s located in field.



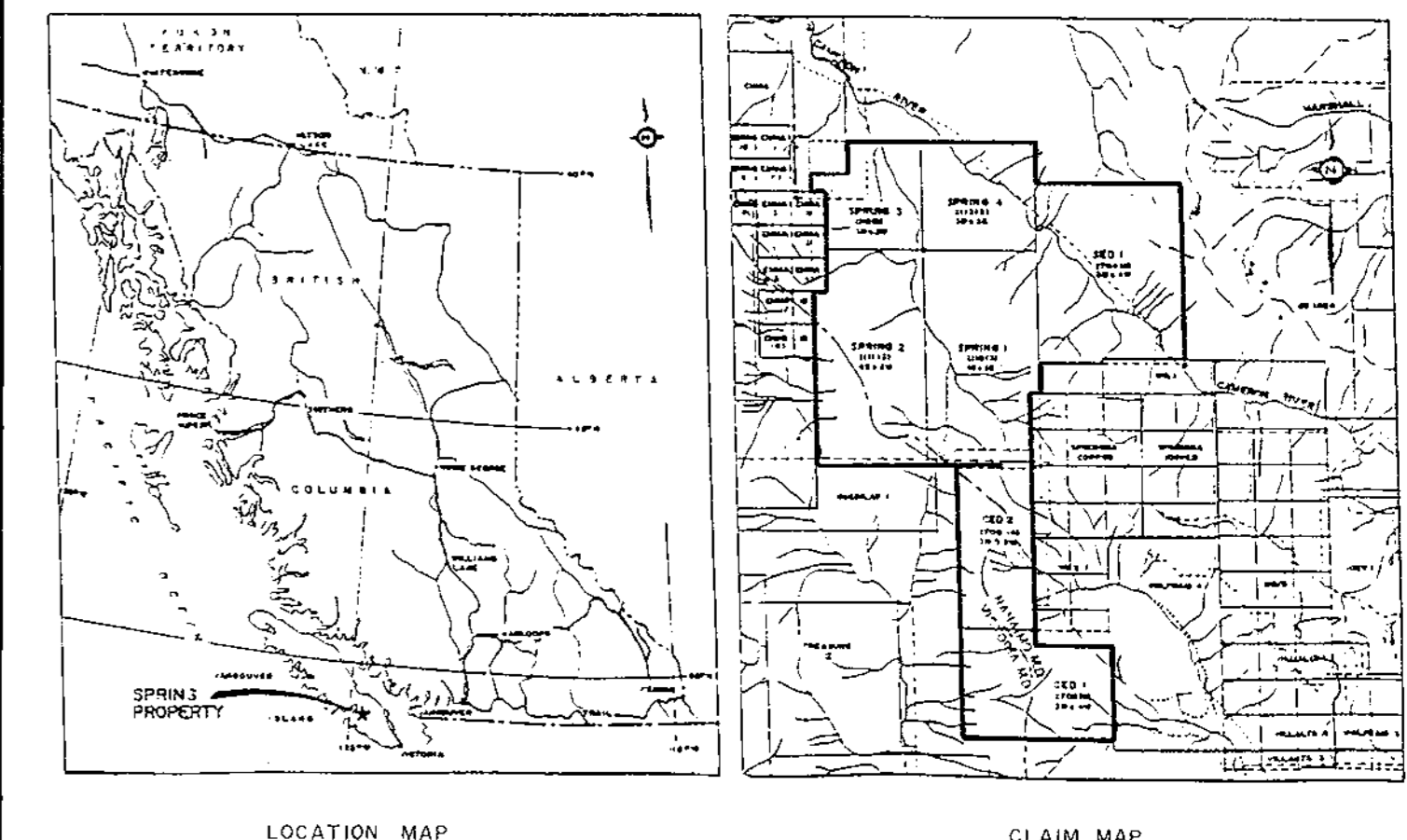
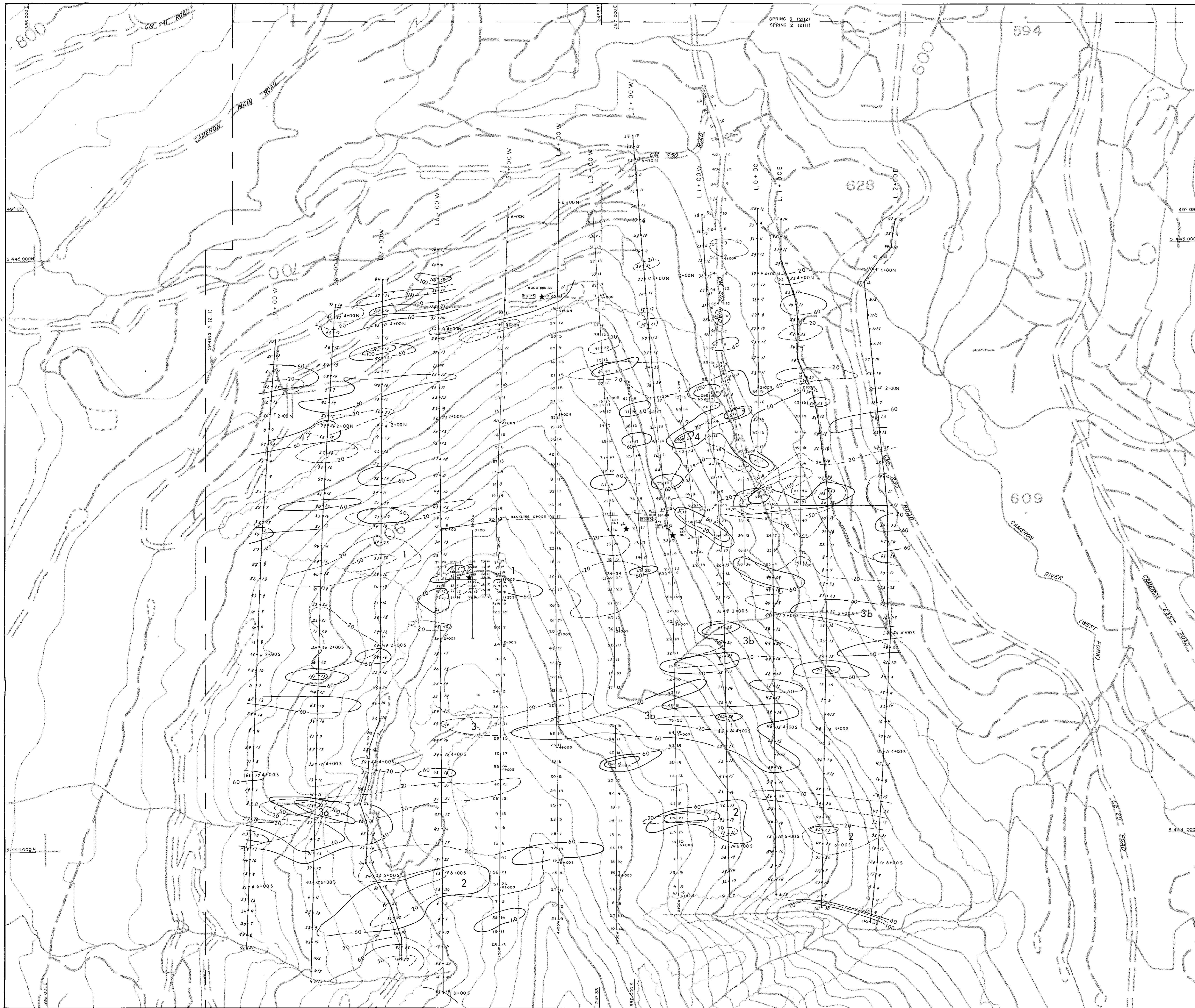
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 GEOLOGICAL BRANCH
 ASSESSMENT REPORT

