

CANADIAN FERRITE CORP.

REPRESENTATION REPORT FOR DIAMOND DRILLING ON THE  
SYNDICATE 41-83 AND THE '98' 12, 17, 22, AND 28 MINERAL CLAIMS  
DAWSON MINING DISTRICT; YUKON TERRITORY

NTS 115 0/14

BY

R. A. GONZALEZ, M.Sc., F.G.A.C., P.ENG.

ARCHEAN ENGINEERING LIMITED

AND

PERRY GRUNENBERG, B.Sc.

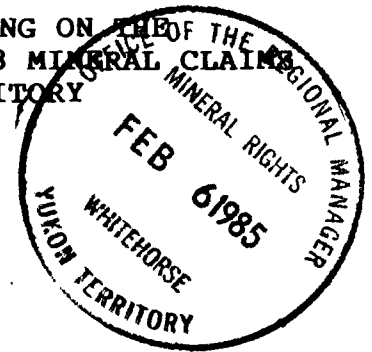
DECEMBER, 1984

091603

LOCATION: 63° 56' NORTH LATITUDE: 139° 20' WEST LONGITUDE  
OWNER: WILLIAM T. DAWSON  
OPERATOR: CANADIAN FERRITE CORP.  
CONSULTANT: ARCHEAN ENGINEERING LTD.  
PROJECT GEOLOGISTS: PERRY GRUNENBERG, B.Sc.  
DATES OF WORK: 3 DECEMBER 1984 TO 23 DECEMBER 1984



REPRESENTATION REPORT FOR DIAMOND DRILLING ON THE OF THE REGIONAL  
SYNDICATE 41-83 AND THE '98' 12, 17, 22, AND 28 MINERAL CLAIMS  
DAWSON MINING DISTRICT; YUKON TERRITORY  
NTS 115 0/14



## SUMMARY

In late 1983, CANADIAN FERRITE CORP. optioned 43 full-size claims in the Klondike Mining District of northwestern Yukon Territory, approximately 14 km south of Dawson City. Their holding were increased in 1984 by optioning an additional 4 contiguous claims. These claims were staked adjacent to some of the most productive placer gravel deposits in the Klondike.

The geology of the claims indicates that the area is underlain by Klondike Schist which is considered to be genetically related to the source of gold. The origin of the gold has long been debated because few sizeable, rich, primary gold-bearing deposits have ever been found in the district.

An airborne geophysical survey with detailed ground follow-up has delineated several targets which warranted preliminary diamond drilling. Five diamond drill holes were completed during the fall and early winter of 1984. The recovered core was split and sent to Vancouver for assaying; the results of which are expected early in the new year.

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## 1.0 INTRODUCTION

During May, 1984 a fixed-wing INPUT electromagnetic and magnetic survey was completed over the SYNDICATE, and '98' Claims under option to CANADIAN FERRITE CORP. This survey outlined a number of EM conductors or magnetically anomalous areas which were confirmed and further delineated by detailed ground geophysics. From the ground geophysics, diamond drill targets were selected, and five drill holes were completed by year end.

This report summaries the results of this preliminary drill programme.

## 1.1 LOCATION AND ACCESS

Dawson City is, and has been since early gold rush days of 1897 and 1898, the principal population and supply centre of northwestern Yukon. Until 1953 it was the territorial capital. It can be reached via the two-lane, mostly gravelled, Klondike Highway from Whitehorse on the Alaska Highway, a distance of 535 km (333 miles). Dawson City is served by scheduled flights of Trans Northern Airways from Whitehorse where connections to Vancouver or Edmonton are available.

The SYNDICATE 41 to 83 and the '98' 12, 17, 22, and 28 Mineral Claims are located 16 km (10 miles) south of Dawson City in the Klondike Mining District (Figure 1). The claims are located along the west side of the Bonanza Creek Valley (Figure 2). Relief is on the order of 485 metres (1590 feet) with elevations ranging from 941 metres (3090 feet) to 457 metres (1500 feet). Terrestrial co-ordinates for the centre of the claim block are as follows:

63° 56' North Latitude  
139° 20' West Longitude

Excellent access to the property is provided by a well-maintained, all-weather, graded gravel road along Bonanza Creek.

