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GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL REPORT

BRONSON PROPERTY

GOSSAN 14-17, 23, 30 CLAIMS

FILMED

LIARD MINING DIVISION

NTS: 104B/10W, 11E

LAT. 56° 37' N LONG. 130° 00' W

CATHEDRAL GOLD CORPORATION

by

D. GORC

JUNE 1989

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,000

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1.0 INTRODUCTION

A program of linecutting, geophysical surveys, soil sampling, prospecting and trenching was completed on the Gossan 15, 17, 23 and 30 mineral claims during the period August 15 - October 10, 1988. A crew consisting of a geologist, geological assistant, geophysical operator - technician and two linecutters was based at the Pamicon camp at the Bronson Airstrip, 7 km northwest of the property.

The aim of the program was to outline mineralized structures with the emphasis on structures bearing 120°. This trend appears to be one of the dominant structural orientations in the Bronson Creek area including the nearby Snip deposit. Bronson Creek itself trends approximately 120°, and workers in the area suspect that there may be a major fault within the Bronson Creek Valley. It was hoped that a combination of prospecting, VLF electromagnetic, Max-Min, HLEM and magnetometer surveys would outline such structures.

As there are other mineralized structures in the Bronson Creek area, for example Skyline's mineralized structures striking at 070°, the geophysical program also tested for possible crosscutting structures.

2.0 LOCATION, ACCESS, TOPOGRAPHY

The Bronson property is located in the Iskut River area of northwestern British Columbia, on NTS map sheets 104B/10W, 11E.

The property is located along Bronson Creek approximately 7 km southeast of the Bronson Airstrip currently servicing the Cominco/Prime Snip project.

Access to the property is by charter aircraft from either Smithers (320 km), Terrace (280 km) or Wrangell, Alaska (80 km) to the Bronson airstrip and by helicopter to the property. A second airstrip is located 14 km SE of the property boundary, along Snippaker Creek, but its condition is uncertain because this strip has seen little use since completion of the Bronson Strip.

Alternate access routes are by helicopter from the Bobquin Airstrip - Highway Maintenance camp located along the Stewart-Cassiar Highway, 50 km to the east and another airstrip near Skyline's Johnny Mountain Gold Mine, 3 km to the west.

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PLATE 1 ISKUT RIVER - BRONSON AIRSTRIP
(Looking West)

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The property occurs within the Coast Range Mountains which are characterized by rugged, steep, glaciated terrain. Elevations on the property range from 600m to 1800m above sea level. The upper elevations are marked by ice caps and valley glaciers. The western portion of the property is marked by very rugged relief with many areas accessible only with mountain climbing gear. Movement about other portions of the property, although time consuming, is not overly difficult.

Vegetation ranges from thick alder growth along the valley bottoms to alpine grasses along the ridge tops.

3.0 CLAIM INFORMATION

The Bronson property is comprised of 6 claim blocks totalling 76 units located on NTS map sheets 104B/10W, 11E in the Liard Mining Division. These claims have been grouped for assessment purposes.

Table 1 - Claim Information - Bronson Property

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Recording Date</u>	<u>Year of Expiry</u>
Gossan 14	18	2405	August 24/83	1994
Gossan 15	12	2406	August 24/83	1995
Gossan 16	10	2407	August 24/83	1994
Gossan 17	20	2408	August 24/83	1993
Gossan 23	12	2848	June 30/83	1994
Gossan 30	4	4164	August 14/87	1992
76 units				
<hr/>				

The Bronson property was staked by Mr. Chris Graf in 1983 as part of his Gossan Claim Group. In 1985, Western Canadian Mining Corporations signed an Option Agreement with Mr. Graf whereby Western Canadian could earn a 60% interest in the Gossan property. In August 1988, Cathedral Gold Corporation signed an option agreement whereby Cathedral Gold Corporation could earn Western Canadian's 60% interest in two separate portions of the Gossan property: one of which is called the Bronson property.



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**BRONSON
LIARD M.D.**

FIGURE 1

N.T.S. 104B/10W,11E

LOCATION MAP

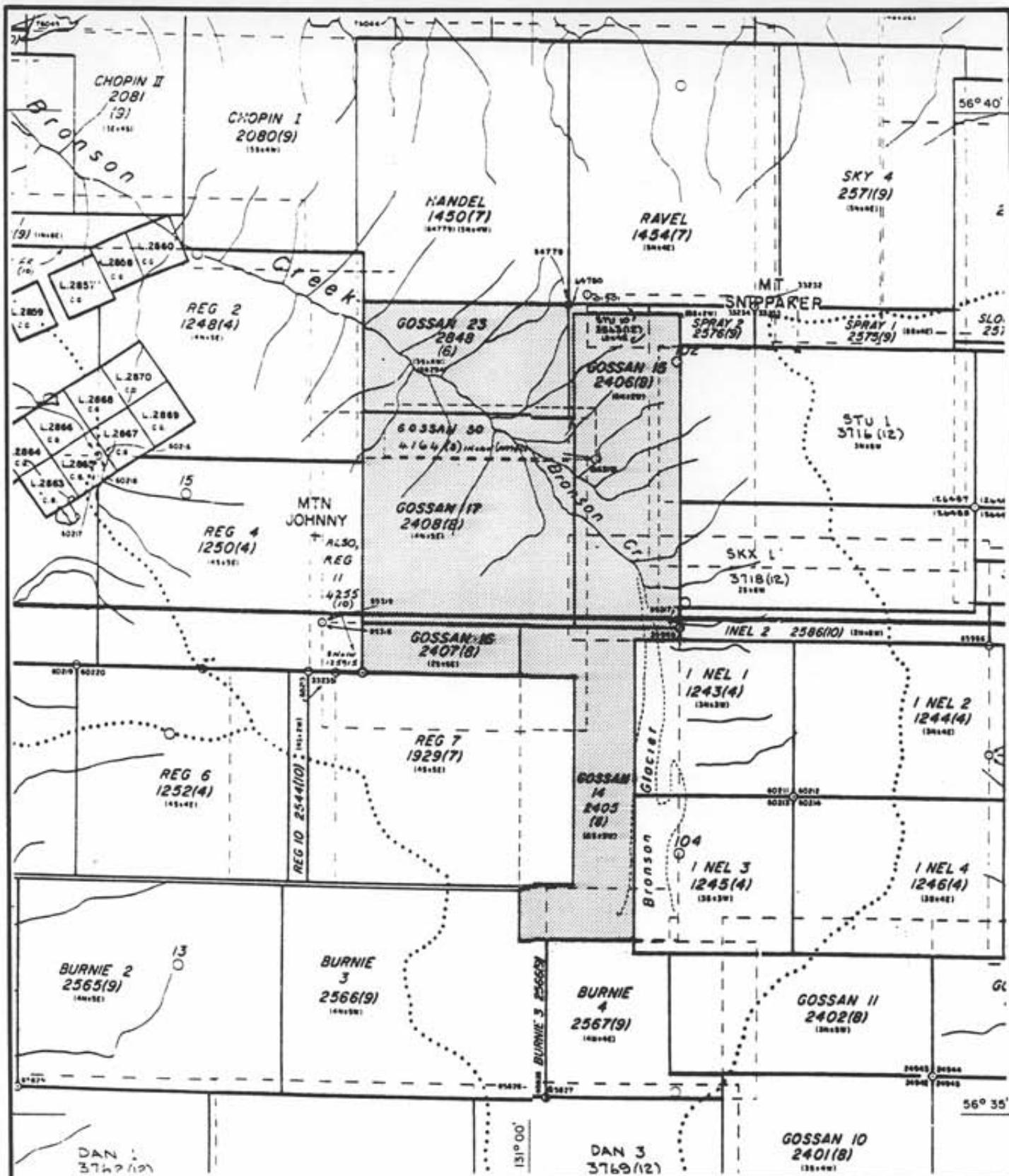
KM 0 50 100 150 200

SCALE: 1:3,750,000

DATE: JUNE, 1989

GEOLOGIST: D. GOREC

DRAWN BY: J. CORKUM



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BRONSON
LIARD M.D.

FIGURE 2

N.T.S. 104B/10W, 11E

CLAIM MAP

0 1000 2000 3000 m

SCALE: 1:50,000

DATE: JUNE, 1989

GEOLOGIST: D. GORC

DRAWN BY: J. CORKUM

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4.0 EXPLORATION HISTORY

Mineral Exploration in the area dates back to 1907 with the discovery of mineralization near Johnny Mountain. Since then the area has undergone sporadic episodes of mineral exploration for both precious metals and base metals.

The latest episode of gold exploration in the Iskut River area began with Skyline's discovery on Johnny Mountain in 1980. Subsequent exploration to 1989 has led to several significant gold deposits in the area including Skyline's Johnny Mountain Mine (opened in mid 1988 - ore reserves 686,000 tons - 0.57 oz/ton Au); Cominco/Prime's Snip Deposit (1,570,000 tons - 0.64 oz/ton Au); Inel Resources (underground exploration program in 1988); Gulf International's McLymont Creek property and Western Canadian Mining/Graf's Khyber property.

During this same period significant discoveries have also been made in the neighbouring Unuk River, South Unuk River, Sulphurets and Stewart Mining Camps. These discoveries include: Calpine/Consolidated Stikine's Eskay Creek Project; Newhawk/Granduc/Corona's Brucejack-West Zone (ore reserves 854,072 tons - 0.354 oz/t Ag and 22.94 oz/ton Ag); Sulphuret's Gold Corporations Kerr Property (reserves of 66,000,000 tons - 0.85% Cu and 0.012 oz/t Au); Catear's Gold Wedge deposit (reserves 1,000,000 tons - 0.5 oz/t Au and 4 oz/t Ag); Magna Ventures/Silver Princess/Echo Bay Mines Ltd.'s Doc Property (470,000 tons - 0.27 oz/t Au, 1.31 oz/t Ag); and Westmin Resources' Premier Gold Project (Silbak-Premier 6.5 million tons - 0.063 oz/t Au, 2.34 oz/t Ag) and Big Missouri (1.8 million tons - 0.105 oz/t Au, 0.86 oz/t Ag).

The Bronson property was staked in 1983 by Mr. Chris Graf as part of the much larger Gossan property which extended a further 15 km southeast. In 1983 Lonestar Resources (Bending, 1984) completed an extensive regional mapping, silt and soil sampling program over the entire Gossan property. During this program a line of soil and silt samples was taken along the north and south slopes of the Bronson Creek Valley including the present Bronson Property. This soil and silt program returned several anomalous gold values. The Bronson East and Wolverine showings were also discovered during this program.

In 1987 Western Canadian completed a geological mapping, rock chip sampling, soil sampling program over most of the Bronson property. This program included a 100 x 25m soil sampling grid along the north side of the Bronson Creek Valley in the vicinity of the Bronson East showing. The survey returned many anomalous gold values most of which were located beneath or south of the Bronson East Showing.

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5.0 REGIONAL GEOLOGY

Regional mapping in the area includes work by Kerr (1948) and Grove (1971, 1986). More detailed mapping programs are currently underway by both the federal and provincial governments.

The property lies at the eastern edge of the Coast Plutonic Complex within a belt of Upper Triassic - Jurassic sedimentary and volcanic rocks. This assemblage is intruded by Mesozoic and Cenozoic stocks and dykes of granodiorite, quartz monzonite and feldspar porphyry. In addition there are some Tertiary basalt and diorite plugs and dykes.

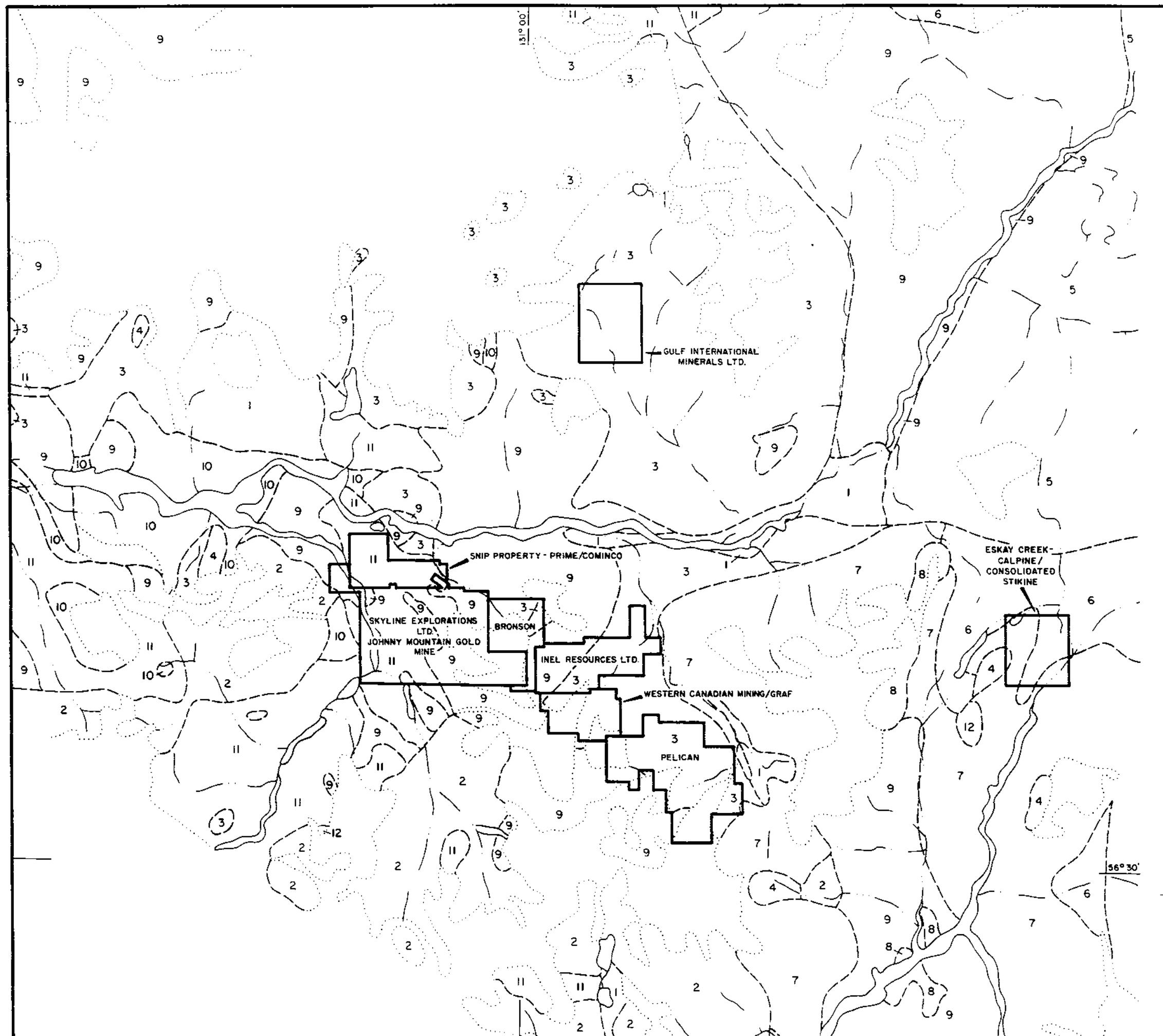
6.0 PROPERTY GEOLOGY

Both Lonestar (1984) and Western Canadian (1987) have completed property scale geological mapping programs. Bending (1984) divided the stratigraphy into five mappable units. These mappable units, from oldest to youngest, are: Black Argillite Unit, Banded Siltstone Unit, Green Volcanic Unit, Upper Tuffaceous Sedimentary Unit and Grey Volcanic Unit. Intrusive rocks were divided into: granodiorite and diorite stocks, orthoclase porphyry, quartz-eye felsite dykes, Coast Range intrusives, and alkali basalt dykes, Bending (1984).

Western Canadian's (1987) geological mapping indicated that the property is underlain by an interbedded sequence of sedimentary and pyroclastic rocks, dipping moderately to the southwest.

The lower portion of the sequence consists largely of thinly laminated siltstones, greywackes and shales which give away to tuffs and lapilli tuffs higher in the sequence. Western Canadian divided the tuffaceous portion of the sequence into two geological units: a tuffaceous siltstone, crystal tuff, lapilli tuff unit containing up to 3% disseminated pyrite and a latite felsic volcanic unit containing up to 10% disseminated pyrite.

Western Canadian also mapped numerous granodiorite, hornblende diorite and aplite dykes which intrude all other rock units. They report local silicification, biotization and quartz veining associated with these dykes.



LEGEND

CENOZOIC

- 1 Recent basalt flows, ash
 - 2 Early Tertiary felsic intrusives

MESOZOIC

 - 3 Cretaceous and Tertiary intrusive rocks, mainly felsic
 - 4 Jurassic intrusives, syenite to granodiorite
 - 5 Jurassic to Cretaceous clastic sediments, Upper Hazleton Group in part
 - 6 Middle to Upper Jurassic Hazleton Group sediments
 - 7 Upper Triassic to Middle Jurassic Hazleton Group volcanics and related sedimentary rocks
 - 8 Triassic and Early Jurassic granodiorite
 - 9 Upper Triassic to Lower Jurassic andesitic volcanics and clastic sediments

PALEOZOIC

 - 10 Carboniferous and Permian greenstone, clastic sediments and limestone
 - 11 Carboniferous and Permian schist and gneiss
 - 12 Metamorphic rocks, age unknown

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BRONSON - PELICAN
LIARD M.D.

FIGURE 3 N.T.S. 104B/10W, II

REGIONAL GEOLOGY

km 0 5 10 15 k
 SCALE: 1:250,000 GEOLOGIST: D. GORE
 DATE: JUNE 1989 DRAWN BY: J. CORKUM

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PLATE 2 BRONSON CREEK VALLEY
(Looking Southeast)

7.0 ECONOMIC GEOLOGY

Previous work by Lonestar (Bending, 1984) and Western Canadian (1987) has outlined two areas of mineralization: the Wolverine and Bronson East Showings. In 1988 Cathedral Gold Corporation discovered the T-Zone mineralization located near the Bronson East showings.

7.1 Wolverine Showing

The Wolverine showing was discovered by Lonestar in 1983. The showing is located on the Gossan 16 claim on the steep western slope of the Bronson Valley. The exposed zone is approximately 90m long and 3 to 5m wide and contains sphalerite and galena with lesser pyrite and chalcopyrite.

The mineralization occurs within tuffaceous siltstones just below the contact with an overlying tuff unit. Within the zone the rocks are locally sericitized and silicified. The mineralization appears to be controlled by northwest trending shears dipping moderately to the southwest. Massive sulphide boulders were discovered at Wolverine showing, samples of which returned assays up to 0.143 oz/t Au and 62.5 oz/t Ag. Such boulders likely come from somewhere above the Wolverine showing.

One should also note the widespread sphalerite-galena float which occurs on top of the Bronson Glacier beneath the Wolverine showing. The source of this float is likely along the western slope of the Bronson Creek Valley.

Detailed rock and chip sampling by Lonestar (1984) and Western Canadian (1987) indicated zinc, lead and silver values but only low gold values.

Table 2 - Wolverine Showing - Rock Geochemistry

Lonestar (Bending, 1984)

Sample Number	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	Cu (ppm)
R - 86	97	5.3	51,000	3,090	104
R - 876	70	13.0	6,380	6,030	725
R - 88	195	68.5	80,800	235,000	478
R - 90	2,650	16.5	10,500	79,500	261

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Western Canadian (1987)

<u>Sample Number</u>	<u>Au (ppb)</u>	<u>Ag (ppm)</u>	<u>Pb (ppm)</u>	<u>Zn (ppm)</u>	<u>Cu (ppm)</u>
WCH - 1	12	3.1	996	524	107
WCH - 2	495	42.1	19,465	52,240	386
WCH - 3	65	13.4	3,546	33,597	346
WCH - 4	25	6.1	1929	19,500	450
WCH - 5	15	10.6	4,548	8,838	100
WCH - 6	1	3.5	1,251	11,108	84
WCH - 7	47	8.5	248	4,821	142
WCH - 8	3	0.6	161	463	48
WCH - 9	1	1.7	379	3,543	72
WCH - 10	18	4.1	1,512	2,517	59
WCH - 11	1	1.4	619	1,463	52
WCH - 12	1	1.5	435	782	21

Cathedral Gold Corporation (1988)

<u>Sample Number</u>	<u>Au (ppb)</u>	<u>Ag (ppm)</u>	<u>Pb (ppm)</u>	<u>Zn (ppm)</u>	<u>Cu (ppm)</u>
Bron-21R	20	1.7	187	105	91
Bron-22R	14	1.1	196	13,629	49
Bron-23R	152	7.8	4,644	23,869	89
Bron-24R	250	10.9	4,744	43,182	89
Bron-25R	79	17.5	3,252	80,216	323

Table 3 - Bronson Glacier Float - Rock Geochemistry

Lonestar (Bending, 1984)

<u>Sample Number</u>	<u>Au (oz/t)</u>	<u>Ag (oz/t)</u>	<u>Pb (%)</u>	<u>Zn (%)</u>	<u>Cu (%)</u>
R-3042	0.028	1.33	1.21	7.95	-
R-3043	0.009	3.10	7.15	10.50	-
R-3044	0.062	1.04	1.40	2.76	-
R-3045	0.002	0.22	0.34	2.17	-
R-3046	0.030	1.32	2.69	7.10	-
R-3047	0.049	17.95	9.40	7.80	-
R-3048	0.109	3.20	5.03	12.50	-
R-3049	0.083	0.59	0.31	1.50	-
R-3050	0.008	0.77	1.96	4.65	-
R-58364C	0.106	1.92	1.57	5.50	0.08

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Cathedral Gold Corporation (1988)

Sample Number	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	Cu (ppm)
Bron-26R	210	2.0	279	874	18
Bron-27R	2	0.5	29	1,362	49
Bron-28R	590	59.8	5,022	39,102	256
Bron-29R	6,840	4.7	46	169	124

7.2 Bronson East Showing

Mineralization was first discovered in the Bronson East area by Lonestar in 1983. They described the showings as occurring within northwest trending shears near small dykes or stocks of felsite and orthoclase porphyry. Localized zones of sericite-pyrite alteration occur alongside the mineralized shears.

Lonestar described the mineralization as consisting of 0.2 to 1.0 metre wide veins of quartz, sphalerite, chalcopyrite, galena, pyrite and pyrrhotite. Rock chip sampling returned good base metal values but only sporadic gold values. Although the showings appear to be narrow and of restricted size they recommended more detailed follow up in the area.

In 1987 Western Canadian examined and resampled many of the Bronson East Showings. For the most part such sampling returned significant base metal and silver values but only low gold values. One northwest trending massive sulphide vein returned 0.202 oz/ton Au, 0.85 oz/ton Ag, 21.5% Zn and 0.38% Pb. The exact location of this vein was not given in their report although it may be located near their grid location L3E 3+35S.