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

SOIL GEOCHEMISTRY SURVEY
 Au, Ag, As
 NORTHWEST PART OF SPRING 2 CLAIM
 SPRING PROPERTY
 VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No: V263-2	By: G.A., T.M.N.
Scale: 1:2500	Drawn: M.W., J.S.
Drawing No: 10	Date: NOVEMBER 1988.

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LEGEND

Cu (ppm) 175
Pb (ppm) 18

RS - Resample
ND - none detected
N/S - No sample

CONTOUR INTERVALS (ppm)

Cu (—) Pb (---)

60 20
100 50
100 100

1 Soil geochemical anomaly discussed in text.

SYMBOLS

★ (152) 1250 Au, 176 Ag
ADL
Trace
Grid line (1987)
Grid line (1988)
Claim boundary

Roads:
2WD accessible, all weather
4WD accessible
Road presently accessible to vehicles

1988 GRID EXTENSIONS

Line	1988 Stations	1987 Stations Resampled in 1988*
L2+00E	7+25S-5+00N	
L1+00E	7+25S-5+00N	
L0+00E	6+75S-1+00S, 2+00N-5+00N	1+00S-2+00N
L1+00W	7+00S-1+00S, 3+00N-5+00N	1+00S-3+00N
L2+00W	2+00N-6+50N	0+25S-0+50S
L3+00W		0+75S
L4+00W		
L5+00W		
L6+00W	7+95S-1+30S, 0+70S-5+50N	1+00S
L7+00W	7+50S-4+75W	
L8+00W	7+00S-4+25N	
L9+00W	7+25S-3+25N	

* 1987 values plotted unless RS specified

NOTE: 20 metre topographic contour interval.
Claim lines from L.C.P.'s located in field.

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

SOIL GEOCHEMISTRY SURVEY
Cu, Pb
NORTHWEST PART OF SPRING 2 CLAIM
SPRING PROPERTY

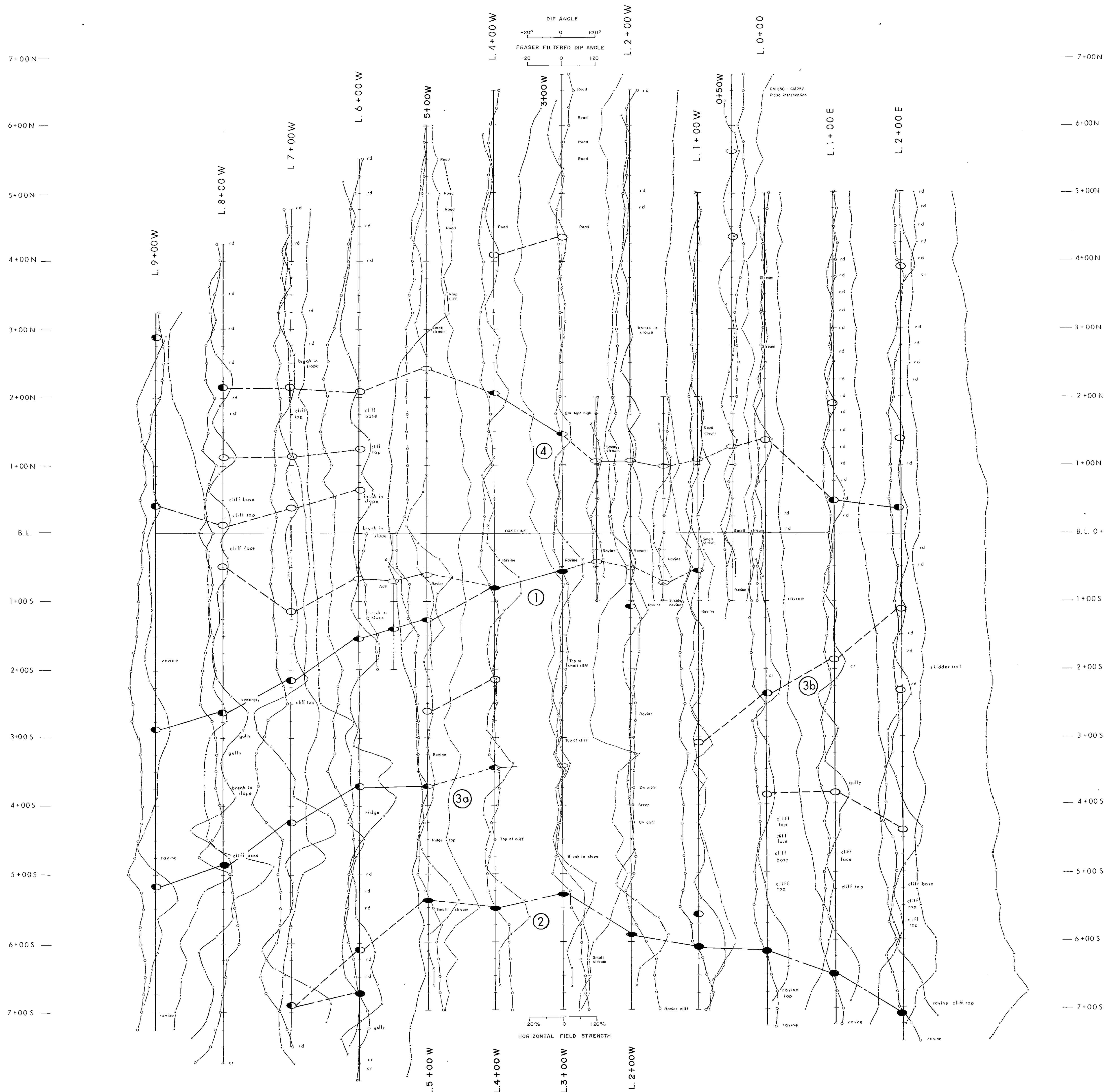
VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No: V263-2	By: G.A. I.M.N.
Scale: 1:2500	Drawn: M.W.J.S.
Drawing No: 11	Date: NOVEMBER 1988