## 1.2 PHYSIOGRAPHY AND CLIMATE

The Klondike region forms a part of the Yukon Plateau or upland surface which, locally, occupies an area between the Pacific and Alaskan Mountain Ranges to the west and northwest, the Ogilvie Mountains to the northeast and east, and the Dawson Range to the southwest and south.

The region has been described as a typical example of a thoroughly dissected upland which was elevated at one period in its history into a

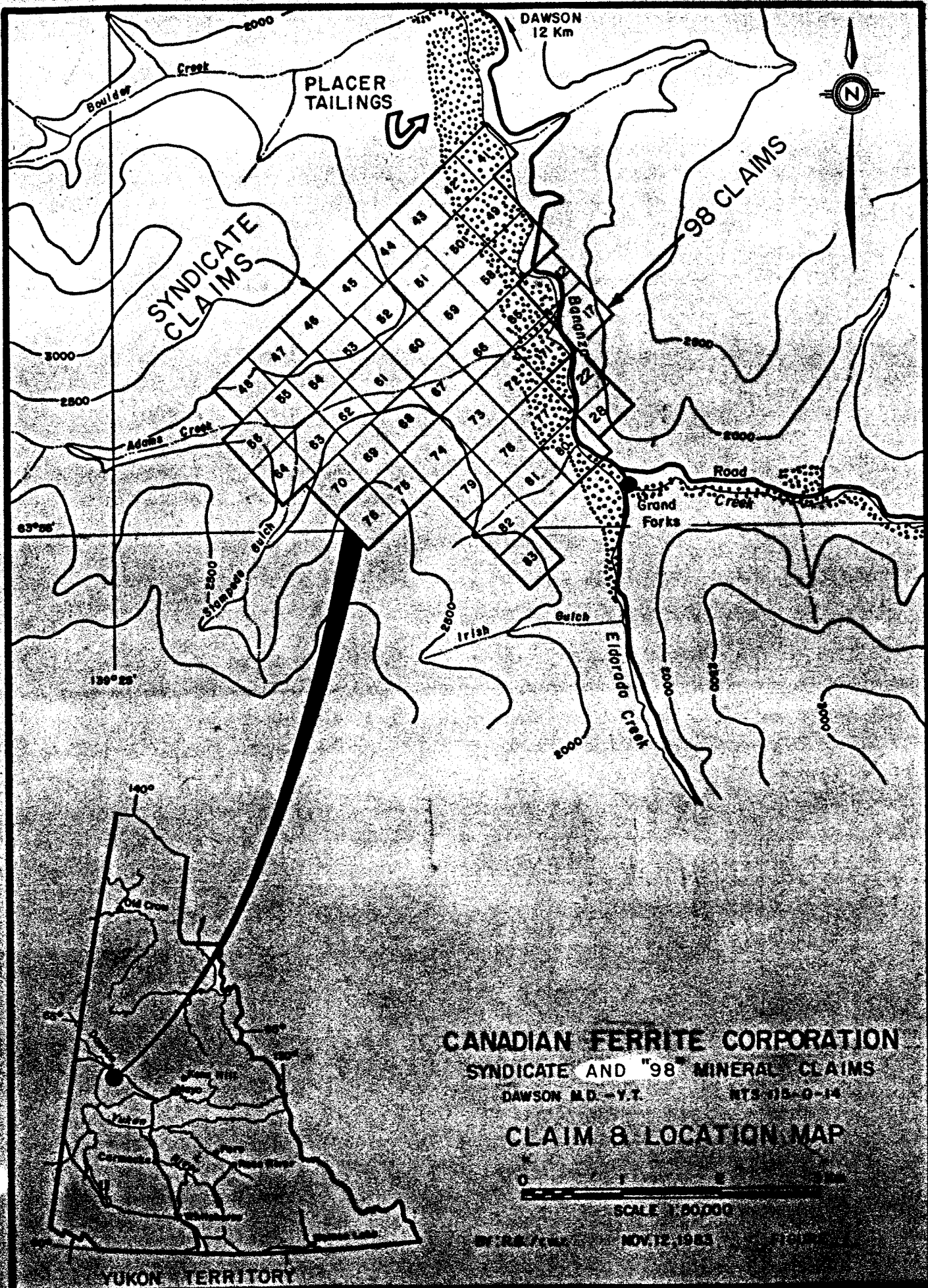
high plateau. This plateau was subsequently deeply eroded by a multitude of small streams, tributary to the main water courses. A secondary uplift resulted in further deepening of the valleys of from 150 metres (500 ft.) to 200 metres (700 ft.). Portions of the old valley-bottoms, still covered with thick accumulations of gravel forming terraces of varying width, bordering the newer valleys (McConnell, 1905; also, G.S.C. Mem. 284, 1957). Today, the valleys are flat and wide in their lower reaches, but gradually narrowing toward their head waters into steep-sided gulches ending in broad, amphitheater-shaped bowls.