The main showings, examined in 1988 by Cathedral Gold Corporation, are located within a bright 75m x 100m gossan, centered around a 10m thick, fresh, unaltered granodiorite dyke. The area has been affected by complex faulting, downfaulting a wedge of tuffs into the siltstone-greywacke sequence which underlies much of the lower elevations of the Bronson Valley. It appears that the fresh granodiorite dyke is intruded along a northeast trending shear zone which provided a zone of weakness.

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PLATE 3 T-ZONE - BRONSON EAST SHOWINGS
(Looking East)

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The showing consists of "pods" of massive sulphide mineralization oriented trending in a northwesterly direction. Most pods range from 0.5m to 1m wide and up to 5m long. It is possible that the northeast trending shear has disrupted the northwesterly trending veins. This area requires more detailed mapping to decipher the structural complexity. See Table 8 for Geochemical results.

Table 4 - Bronson East Showing - Rock Geochemistry

Lonestar (Bending, 1984)

Sample Number	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	Cu (ppm)
R4735	5,800	9.9	12,700	146,000	957
R4736	860	7.1	2,480	168,000	645
R4738	2,600	6.5	783	54,100	253
R-358	2,800	26.9	586	113,000	2,030

Western Canadian (1987)

Sample Number	Au (oz/t)	Ag (oz/t)	Pb (%)	Zn (%)	Cu (%)
WCH-50	0.001	0.08	0.01	0.19	0.05
WCH-51	0.006	0.23	0.02	9.32	0.08
WCH-52	0.046	0.83	0.10	0.36	0.11
WCH-53	0.041	0.62	0.09	0.63	0.10
WCH-54	0.018	0.44	0.02	4.49	0.13

Cathedral Gold Corporation (1988)

Sample Number	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	Cu (ppm)
Bron-42	1,735	27.3	52	99,999	1,605
Bron-43	2,915	31.1	9	632	10,400
Bron-52	1,325	5.6	55	903	133
Bron-53	780	7.7	257	9,622	129
Bron-54	3,035	5.8	140	486	428
Bron-55	4,170	76.0	1,490	99,999	2,449
Bron-56 (soil)	3,860	111.9	20,263	1,886	927
Bron-57	2,460	39.6	275	2,322	3,310
Bron-58 (soil)	550	7.3	225	522	183
Bron-59	9,550	43.2	224	99,999	1,416

7.3 T-Zone Showing

The T-Zone Showing is located approximately 150m northwest of the Bronson East Showing. The showing is exposed in a creek bed where the creek makes a sharp bend. As can be seen in Plate 2, a noticeable ridge extends southeasterly from the T-Zone showing towards the Bronson East Showing suggesting the two may be interconnected.

The T-Zone is comprised of two parallel mineralized structures approximately 10m apart. The Lower Zone is the most significant of the two. In 1988 two trenches, approximately 8m apart, exposed the Lower T-Zone showing. A smaller trench attempted to expose the Upper T-Zone showing but unfortunately the overlying clay bank collapsed on the trench area during the blast.

7.3.1 Lower T-Zone Showing

The Lower T-Zone Showing is comprised of a massive sulphide-quartz lode 1m to 1.5m thick underlain by a 5m wide pyrite stringer zone.

The massive sulphide lode strikes at approximately 120° and dips 45° - 50° southwesterly. The lode is comprised of 85% sulphide consisting largely of pyrrhotite, with noticeable chalcopyrite, pyrite and sphalerite.

The pyrite stringer zone is comprised of a complexely interwoven series of massive pyrite veins to 20 cm thick. Although no one vein has continuity the general fabric of the veins has a strike similar to that of the lode structure. However the pyrite stringer zone appears to dip more steeply than the lode, 65° southwesterly dip as compared to 45° - 50° for the lode. This suggests that the two may represent separate mineralizing episodes. However the irregular nature of the lode and stringer zones make accurate dip measurements impossible and therefore the apparent difference in dip uncertain. Geochemical results are reported in Table 5.

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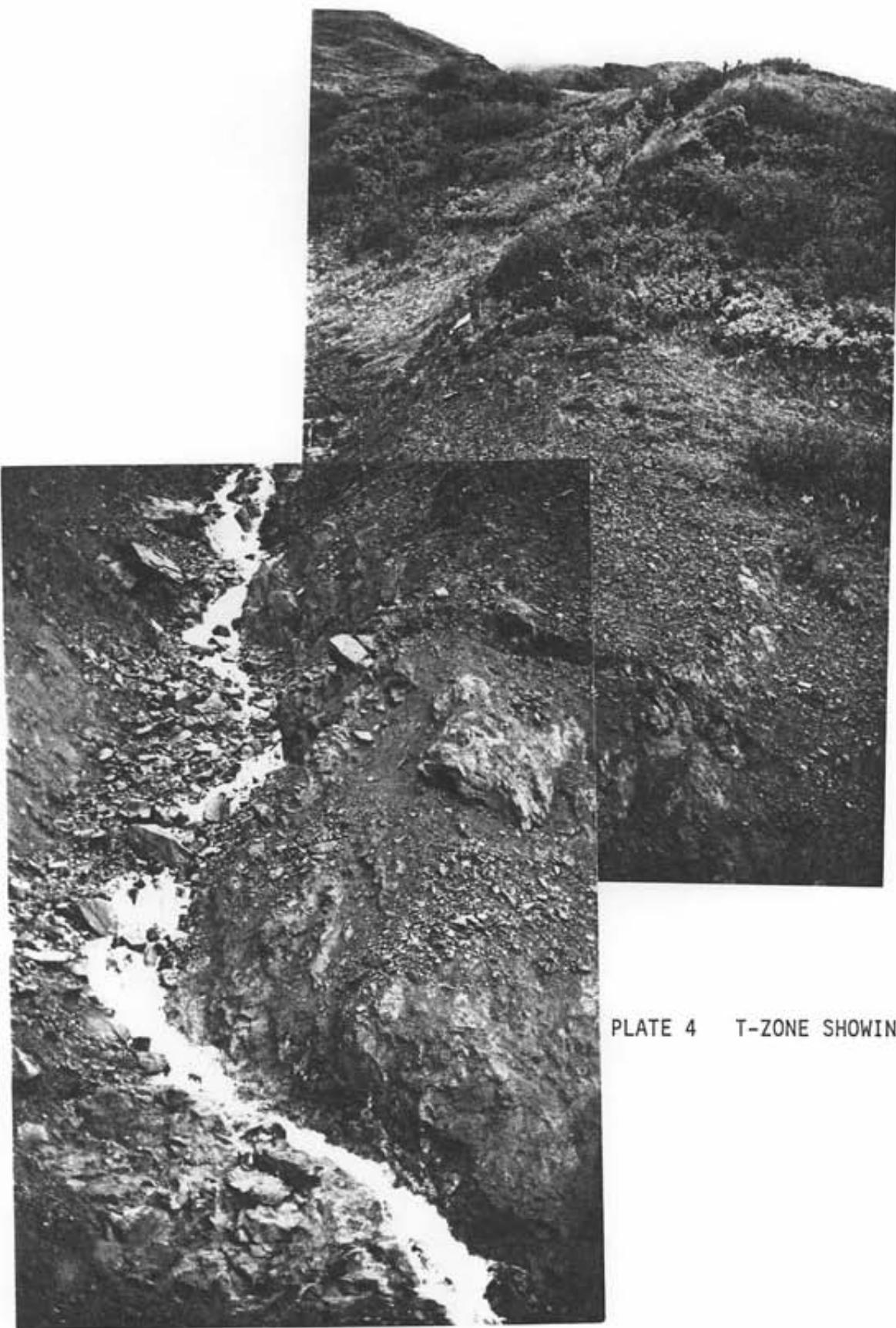


PLATE 4 T-ZONE SHOWING

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PLATE 5 T-ZONE SHOWING: MASSIVE SULPHIDE - QUARTZ LODE

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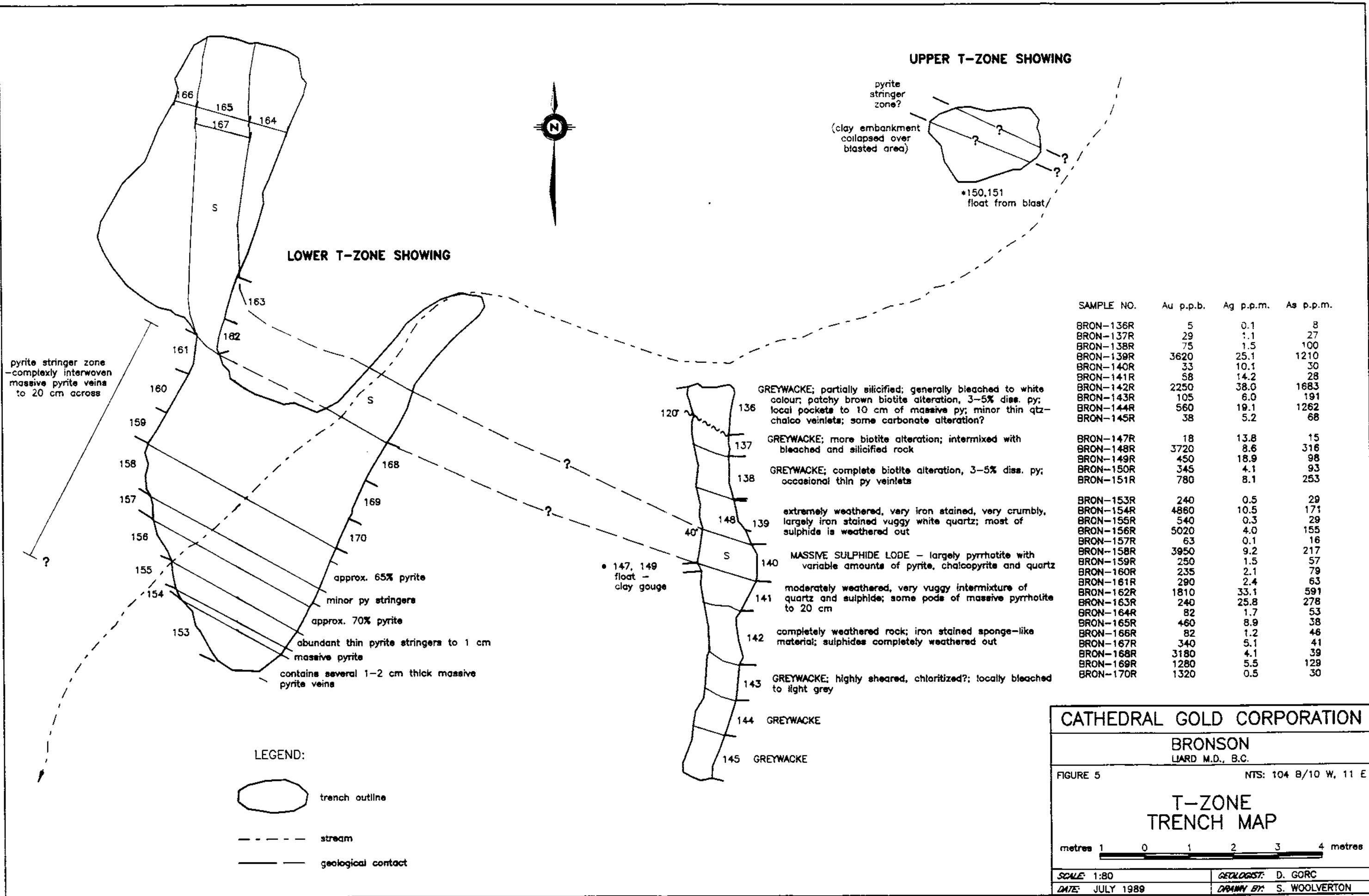
PLATE 6 T-ZONE SHOWING: PYRITE STRINGER ZONE

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Table 5 - Lower T-Zone Showing - Rock Geochemistry

Sample Number	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ni (ppm)
Bron-45R	Grab: pyrite stringer zone	2,790	12.8	1,147	164	624	383	79
Bron-46	Grab: pyrite stringer zone	1,725	6.8	4,449	82	125	39	242
Bron-47	Grab: pyrite stringer zone	1,030	4.8	70	110	196	63	20
Bron-49	Grab: weathered lode	240	15.5	809	179	5,848	203	37
Bron-50	Grab: massive sulphide lode	3,850	29.0	120	271	218	473	22
Bron-61	Grab: pyrite stringer zone	16,920	6.4	2,208	14	131	209	66
Bron-62	Grab: massive sulphide lode	870	13.4	476	117	85	822	73
Bron-63	Grab: rusty shear	105	0.7	78	20	117	56	26
<u>Float from Blast</u>								
Bron-100R	Stringer Py	340	35.3	8,978	350	9,946	258	84
Bron-101	Qtz-cp-po	76	3.0	1,300	21	184	54	31
Bron-102	Stringer Py	7,640	13.3	1,393	84	1,232	319	94
Bron-103	Stringer Py	96	4.2	2,187	14	195	69	46
Bron-104	Massive Po	5,160	54.6	11,193	328	35,217	344	201
Bron-105	Stringer Py	220	8.5	2,161	62	470	48	48
Bron-106	Massive Py	8,640	72.4	81	562	685	630	32
Bron-107	Massive Po	680	16.7	1,881	144	2,850	81	89
Bron-108	Massive Po	75	7.2	1,886	8	300	2	90
Bron-109	Massive Py-Po	51	5.0	1,870	16	886	123	81
Bron-110	Qtz-py-po	290	26.4	17,922	18	455	7	25
Bron-111	Qtz-py-cp	37	12.6	6,068	18	199	5	17
Bron-112	Massive Po-cp	280	9.8	3,303	62	17,077	52	94
Bron-113	Stringer Py	4,160	8.8	992	48	1,030	202	154
Bron-114	Sphal-qtz	4,390	90.5	3,958	2,088	99,999	175	57
Bron-115	Massive Py	6,305	22.1	391	316	1,116	561	30



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Table 5 - Float from Blast (Cont'd)

Sample Number	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ni (ppm)
Bron-116R	Massive Py	7220	17.7	453	204	567	380	33
Bron-117	Massive Py	3010	14.5	447	177	304	477	29
Bron-118	Stringer Py	1060	13.0	627	96	396	377	65
Bron-123	Stringer Py	255	3.8	910	28	372	61	51
Bron-124	Massive Po	43	5.7	596	107	1918	1331	128
Bron-125	Massive Po	17	3.9	1040	16	990	508	126
Bron-126	Massive Po	21	4.1	927	17	683	463	123
Bron-127	Massive Po	23	3.9	796	8	1003	553	125
Bron-128	Silicified zone: 15% Py	330	8.4	948	164	284	257	163
Bron-129	Silicified zone: 15% Py	405	5.9	421	129	134	257	107
Bron-130	Qtz-cp-Po	26	13.2	7,410	21	595	6	27
Bron-131	Qtz-Po	8	2.9	1,186	8	182	10	77
Bron-132	Massive Po	4	2.6	1,087	3	248	13	107
Bron-133	Massive Po	10	1.9	1,018	4	1,087	6	118
Bron-134	Qtz-Cp	57	18.5	9,265	5	429	3	86
Bron-135	Stringer Py	13,690	4.3	327	50	755	109	118

Trench Samples

Bron-136R	5	0.1	50	7	341	8	17
Bron-137	29	1.1	289	14	212	27	78
Bron-138	75	1.5	241	44	392	100	28
Bron-139	3,620	25.1	276	327	335	1,210	11
Bron-140	33	10.1	5,319	17	1,157	30	87
Bron-141	58	14.2	7,320	14	586	28	23
Bron-142	2,250	38.0	813	643	303	1,683	6
Bron-143	105	6.0	515	113	400	191	25
Bron-144	560	19.1	268	254	92	1,262	5
Bron-145	38	5.2	668	29	376	68	72
Bron-147	18	13.8	6,932	9	211	15	75
Bron-148R	3,720	13.8	6,932	9	211	15	75
Bron-149	450	8.6	304	137	129	316	8
Bron-153	240	0.5	249	15	308	29	86
Bron-154	4,860	10.1	4,621	25	1,581	171	130
Bron-155	540	0.3	239	20	298	29	107
Bron-156	5,020	4.0	584	47	350	155	112
Bron-157	63	0.1	39	15	852	16	143
Bron-158	3,950	9.2	1,278	75	629	217	146
Bron-159	250	1.5	769	29	472	57	59
Bron-160	235	2.1	342	51	581	79	61
Bron-161	290	2.4	424	67	824	63	52
Bron-162	1,810	33.1	2,203	908	14,009	591	110
Bron-163	240	25.8	2,324	619	12,390	278	21
Bron-164	44	1.7	755	19	776	53	88
Bron-165	460	8.9	4,800	13	764	38	49

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Table 5 - Trench Samples (Cont'd)

Sample Number	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ni (ppm)
Bron-166		82	1.2	585	32	628	46	45
Bron-167		340	5.1	4,379	13	427	41	78
Bron-168		3,180	4.1	2,021	8	346	39	152
Bron-169		1,280	5.5	721	87	1,868	129	73
Bron-170		1,320	0.5	374	17	348	30	79

7.3.2 Upper T-Zone Showing

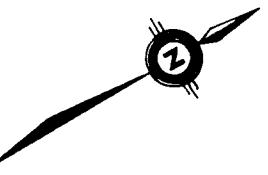
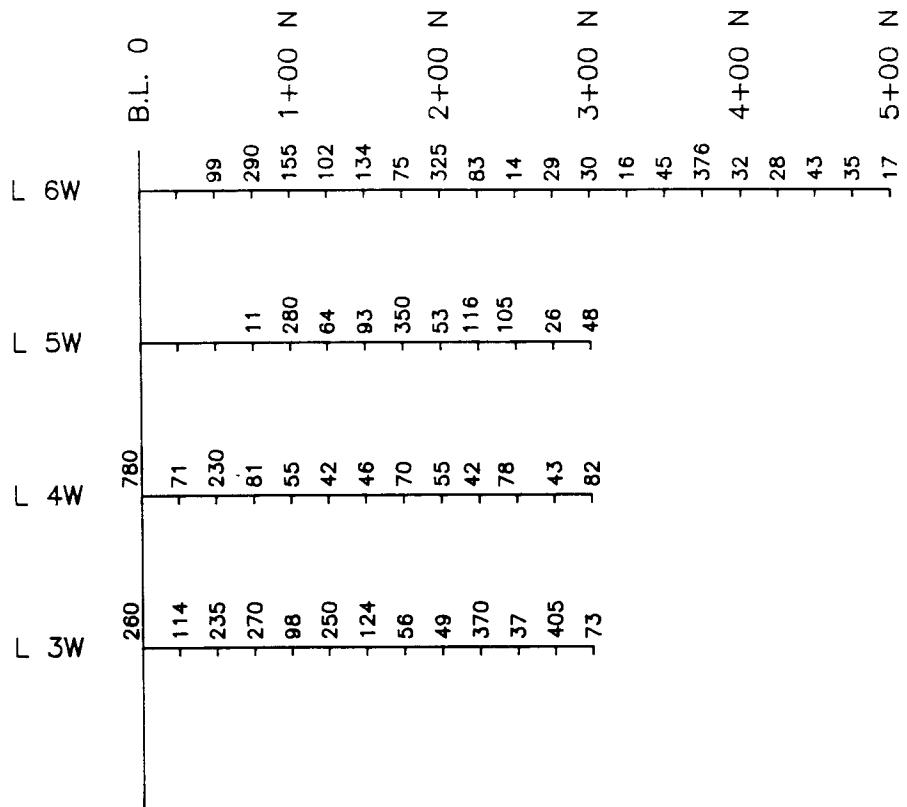
Another 1 meter wide zone of complexely interwoven pyrite veins occurs approximately 10m above the Lower Zone. Attempts to trench the zone were unsuccessful as the overlying clay bank collapsed during the blast. Results of rock chip sampling are displayed in Table 6.

Table 6 - Upper T-Zone Showing - Rock Geochemistry

Sample Number	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ni (ppm)
Bron-48R	Grab	1,465	12.3	387	51	113	267	148
Bron-64R	Grab	2,990	1.4	170	11	1,563	30	53
Bron-119R	Grab	820	7.5	1,298	21	167	357	142
Bron-120R	Grab	610	7.1	1,417	24	223	295	122
Bron-121R	Grab	990	14.4	2,957	13	199	589	199
Bron-122R	Grab	755	11.1	2,028	22	205	161	191
Bron-150R	Grab	345	4.1	929	22	250	93	122
Bron-151R	Grab	780	8.1	1,527	27	241	253	157

7.3.3 Geochemistry - T-Zone Showing

For comparative purposes geochemical results returned from samples of the T-Zone are given with geochemical results from the Snip deposit made public by Cominco in 1988. (Table 7)



LEGEND:

3 SOIL SAMPLE LOCATION
Au (p.p.b.)

CATHEDRAL GOLD CORPORATION	
BRONSON	
LIARD M.D., B.C.	
FIGURE 6	NTS: 104 B/10 W, 11 E
T-ZONE	
Au GEOCHEMISTRY	
 metres 50 0 50 100 metres	
SCALE: 1:2500	GEOLOGIST: D. GORC
DATE: JULY 1989	DRAWN BY: S. WOOLVERTON

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Table 7 - Geochemistry Comparison:
 T-Zone Showing vs Snip Deposit Mineralization

<u>Element</u>	<u>T-Zone (CAT) average of 76 samples</u>	<u>Snip (Cominco) (144 average samples)</u>
Fe	21.52%	9.84%
Zn	2281 ppm	2100 ppm
As	250 ppm	662 ppm
Cu	2223 ppm	504 ppm
Pb	131 ppm	360 ppm
Bi	24 ppm	33 ppm
Cd	55 ppm	16 ppm
Ag	12.7 ppm	14 ppm
Sb	3.2 ppm	1 ppm
Hg	Not analyzed	9 ppb

Sampling of mineralization at the Snip and Skyline deposits by Cathedral in 1988, indicate that nickel and molybdenum may be added to the above list.

Table 8 - Snip and Skyline Deposits - Rock Geochemistry

<u>Sample Number</u>	<u>Description</u>	<u>Mo (ppm)</u>	<u>Cu (ppm)</u>	<u>Pb (ppm)</u>	<u>Zn (ppm)</u>	<u>Ni (ppm)</u>	<u>As (ppm)</u>	<u>Sb (ppm)</u>	<u>Bi (ppm)</u>
Sky 1	Discovery								
	Zone	1	41,193	391	710	2	74	3	59
Sky 2	16 Vein	5	2,735	249	4,762	7	86	2	2
Sky 3	16 Vein	10	2,991	2,174	6,490	7	118	2	7
Sni 1	Snip	59	148	88	603	15	26	2	7
Sni 2	Snip	26	2,481	1,009	1,682	496	362	3	363
Sni 3	Snip	48	1,614	770	1,516	284	5,871	14	69
Sni 4	Snip	23	289	191	578	26	820	3	7
Sni 5	Snip	5	87	61	191	17	155	2	12

At first glance, the Snip and T-Zone mineralization would appear to have similar geochemical signatures, although more extensive and rigorous sampling will be required to confirm this conclusion.