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GEOLOGICAL BRANCH
MINING DEPARTMENT REPORT



1988 GRID EXTENSIONS

Line	1988 Stations	1987 Stations Resurveyed in 1988*
L.2+00E	7+25S-5+00N	
L.1+00E	7+25S-5+00N	
L.0+00	6+75S-1+00S, 0+00-5+00N	1+00S-0+00
L.1+00W	7+00S-1+00S, 2+00N-5+00N	1+00S-2+00N
L.2+00W	2+00N-6+50N	0+00-2+00N
L.3+00W		0+25S-0+50S
L.4+00W	4+50N-6+50N	0+75S
L.5+00W		
L.6+00W	7+95S-2+00S, 0+00-5+50N	2+00S-0+00
L.7+00W	7+50S-4+75N	
L.8+00W	7+00S-4+75N	
L.9+00W	7+25S-3+25N	

* 1988 data used

- LEGEND**
- PROFILES:**
- Horizontal Field Strength (in percent)
 - Dip Angle (in degrees)
 - Fraser Filtered Dip Angle
- INTERPRETATION:**
- Conductors:**
- Strong - Definite
 - Moderate - Probable
 - Weak - Possible
 - Conductive zone
- Conductor Continuity:**
- Definite
 - Probable
 - Possible

- INSTRUMENT -** Sabre 27 VLF-EM Receiver
- SCALES:**
- Dip Angle 1 cm = 10°
 - Fraser Filtered Dip Angle 1 cm = 10
 - Horizontal Field Strength 1 cm = 10%
- ABBREVIATIONS:**
- rd Road
 - cr Creek
 - Grid line (1987)
 - Grid line (1988)