Locally within the Klondike region, the drainage is dominated by the northerly flowing Yukon River and its westerly flowing tributaries, the Klondike River on the north and the Indian River on the south. The intervening Klondike area to the east of the Yukon River is a gently rolling, mature, and deeply dissected upland with tributaries to the Klondike and Indian Rivers radiating from a more or less centrally located topographic and drainage high point known as King Solomon Dome, located approximately 32 km (20 miles) southeast of Dawson City.

The Klondike proper occupies an area of approximately 30 by 60 km (18 by 37 miles) its long axis extending southeasterly from Dawson City which is situated at the northwestern apex of the main gold producing region. Elevations within the Klondike range from 320 metres (1050 ft.) at Dawson City to 1295 metres (4048 ft.) at the top of King Solomon Dome, a span of approximately 915 metres (3000 ft.). The principal gold producing streams of the Klondike originate near, and radiate in a general way from, King Solomon Dome, flowing eventually into the Klondike River on the north and the Indian River on the south and thence into the Yukon River.

The Klondike region was not glaciated and, as a result, the deeply weathered, pre-glacial, gently rolling upland surface has been preserved. A thick covering of decomposed schist, usually intermingled with slide rock, mantles the side hills nearly everywhere. On the ridges the covering is less; the schists, often worn into fantastic shapes, occasionally project above the surface or crop out along the sides of the steeper hills.

The region has a northern continental climate, characterized by low precipitation and a wide temperature range. The winters are intensely cold and long, while the summers, although short, are pleasant with cool nights and warm days. Because of the land form there is a tendency for local micro-climates to develop at the bottom of steep valleys which involves higher summer maxima and lower winter minima than are recorded in Dawson City. Precipitation is only about 30 cm (12 in.) per year with more rain in summer than snow in winter. Most of the mountain ridges are free of snow by mid-July, but frost may occur at any time during the summer. As a rule, precipitation is so low that shortages of water for placer mining are sometimes experienced.



**CANADIAN FERRITE CORPORATION**  
**SYNDICATE AND "98" MINERAL CLAIMS**  
 DAWSON M.D. - Y.T.      RTS 015-0-14

**CLAIM & LOCATION MAP**

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:50,000

DATE: 7/84      NOV 12, 1985      1/10/85

YUKON TERRITORY

Vegetation is mixed boreal forest and tundra. Immature and stunted stands of aspen, balsam poplar, and birch are present in the valley bottoms and are beginning to reclaim the older mining areas. Softwood timber consisting mainly of white and black spruce are limited to slopes and ridge tops.