Selected samples from the T-Zone were also analyzed for As-Sb-Bi-Ge-Se-Te by hydride generation ICP, as an additional check of trace element geochemistry. The results are given in Table 9.

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Table 9 - T-Zone Showing - Trace Element Geochemistry

<u>Sample Number</u>	As (ppm)	Sb (ppm)	Bi (ppm)	Ge (ppm)	Se (ppm)	Te (ppm)
Bron-100R	80.4	3.8	4.9	.7	.2	.6
Bron-101R	37.7	2.0	11.5	.2	1.3	3.8
Bron-102R	215.1	1.9	31.1	.7	.5	.5
Bron-103R	39.6	1.3	3.8	.4	1.0	.8
Bron-104R	82.6	1.9	4.5	.7	.2	.5
Bron-105R	34.7	2.3	18.2	.2	.4	2.8
Bron-106R	534.5	3.6	197.1	.3	.2	.8
Bron-107R	65.7	4.0	46.0	.8	.2	.7
Bron-108R	2.9	.8	.2	.2	.9	.5
Bron-109R	78.4	.6	3.6	.8	.2	.8
Bron-110R	5.3	1.2	.4	.4	.2	.3
Bron-111R	1.6	.8	.5	.2	.2	.4
Bron-112R	26.7	1.4	3.5	.8	.2	.5
Bron-113R	143.4	2.5	18.5	.9	.2	.5
Bron-114R	64.8	6.4	24.5	.8	.5	1.1
Bron-115R	452.4	5.7	29.1	.8	.2	1.1
Bron-116R	319.9	2.7	21.1	.4	.2	.9
Bron-117R	385.9	2.4	21.6	.4	.2	1.1
Bron-118R	298.3	1.2	23.0	.8	1.0	1.4
Bron-119R	238.4	3.2	15.1	.5	.2	1.1
Bron-120R	196.3	3.0	11.2	1.3	.6	1.2
Bron-121R	282.6	3.5	4.6	.9	.4	.5
Bron-122R	104.0	2.2	10.5	.4	.2	.5
Bron-123R	37.1	1.0	4.8	.7	2.1	.6
Bron-124R	1,025.6	2.9	53.5	.4	.2	.3
Bron-125R	446.9	5.4	8.8	1.0	1.2	.7
Bron-126R	341.8	3.6	12.7	.8	.9	.8
Bron-127R	447.8	2.2	9.3	.7	1.5	.4
Bron-128R	188.2	1.5	9.4	.2	.6	.4
Bron-129R	210.5	3.3	8.8	.3	1.0	1.8
Bron-130R	4.5	.2	.1	.3	.3	.3
Bron-131R	8.4	.3	3.7	.7	3.5	.5
Bron-132R	2.3	1.7	6.4	.6	3.7	1.1
Bron-133R	5.3	.6	5.6	1.0	2.5	1.4
Bron-134R	1.8	.2	.1	.2	.2	.3
Bron-136R	7.7	1.2	.6	.2	.4	.4
Bron-137R	27.4	1.8	1.0	.8	.4	1.2
Bron-138R	91.5	1.5	3.7	.2	1.7	1.7
Bron-139R	1,031.9	87.1	131.0	.8	2.8	3.4
Bron-140R	22.1	4.6	.1	.5	.2	.3
Bron-141R	19.5	1.4	3.4	.5	5.2	.2
Bron-142R	1,218.4	20.5	59.9	.7	1.2	1.1
Bron-143R	184.6	3.0	10.0	1.0	1.6	1.1
Bron-144R	1,023.2	6.5	25.3	.2	2.7	.3

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Table 9 - T-Zone Showing (Cont'd)

<u>Sample Number</u>	As (ppb)	Sb (ppm)	Bi (ppm)	Ge (ppm)	Se (ppm)	Te (ppm)
Bron-145R	81.5	1.8	4.8	.8	.7	.9
Bron-147R	35.8	1.3	1.8	.3	4.2	.2
Bron-148R	245.4	4.5	36.7	.6	2.0	.6
Bron-149R	41.9	2.3	3.8	.5	1.3	.3
Bron-150R	80.4	1.1	6.3	.4	1.4	.3
Bron-151R	175.4	1.0	5.2	1.2	1.0	1.0
Bron-156R	144.7	1.9	9.4	.5	.3	1.3
Bron-158R	176.8	2.2	15.3	.2	.4	.3
Bron-159R	54.2	1.3	5.5	.2	.4	.3
Bron-160R	67.0	.8	5.2	.4	1.0	1.0
Bron-161R	56.5	.5	4.7	.2	1.7	.5
Bron-162R	314.7	4.2	23.6	.2	1.1	.3
Bron-163R	144.4	1.1	10.9	.2	.3	.6
Bron-164R	44.1	1.3	3.5	.4	1.2	.3
Bron-166R	37.2	1.1	3.9	.2	.8	.3

7.3.4 Fire Assay Results - T-Zone Showing

As a check of gold analyses by atomic absorption several samples were re-run for gold by fire assay. Results are given on Table 10:

Table 10 - Gold Analyses - Fire Assay vs Atomic Absorption

<u>Sample No.</u>	<u>Fire Assay</u> <u>Au oz/t</u>	<u>Atomic Absorption</u> <u>Au ppb</u>
Bron-102R	.204	7,640
Bron-103R	.004	96
Bron-104R	.140	5,160
Bron-106R	.230	8,640
Bron-107R	.019	680
Bron-108R	.003	75
Bron-109R	.002	51
Bron-111R	.001	37
Bron-112R	.009	280
Bron-113R	.112	4,160
Bron-116R	.206	7,220
Bron-124R	.002	43
Bron-126R	.001	21
Bron-130R	.001	26
Bron-132R	.001	4
Bron-135R	.226	13,690
Bron-140R	.002	33
Bron-141R	.003	58
Bron-156R	.168	5,020
Bron-162R	.054	1,810

7.3.5 Soil Geochemistry - T-Zone Showing

Although Western Canadian had completed a soil survey in the area in 1987, it was felt that additional soil sampling in the vicinity of the T-Zone may provide useful information. With a few exceptions most samples taken below the projected trend of the T-Zone were marginally anomalous in gold with the majority of values ranging between 40 and 780 ppb Au.

The soil survey completed by Western Canadian in 1987 returned many anomalous gold values along the eastern slope of the Bronson Valley along strike of and below the T-Zone and Bronson East Showings, indicating that this portion of the Bronson property has good potential for gold mineralization.

7.3.6 Petrography - T-Zone Showing

Three rock samples from T-Zone trenches were submitted for thin sections and petrographic study. A copy of the petrographic report is attached as Appendix 2.

The petrographic work suggests that the rock underlying the T-Zone consists of greywacke, likely with some tuffaceous component. The rocks show indications of a nearby fault structure, such as brecciation and chlorite-carbonate micro shears. The rocks have been altered by biotization, carbonate alteration and minor chlorite.

One should note that the thin sections from the Snip deposit also show a high biotite-chlorite association.

7.4 Additional Quartz-Pyrite Veins: T-Zone - Bronson East Area

Additional massive pyrite veins were encountered within a 200m area surrounding the T-Zone - Bronson East Showings. For the most part these veins are very thin (0.25 cm to 5 cm), trend approximately 120° and dip 75° to 85° southwesterly. Such veins often have a slight silicification and/or biotization association. Geochemical results from grab samples of these veins are given in Table 11.

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Table 11- Additional Quartz-Pyrite Veins: T-Zone - Bronson East Area

Sample Number	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ni (ppm)
Bron-31R	Massive Py-qtz	335	5.5	1,618	14	4,333	8	252
Bron-32	adjacent Wall Rock	595	0.8	156	9	263	6	75
Bron-33R	Massive Py-qtz	315	6.3	1,056	80	121	23	208
Bron-34	Small Shear adjacent to 33R	26	0.5	121	10	238	8	9
Bron-35	Massive Py-qtz	825	15.4	1,051	21	188	6	18
Bron-36	Massive Py-qtz	215	4.5	1,022	27	262	10	249
Bron-37	Massive Py-qtz	1,140	2.2	365	12	12,975	143	142
Bron-38	Barren flat lying qtz	10	0.2	21	8	125	7	37
Bron-39	Massive Py-qtz	205	2.3	469	18	137	512	412
Bron-40	Vuggy qtz-Py	29	0.1	12	7	61	9	20
Bron-41	Rusty Shear	103	0.8	162	22	596	3	7
Bron-43	Chlorite-Py- cp shear	2,915	31.1	10,400	9	632	57	58
Bron-51	Massive Py-qtz	430	0.6	23	24	252	52	12
Bron-60R	Massive Py-qtz	830	2.7	1,502	17	116	11	256

7.5 Western Slope Bronson Valley

Prominent gossans occur along the Western boundary of the Bronson property above 1200m elevation. These gossans are in steep terrain and many are difficult to reach. Sampling by Western Canadian in 1987 returned no anomalous values and suggest that the gossans are due to barren disseminated pyrite within tuffs or felsic volcanics. Sampling completed in 1988 by Cathedral confirmed this.

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Table 12 - West Slope Bronson Valley - 1988 Geochemical Results

<u>Sample Number</u>	<u>Description</u>	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ni (ppm)
Bron-1R	Volcanic 5-10% diss pyrite	7	0.1	9	42	24	14	2
Bron-2	Volcanic 5-10% diss pyrite	8	0.5	10	81	24	11	1
Bron-3	Volcanic 5-10% diss pyrite	1	0.2	8	59	27	13	1
Bron-4	Volcanic 5-10% diss pyrite	3	0.7	9	68	77	16	1
Bron-5	Volcanic 5-10% diss pyrite	5	0.5	20	28	34	17	2
Bron-6	Volcanic 5-10% diss pyrite	1	0.2	9	9	30	11	1
Bron-7	Volcanic 5-10% diss pyrite	4	0.4	12	17	50	11	3
Bron-8	Volcanic 5-10% diss pyrite	2	0.2	17	12	19	13	5
Bron-9	Pyritic shear	67	0.5	19	255	205	21	1
Bron-10	shear zone - mariposite	23	0.2	45	46	151	32	43
Bron-11	shear zone - mariposite	1	0.1	39	6	24	41	45
Bron-12S	shear zone - mariposite	4	0.2	115	42	165	179	144
Bron-13R	shear zone - mariposite	31	0.1	37	51	25	60	27
Bron-14S		20	0.2	20	23	94	18	11
Bron-15R	Volcanic 10-15% diss py	1	0.1	12	6	66	13	3
Bron-16R	Volcanic 10-15% diss py	1	0.1	4	44	20	71	4
Bron-18S		1	0.4	27	31	107	23	7
Bron-19S		1	0.3	32	32	106	23	6
Bron-20R	Qtz float	1	0.1	31	9	61	22	5

The only peculiar feature noted was a 1m shear zone (Bron 10-13) within which trace bright green chrome mica was noted. Sampling indicated somewhat elevated nickel and arsenic values.

8.0 GEOPHYSICS

8.1 Introduction

In preparation for the geophysical survey, a cut and chained grid was established. A 2.5 km long baseline was cut at an azimuth of 120°. The baseline began along the east slope to the Bronson Valley, just below the Bronson East Showing and extended northwesterly along the Bronson Valley. The baseline was slope-corrected and picketed. Next, approximately 18 km of cut and picketed crosslines were emplaced. The crosslines were spaced 100m apart with stations picketed every 25m. The crosslines were not slope corrected but slope measurements between stations were noted.

SJV Consultants Ltd. of Vancouver was contracted to complete VLF-EM, magnetometer and Max-Min surveys on the Bronson Property. The aim of the program was to outline structures along which exploration efforts could be focused. Faults, shear zones and/or sulphide veins were the geophysical targets. Emphasis was placed on 120° azimuth structures, although tests were also made for other structures.

The geophysical surveys outlined several conductors worthy of follow-up. Projected conductor trends are indicated on the geophysical maps, however, more detailed surveys are required to confirm the conductive trends.

The most promising areas containing conductors are:

- a) below the T-Zone Showing between L2W and L6W.
- b) at the northwestern end of the grid between L22W and L25W.

The following interpretation of the surveys is provided by SJV Consultants Ltd:

One should note that T-Zone was not tested by geophysics during the 1988 program. Since hand specimens react favorably to an ohm-meter, it would appear likely that the zone be at least slightly conductive.

8.2 Interpretation

The Max-Min data shows that the conductivity of the conductors is low (.1 to 1 mho) and is similar to that of the conductors on the Skyline property. Since there is only a limited amount of Max-Min data available, the conductors on each line will be commented on individually. The limited data multiple conductors combination makes the strike, strike length, and dip determination difficult.

8.2.1 Max-Min Survey

a) Line 300W

The main conductor on line 300W appears to be 0.5 mho conductor located at approximately 65N. The dip of this conductor appears to be approximately 80° to 90° north from the plane of the average slope (therefore is probable close to 55° north from the true horizontal). Additionally, there appears to be a rather weak conductor (possibly structural) at approximately 100N to 120N.

b) Line 400W

There are two conductors on line 400W: one at approximately 30N with a conductivity of about 5 mhos and one at approximately 85N with a conductivity of about 1 mho.

Both of these conductors appear to have the same general dip as the one on line 300W. It is difficult to determine the strike of these conductors, although the data from the baseline suggest that the conductors may strike NW. This would indicate that the conductor on line 300W does not continue east to line 200W and that the conductor at 30N on line 400W does not continue east to line 300W. The western extent of the conductor is not known but it appears that the conductor at 30N on line 400W has a short (>300M) strike length. The conductor at approximately 85N may continue west to line 600W or 700W, as suggested by the VLF data.

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c) Line 600W

The conductor at 175N on line 600W is estimated to have a conductivity of approximately 0.5 mhos and dips to the south. The curve appears to be somewhat distorted by a very weak conductor to the north. This conductor also appears to be at a resistivity contact.

d) Line 700W

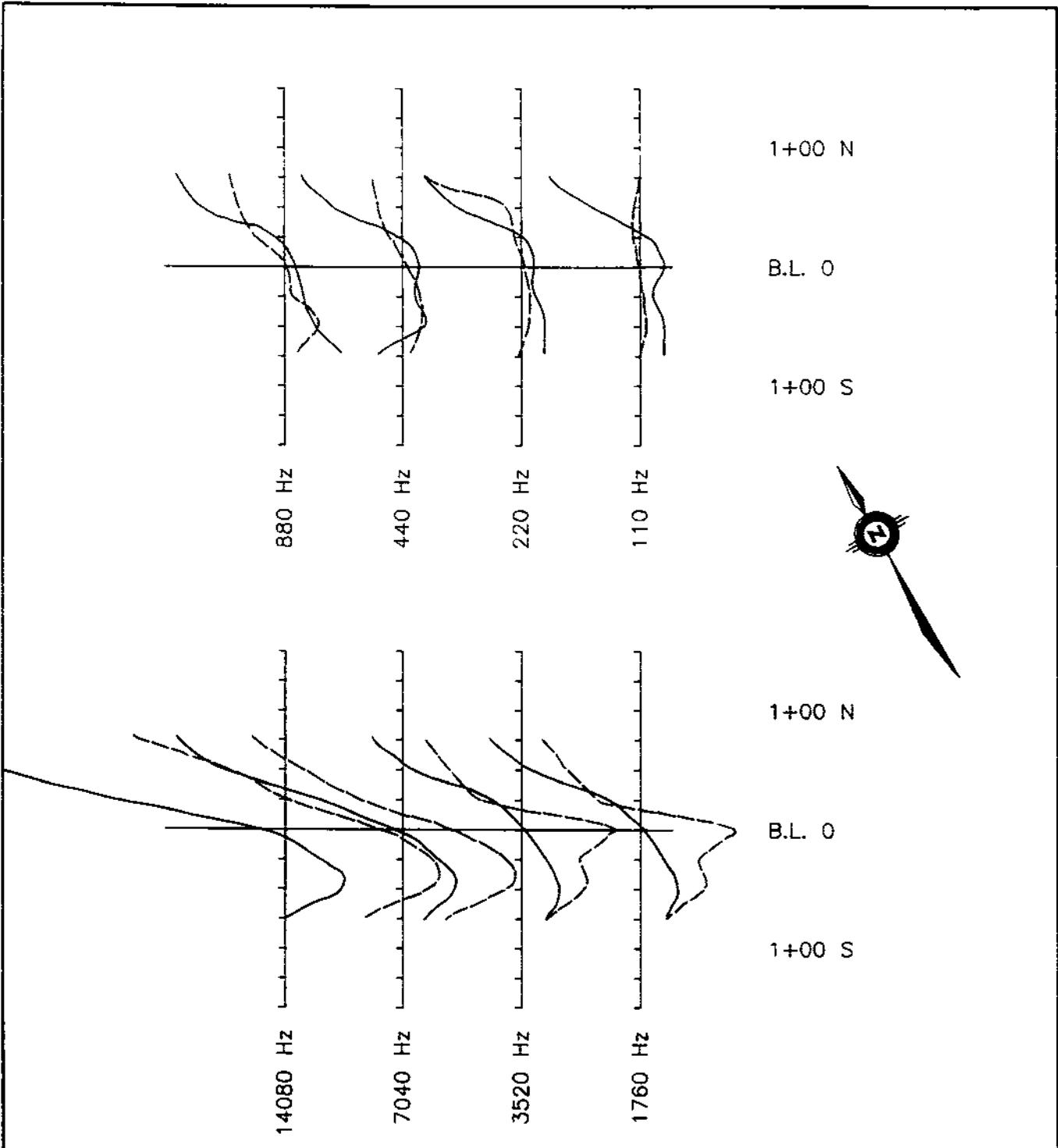
There are four conductors on line 700W. The first is at about 200N with a conductivity of approximately 1 mho. The next one, at approximately 275N, is a very weak conductor. These conductors are difficult to interpret because there appears to be a conductive contact or cross structure in this area.

The most interesting conductor on this line is located at approximately 450N. This conductor is estimated to be at a depth of 20m and has a conductivity of approximately 2 mhos. This conductor was not noticed on the VLF survey in the area.

Lastly, there is a weak conductor located at approximately 680N on line 700W.

e) Baseline

The Max-Min survey on the baseline indicates: one parallel or two conductors parallel to the baseline from approximately 250W to 550W; a weak conductor or conductive zone at approximately 1760W (this corresponds with a cliff and bend in the line which may account for the response); and a conductor parallel to the line from 2225W to the end of the line. The later parallel conductor was confirmed to be south of the baseline by both Max-Min and VLF.



CATHEDRAL GOLD CORPORATION

BRONSON
LARD M.D., B.C.

FIGURE 15

NTS: 104 B/10 W, 11 E

MAX-MIN SURVEY - L 2475 W
STACKED PROFILES

LEGEND:

— IN PHASE

- - - OUT OF PHASE

PROFILE SCALE: 1 cm ~ 10%

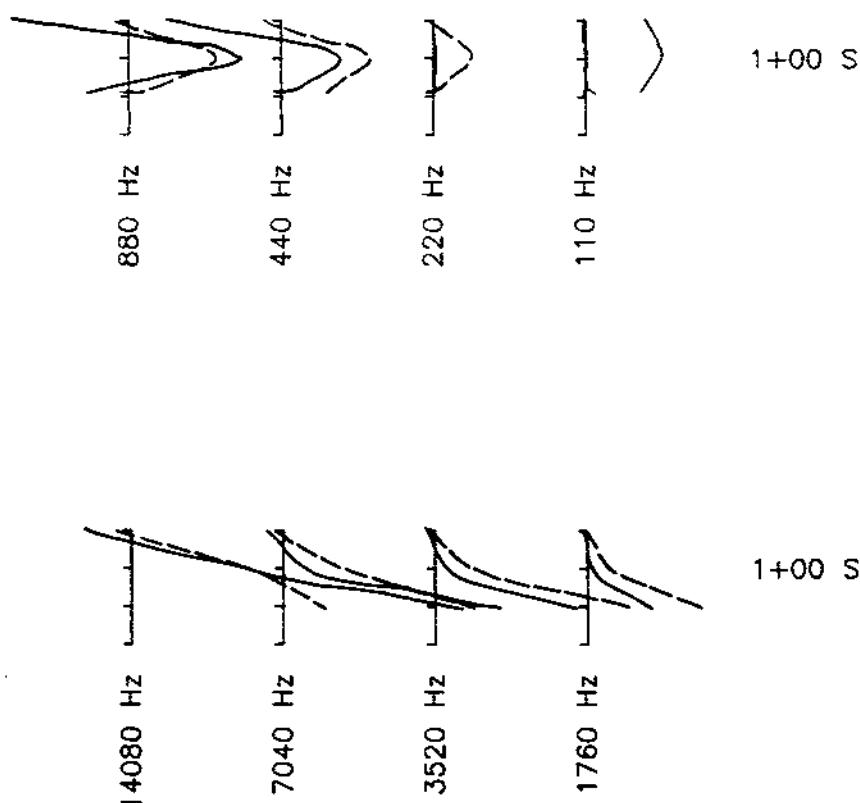
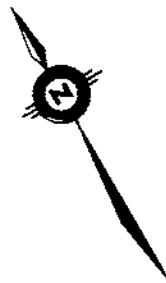
metres 100 0 100 200 metres

SCALE: 1:5000

GEOLOGIST: D. GORE

DATE: JULY 1989

DRAWN BY: S. WOOLVERTON



LEGEND:

— IN PHASE

— — OUT OF PHASE

PROFILE SCALE: 1 cm ~ 10%

CATHEDRAL GOLD CORPORATION

BRONSON
LARD M.D., B.C.

FIGURE 16

NTS: 104 B/10 W. 11 E

'UTEM - STYLE'
MAX-MIN SURVEY - L 2475 W
STACKED PROFILES

metres 100 0 100 200 metres

SCALE: 1:5000

DATE: JULY 1989

GEOLOGIST: D. GORC

DRAWN BY: S. WOOLVERTON

8.2.2 VLF-Electromagnitic (VLF-EM) Survey

The VLF-EM outlines a major NNW striking conductive feature and some minor NW striking features. Two strong shallow short strike length conductors are seen at 375N on line 900W and at approximately 610N on line 1100W. The small part of the grid surveyed using Annapolis (which was very difficult to receive) indicates a weak anomaly at approximately 10S on line 100W and at 110S on line 25W. These anomalies indicate that there may be some W to SW striking structures present in the grid area.

a) Line 2200W and 2500W

The main conductors noticed on these lines are at approximately 50S on line 2200W and at 25S and 50S on line 2500W. These conductors are probably related because they have a very similar shape and only show up strongly on the data from Seattle, suggesting that the strike is N to NW as indicated by their positions on the lines. Two other weak anomalies which were noted on line 2500W at approximately 430S and 210S could possibly be related to topography.