GEOLOGICAL BRANCH ASSESSMENT REPORT

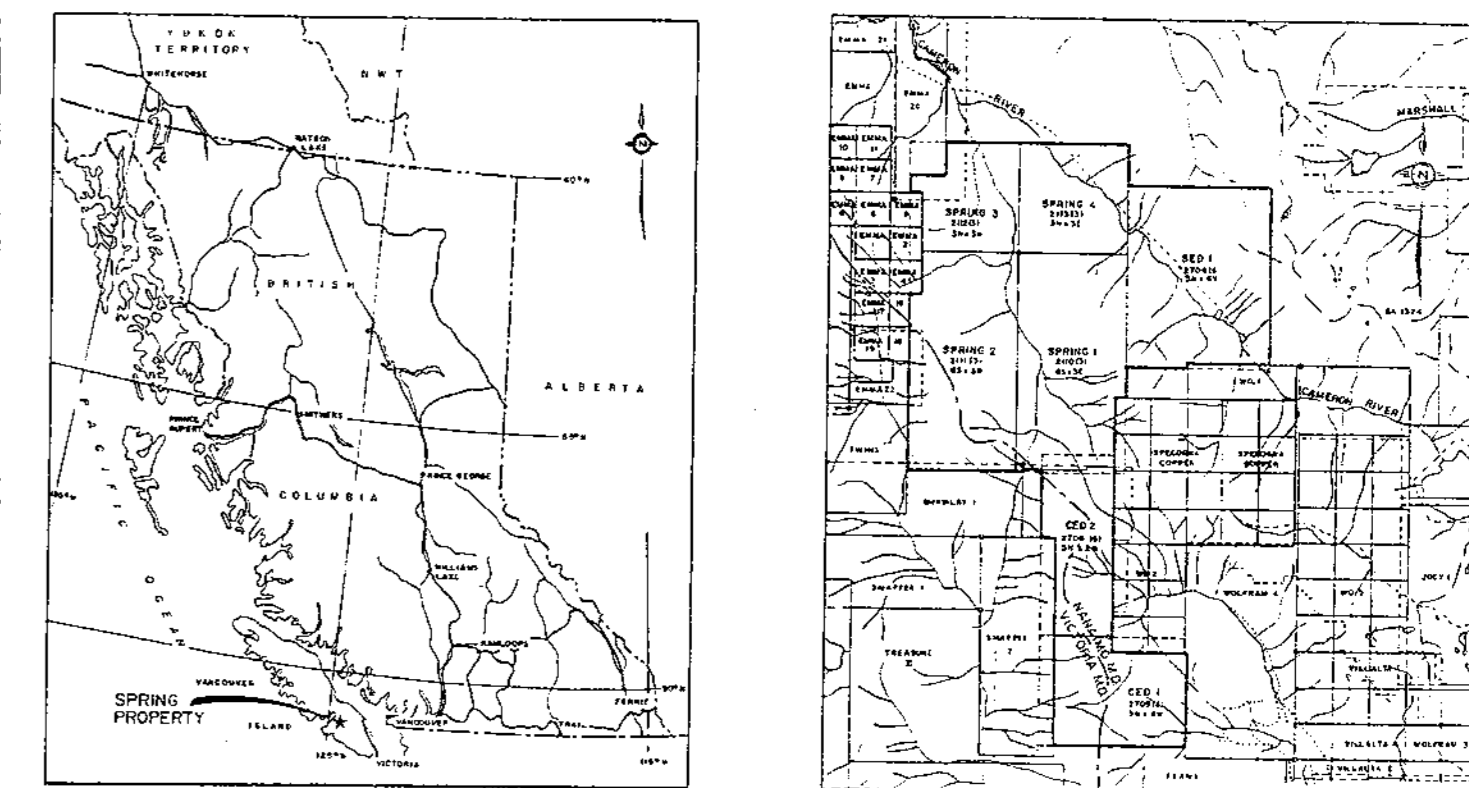