### 1.3 CLAIM INFORMATION

The property is located in the Dawson Mining District of northwestern Yukon Territory and comprises 47 claims covering an area of approximately 899 hectares on the west side of Bonanza Creek. Claim information is listed in TABLE I below:

TABLE I

CLAIM STATUS		
CLAIM NAME	RECORD NO.	DATE CLAIM LOCATED
Syndicate 41	YA 79238	14 September, 1983
Syndicate 42	YA 79239	14 September, 1983
Syndicate 43	YA 79240	14 September, 1983
Syndicate 44	YA 79241	14 September, 1983
Syndicate 45	YA 79242	14 September, 1983
Syndicate 46	YA 79243	14 September, 1983
Syndicate 47	YA 79244	14 September, 1983
Syndicate 48	YA 79245	14 September, 1983
Syndicate 49	YA 79246	14 September, 1983
Syndicate 50	YA 79247	14 September, 1983
Syndicate 51	YA 79248	14 September, 1983
Syndicate 52	YA 79249	14 September, 1983
Syndicate 53	YA 79250	14 September, 1983
Syndicate 54	YA 79251	14 September, 1983
Syndicate 55	YA 79252	14 September, 1983
Syndicate 56	YA 79253	14 September, 1983
Syndicate 57	YA 79254	14 September, 1983
Syndicate 58	YA 79255	14 September, 1983
Syndicate 59	YA 79256	14 September, 1983
Syndicate 60	YA 79257	14 September, 1983
Syndicate 61	YA 79258	14 September, 1983
Syndicate 62	YA 79259	14 September, 1983
Syndicate 63	YA 79260	14 September, 1983
Syndicate 64	YA 79261	14 September, 1983
Syndicate 65	YA 79262	15 September, 1983

## CLAIM STATUS (Continued)

CLAIM NAME	RECORD NO.	DATE CLAIM LOCATED
Syndicate 66	YA 79263	15 September, 1983
Syndicate 67	YA 79264	15 September, 1983
Syndicate 68	YA 79265	15 September, 1983
Syndicate 69	YA 79266	15 September, 1983
Syndicate 70	YA 79267	15 September, 1983
Syndicate 71	YA 79268	15 September, 1983
Syndicate 72	YA 79269	15 September, 1983
Syndicate 73	YA 79270	15 September, 1983
Syndicate 74	YA 79271	15 September, 1983
Syndicate 75	YA 79272	15 September, 1983
<hr/>		
Syndicate 76	YA 79273	15 September, 1983
Syndicate 77	YA 79274	15 September, 1983
Syndicate 78	YA 79275	15 September, 1983
Syndicate 79	YA 79276	15 September, 1983
Syndicate 80	YA 79277	15 September, 1983
Syndicate 81	YA 79278	15 September, 1983
Syndicate 82	YA 79279	15 September, 1983
Syndicate 83	YA 79280	15 September, 1983
"98" 12	YA 79560	5 December, 1983
"98" 17	YA 79565	5 December, 1983
<hr/>		
"98" 22	YA 79570	5 December, 1983
"98" 28	YA 79576	5 December, 1983

## 1.4 HISTORY AND PREVIOUS PRODUCTION

The colourful history of discovery, development, and subsequent mining of placer gold in the Klondike has been documented by many authors and historians and is therefore treated only briefly herein.

The earliest reported discovery of gold dates to the mid-1800's, but not until the phenomenally rich "Klondike Discovery" in 1896 on Bonanza Creek and the subsequent gold rush of 1897-98, was much interest paid to the area. Gold production from the Western Cordillera of Canada to the end of 1978 totals 35 million ounces, of which over 11 million ounces were produced from the Klondike.

The mining history of the Klondike can be divided into four overlapping periods: 1) hand and primitive mining, 2) dredging, 3) dormant, and 4) renewed activity.

Hand and primitive mining methods lasted about nine years (1896 to 1905) and were undertaken usually by individuals or small groups. Production through these early years was estimated by McConnell in 1905 to have been over 5.5 million ounces; this production was primarily by shaft sinking and drifting along bedrock or by open-cut mining. When water was available and the topography allowed the use

of hydraulicking operations, good results were possible.