8.2.3 Magnetometer Survey

The magnetometer data shows a number of weak anomalies striking NW across the grid. These are probably due to a slightly more magnetic rock unit in this area. It is interesting to note that most of the EM conductors are close to the contact of this magnetic unit.

8.2.4 Geophysics: Conclusions

A number of conductors were found in the survey area that have a conductivity very similar to the conductors found at Skyline and therefore require follow-up work.

Further geophysics is required to properly determine the best drill targets.

8.2.5 Geophysics: Recommendations

It is recommended to do more follow-up of the VLF data using a better EM system. Because of the general background noise, it is difficult to estimate dip, quality of the conductor and strike from the VLF data. It is also noticed that the background conductivity is fairly high, therefore the penetration of the VLF-EM is very shallow as indicated by the anomaly on line 700W. Although sufficient data was gathered by the Max-Min survey to determine that the conductors respond to EM, not enough data was collected to completely determine the strike, strike length, and dip of all the conductors or conductive zones in the survey area.

It is recommended to survey the whole area using UTEM (University of Toronto EM), although it would be sufficient to do Max-Min in the areas of low overburden cover, as on the hillside where it would probably be faster to do UTEM. In the valley where the overburden may be more than 75m deep, it is definitely advised to go to UTEM. There is not a problem with laying out the loops required with the UTEM system since the loop to survey the hillside can be laid out in the valley and the loop to survey the valley can be laid out on the northern hillside.

From my experience on the Skyline property, there are disseminated sulfides all over the property which would probably swamp the I.P. chargeability response. It is therefore suggested that in the areas where a siliceous zone (a resistivity high) may be the target an electric field UTEM survey to be done. It must be remembered that neither the UTEM electric field survey nor the I.P. survey can be conducted over the ice unless holes are drilled to the soil below.

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9.0 RECOMMENDATIONS

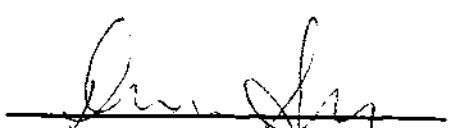
- a) More sophisticated geophysical testing especially in vicinity of T-Zone Showing. This should include extension of crosslines northeasterly as well as additional lines at 50m spacings. Additional soil sampling should also be done in this area.
- b) Detailed geological and structural mapping in the vicinity of the T-Zone and Bronson East Showing. This should include surveying to provide sufficient accuracy.
- c) Prospecting along conductor traces to discover source of EM anomaly.
- d) Extension of grid coverage to the northwest especially in area of L22W and L25W where conductors were located in 1988.

10.0 STATEMENT OF QUALIFICATIONS

I, DENNIS M. GORC, residing at 406 - 1176 Falcon Drive in Coquitlam, British Columbia, V6E 2N8, state that:

- (1) I graduated from Queen's University, Kingston, Ontario with a B.Sc. (Eng.) degree in mineral exploration in May 1976.
- (2) Since 1976, I have supervised mineral exploration programs in British Columbia, N.W.T., Manitoba and Ontario.
- (3) I am presently employed as a geologist with Imperial Metals Corporation, Suite 800, 601 West Hastings Street, Vancouver, British Columbia.
- (4) I supervised work on the Bronson Property.

Dated this 29th day of July, 1989, in the CITY OF VANCOUVER, Province of British Columbia.


Dennis M. Gorc
IMPERIAL METALS CORPORATION

VANCOUVER, B.C.

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11.0 REFERENCES

- Bending, D.A., 1984: 1983 Summary Report of the Snippaker Creek Area, British Columbia. Report for Lonestar Resources Ltd.
- Butterworth, B.P.; Peterson, O.B., 1987: Geological and Geochemical Report on the Gossan 14-17, 23 and 30 Claim Groups, Western Canadian Mining Corp.
- Grove, E.W., 1971: Geology and Mineral Deposits of the Stewart Area, British Columbia. B.C. Department of Mines and Petroleum Resources, Bulletin No. 58.
- Grove, E.W., 1986: Geology and Mineral Deposits of the Unuk River - Salmon River - Anyox Area. Ministry of Energy, Mines and Petroleum Resources, Bulletin No. 63
- Kerr, F.A., 1948: Lower Stikine and Western Iskut River Areas, British Columbia, Geology Survey Canada, Memoir 246.
- Meyers, R.E., 1986: 1986 Geochemical Sampling and Reconnaissance Mapping on the Gossan 1-4, 7 Claim Group and Gossan 14-17, 23 Claim Group. Assessment Report.
- Peterson, D.B., Woodcock, J.R., Gorc, D., 1985: Geological, Treching and Diamond Drilling Report on the Gossan 11 Claim. British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report.

A P P E N D I X I

GEOCHEMICAL RESULTS

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 Ni Fe Sr Ca P La Cr Mg Ba Ti B V AND LIMITED FOR Na K AND Al. NO DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1 ROCK P2 SOIL Au* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: SEP 16 1988 DATE REPORT MAILED: Sept 22/88 ASSAYER: C.L. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

CATHEDRAL GOLD CORP. PROJECT 8102 File # 88-4557 Page 1

SAMPLE#	No PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Wl PPM	Co PPM	Mo PPM	Fe %	As PPM	B PPM	Au PPM	Tb PPM	Sc PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Ct PPM	Mg PPM	Ba PPM	Tl PPM	B PPM	Al PPM	Na PPM	I PPM	N PPM	Au* PPB
BROW 1R	2	9	42	24	.1	2	6	120	5.15	14	5	ND	2	15	1	2	2	12	.21	.128	6	4	.35	62	.02	4	.62	.03	.34	1	7
BROW 2R	4	10	81	24	.5	1	5	83	5.02	11	5	ND	2	14	1	2	2	3	.19	.137	6	3	.20	38	.01	2	.45	.02	.23	1	8
BROW 3R	2	8	59	27	.2	1	5	156	5.38	13	5	ND	2	12	1	2	2	9	.25	.161	5	3	.37	73	.01	2	.55	.03	.17	1	1
BROW 4R	2	9	68	77	.7	1	7	928	5.24	16	5	ND	2	38	1	2	1	10	1.10	.139	4	5	.70	26	.01	2	.64	.03	.22	1	3
BROW 5R	3	20	28	34	.5	2	9	644	5.58	17	5	ND	2	26	1	2	3	8	.94	.145	4	3	.31	25	.01	4	.47	.02	.21	1	5
BROW 6R	1	9	9	30	.2	1	8	596	5.76	11	5	ND	2	20	1	2	2	8	.76	.133	5	3	.38	37	.01	5	.58	.03	.14	1	1
BROW 7R	2	12	17	50	.4	3	6	223	4.94	11	5	ND	3	19	1	2	2	11	.27	.138	7	4	.84	40	.01	2	.90	.02	.14	1	4
BROW 8R	2	17	12	19	.2	5	8	94	4.95	13	5	ND	3	16	1	2	2	7	.44	.123	4	7	.39	26	.01	2	.58	.02	.15	1	2
BROW 9R	8	19	255	205	.5	1	5	158	5.66	21	5	ND	2	26	2	2	2	5	.63	.117	6	2	.12	57	.01	2	.28	.02	.15	1	67
BROW 10R	3	45	46	151	.2	43	8	1279	2.48	32	5	ND	1	187	2	2	2	9	5.24	.046	2	29	1.02	35	.01	2	.23	.01	.06	1	23
BROW 11R	4	39	6	24	.1	45	8	757	1.81	41	5	ND	1	70	1	2	2	7	1.92	.061	2	41	.15	65	.01	2	.25	.01	.05	1	1
BROW 13R	3	37	51	25	.1	27	5	518	1.83	60	5	ND	1	435	1	2	2	1	6.43	.007	2	22	.07	8	.01	2	.03	.01	.01	1	31
BROW 15R	1	12	6	66	.1	3	8	595	4.87	13	5	ND	2	27	1	2	2	22	.38	.126	5	4	.84	38	.08	4	1.05	.03	.16	1	1
BROW 16R	5	4	4	20	.1	4	4	897	4.21	71	5	ND	2	63	1	2	2	6	1.99	.056	20	15	.09	38	.01	3	.39	.04	.04	1	1
BROW 20R	2	31	9	61	.1	5	6	493	2.36	22	5	ND	1	23	1	2	2	3	.79	.064	4	12	.05	49	.03	8	.40	.02	.09	1	1
BROW 21R	6	91	187	105	1.7	14	7	1284	5.50	32	5	ND	1	46	1	2	2	40	.91	.063	2	24	.96	54	.07	2	1.78	.02	.82	1	20
BROW 22R	3	49	196	13629	1.1	21	5	1115	6.05	12	5	ND	1	54	62	3	2	29	.85	.032	2	38	1.08	74	.05	2	2.28	.02	.52	1	24
BROW 23R	3	89	644	23869	7.8	22	3	3775	3.68	56	5	ND	1	64	103	12	2	14	2.39	.022	2	23	.81	68	.02	2	.85	.01	.27	1	152
BROW 24R	2	89	4744	43182	10.9	5	5	5709	6.16	28	5	ND	1	25	210	18	2	15	1.21	.038	3	20	.79	51	.02	4	.91	.01	.27	1	250
BROW 25R	2	323	3252	80216	17.5	12	4	5272	6.05	92	5	ND	1	34	407	9	2	13	2.03	.004	2	17	1.01	37	.01	2	.96	.01	.31	4	79
BROW 26R	1	18	279	874	2.0	12	7	2760	5.59	233	5	ND	1	69	3	8	2	5	2.16	.027	2	6	.81	48	.01	2	.15	.01	.08	2	210
BROW 27R	6	49	29	1362	.5	24	6	858	1.66	14	5	ND	1	180	23	2	2	9	3.35	.028	2	15	.44	47	.01	2	.41	.02	.18	1	2
BROW 28R	1	256	5022	39102	59.8	10	6	6830	9.14	63	5	ND	1	87	142	69	2	8	3.79	.047	3	31	1.53	42	.01	2	.32	.01	.17	84	590
BROW 29R	3	124	46	169	4.7	11	1	125	.77	2	5	5	1	3	1	2	2	1	.06	.002	2	10	.02	4	.01	5	.02	.01	.01	1	6840
BROW 30R	1	1615	1274	892	45.4	8	5	638	13.15	87	5	ND	1	9	7	35	2	4	.29	.031	3	4	.23	13	.01	6	.27	.01	.15	1	350
BD 001	3	22	17	133	.4	9	1	292	1.69	7	5	ND	1	16	1	2	2	7	.07	.025	2	8	.26	40	.01	3	.43	.01	.03	1	8
BD 002	1	18	23	174	1.0	18	8	1695	7.51	39	5	ND	1	98	1	6	2	104	.75	.140	5	58	2.64	23	.35	2	2.71	.01	.04	1	58
BD 004	2	22	15	300	1.2	45	113	3368	11.43	15	5	ND	1	54	1	4	2	28	.36	.036	2	17	1.82	18	.09	2	2.13	.01	.04	1	113
BD 005	1	30	13	26	.7	4	9	92	7.07	23	5	ND	1	8	1	3	2	8	.05	.018	2	9	.07	40	.02	2	.16	.01	.02	6	108
BD 006	3	12	3	11	.3	9	16	24	5.25	8	5	ND	1	3	1	2	2	3	.01	.009	2	6	.02	15	.02	2	.14	.01	.08	1	27
BD 007	1	29	45	22	1.3	4	8	40	6.69	72	5	ND	1	6	1	2	2	9	.05	.012	2	10	.01	34	.03	3	.08	.01	.01	6	470
BD 008	5	19	11	14	.6	11	6	58	4.45	32	5	ND	1	7	1	2	2	5	.04	.012	2	37	.01	44	.01	2	.07	.01	.01	1	49
BD 009	1	7865	9	1372	9.9	10	4	9656	7.29	65	5	ND	1	82	9	3	2	29	8.71	.055	2	35	1.70	3	.03	2	1.58	.01	.01	1	580
STD C/AU-R	17	58	40	131	6.9	67	29	1044	4.22	42	22	8	37	47	18	16	20	58	.50	.091	38	55	.94	174	.07	33	2.03	.06	.13	11	510

- ASSAY REQUIRED FOR CORRECT RESULT - for Zn > 1%

CATHEDRAL GOLD CORP. PROJECT 8102 FILE # 88-4557

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Wl PPM	Co PPM	Mo PPM	Fe %	As PPM	U PPM	Au PPM	Tb PPM	Se PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti %	B PPM	Al %	Na %	K PPM	W PPB	Au ² PPB
BROW 12S	1	115	42	165	.2	144	45	6978	7.13	179	5	ND	4	62	1	3	2	40	.64	.180	20	32	.73	379	.06	2	1.32	.02	.20	1	4
BROW 14S	1	20	23	94	.2	11	9	663	7.75	18	5	ND	4	116	1	2	2	53	.17	.264	19	5	.74	204	.16	2	1.00	.05	.15	1	1
BROW 1BS	1	27	31	107	.4	7	11	1298	7.49	20	5	ND	5	99	1	3	3	49	.13	.246	21	3	.79	304	.13	2	1.15	.04	.26	1	1
BROW 19S	2	32	32	106	.3	6	14	1575	7.76	23	5	ND	6	86	1	2	3	36	.19	.262	20	4	.60	225	.09	2	.95	.03	.17	1	1
STD C	18	60	41	133	6.8	69	30	1023	4.11	35	17	7	38	49	18	16	19	60	.50	.096	40	58	.92	179	.07	33	2.00	.06	.13	12	-

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 NN FE ZN 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: ROCK AU* ANALYSIS BY ACID LEACH/RA FROM 10 GM SAMPLE.

DATE RECEIVED: SEP 16 1988 DATE REPORT MAILED: Sept 21/88 ASSAYER: C.L. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

CATHEDRAL GOLD CORP. PROJECT 8102 File # 88-4556

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Wt	Co	Mn	Fe	As	U	Ru	Tb	St	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	X	W	Au*
	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	PPB	
BD 003	1	20	2	861	.1	7	11	1242	1.56	13	5	ND	1	6	4	2	2	16	.27	.010	2	5	.59	7	.01	2	.56	.01	.01	1	9
BROM-31R	49	1618	14	4333	5.5	252	28	1224	14.31	8	5	ND	1	26	40	2	6	60	1.45	.079	2	71	2.06	24	.11	2	2.75	.05	1.09	2	335
BROM-32R	4	156	9	263	.8	75	19	1285	8.15	6	5	ND	1	54	1	2	2	114	2.91	.108	2	145	2.26	121	.18	2	3.03	.09	1.66	1	595
BROM-33R	28	1056	89	121	6.3	268	62	674	6.52	23	5	ND	1	84	2	2	81	73	3.08	.101	3	143	1.26	47	.13	2	1.36	.03	.92	1	315
BROM-34R	1	121	10	238	.5	9	7	1297	2.25	8	5	ND	1	306	2	2	2	79	9.65	.047	2	19	1.18	82	.07	2	1.10	.02	.74	1	26
BROM-35R	1	1510	21	262	15.4	18	4	330	1.19	6	5	ND	1	520	7	2	2	7	2.70	.007	2	8	.17	12	.01	2	.22	.01	.09	5	825
BROM-36R	1	1022	27	188	4.5	249	42	763	9.10	10	5	ND	1	263	2	5	2	78	2.75	.101	2	200	1.64	34	.16	2	3.36	.16	1.50	4	215
BROM-37R	1	365	12	12975	2.2	142	105	528	12.44	143	5	ND	1	54	18	2	6	29	2.14	.041	2	71	.89	18	.06	2	1.06	.02	.84	1	1140
BROM-38R	1	21	8	125	.2	37	9	245	1.35	7	5	ND	1	121	1	2	2	20	.97	.029	2	25	.43	28	.03	2	.62	.02	.10	1	10
BROM-39R	1	469	18	137	2.3	412	242	297	17.38	512	5	ND	1	20	2	2	2	41	.30	.052	2	45	.92	7	.10	2	.95	.03	.66	1	205
BROM-40R	1	12	7	61	.1	20	10	983	2.11	9	5	ND	2	108	1	2	2	8	2.52	.048	3	3	.24	100	.01	2	.43	.01	.19	1	29
BROM-41R	2	162	22	596	.8	7	2	255	10.89	3	5	ND	2	9	4	2	2	41	.03	.044	2	30	.70	149	.04	3	.78	.02	.15	1	103
BROM-42R	1	1605	52	99999	27.3	208	39	1250	21.81	8	5	ND	1	10	950	2	13	20	.24	.009	4	29	.40	8	.02	2	.86	.01	.06	1	1735
BROM-43R	19	10400	9	632	31.1	58	107	151	23.75	57	5	ND	3	16	6	2	3	61	.05	.016	5	39	.53	9	.02	3	.85	.01	.13	10	2915
BROM-44R	1	3790	1814	47194	26.9	9	47	775	9.58	8	5	ND	1	47	545	8	2	1	1.10	.001	2	18	.12	3	.01	2	.03	.01	.01	1	725
STD C/AU-R	17	59	37	135	6.9	67	29	1049	4.22	39	19	7	38	47	18	16	19	58	.50	.092	38	56	.92	179	.07	33	2.01	.06	.13	11	480

✓ ASSAY REQUIRED FOR CORRECT RESULT -

CATHEDRAL GOLD CORP. PROJECT 8102 FILE # 88-4528

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SAMPLE	No	Cu	Pb	Zn	Ag	Wt	Co	Mn	Tc	As	U	Ar	Th	St	Cd	Sb	Bj	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	I	W	Au ^a
	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		
BROW 45R	2	1147	164	624	12.8	.79	19	828	20.10	383	5	ND	2	3	3	2	28	22	.08	.033	2	27	.86	7	.01	2	1.27	.01	.05	1	2790
BROW 46R	1	449	82	125	6.8	.242	60	75	19.25	39	5	ND	2	2	14	2	23	6	.03	.004	6	13	.19	5	.01	2	.25	.01	.03	1	1725
BROW 47R	1	70	110	196	4.8	.20	2	393	10.23	63	5	ND	2	6	1	2	16	29	.07	.060	2	45	1.32	21	.01	2	1.72	.01	.13	1	1930
BROW 48R	1	387	51	113	12.3	.140	61	624	17.77	267	5	ND	2	6	1	5	21	20	.06	.029	2	25	.85	5	.05	2	1.14	.01	.37	1	1465
BROW 49R	1	809	179	5848	15.5	.37	23	170	7.01	203	5	ND	1	4	59	2	18	12	.10	.023	4	36	.36	26	.01	2	.65	.01	.10	2	240
BROW 50R	1	120	271	218	29.0	.22	74	44	15.36	473	5	ND	1	1	1	2	66	3	.01	.004	2	4	.03	3	.01	2	.06	.01	.03	1	3850
BROW 51R	1	23	24	252	.6	.12	3	8259	2.68	52	5	ND	1	377	1	2	2	8	28.68	.008	3	17	.66	8	.01	2	.55	.01	.03	1	430
BROW 52R	2	133	55	903	5.6	.20	13	1633	7.36	18	5	ND	2	27	8	2	2	38	.37	.074	7	32	1.16	30	.03	2	1.02	.01	.32	1	1325
BROW 53R	1	129	257	9622	7.7	.51	17	879	15.08	414	5	ND	1	27	68	2	20	27	.86	.087	2	36	1.11	14	.05	2	1.89	.02	.29	1	780
BROW 54R	2	428	140	486	5.8	.96	55	1435	19.85	229	5	ND	2	17	4	2	13	36	.31	.048	2	61	.95	16	.03	2	1.57	.01	.22	1	3035
BROW 55R	1	2449	1490	99999	✓76.0	.26	15	3280	18.92	372	5	2	3	47	1263	13	144	8	1.76	.007	2	15	.27	6	.01	2	.45	.01	.04	3	4170
BROW 57R	1	3310	275	2322	39.6	.57	43	1247	30.11	88	5	ND	3	10	20	2	5	5	.17	.012	2	10	.03	5	.01	2	.52	.01	.01	1	2460
BROW 59R	1	1416	224	99999	✓43.2	.28	24	2407	19.24	178	5	7	2	15	1774	2	51	6	.45	.005	2	10	.08	5	.01	2	.19	.01	.02	1	9550
STD C/AU-2	18	56	42	132	7.1	.68	29	1035	4.06	38	10	7	36	47	18	18	19	58	.48	.097	38	53	.89	173	.07	32	1.91	.06	.14	12	490

✓ASSAY REQUIRED FOR CORRECT RESULT -

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR Mn Fe Ni 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: ROCK Au⁺ ANALYSIS BY ACID LEACH/AAS FROM 10 GM SAMPLE.