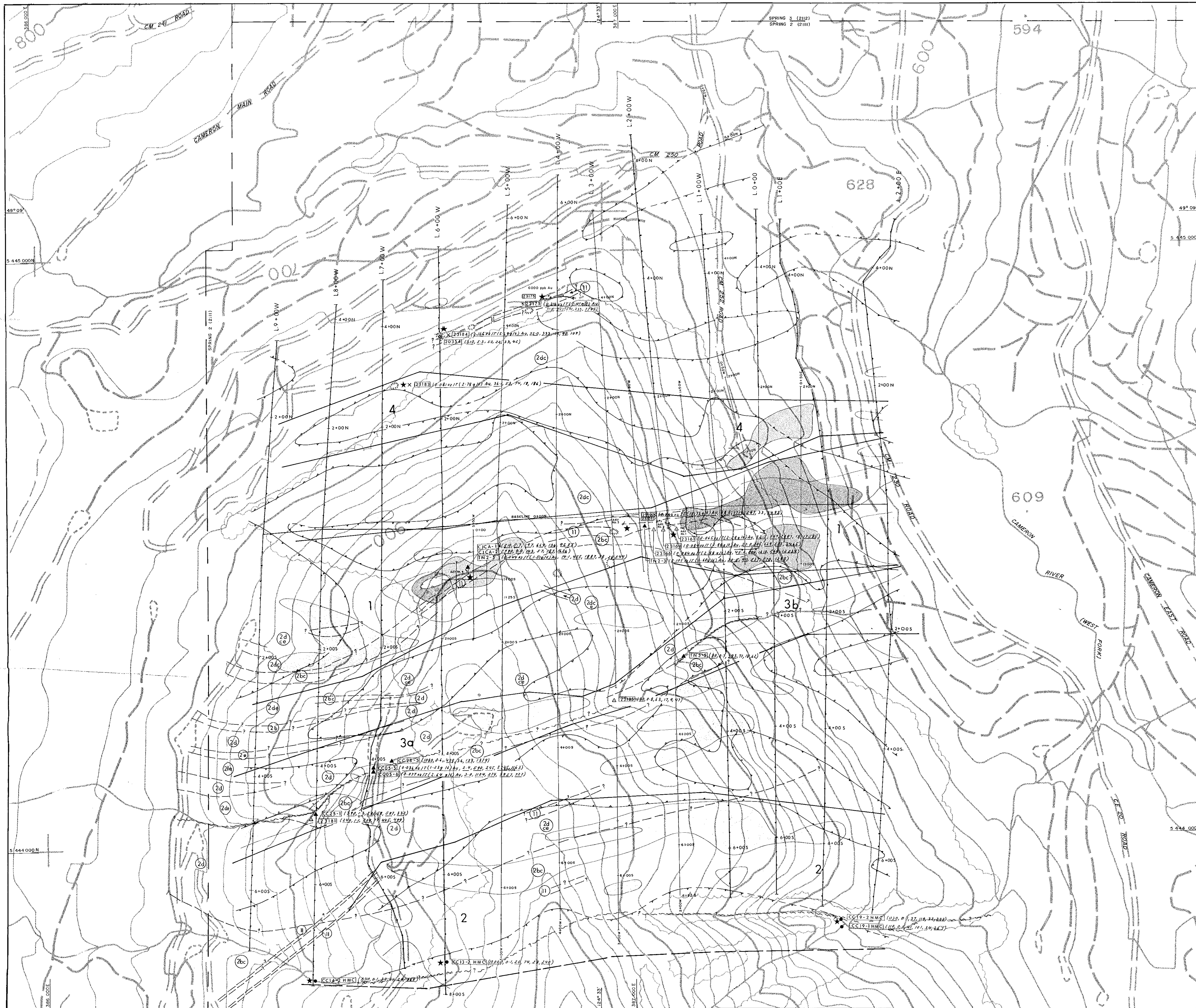
18-108