DATE RECEIVED: SEP 30 1988 DATE REPORT MAILED: Oct 7/88 ASSAYER: C. Hung D.TOEY OR C.LEONG, CERTIFIED B.C. ASSAYERS

CATHEDRAL GOLD CORP. PROJECT 8102 File # 88-4916

SAMPLE#	No PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Wl PPM	Co PPM	Fe %	As PPM	U PPM	Au PPM	Tb PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au ⁺ PPB	
PEL-G-1R	2	.58	12	1514	.9	.59	165	293	16.86	13	5	ND	1	178	7	2	15	.28	.95	.084	2	15	.27	.10	2	.90	.01	.03	1	.26	
PEL-G-2R	1	222	2	.39	1.5	.93	151	106	17.99	.50	5	ND	1	3	1	2	2	4	.47	.019	2	3	.04	.01	2	.05	.01	.01	1	.18	
SKY-1-R	1	41193	391	710	78.6	2	99	1305	22.27	74	5	6	1	65	7	3	59	4	1.27	.001	2	1	.36	8	.01	2	.09	.01	.02	1	17540
SKY-2-R	5	2735	289	4762	16.2	7	8	1010	13.20	86	5	37	1	48	34	2	2	4	1.01	.002	2	2	.20	8	.01	2	.08	.01	.04	4	38700
SKY-3-R	10	2991	2374	6490	38.3	7	5	596	7.80	113	5	26	1	24	44	2	7	3	.48	.003	2	6	.17	12	.01	2	.12	.01	.05	1	54200
BRON-60R	2	1502	17	116	2.7	256	159	463	23.18	11	5	2	1	20	1	3	192	30	.86	.018	2	18	.90	15	.03	3	1.09	.01	.40	25	.830
BRON-61R	2	2208	24	131	6.4	213	66	223	19.56	209	5	10	1	9	1	2	2	6	.21	.003	2	10	.33	7	.01	2	.54	.01	.11	1	16920
BRON-62R	1	476	117	.85	13.4	131	73	168	29.10	822	5	ND	2	1	1	6	21	2	.02	.002	2	4	.03	10	.01	4	.17	.01	.05	1	.870
BRON-63R	10	.78	20	177	.7	106	26	469	13.68	56	5	ND	1	39	1	2	2	31	.65	.111	2	56	1.05	45	.04	2	1.43	.01	.57	1	.105
BRON-64R	4	170	11	1563	1.4	.53	19	1170	10.85	30	5	ND	1	37	10	2	12	74	.82	.088	2	110	1.84	27	.18	2	3.39	.11	.59	1	2990
BRON-65R	1	2257	87	79456	27.1	226	47	1133	26.85	16	5	ND	1	15	627	2	13	23	.32	.016	5	26	.48	10	.02	2	1.23	.01	.07	205	.2110
SNI-1R	59	148	88	603	6.0	19	10	3142	7.56	26	5	7	3	254	3	2	7	299	8.77	.122	7	5	2.25	140	.16	2	3.17	.01	1.98	1	23600
SNI-2R	26	2481	1009	1682	56.6	496	76	1498	17.63	362	5	141	1	175	13	3	363	41	3.21	.037	2	3	.49	22	.01	2	.62	.01	.19	1	207000
SNI-3R	48	1614	770	1516	30.1	284	161	1729	21.47	5871	5	41	2	173	14	14	69	46	5.38	.035	2	3	.47	15	.01	2	.57	.01	.12	1	42600
SNI-4R	23	289	191	578	6.0	26	16	2508	4.77	820	1	8	4	512	6	3	7	44	13.91	.045	7	3	1.53	39	.06	2	1.66	.01	.60	3	9390
SNI-5R	5	87	61	191	1.9	17	60	1050	16.03	155	5	ND	2	45	2	2	12	33	1.32	.080	8	1	.73	24	.11	2	1.35	.01	.92	1	1200
STD C/AU-R	18	62	40	134	6.6	67	31	1059	4.27	42	19	8	38	48	18	20	18	59	.49	.095	39	57	.95	183	.07	32	2.00	.06	.13	13	495

- ASSAY REQUIRED FOR CORRECT RESULT for Cu Zn > 1%
 Ag > 35 ppm

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 LEACH IS PARTIAL FOR K, Na, Fe, Pb, Sb, Ca, P, La, Cr, Mg, Ba, Ti, B, W AND LIMITED FOR Na, K AND Al. NO DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK AgP ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 12 1988 DATE REPORT MAILED: Oct 19/88 SIGNED BY: *[Signature]* D.TOTE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

CATHEDRAL GOLD CORP. PROJECT 8102 File # 88-5133 Page 1																															
SAMPLE#	Mo	Cu	Pb	Zn	Ag	Wt	Co	Mn	Fe	As	U	Au	Tb	St	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	Si	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	t	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM		
BRON 1002	1	8978	550	9946	35.3	.84	35	2123	20.28	258	5	ND	2	104	93	2	29	3	3.07	.006	3	4	1.05	11	.01	2	.13	.01	.03	4	340
BRON 131R	1	1500	21	184	3.0	.31	6	1921	20.69	54	5	ND	3	69	3	2	16	9	6.74	.012	3	4	.30	18	.01	3	.46	.91	.06	21	76
BRON 102R	1	1393	84	1232	13.3	.94	37	1280	23.39	319	5	ND	2	3	11	2	35	15	.12	.028	2	32	.65	9	.01	5	1.13	.01	.07	1	7640
BRON 103R	1	2187	14	195	4.2	.46	7	1796	21.73	69	5	ND	2	79	3	2	11	12	4.93	.012	4	4	.77	23	.01	8	.65	.01	.13	2	96
BRON 104R	1	11193	328	35217	54.6	201	75	463	23.27	344	5	ND	2	10	358	2	51	5	.25	.006	2	4	.24	8	.01	5	.25	.01	.03	4	5160
BRON 105R	1	2151	62	470	8.5	.48	14	1918	25.21	48	5	ND	3	71	4	2	56	7	6.08	.009	4	3	.39	12	.01	4	.44	.01	.06	13	230
BRON 106R	1	81	562	685	72.4	.32	201	70	19.59	630	5	ND	2	2	2	2	170	2	.10	.002	2	2	.01	5	.01	3	.06	.01	.04	1	8640
BRON 107R	1	1881	144	2850	16.7	.83	19	643	37.51	81	5	ND	3	23	16	2	93	2	1.54	.001	2	1	.06	8	.01	2	.10	.01	.03	19	680
BRON 108R	1	1886	8	300	7.2	.90	18	848	33.92	2	5	ND	3	40	3	2	6	3	2.02	.003	4	1	.20	11	.01	5	.17	.01	.03	2	75
BRON 109R	1	1870	16	886	5.0	.81	162	397	37.27	123	5	ND	2	7	6	2	8	2	.62	.001	2	1	.03	7	.01	9	.07	.01	.01	1	51
BRON 110R	1	17922	18	455	26.4	.25	16	954	14.66	7	5	ND	1	3	5	2	5	4	.19	.007	2	4	.12	16	.01	4	.23	.01	.04	7	290
BRON 111R	1	6066	18	199	12.6	.17	14	2602	11.00	5	5	ND	1	219	3	2	6	3	6.18	.010	2	5	.19	14	.01	4	.13	.01	.02	8	37
BRON 112R	1	3303	62	17077	9.8	.98	17	218	38.32	52	5	ND	2	2	130	2	17	5	.05	.003	2	6	.16	8	.01	7	.32	.01	.01	2	280
BRON 113R	1	992	48	1030	8.8	.154	34	798	24.08	202	5	ND	2	2	7	2	27	13	.08	.028	2	18	.54	11	.01	6	.96	.01	.07	1	4160
BRON 114R	2	3958	2088	99999	90.5	.57	88	568	9.33	175	5	3	1	13	2310	7	151	2	.36	.006	2	4	.18	9	.01	4	.07	.01	.02	3	4390
BRON 115R	1	391	316	1116	22.1	.30	55	55	20.12	561	5	ND	1	3	7	4	31	2	.06	.007	2	5	.05	7	.01	7	.12	.01	.04	2	6305
BRON 116R	1	453	204	582	17.7	.33	69	122	19.67	380	5	ND	2	5	1	2	21	3	.11	.011	2	3	.08	8	.01	5	.19	.01	.05	1	7220
BRON 117R	1	447	177	304	16.5	.29	52	203	19.31	477	5	ND	1	9	1	2	20	3	.22	.013	2	3	.10	10	.01	10	.22	.01	.05	1	3010
BRON 118R	3	627	96	396	13.0	.65	33	1339	20.05	377	5	ND	2	3	2	4	26	28	.12	.050	3	26	1.12	13	.01	6	2.10	.01	.12	6	1060
BRON 119R	1	1298	21	167	7.5	.142	75	415	22.43	357	5	ND	1	1	2	24	12	.02	.012	2	13	.65	4	.01	7	.83	.01	.05	1	820	
BRON 120R	1	1417	24	223	7.1	.122	53	814	22.66	295	5	ND	1	2	2	2	17	30	.06	.036	2	49	1.32	6	.06	6	2.03	.01	.24	1	610
BRON 121R	1	2957	13	199	14.4	.199	32	395	22.08	589	5	ND	2	6	1	5	10	14	.03	.015	2	10	.58	3	.01	6	.80	.01	.07	5	990
BRON 122R	1	2028	22	205	11.1	.191	45	776	22.53	161	5	ND	1	2	2	2	22	24	.05	.028	2	34	1.21	6	.03	6	1.76	.01	.23	2	755
BRON 123R	1	910	28	372	3.8	.51	22	2146	18.14	61	5	ND	2	4	3	13	2	86	.22	.099	2	144	3.38	19	.18	13	6.43	.01	1.18	6	255
BRON 124R	1	596	107	1918	5.7	.128	89	478	41.81	1331	5	ND	3	10	16	2	55	3	.66	.002	2	3	.12	7	.01	4	.19	.01	.03	1	63
BRON 125R	1	1040	16	990	3.9	.126	73	592	40.09	508	5	ND	3	16	9	2	9	3	1.12	.001	2	3	.10	8	.01	6	.15	.01	.03	1	17
BRON 126R	1	927	17	683	4.1	.123	72	510	39.49	463	5	ND	3	12	6	2	16	3	.71	.001	2	3	.13	9	.01	6	.14	.01	.02	3	21
BRON 127R	1	796	8	1003	3.9	.125	72	525	40.62	553	5	ND	3	15	6	2	12	3	.79	.001	2	2	.16	10	.01	5	.17	.01	.03	1	23
BRON 128R	1	948	164	284	8.4	.163	138	1356	24.12	257	5	ND	2	20	1	2	12	48	2.03	.047	2	50	1.47	18	.08	7	2.76	.01	.38	2	330
BRON 129R	1	421	129	134	5.9	.107	152	1491	19.71	257	5	ND	1	35	1	2	13	14	4.18	.009	2	10	.45	9	.01	4	.57	.01	.06	2	405
BRON 130R	1	7410	21	595	13.2	.27	13	883	10.68	6	5	ND	1	65	4	2	3	2	2.21	.003	2	5	.59	12	.01	5	.08	.01	.02	8	26
BRON 131R	1	1186	8	182	2.9	.77	28	267	23.67	10	5	ND	2	21	1	2	7	1	.57	.001	2	1	.17	12	.01	7	.04	.01	.02	1	8
BRON 132R	1	1087	3	248	2.6	.107	39	476	36.12	13	5	ND	2	36	1	2	11	2	1.15	.001	2	2	.28	14	.01	6	.07	.01	.03	1	4
BRON 133R	1	1018	4	1087	1.9	.118	46	531	40.58	6	5	ND	3	39	8	2	9	2	1.77	.001	2	2	.15	9	.01	3	.06	.01	.02	1	10
BRON 134R	1	9265	5	429	18.5	.86	24	913	27.82	3	5	ND	2	73	4	2	8	1	2.25	.001	2	3	.68	10	.01	6	.03	.01	.01	7	57
BRON 135R	1	327	50	755	3.3	.118	20	1101	22.40	109	5	ND	2	13	5	2	9	32	.47	.032	2	104	1.68	8	.01	3	2.57	.01	.02	2	13530
STD C/AU-R	18	60	42	133	7.1	.69	30	1018	6.24	42	20	7	36	45	19	19	20	59	.56	.095	37	55	.91	176	.07	33	1.36	.06	.13	12	515

CATHEDRAL GOLD CORP. PROJECT 8102 FILE # 88-5133

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SAMPLE#	Mo	Cu	Pd	Sn	Ag	Ni	Co	Mn	Fe	As	U	Tb	St	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Au*	
	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	PPB			
BRON 136R	1	.50	7	341	.1	17	5	1512	1.62	8	5	ND	1	93	3	2	2	16	7.04	.097	9	21	.50	.53	.01	2	.91	.01	.28	1	5
BRON 137R	1	289	14	212	1.1	78	8	2572	4.21	27	5	ND	1	209	1	2	2	51	12.24	.064	3	139	1.75	113	.12	2	3.80	.03	1.97	1	29
BRON 138R	1	241	46	392	1.5	28	23	1620	6.54	100	5	ND	1	123	4	2	2	28	7.77	.073	4	51	1.02	32	.06	2	2.57	.06	.53	1	75
BRON 139R	1	276	327	335	25.1	11	11	159	21.03	1210	5	3	2	6	1	43	158	18	.12	.012	2	22	.09	19	.01	3	.28	.01	.05	1	3620
BRON 140R	1	5319	17	1157	10.1	87	54	675	29.42	30	5	ND	2	46	9	2	2	1	1.55	.002	2	3	.46	5	.01	3	.12	.01	.01	1	33
BRON 141R	1	7320	14	586	14.2	23	18	435	10.40	28	5	ND	1	31	6	2	4	2	1.03	.009	2	29	.34	13	.01	2	.12	.01	.04	3	58
BRON 142R	1	813	643	303	38.0	6	13	71	32.71	1683	5	3	3	2	1	12	99	22	.03	.034	2	13	.03	2	.01	2	.23	.01	.01	2	2250
BRON 143R	1	515	113	400	6.0	25	12	891	12.17	191	5	ND	2	6	2	2	14	39	.04	.053	2	131	1.87	14	.03	3	2.79	.01	.14	3	105
BRON 144R	1	268	258	92	19.1	5	9	252	14.40	1262	5	ND	3	4	1	2	30	30	.02	.109	2	37	.52	18	.02	2	.81	.01	.15	4	560
BRON 145R	2	668	29	376	5.2	72	15	1074	7.61	68	5	ND	3	6	3	2	2	35	.23	.084	4	90	1.86	24	.04	2	2.76	.01	.28	1	38
BRON 147R	1	6932	9	211	13.8	75	39	629	21.48	15	5	ND	1	51	2	2	2	1	1.60	.001	2	4	.52	6	.01	2	.07	.01	.01	1	18
BRON 148R	1	304	137	129	8.6	8	6	154	9.67	316	5	4	2	6	1	2	51	15	.07	.045	3	45	.29	25	.01	2	.54	.01	.15	1	3720
BRON 149R	1	5114	44	3214	18.9	53	41	145	19.16	98	5	ND	1	12	28	4	17	3	.38	.008	2	4	.09	10	.01	4	.17	.01	.02	3	450
BRON 150R	1	929	22	250	4.1	122	51	1695	20.16	93	5	ND	2	5	1	2	4	49	.20	.068	2	103	2.68	4	.07	2	3.88	.01	.59	1	345
BRON 151R	1	1527	27	243	8.1	157	47	863	20.46	253	5	ND	2	9	2	2	3	36	.13	.037	2	24	1.42	1	.07	2	2.29	.01	.61	1	780
BRON 156R	1	584	47	350	4.0	112	38	1352	21.67	155	5	3	1	18	2	2	5	19	.61	.025	5	44	1.10	1	.01	2	1.57	.01	.05	8	5020
BRON 158R	1	1278	75	629	9.2	146	33	1014	22.01	217	5	ND	2	6	7	2	27	14	.17	.020	2	64	.82	5	.01	2	1.34	.01	.06	1	3950
BRON 159R	1	769	29	472	1.5	59	20	1854	17.27	57	5	ND	3	5	5	2	4	41	.20	.066	2	52	2.55	8	.01	2	4.17	.01	.06	1	250
BRON 160R	4	342	51	581	2.1	61	30	1268	15.39	78	5	ND	3	18	8	2	5	30	.38	.074	2	42	1.97	13	.01	2	3.10	.01	.10	2	235
BRON 161R	2	424	67	824	2.4	52	21	1435	13.09	63	5	ND	2	43	12	2	3	29	.01	.076	2	31	1.85	17	.01	2	2.82	.01	.12	1	290
BRON 162R	5	2203	908	14009	33.1	110	149	1843	23.15	591	5	3	1	84	119	3	59	5	2.39	.010	2	21	.88	7	.01	2	.37	.01	.06	1	1810
BRON 163R	1	2324	619	12390	25.8	21	16	4524	10.05	278	5	ND	1	372	110	2	34	3	12.82	.010	2	3	2.73	12	.01	2	.10	.01	.04	1	240
BRON 164R	1	755	19	776	1.7	88	51	1411	18.82	53	5	ND	1	22	4	2	7	54	.65	.066	3	29	1.57	5	.09	2	3.23	.06	.79	1	44
BRON 166R	1	585	32	628	1.2	45	54	842	14.01	46	5	ND	2	7	3	2	2	47	.24	.084	3	103	1.81	12	.10	2	3.15	.01	.70	1	82
STD C/AU-R	17	58	40	133	7.2	67	31	1032	4.12	40	18	8	37	47	17	18	19	56	.48	.091	38	55	.91	176	.06	32	2.03	.06	.14	12	505

- ASSAY REQUIRED FOR CORRECT RESULT for Cu 21 > 1%
Ag > 35 PPM

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR Mn Fe Sr Cr 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: ROCK Au* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 24 1988 DATE REPORT MAILED: Oct 26/88 SIGNED BY..... C. L. CHAN, D.TOTE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

CATHEDRAL GOLD CORP. PROJECT 8102 File # 88-5375

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Wt PPM	Co PPM	Mn PPM	Fe %	As PPM	V PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti %	B PPM	Al %	Na %	K PPM	W PPB	Au* PPB
BROW 153R	3	249	15	308	.5	85	8	805	10.64	29	5	ND	3	6	3	3	2	44	.30	.088	6	94	2.36	20	.02	2	3.35	.01	.19	1	240
BROW 154R	1	4621	25	1581	10.1	120	28	1187	23.03	171	5	ND	2	1	16	2	18	18	.11	.011	3	24	.73	3	.01	2	1.15	.01	.08	I	4860
BROW 155R	1	239	20	298	.3	107	9	992	10.23	29	5	ND	2	12	2	2	2	42	.39	.092	3	88	2.45	18	.01	2	3.46	.01	.16	I	540
BROW 157R	1	39	15	852	.1	143	7	1083	7.45	16	5	ND	1	6	8	2	2	37	.21	.058	2	169	2.32	20	.01	2	3.18	.01	.18	I	63
BROW 163R	1	4800	13	764	8.9	49	23	1153	18.16	38	5	ND	2	61	7	2	8	6	1.58	.025	4	16	.52	21	.01	2	.36	.01	.08	23	460
BROW 167R	1	4379	13	427	5.1	78	38	406	30.50	41	5	ND	3	7	5	2	2	3	1.11	.002	2	2	.04	4	.01	2	.11	.01	.06	24	340
BROW 168R	1	2021	8	346	4.1	152	16	887	30.38	39	5	ND	2	4	4	2	13	32	.22	.025	6	66	1.13	5	.01	2	1.88	.01	.05	I	2180
BROW 169R	1	721	67	1868	5.5	73	41	1437	17.13	129	5	ND	3	25	23	2	3	43	.58	.070	3	102	1.94	15	.01	2	3.15	.01	.11	I	1280
BROW 170R	1	374	17	348	.5	79	24	755	17.37	30	5	ND	3	5	1	2	2	42	.15	.048	3	103	2.02	11	.01	2	3.19	.01	.13	I	1320
STD C/AU-R	19	62	42	134	7.1	71	31	1023	4.16	42	19	8	40	51	18	16	22	61	.49	.090	39	56	.30	184	.07	41	2.01	.06	.15	13	525

Brown

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 25 1988
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Nov. 7/88..

ASSAY CERTIFICATE

P.L.
- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY..... D.TOE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

CATHEDRAL GOLD CORP. PROJECT 8102 FILE # 88-5133R

SAMPLE#	AU** oz/t
BRON 102R	.204
BRON 103R	.004
BRON 104R	.140
BRON 106R	.230
BRON 107R	.019
BRON 108R	.003
BRON 109R	.002
BRON 111R	.001
BRON 112R	.009
BRON 113R	.112
BRON 116R	.206
BRON 124R	.002
BRON 126R	.001
BRON 130R	.001
BRON 132R	.001
BRON 135R	.226 ✓
BRON 140R	.002
BRON 141R	.003
BRON 156R	.168
BRON 162R	.054

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

DATE RECEIVED: FEB 2 1989

Feb. 8, 1989

GEOCHEMICAL ICP ANALYSIS

.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.
ANALYSIS BY HYDROLYSIS ICP. Ge PARTIAL LEACHED.

- SAMPLE TYPE: ROCK PULP

SIGNED BY.. *D. Toye* D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

IMPERIAL METALS CORP. PROJECT 8102 FILE # 89-0237 Page 1

SAMPLE#	As PPM	Sb PPM	Bi PPM	Ge PPM	Se PPM	Te PPM
BRON 100R	80.4	3.8	4.9	.7	.2	.6
BRON 101R	37.7	2.0	11.5	.2	1.3	3.8
BRON 102R	215.1	1.9	31.1	.7	.5	.5
BRON 103R	39.6	1.3	3.8	.4	1.0	.8
BRON 104R	82.6	1.9	4.5	.7	.2	.5
BRON 105R	34.7	2.3	18.2	.2	.4	2.8
BRON 106R	534.5	3.6	197.1	.3	.2	.8
BRON 107R	65.7	4.0	46.0	.8	.2	.7
BRON 108R	2.9	.8	.2	.2	.9	.5
BRON 109R	78.4	.6	3.6	.8	.2	.8
BRON 110R	5.3	1.2	.4	.4	.2	.3
BRON 111R	1.6	.8	.5	.2	.2	.4
BRON 112R	26.7	1.4	3.5	.8	.2	.5
BRON 113R	143.4	2.5	18.5	.9	.2	.5
BRON 114R	64.8	6.4	24.5	.8	.5	1.1
BRON 115R	452.4	5.7	29.1	.8	.2	1.1
BRON 116R	319.9	2.7	21.1	.4	.2	.9
BRON 117R	385.9	2.4	21.6	.4	.2	1.1
BRON 118R	298.3	1.2	23.0	.8	1.0	1.4
BRON 119R	238.4	3.2	15.1	.5	.2	1.1
BRON 120R	196.3	3.0	11.2	1.3	.6	1.2
BRON 121R	282.6	3.5	4.6	.9	.4	.5
BRON 122R	104.0	2.2	10.5	.4	.2	.5
BRON 123R	37.1	1.0	4.8	.7	2.1	.6
BRON 124R	1025.6	2.9	53.5	.4	.2	.3
BRON 125R	446.9	5.4	8.8	1.0	1.2	.7
BRON 126R	341.8	3.6	12.7	.8	.9	.8
BRON 127R	447.8	2.2	9.3	.7	1.5	.4
BRON 128R	188.2	1.5	9.4	.2	.6	.4
BRON 129R	210.5	3.3	8.8	.3	1.0	1.8
BRON 130R	4.5	.2	.1	.3	.3	.3
BRON 131R	8.4	.3	3.7	.7	3.5	.5
BRON 132R	2.3	1.7	6.4	.6	3.7	1.1
BRON 133R	5.3	.6	5.6	1.0	2.5	1.4
BRON 134R	1.8	.2	.1	.2	.2	.3

SAMPLE#	As PPM	Sb PPM	Bi PPM	Ge PPM	Se PPM	Te PPM
BRON 136R	7.7	1.2	.6	.2	.4	.4
BRON 137R	27.4	1.8	1.0	.8	.4	1.2
BRON 138R	91.5	1.5	3.7	.2	1.7	1.7
BRON 139R	1031.9	87.1	131.0	.8	2.8	3.4
BRON 140R	22.1	4.6	.1	.5	.2	.3
BRON 141R	19.5	1.4	3.4	.5	5.2	.2
BRON 142R	1218.4	20.5	59.9	.7	1.2	1.1
BRON 143R	184.6	3.0	10.0	1.0	1.6	1.1
BRON 144R	1023.2	6.5	25.3	.2	2.7	.3
BRON 145R	81.5	1.8	4.8	.8	.7	.9
BRON 147R	35.8	1.3	1.8	.3	4.2	.2
BRON 148R	245.4	4.5	36.7	.6	2.0	.6
BRON 149R	41.9	2.3	3.8	.5	1.3	.3
BRON 150R	80.4	1.1	6.3	.4	1.4	.3
BRON 151R	175.4	1.0	5.2	1.2	1.0	1.0
BRON 156R	144.7	1.9	9.4	.5	.3	1.3
BRON 158R	176.8	2.2	15.3	.2	.4	.3
BRON 159R	54.2	1.3	5.5	.2	.4	.3
BRON 160R	67.0	.8	5.2	.4	1.0	1.0
BRON 161R	56.5	.5	4.7	.2	1.7	.5
BRON 162R	314.7	4.2	23.6	.2	1.1	.3
BRON 163R	144.4	1.1	10.9	.2	.3	.6
BRON 164R	44.1	1.3	3.5	.4	1.2	.3
BRON 166R	37.2	1.1	3.9	.2	.8	.3