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

VLF-EM SURVEY
PROFILES
NORTHWEST PART OF SPRING 2 CLAIM
SPRING PROPERTY
VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No: V 263 - 2	By: C. J. C.
Scale: 1:2500	Drawn: M. W. J. S.
Drawing No: 16	Date: NOVEMBER 1988.

MPH MPH Consulting Limited



LEGEND

- GEOLOGY**
- CENOZOIC**
TERTIARY (EOCENE ?)
 [Symbol] GRANODIORITE + hornstone - feldspar porphyry
- MESOZOIC**
TRIASSIC
 [Symbol] KAMBUITEN FORMATION: basalt flows, pillow breccia and hydrothermal rocks
- PALEOZOIC**
UPPER SILURIAN TO LOWER PERMIAN
ROCKY MOUNTAIN
 [Symbol] M'LAURUM HIDE FORMATION (formerly mapped as Myra Formation)
 2a argillite
 2b shaly buff, cherty siltstone, chert
 2c fine-grained buff, siliceous siltstone, silstone
 2d medium to coarse-grained buff, siliceous sandstone
 2e highly buff, well lignitiferous
 2f conglomerate
 2g agglomerate
- NOTE: Legend based in part on Mackay, B.C.M.P.H., G.F. 1987/2, and Muller, 1955 p. 85C Paper 79-30.

- ANOMALIES**
- [Symbol] VLF-E M Fraser filtered dip angles 20
 [Symbol] Gold ≥ 20ppb
 [Symbol] Arsenic ≥ 20ppm
 [Symbol] Target zone

- SAMPLING**
- [Symbol] Rock-outcrop (1987, 1988)
 [Symbol] Rock-floor (1987, 1988)
 [Symbol] Silt or soil (1987)
 [Symbol] Heavy mineral silt concentrate (1988)
 [Symbol] Outstanding anomalous analysis
 (5, 8, 23, 49, 74, 103) Au, Ag, As, Cu, Pb, Zn results; anomalous values underlined; additional anomalous elements also listed; results in ppb for Au, ppm for all other elements, unless otherwise specified.

- SYMBOLS**
- [Symbol] 1987 grid line
 [Symbol] 1988 grid line
 [Symbol] Claim boundary
 [Symbol] 4wd road
 [Symbol] Road presently inaccessible to vehicles
 [Symbol] Geologic contact (defined, approximate, assumed)
 [Symbol] Fault (approximate, assumed)
 [Symbol] Vein
 [Symbol] Trench
 [Symbol] Adit

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

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0 50m 100m 150m 200m

NOTE: 20 metre topographic contour interval.
 Claim lines from L.C.P.'s located in field.



INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

COMPILATION MAP
 NORTHWEST PART OF SPRING 2 CLAIM
 SPRING PROPERTY
 VICTORIA AND NANAIMO MINING DIVISIONS, B.C.

Project No: V 263-2	By: T.M.N.
Scale: 1:2500	Drawn: J.S.
Drawing No: 18	Date: NOVEMBER 1988

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