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 LEACH IS PARTIAL FOR NH4+ Pb Sr Cr P La Cr Mg Ba Ti B V AND LIMITED FOR Na K AND Al. Au DETECTION LIMIT BY ICP IS 3 PPM.
 ~ SAMPLE TYPE: P1-P2 SOIL P3 ROCK Au* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE

DATE RECEIVED: SEP 16 1988 DATE REPORT MAILED: Sept 23/88 ASSAYER: C. Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

CATHEDRAL GOLD CORP. PROJECT 8102 File # 88-4528 Page 1

SAMPLE#	Mo	Co	Pb	Zn	Ag	Ni	Co	Mg	Fe	As	U	Al	Tb	St	Cd	Sd	B1	V	Ca	P	La	Ct	Mg	Ba	Ti	B	Al	Na	K	V	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPB								
BRO LSW 5+00H	1	34	19	140	3.0	21	5	377	3.33	13	5	ND	1	25	1	2	3	63	.24	.130	6	43	.73	104	.11	3	1.34	.01	.30	1	17
BRO LSW 4+75N	2	89	54	435	1.2	56	18	2063	5.33	23	5	ND	1	37	3	2	2	92	.45	.136	7	72	1.85	199	.10	3	3.44	.03	.49	3	35
BRO LSW 4+50N	2	66	40	184	2.3	40	10	863	5.75	20	5	ND	2	23	1	2	2	105	.22	.124	7	79	1.55	144	.09	3	3.02	.01	.42	2	43
BRO LSW 4+25N	1	79	57	262	1.5	48	18	1762	5.35	19	5	ND	1	44	1	2	2	89	.40	.165	9	64	1.88	186	.08	3	2.95	.02	.44	1	28
BRO LSW 4+00H	2	71	72	296	1.2	38	21	1936	5.86	28	5	ND	1	34	1	2	2	85	.45	.206	9	53	1.81	155	.08	3	2.79	.02	.37	1	32
BRO LSW 3+75N	3	130	80	360	1.1	46	19	1542	5.31	30	5	ND	2	67	1	2	2	73	1.02	.146	12	56	1.36	174	.09	5	2.23	.04	.34	1	376
BRO LSW 3+50N	1	82	41	233	1.4	49	17	1694	5.08	17	5	ND	2	26	2	2	2	80	.32	.139	7	72	1.78	177	.11	3	3.25	.03	.52	2	45
BRO LSW 3+25N	2	159	91	301	2.1	57	21	2523	4.72	13	5	ND	1	102	2	2	2	82	1.90	.163	4	63	1.30	214	.13	2	2.30	.06	.92	1	16
BRO LSW 3+00H	1	118	41	278	1.1	53	22	1654	5.70	18	5	ND	3	101	2	2	2	103	1.21	.183	8	70	1.72	267	.17	3	2.66	.06	1.00	1	30
BRO LSW 2+75N	1	167	53	383	1.5	49	22	2029	6.10	10	5	ND	2	123	3	2	2	105	1.19	.174	8	69	1.64	210	.19	2	2.13	.07	.90	2	29
BRO LSW 2+50N	1	144	42	312	1.8	64	23	1745	5.92	16	5	ND	3	156	3	2	2	106	2.57	.172	6	87	1.77	235	.18	4	2.98	.08	1.23	1	14
BRO LSW 2+25N	2	158	57	370	.9	76	21	1462	5.74	24	5	ND	2	139	3	2	2	95	1.20	.162	8	129	2.15	334	.17	2	3.15	.07	1.03	1	83
BRO LSW 2+00H	2	136	65	366	1.0	46	19	1813	5.36	30	5	ND	3	89	2	2	2	78	.97	.169	10	56	1.30	200	.11	3	2.27	.05	.47	1	325
BRO LSW 1+75N	2	167	75	425	.8	62	22	1722	5.96	24	5	ND	3	103	4	2	2	94	1.22	.167	10	88	1.83	310	.15	2	2.81	.05	1.01	1	75
BRO LSW 1+50N	2	168	74	375	1.0	55	21	1533	5.63	27	5	ND	3	92	2	2	2	85	1.08	.176	10	78	1.61	235	.13	2	2.52	.05	.90	1	131
BRO LSW 1+25N	3	178	61	381	.9	53	21	1589	5.91	32	5	ND	2	91	2	2	2	83	1.06	.172	10	74	1.57	247	.13	2	2.45	.05	.79	1	102
BRO LSW 1+00H	2	181	72	429	1.2	58	22	1643	5.90	33	5	ND	3	93	3	2	2	85	1.12	.169	10	72	1.63	247	.13	3	2.54	.05	.92	1	155
BRO LSW 0+75N	7	151	60	223	1.3	31	18	1085	8.04	39	5	ND	3	43	1	2	2	81	.45	.165	7	53	1.33	174	.13	2	2.18	.04	.59	1	290
BRO LSW 0+50N	2	167	66	388	1.1	54	21	1631	5.82	31	5	ND	2	82	3	2	2	84	1.01	.171	10	73	1.58	288	.13	3	2.49	.05	.87	1	99
BRO LSW 3+00H	1	123	38	185	.8	40	20	1391	5.49	18	5	ND	2	82	2	2	2	82	.99	.150	9	59	1.19	117	.12	5	2.44	.06	.35	1	48
BRO LSW 2+75N	1	148	44	247	1.5	60	24	1560	6.98	42	5	ND	3	129	3	2	2	123	2.02	.181	6	90	1.91	184	.20	4	3.36	.10	1.13	1	26
BRO LSW 2+50N	3	155	47	224	.8	56	26	1532	6.61	20	5	ND	3	90	1	2	2	99	1.00	.194	7	85	1.62	143	.16	2	2.87	.07	.88	2	105
BRO LSW 2+25N	5	179	55	238	1.9	36	23	1409	7.45	30	5	ND	2	74	2	2	2	89	.81	.162	7	47	1.26	162	.14	2	2.44	.07	.79	2	116
BRO LSW 2+00H	3	147	61	349	1.2	49	21	1597	5.92	28	5	ND	3	83	3	2	2	93	1.01	.189	9	75	1.62	205	.14	3	2.53	.06	.58	1	53
BRO LSW 1+75N	1	209	67	389	2.2	57	25	2557	7.10	21	5	ND	2	120	4	2	2	115	1.94	.181	6	77	1.90	235	.19	2	3.19	.07	1.10	1	350
BRO LSW 1+50N	2	181	93	469	1.3	64	24	1761	6.37	36	5	ND	2	92	3	2	2	94	1.28	.183	11	81	1.78	295	.15	2	2.71	.05	1.01	1	93
BRO LSW 1+25N	2	184	83	479	1.0	60	23	1931	6.32	34	5	ND	3	91	4	2	2	94	1.03	.170	11	86	1.86	327	.15	2	2.80	.05	1.00	1	64
BRO LSW 1+00H	2	241	98	459	4.0	67	24	1656	6.27	45	5	ND	2	98	9	2	2	90	1.22	.190	10	79	1.70	297	.14	1	2.67	.05	.96	1	280
BRO LSW 0+75N	2	168	98	388	1.1	61	23	1740	5.92	32	5	ND	2	91	2	2	2	89	1.14	.187	11	80	1.72	263	.14	2	2.65	.05	.92	1	11
BRO LSW 3+00H	2	59	55	170	1.0	32	8	458	4.57	36	6	ND	1	15	2	2	2	62	.09	.103	10	60	.95	74	.03	2	2.19	.01	.10	2	82
BRO LSW 2+75N	8	59	64	144	3.6	16	8	669	10.45	41	7	ND	3	11	4	2	3	92	.09	.031	28	30	.51	43	.12	2	1.32	.01	.11	2	43
BRO LSW 2+50N	6	62	62	196	.6	24	12	1600	10.98	51	12	ND	5	13	3	2	6	78	.11	.041	23	53	.80	50	.10	2	2.47	.01	.12	2	78
BRO LSW 2+25N	3	112	37	177	.5	63	22	1449	5.46	18	5	ND	1	99	1	2	2	70	3.78	.153	6	69	1.05	131	.11	2	1.82	.05	.44	2	42
BRO LSW 2+00H	1	147	63	286	1.0	61	23	1656	6.03	31	5	ND	2	87	2	2	2	95	1.08	.177	10	86	1.70	208	.14	2	2.72	.06	.60	1	55
BRO LSW 1+75N	1	128	61	290	1.0	62	21	1572	5.90	29	5	ND	2	89	3	2	2	100	1.02	.167	10	88	1.79	196	.15	2	2.86	.06	.78	1	70
BRO LSW 1+50H	2	145	135	577	1.5	70	25	8070	6.71	56	5	ND	1	72	2	2	2	74	1.11	.201	14	70	1.73	243	.08	2	2.45	.03	.26	1	46
STD C/U-S	18	59	42	132	7.1	69	30	1020	4.04	43	20	8	30	46	19	17	19	60	.48	.094	40	55	.90	100	.07	33	1.99	.06	.15	13	49

CATHEDRAL GOLD CORP. PROJECT 8102 FILE # 88-4528

Page 2

SAMPLE#	No	Cu	Pb	Zn	Ag	Wt	Co	No	Fe	As	U	Au	Tb	Se	Cd	SD	Bi	V	Ca	P	La	Ct	Mg	Ba	Tl	B	Al	Na	K	V	Au*
	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		
BRO L4W 1+25W	2	112	99	328	1.2	49	20	3289	4.97	42	5	ND	1	91	1	2	2	60	1.45	.167	12	45	1.17	180	.06	1	1.70	.03	.22	1	42
BRO L4W 1+00W	1	120	88	316	1.0	55	22	2848	5.38	45	5	ND	1	91	2	3	2	70	1.08	.150	13	50	1.28	184	.09	3	1.90	.04	.23	1	55
BRO L4W 0+75W	1	139	93	437	1.2	61	24	2988	6.20	50	5	ND	2	87	2	2	2	85	1.04	.175	16	59	1.51	215	.12	5	2.28	.05	.28	1	81
BRO L4W 0+50W	9	249	61	324	1.2	38	22	1678	6.02	35	5	ND	2	75	2	2	2	80	.87	.177	10	46	1.13	200	.13	4	2.10	.06	.53	1	230
BRO L4W 0+25W	3	169	60	338	.8	50	22	1717	5.91	28	5	ND	1	112	1	4	2	94	1.25	.193	10	71	1.47	210	.16	4	2.42	.06	.96	1	71
BRO L4W 0+00W	4	184	61	415	.9	58	24	1258	6.31	34	5	ND	1	73	1	3	3	82	.87	.205	10	62	1.25	158	.14	2	1.93	.05	.53	2	780
BRO L3W 3+00W	2	81	62	173	1.7	26	9	404	6.01	53	5	ND	1	11	1	2	2	104	.06	.228	10	48	.35	55	.08	3	.94	.01	.14	1	73
BRO L3W 2+75W	1	108	71	193	2.1	41	9	918	7.45	39	5	ND	2	27	1	4	2	113	.22	.194	10	91	1.28	119	.12	8	2.26	.02	.45	1	405
BRO L3W 2+50W	2	102	135	425	.8	59	29	6573	6.35	95	5	ND	2	70	4	5	2	71	.97	.208	15	69	1.45	472	.06	8	2.18	.03	.37	1	37
BRO L3W 2+25W	1	121	143	393	1.5	78	24	3913	6.08	51	5	ND	3	54	3	4	2	79	.81	.157	16	85	1.84	223	.07	8	2.49	.02	.51	1	370
BRO L3W 2+00W	1	142	84	325	1.2	67	27	3030	6.90	50	5	ND	2	95	1	6	2	112	1.24	.180	14	77	2.34	225	.16	8	2.98	.05	.43	3	49
BRO L3W 1+75W	1	126	100	341	1.9	58	24	2006	6.46	67	5	ND	1	91	1	7	2	85	.96	.171	16	54	1.61	180	.11	2	2.35	.07	.19	1	56
BRO L3W 1+50W	1	149	99	513	.7	61	23	2096	6.46	40	5	ND	3	73	1	2	2	89	.89	.164	16	69	1.63	193	.16	7	2.42	.06	.39	1	124
BRO L3W 1+25W	1	188	60	348	1.1	135	47	1755	6.08	24	5	ND	1	111	1	4	2	96	1.19	.203	12	79	1.42	142	.17	4	2.60	.06	.46	1	250
BRO L3W 1+00W	2	155	96	522	.9	62	22	1949	6.27	36	5	ND	3	73	2	4	2	98	.94	.182	16	77	1.66	197	.16	3	2.51	.05	.62	1	98
BRO L3W 0+75W	1	136	91	446	.7	38	20	1772	5.71	44	5	ND	2	49	1	3	2	62	.65	.212	18	43	1.21	188	.08	3	1.66	.02	.22	1	270
BRO L3W 0+50W	2	167	146	609	1.8	65	27	3325	7.27	41	5	ND	3	73	4	1	2	98	.98	.194	16	71	1.73	210	.15	3	2.38	.04	.39	1	235
BRO L3W 0+25W	1	158	116	783	1.0	50	21	1899	6.09	37	5	ND	3	73	4	5	2	81	.85	.201	17	53	1.41	174	.13	1	2.11	.05	.25	1	114
BRO L3W 0+00W	2	210	114	788	.9	63	24	2381	6.27	42	5	ND	2	66	4	3	2	76	.76	.172	16	64	1.33	222	.12	2	2.24	.03	.39	1	260
BROM 56S	1	927	20263	1886	111.9	33	11	2500	23.54	1198	5	ND	4	52	3	56	110	59	.10	.093	4	45	.53	20	.09	8	.97	.02	.85	1	3860
BROM 58S	3	183	225	522	7.3	54	20	1698	12.32	68	5	ND	4	96	1	5	7	132	.63	.264	15	92	1.92	147	.22	7	2.84	.07	.41	1	550
STD C/AU-S	19	62	44	132	6.5	70	30	1137	4.02	40	18	7	39	51	19	17	18	63	.48	.094	42	56	.89	180	.08	34	1.96	.06	.16	12	51

A P P E N D I X II

PETROGRAPHIC REPORT

Harris
**EXPLORATION
SERVICES**

MINERALOGY AND GEOCHEMISTRY

534 ELLIS STREET, NORTH VANCOUVER, B.C., CANADA V7H 2G6

TELEPHONE (604) 929-5867

Report for: Dennis Gorc,
Imperial Metals Corp.,
P.O. Box 84,
800-601 West Hastings St.,
Vancouver, B.C.
V6B 5A6

Job 88-154

December 29th, 1988

Samples:

3 rock samples from Project 8102 for thin sectioning and petrographic study, with special reference to biotite composition. Two samples are numbered Bron 136 and the other Bron 138. Corresponding slide numbers are 88-371X, 372X and 373X.

Summary:

These rocks appear to be volcanic wackes and tuffs - possibly (most clearly in the case of 136B) reconstituted as coarse breccias.

They are composed predominantly of felsitic plagioclase, sericite and carbonate, in various proportions, and also include occasional siliceous (cherty?) clasts. They are non-foliated.

Fine-grained biotite is a notable constituent, as pervasive, randomly oriented flecks and small clumps. It is developed in both matrix and clasts in the coarser fragmental rocks, and may be a product of thermal metamorphism.

The biotite composition was checked by SEM microanalysis and found to consist of Mg, Fe, Al and Si. The mineral is thus indicated as a normal biotite, rather than the Fe end-member which had been suspected.

Individual petrographic descriptions are attached.



J.F. Harris Ph.D.

SAMPLE BRON 136(A): Slide 88-371X
ALTERED DOLOMITIC WACKE

Estimated mode

Quartz	3
Plagioclase	24
Sericite	8
Carbonate	44
Biotite	18
Epidote	1
Chlorite	1
Pyrite)	1
Pyrrhotite)	

This rock is composed predominantly of an intimate intergrowth of fine-grained, felsitic plagioclase, sericite, carbonate and biotite.

These components, intergrown in various proportions, appear to define a clastic aggregate of altered fragments, 0.1 - 0.3mm in size. The most abundant fragments are carbonate, sometimes with intergrown sericite, with felsitic material forming a matrix phase. Some clasts of felsite are also seen, as well as occasional quartz. The latter (crystal clasts) occur sporadically scattered through the predominant aggregate of altered lithic (carbonate-sericite/felsite) clasts.

Biotite occurs as a fine-grained, pervasive phase throughout the altered lithic clasts, locally segregating as small, individual flakes, to 0.1mm, and clumps of such flakes.

Epidote is a minor accessory, as sporadic, small flecks and pockets.

This assemblage is essentially non-foliated. It apparently represents a form of impure wacke, possibly with tuffaceous affinities.

One end of the slide incorporates a zone of carbonate veinlets, having sheared/granulated margins with intergrown chlorite. More minor carbonate and chlorite microshears are also seen elsewhere in the slide.

Fine-grained sulfides (probably mainly pyrrhotite) are seen associated with the carbonate veinlets and localized microshears, and also as random disseminations. Epidote and/or chlorite is often associated with the sulfide clumps, which may be diagenetic or epigenetic in character rather than primary.

The rock may incorporate a coarsely brecciated structure on a scale of 1 - 2 inches - the slide consisting almost entirely of a single large fragment.

Sample Bron 136(A) cont.

The carbonate (both in the clastic matrix and the veinlets) is weakly reactive to dilute acid, and probably consists of dolomite with a minor component of intergrown calcite.

SAMPLE BRON 136(B): Slide 88-372X
BIOTITIZED BRECCIA

Estimated mode

Quartz	10
Plagioclase	20
Sericite	33
Biotite	26
Carbonate	2
Epidote	3
Chlorite	3
Sulfides	3

This sample clearly displays the coarse breccia structure suspected in 371X. The slide incorporates part of an angular fragment, 3.5cm in size, of a fine-grained, diffusely laminated rock, plus smaller angular fragments, 0.5 - 12mm or more in size, of a quartzose rock.

The large fragment is composed of minutely fine-grained sericitized felsite (grain size 5 - 20 microns). This appears structureless, and may be a form of mudstone or ash tuff. Red-brown biotite occurs throughout as minute, disseminated flecks and individual ragged flakes, to 0.1mm, sometimes clumped. Minor carbonate forms occasional diffuse wisps. Epidote, as cryptocrystalline flecks, skeletal clumps and rare small porphyroblasts, is the other accessory.

The laminar structure in this fragment is defined by concentrations of slightly coarser biotite with epidote and lamellar opaques (pyrrhotite?). Traces of chlorite are developed in the biotite marginal to the opaques.

The lithotype bordering the large fragment at one end of the slide is composed of sericitized felsite and abundant ragged biotite grains to 0.2mm. Carbonate is a minor accessory, and epidote and chlorite are locally seen. Disseminated sulfides (pyrite and lamellar pyrrhotite?) are patchily abundant.

Scattered, small mineral clasts of plagioclase are seen, and this rock type is probably a lithic wacke similar (except for having more biotite and much less carbonate) to 371X.

The prominent quartzose clasts are composed of varigranular aggregates of sub-rounded quartz grains and recrystallized mosaics, of grain size 0.02 - 1.0mm in size. They contain scattered clumps of chlorite and carbonate, and often have abundant disseminated sulfides.

Sample Bron 136(B) cont.

It is unclear whether these fragments are of siliceous wacke, recrystallized chert, or disrupted vein material.

The biotite in the large, fine-grained fragment, and in the heterogenous wacke or tuff (which appears to represent the matrix phase of the coarse breccia) seems identical. Its maximum absorption colour is a distinctive reddish brown, whilst in the minimum absorption position it is very pale brown to colourless. It looks like a normal biotite, and this is confirmed by SEM microanalysis, which shows Fe Mg.

The biotite throughout the rock is randomly oriented, and may have developed, subsequent to the brecciation, by thermal metamorphism (hornfelsing).

Pyritization - especially strong in the matrix phase - may be of related, or slightly later, origin.

SAMPLE BRON 138: Slide 88-373X
ALTERED TUFF(?)

Estimated mode

Quartz	4
Felsite	36
Sericite	36
Biotite	7
Carbonate	14
Rutile	1
Apatite	1
Pyrite	1

This rock is composed predominantly of minutely fine-grained felsitic plagioclase, strongly and evenly pervaded by sericite, and with diffuse patches and wisps of micritic carbonate.

This forms the matrix to rather abundant, diffuse, sometimes barely distinguishable, sub-angular patches, 0.2 - 1.0mm or more in size, of slightly different composition. Some of these are of felted sericite, some are of granular carbonate, some are of relict plagioclase, some include flecks of quartz, and some are concentrations of felted biotite and dusty rutile. These have somewhat the aspect of altered phenocrysts, but more likely represent original clasts in an altered tuff.

Small, randomly scattered euhedra of apatite are a notable accessory.

Disseminated pyrite occurs as sparse, fine-grained flecks throughout, and is more strongly associated with a veniform segregation of coarser carbonate, biotite and quartz.

The slide includes part of a discrete, fractured clast >5mm in size, of varigranular, crenulate-margined, mosaic quartz (chert or vein material).

Biotite is relatively minor in this rock compared with the other two, but is of similar appearance. Its distribution, including rimming textures and impregnations of relict fragments suggests development as a possible thermal metamorphic overprint (mild hornfelsing).

The rock is totally non-foliated, and appears to be of volcanic or pyroclastic (rather than sedimentary) origin.

A P P E N D I X III

COST SUMMARY

COST SUMMARY
BRONSON PROPERTY - 1988 PROGRAM
Gossan 14-17, 23, 30
Liard M.D.

WAGES

D. Gorc - August 15, 18, 21-23, 25-29, 1988	\$7,770
September 1-6, 8-11, 13-14, 16, 30, 1988	
October 1-10, 12, 21, 1988	
May 25-26, 29, 31, 1989	
L. Lay - August 15, 17-29, 1988	2,700
September 1-14, 1988	
D. Johannessen - September 1, 2, 1988	<u>200</u>
	\$10,670.00

ACCOMMODATION - TRAVEL

Airline tickets Vancouver - Smithers return	\$ 2,100
D. Gorc, L. Lay (Geophysicists - S. Visser, B. Farrer, J. Ashenhurst)	
Air Freight - Passengers (Smithers - Bronson Strip)	4,793
Central Mountain Air	
Travel Expenses (Hotel, Taxi, etc)	200
Accommodation (lodging and meals - Pamicon Camp) 155 man-days @ \$115/day	<u>17,825</u>
	24,918.00

HELICOPTER

Northern Mountain Helicopters - 21.1 hrs	13,851.51
--	-----------

EQUIPMENT

Supplies and Equipment	\$1,500
Expeditor	<u>350</u>
	1,850.00

LINECUTTING (Gordon Clark and Associates)

10 days - 2 men and gear @ \$475/day	\$4,750
6 days - 2 men and gear @ \$500/day	3,000
Expenses	<u>397</u>
	8,147.00

GEOPHYSICS (SJV Consultants Ltd.)

VLF electromagnetic, magnetometer,	\$11,555
Max-Min electromagnetic surveys	
Geophysicist, geophysical operator,	
Technician, computer and software	
39 man-days	
Expenses	<u>300</u>
	11,855.00

GEOCHEMICAL (Acme Laboratories)

137 rock samples analyzed for gold by A.A. and 30 element I.C.P.	\$1,914.71
60 soil samples analyzed for gold by A.A. and 30 element I.C.P.	679.10
59 analyzes for As, Sb, Bi, Ge, Se, Te	324.50
Shipping	<u>380.00</u>
	3,298.31

TRENCHING (Jempland Construction)

Explosives	\$ 942.89
14 man-days @ \$300/day	4,200.00
Expenses	1,188.86
Compressor	<u>500.00</u>
	6,831.75

SURVEYING (McWilliam, Whyte, Goble and Associates) 1,000.00

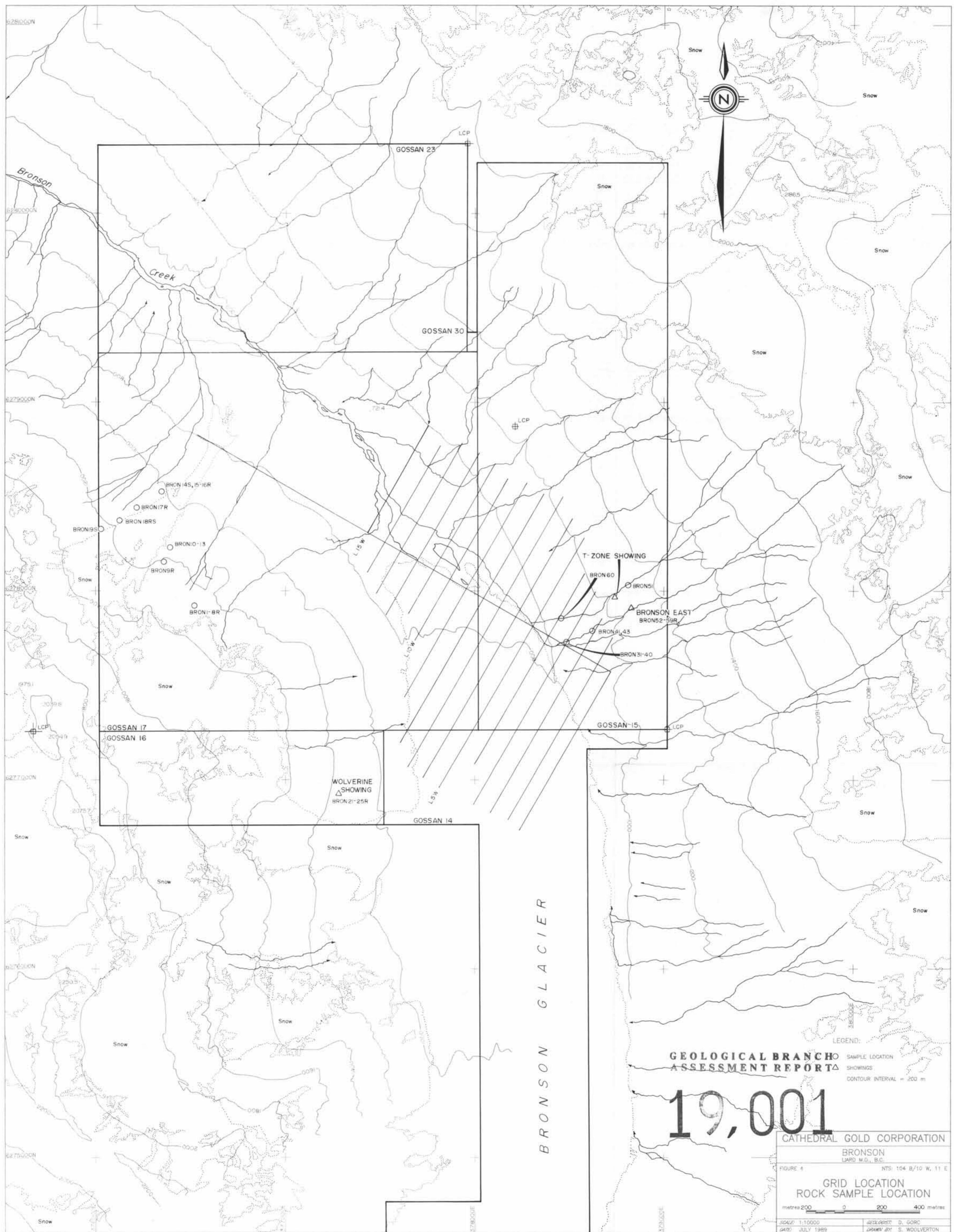
Survey LCP for Gossan 15

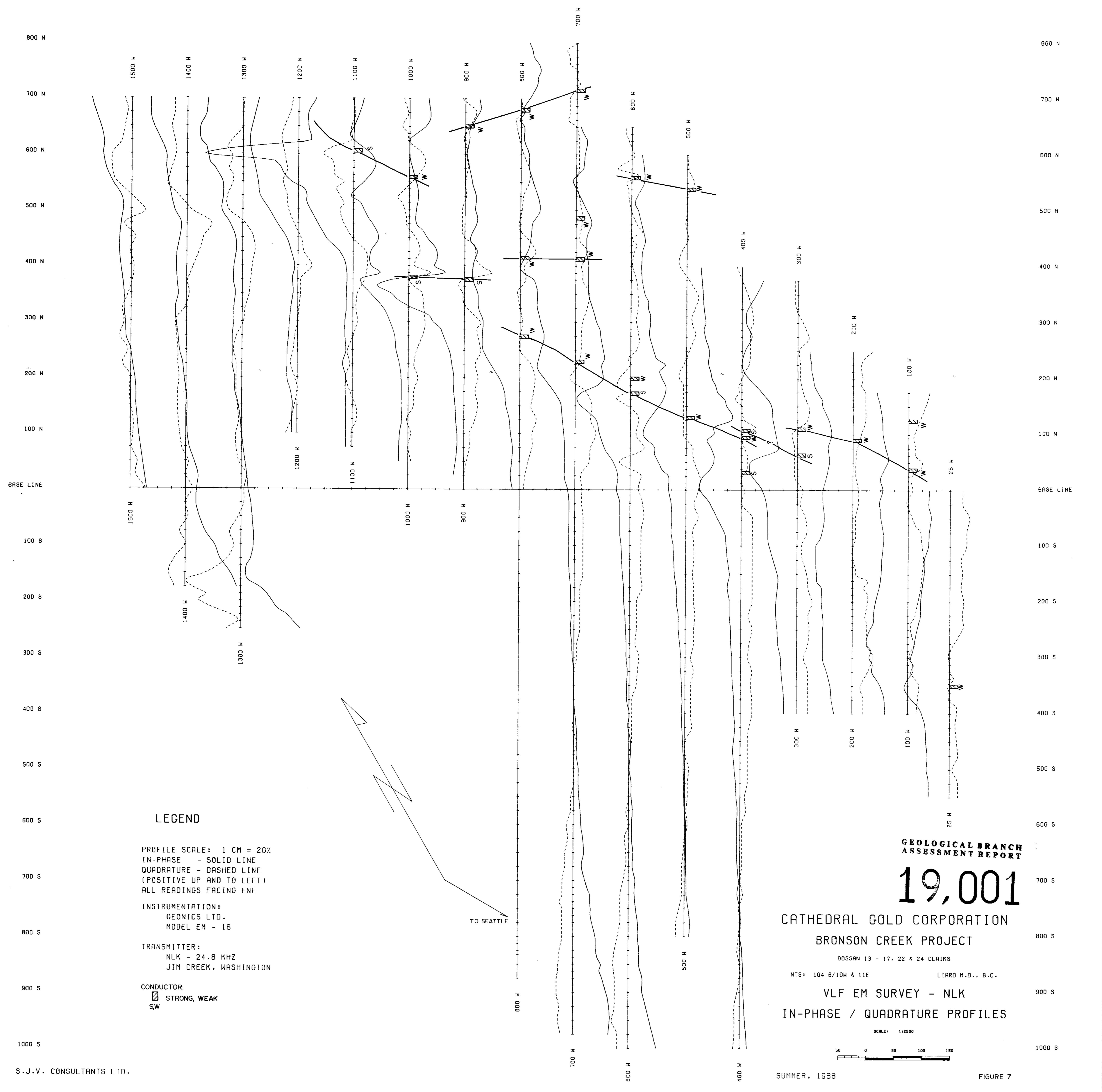
MISCELLANEOUS

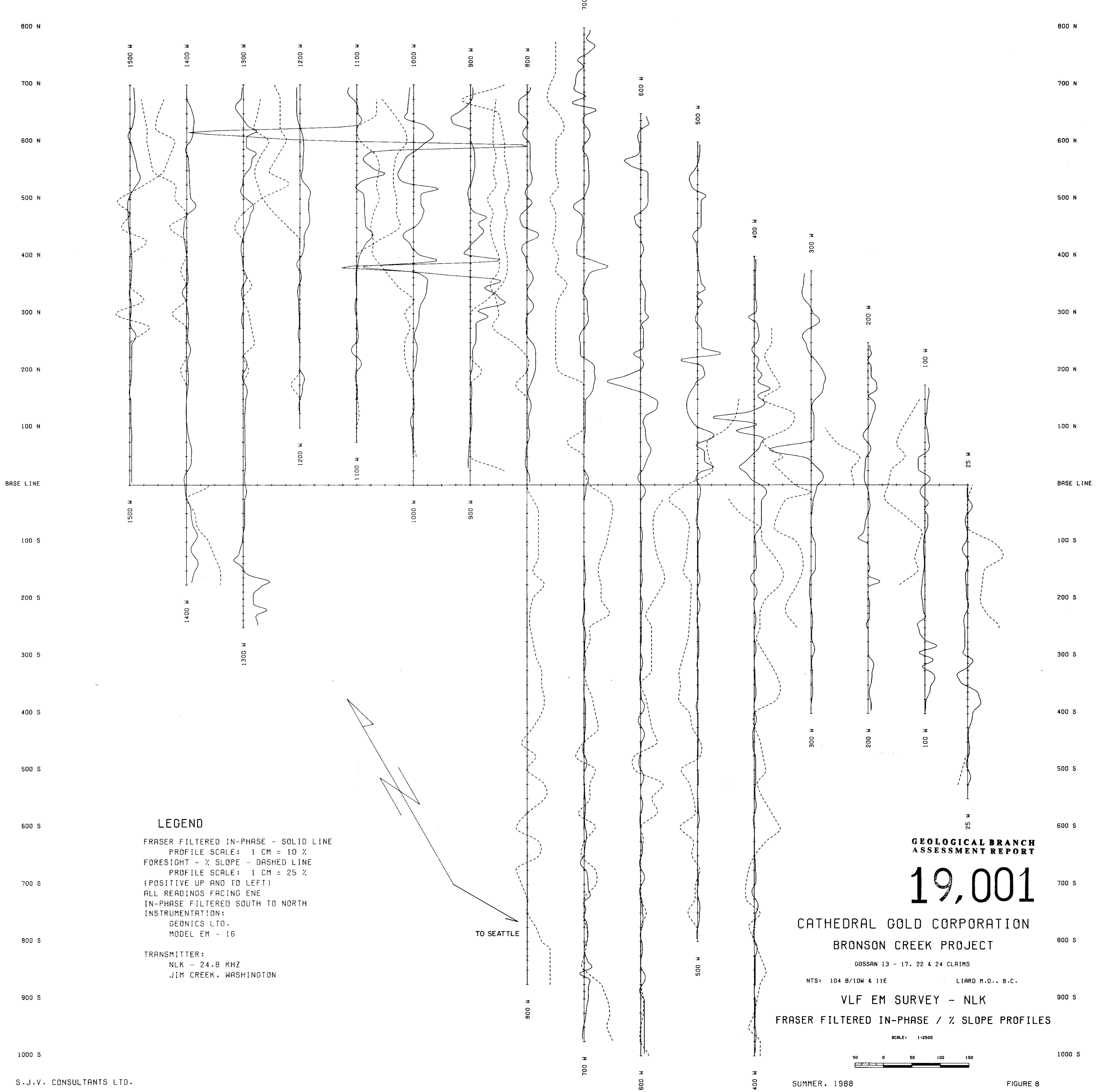
Report (typing, drafting, computer, etc.)	<u>2,000.00</u>
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SUMMARY

WAGES	\$10,670.00
ACCOMMODATION AND TRAVEL	24,918.00
HELICOPTER	13,841.51
EQUIPMENT	1,850.00
LINECUTTING	8,147.00
GEOPHYSICS	11,855.00
GEOCHEMICAL	3,298.31
TRENCHING	6,831.75
SURVEYING	1,000.00
MISCELLANEOUS	<u>2,000.00</u>
	\$84,421.57







CATHEDRAL GOLD CORPORATION

BRONSON CREEK PROJECT

GOSAN 14 -17, 23 & 30 CLAIMS

NTS: 104 B/10W & 11E

LIARD M.D., B.C.

VLF EM SURVEY - NSS

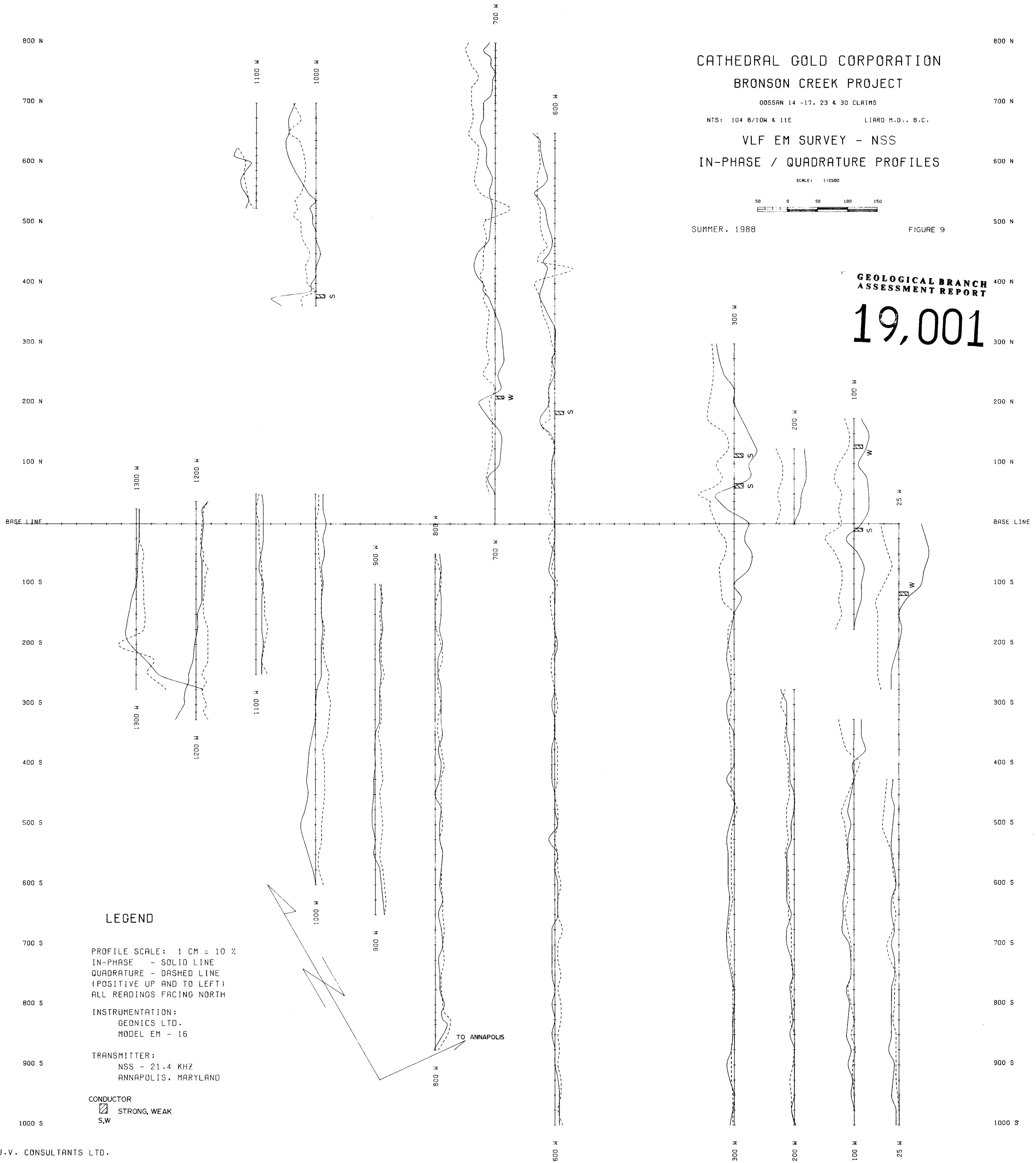
IN-PHASE / QUADRATURE PROFILES

SCALE: 1:2500



SUMMER, 1988

FIGURE 9



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,001

LEGEND

PROFILE SCALE: 1 CM = 10 %
 IN - PHASE - SOLID LINE
 QUADRATURE - DASHED LINE
 (+ POSITIVE UP AND TO LEFT)
 ALL READINGS FACING ENE
 BASE VALUE: -70 % IN - PHASE
 0 % QUADRATURE

INSTRUMENTATION:
 GEONICS LTD.
 MODEL EM - 16

TRANSMITTER:
 NLK - 24.8 KHZ
 JIM CREEK, WASHINGTON

CONDUCTOR
 STRONG, WEAK
 S,W

CATHEDRAL GOLD CORPORATION
 BRONSON CREEK PROJECT

GOSSAN I7, 30 CLAIMS

NTS: I04 B/I0W & IIE

LIARD M.D., B.C.

VLF-EM SURVEY - NLK
 IN - PHASE / QUADRATURE PROFILES
 L 22W, L 25W

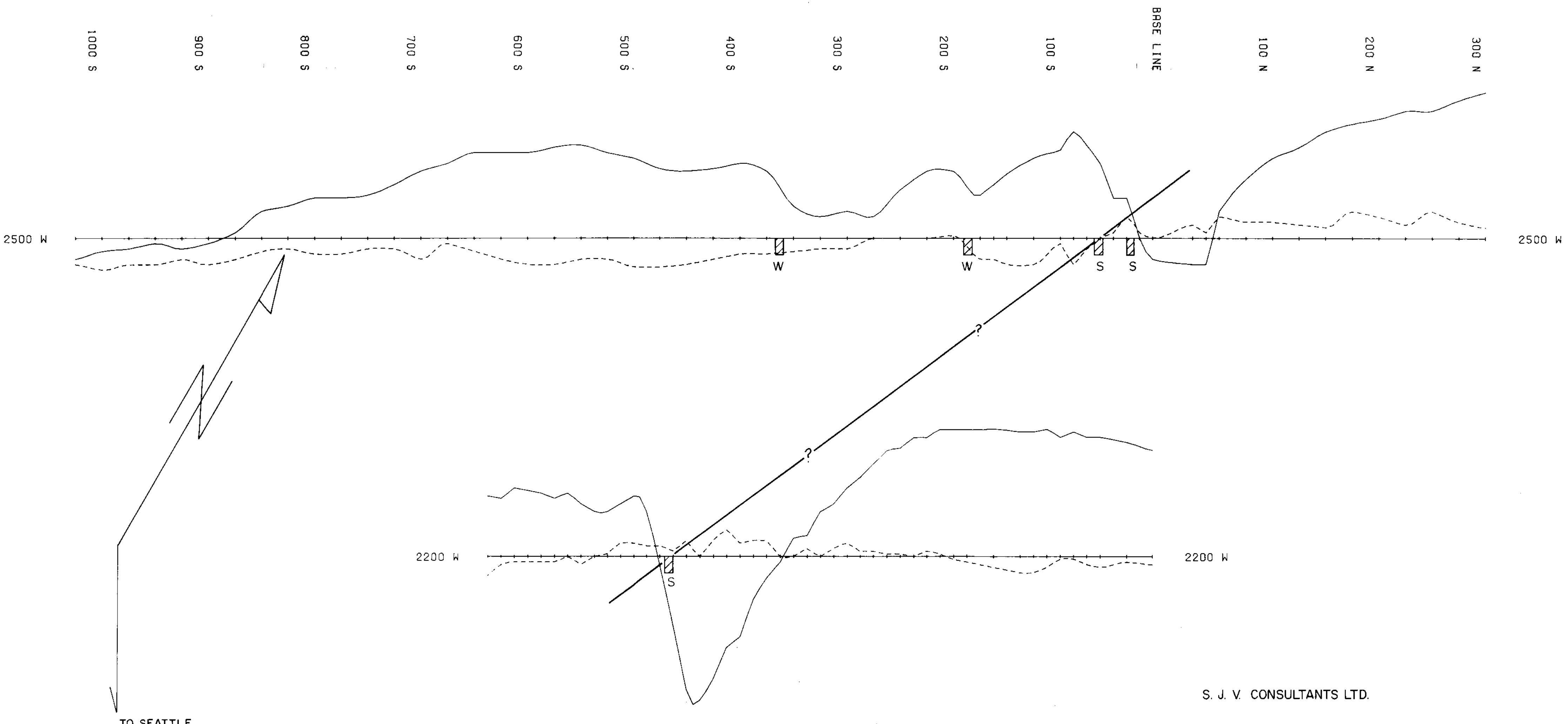
SCALE: 1:2500



S. J. V. CONSULTANTS LTD.

SUMMER, 1988

FIGURE 10



LEGEND

PROFILE SCALE: 1 CM = 10 %
IN-PHASE - SOLID LINE
QUADRATURE - DASHED LINE
~~(POSITIVE UP AND TO LEFT)~~
ALL READINGS FACING ENE
BASE VALUE: -20 % IN-PHASE
0 % QUADRATURE

INSTRUMENTATION:
GEONICS LTD.
MODEL EM-16

TRANSMITTER:
NSS - 21.4 KHZ
ANNAPOLIS, MARYLAND

CONDUCTOR
 STRONG, WEAK
S,W

CATHEDRAL GOLD CORPORATION

BRONSON CREEK PROJECT

GOSSAN 17, 30 CLAIMS

NTS: 104 B/10W & 11E

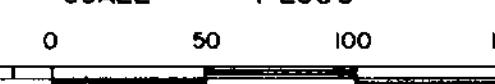
LIARD M.D., B.C.

VLF-EM SURVEY - NSS

IN-PHASE / QUADRATURE PROFILES

L 22W, L 25W

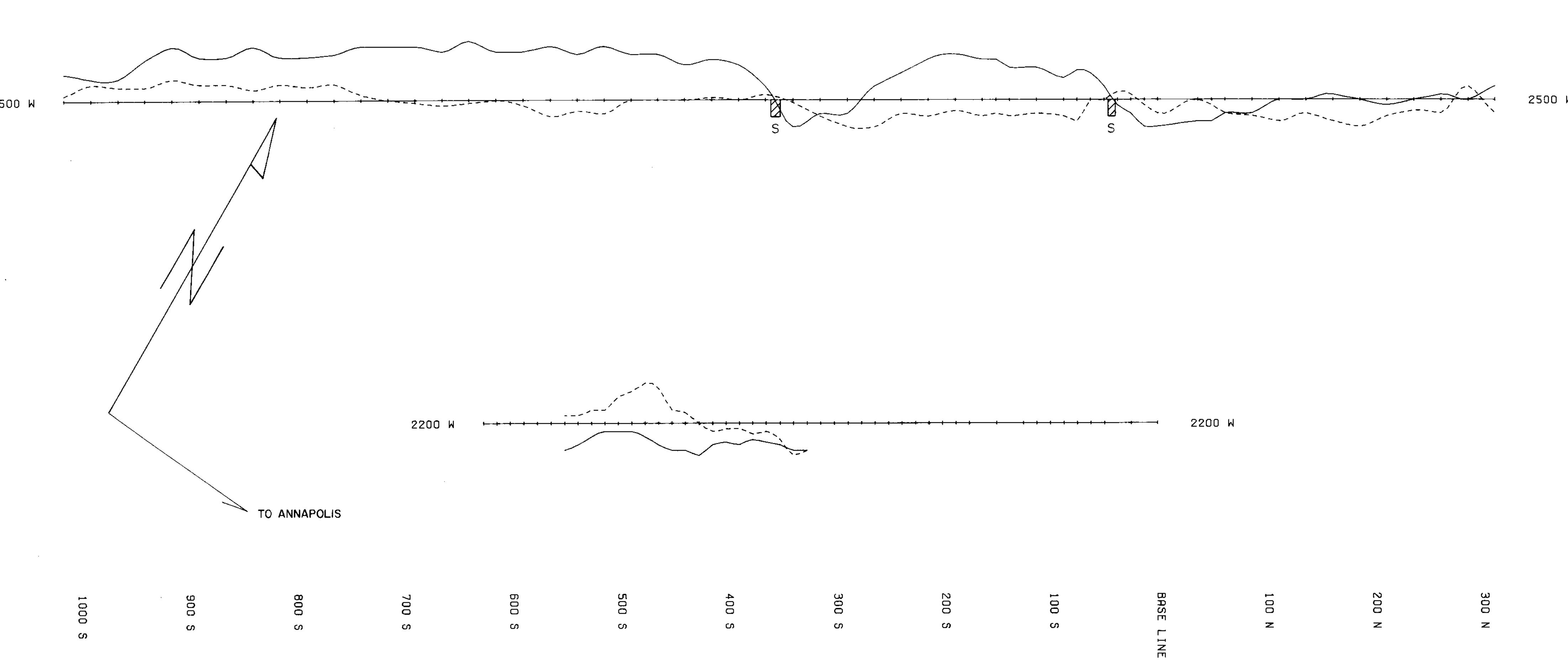
SCALE: 1:2500



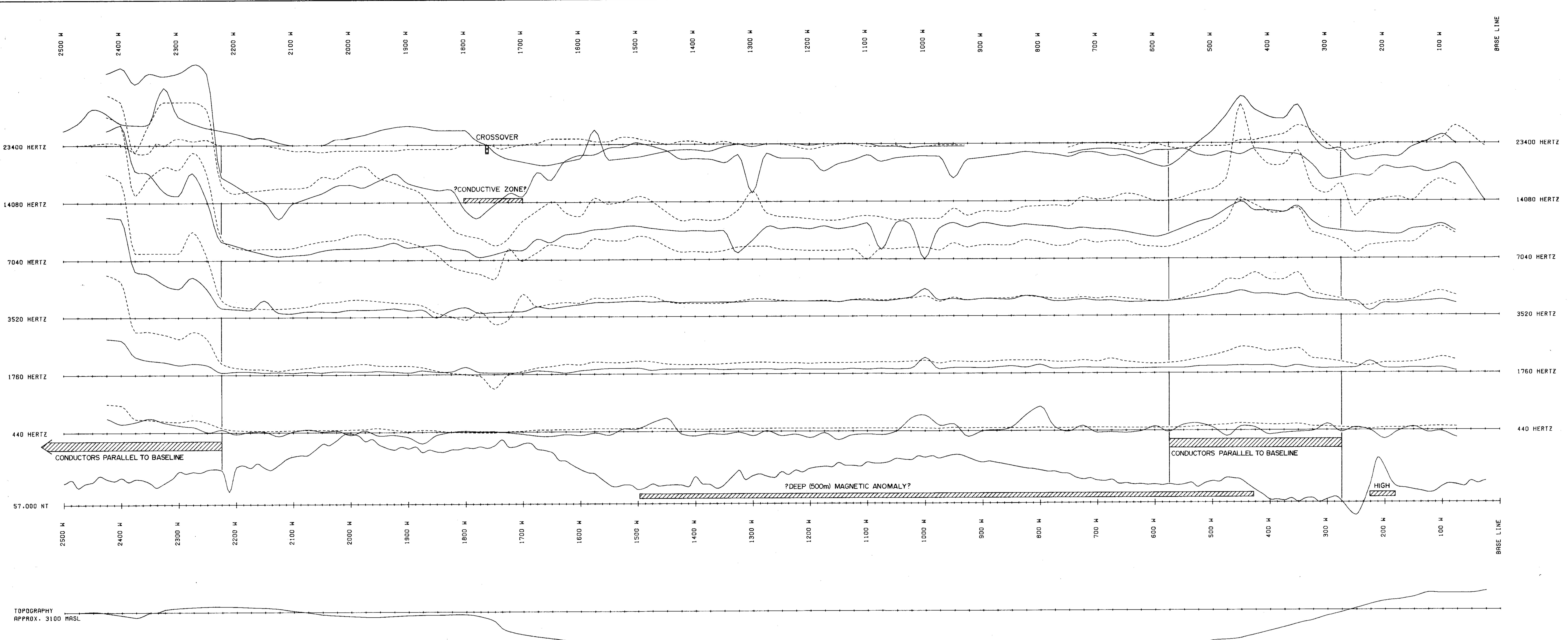
SUMMER, 1988

19001

FIGURE II



S. J. V. CONSULTANTS LTD.



LEGEND

HLEM PROFILES:
PROFILE SCALE: 1 CM = 10 %
IN-PHASE - SOLID LINE
OUT-OF-PHASE - DASHED LINE
(POSITIVE UP)
INSTRUMENTATION:
APEX PARAMETRICS LTD.
MAX-MIN MODEL I-9

VLF EM PROFILES:
PROFILE SCALE: 1CM = 10 %
IN-PHASE - SOLID LINE
QUADRATURE - DASHED LINE
INSTRUMENTATION:
GEONICS LTD. MODEL EM - 16
TRANSMITTER:
NPM - 23.4 KHZ
LUALUALAI, HAWAII

MAGNETICS PROFILE:
PROFILE SCALE: 1 CM = 200 NT (GAMMAS)
BASE VALUE: 57,000 NT
INSTRUMENTATION:
GEM SYSTEMS LTD.
MODEL GSM - 8
ELEVATION PROFILE: (BOTTOM)
PROFILE SCALE: 1 CM = 50 METRES
APPROXIMATE BASE VALUE = 3,100 MASL



CATHEDRAL GOLD CORPORATION
BRONSON CREEK PROJECT

DOSSAN 13 - 17, 22 & 24 CLAIMS

N.T.S: 104 B/10W & 11E LIARD M.D., B.C.

BASE LINE STACKED PROFILES

SCALE: 1:2500

50 0 50 100 150

GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,001

CATHEDRAL GOLD CORPORATION
BRONSON CREEK PROJECT

GOSSAN 14 -17, 23 & 30 CLAIMS

NTS: 104 B/10W & 11E

LIARD M.D., B.C.

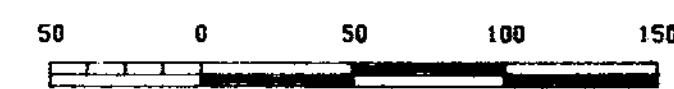
700 N

MAX-MIN SURVEY

7040 HERTZ PROFILES

SCALE: 1:2500

600 N

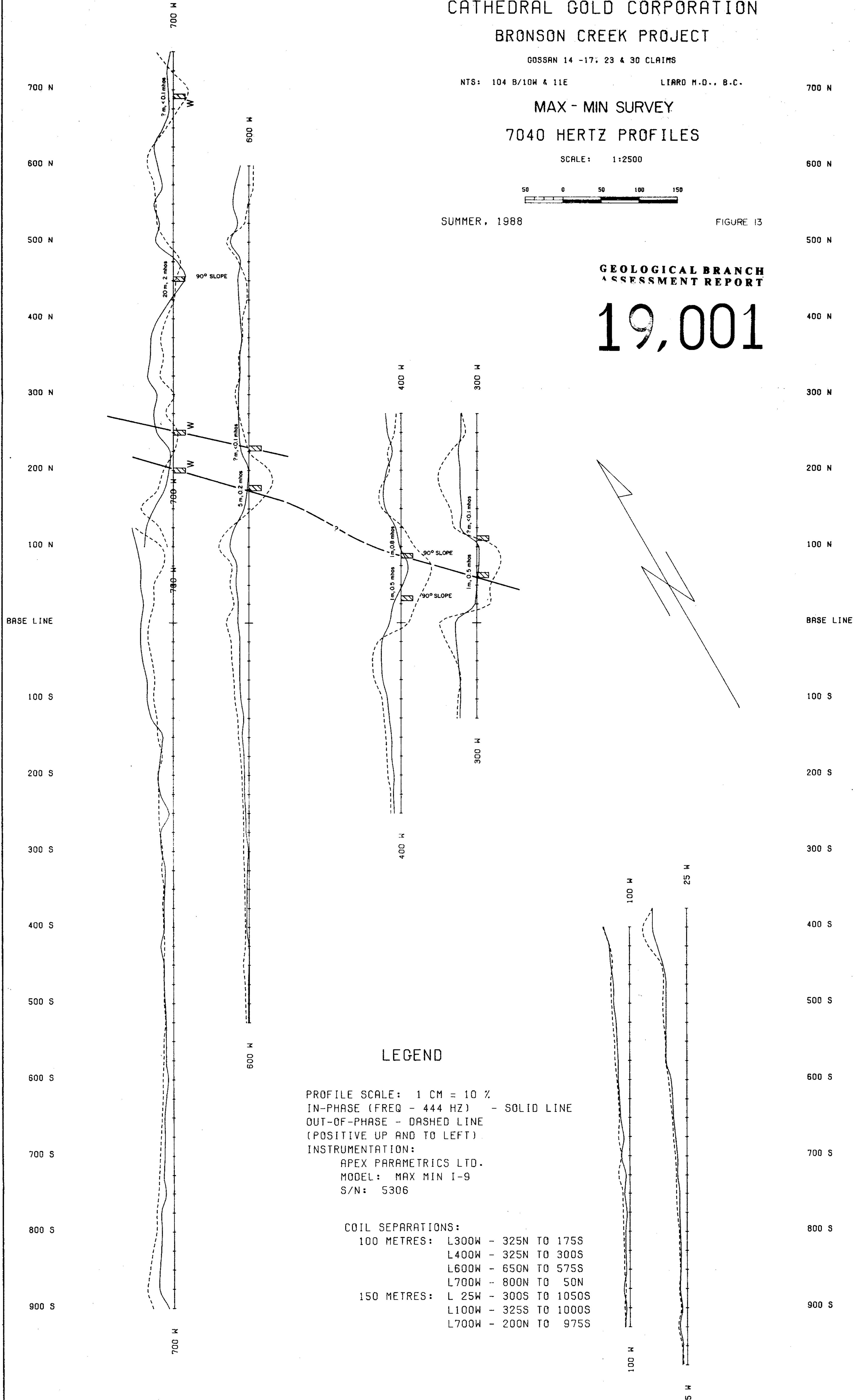


SUMMER, 1988

FIGURE 13

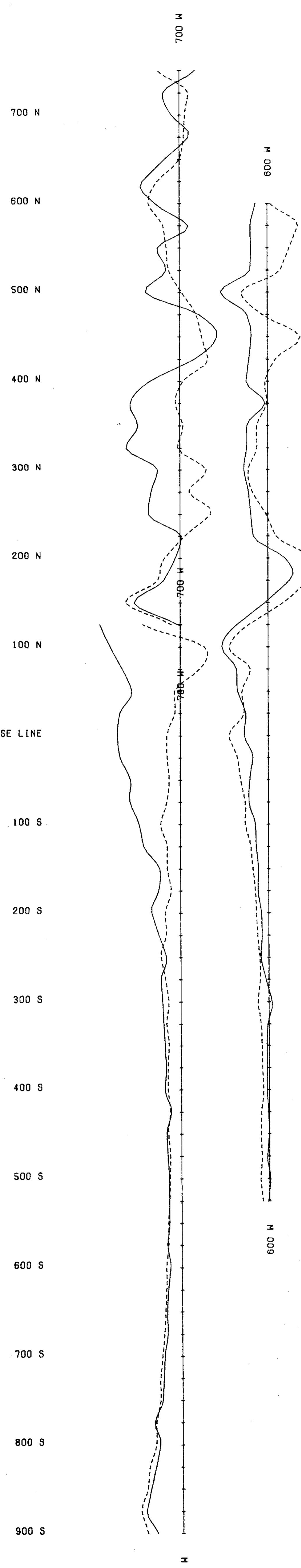
GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,001



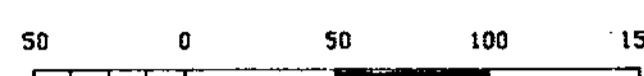
CATHEDRAL GOLD CORPORATION
BRONSON CREEK PROJECT

GOSSAN 14 -17, 23 & 30 CLAIMS
NTS: 104 B/10W & 11E LIARD M.D., B.C.



MAX - MIN SURVEY
14080 HERTZ PROFILES

SCALE: 1:2500

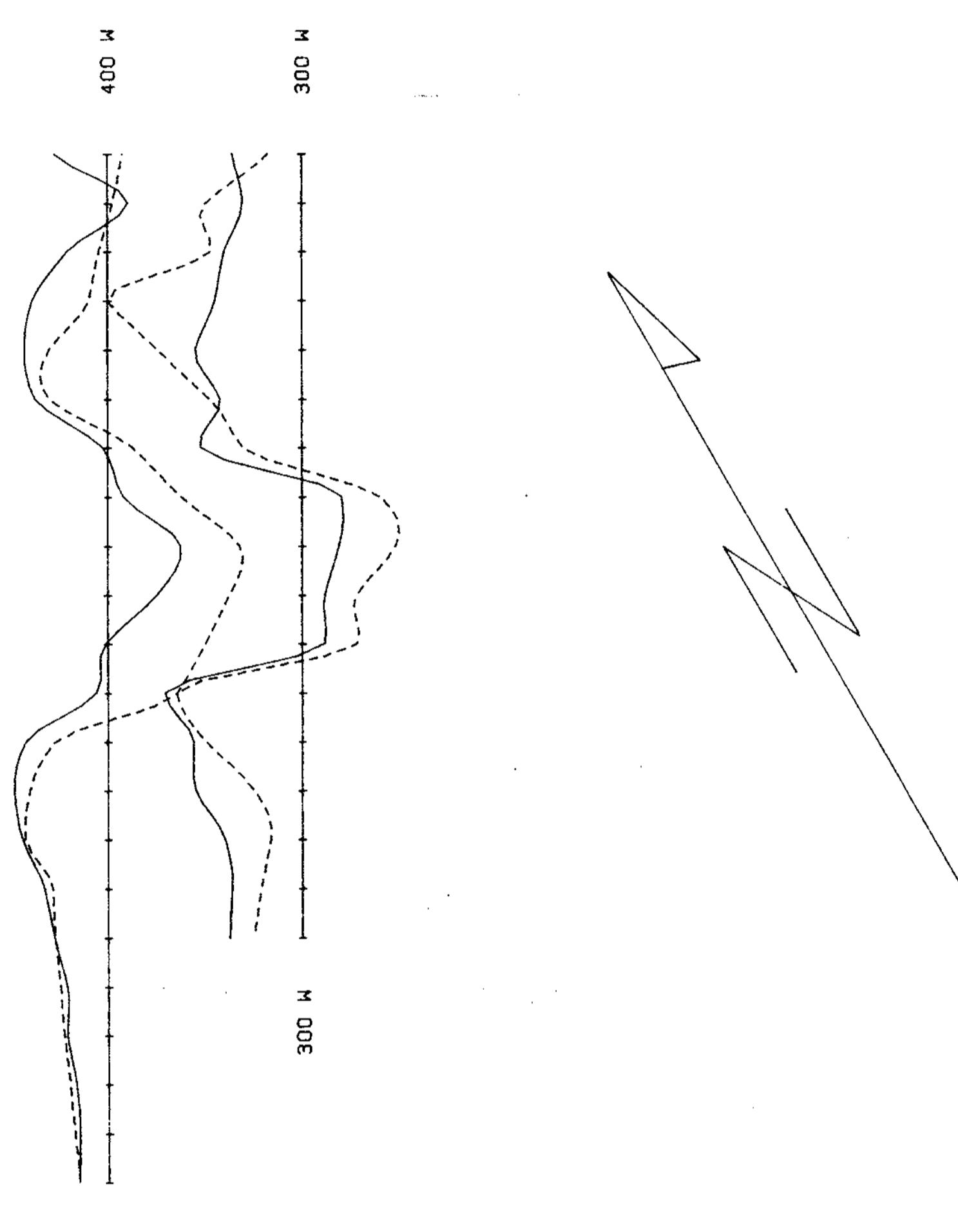


SUMMER, 1988

FIGURE 14

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,001

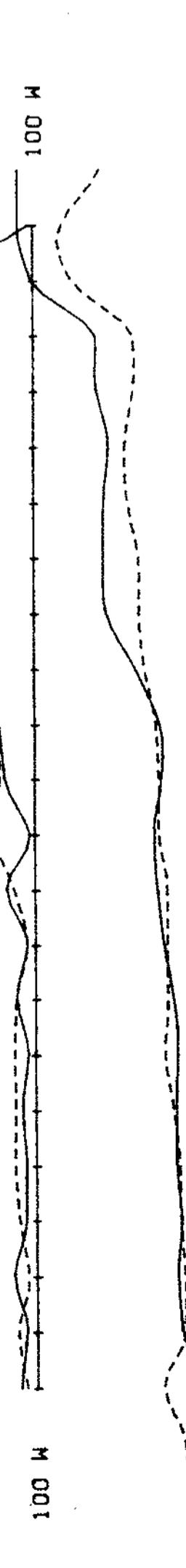


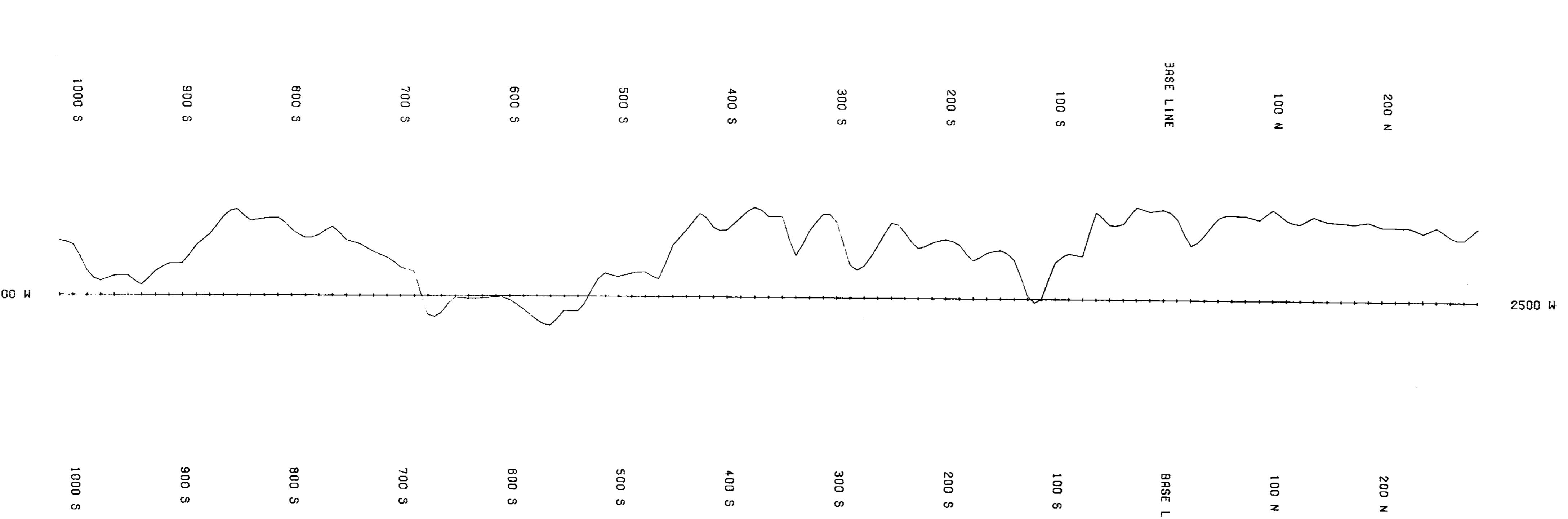
LEGEND

PROFILE SCALE: 1 CM = 10 %
IN-PHASE (FREQ - 444 Hz) - SOLID LINE
OUT-OF-PHASE - DASHED LINE
(POSITIVE UP AND TO LEFT)

INSTRUMENTATION:
APEX PARAMETRICS LTD.
MODEL: MAX MIN I-9
S/N: 5306

COIL SEPARATIONS:
100 METRES: L300W - 325N TO 175S
L400W - 325N TO 300S
L600W - 650N TO 575S
L700W - 800N TO 50N
150 METRES: L 25W - 300S TO 1050S
L100W - 325S TO 1000S
L700W - 200N TO 975S





**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,001

CATHEDRAL GOLD CORPORATION

BRONSON CREEK PROJECT

GOSSAN 17, 30 CLAIMS

NTS:

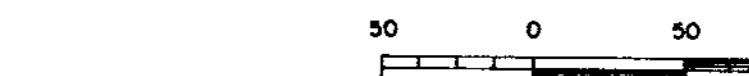
I04 B/I08 & I1E

LIARD M.D., B.C.

MAGNETOMETER PROFILE

L 25 W

SCALE: 1:2500



SUMMER, 1988

FIGURE 17