The first dredge was introduced in 1903, and although there were some non-production years during the start of this period, the last dredging operation ceased production in 1966. During the more than 60 years of dredging over 400 million yards of creek and river gravels were treated and more than 5.0 million ounces of gold recovered.

Dredging operations began to decline in the late 1950's and ended in 1966 initiating the 10 to 12 year dormant period. During this time only a few hardy individuals worked their claims on a part-time basis.

In 1977 interest and activity resumed with the increase in the price of gold. Today the area is swarming with activity; although only one dredge is presently working in the Dawson Mining District (at Clear Creek), many operators have introduced the largest earth moving equipment available, and for five months a year the area is alive with small and medium-sized operations re-working or re-examining the area.

## 1.5 PREVIOUS WORK

No available information was found to indicate that this area had ever been staked for its lode potential; however, the hillsides are dotted with small shafts and workings that indicate at one time there was interest in the area if only for its placer potential.

In 1983, an independent aerial photogrammetric project was carried out by Mr. William Dawson to trace geologic units and to identify source areas for gold mineralization in the Klondike placer gold camp. This survey identified the existence of a geologic, probably stratiform, unit believed to be the principal source area for placer gold in Bonanza Creek. The suspected source was staked for lode mineralization in late summer and early fall of 1983; additional ground was added during the summer of 1984. An initial VLF-EM survey and a cursory geochemical programme, of heavy mineral concentrate sampling, outlined a coincident EM conductor and anomalous gold values overlying some of the photogrammetric linears.

In May, 1984 Questor Surveys Limited of Mississauga, Ontario was contracted to fly an INPUT electromagnetic and magnetic survey over the northern portion of the Klondike. This survey outlined a number of anomalous areas which were confirmed and further delineated by detailed ground geophysics. From the ground geophysics, diamond drill targets were selected and drilling began in the fall of 1984.

## 2.0 GEOLOGY

### 2.1 GENERAL GEOLOGY

Bedrock exposures probably amount to less than one per cent of the area and are generally confined to gulches, recent landslide areas, and road cuts. When exposed, the bedrock is always deeply weathered. The claims appear to be underlain by metamorphic rocks of unknown age, but believed to be late Precambrian. These are referred to as the Klondike Schists. This series of metamorphics are locally intruded at numerous points by several types of intrusives. Although no intrusives were seen on the claims they are reported in the area. A massive coarse-grained grayish granite, similar to coast granites, cuts the schist to the west of the claim block, and serpentines, derived in part from peridotites, crop out at several points on the crest of the ridge separating Hunker Creek from the Klondike; also, numerous small, intrusions of quartz porphyry, rhyolite, and andesites are dotted irregularly throughout the district.

The Klondike Schists are the most important group of rocks in the district, as they constitute the country rock along the productive portions of all the richer creeks and are apparently genetically related to the occurrence of gold. The rocks of this series are now mainly light-coloured or greenish micaceous schists; the principal minerals present being quartz, orthoclase, some plagioclase, sericite, and fine-grained chlorite. The schists often occur in alternating white and green bands; the colour of the banding entirely dependent on the predominance of either sericite or chlorite. Ferromagnesian minerals are almost entirely absent. The rocks are greatly crushed and altered, and in places they are almost entirely recrystallized. Narrow discontinuous quartz veins, lenses, and blows are ubiquitous within the schists. McConnell (1905) reports that thin-section examination indicates that the schists were derived from quartz and granite porphyries.

The Klondike Schists are cut repeatedly by small faults with indicated displacements ranging from a few centimetres to several metres. Because of the depth of weathering and the resulting decomposition of the bedrock, faults are seldom conspicuous except in areas where bedrock is exposed by mining operations. Figure 2 is a generalized geologic map of the Klondike showing the approximate distribution of the Klondike Schist.

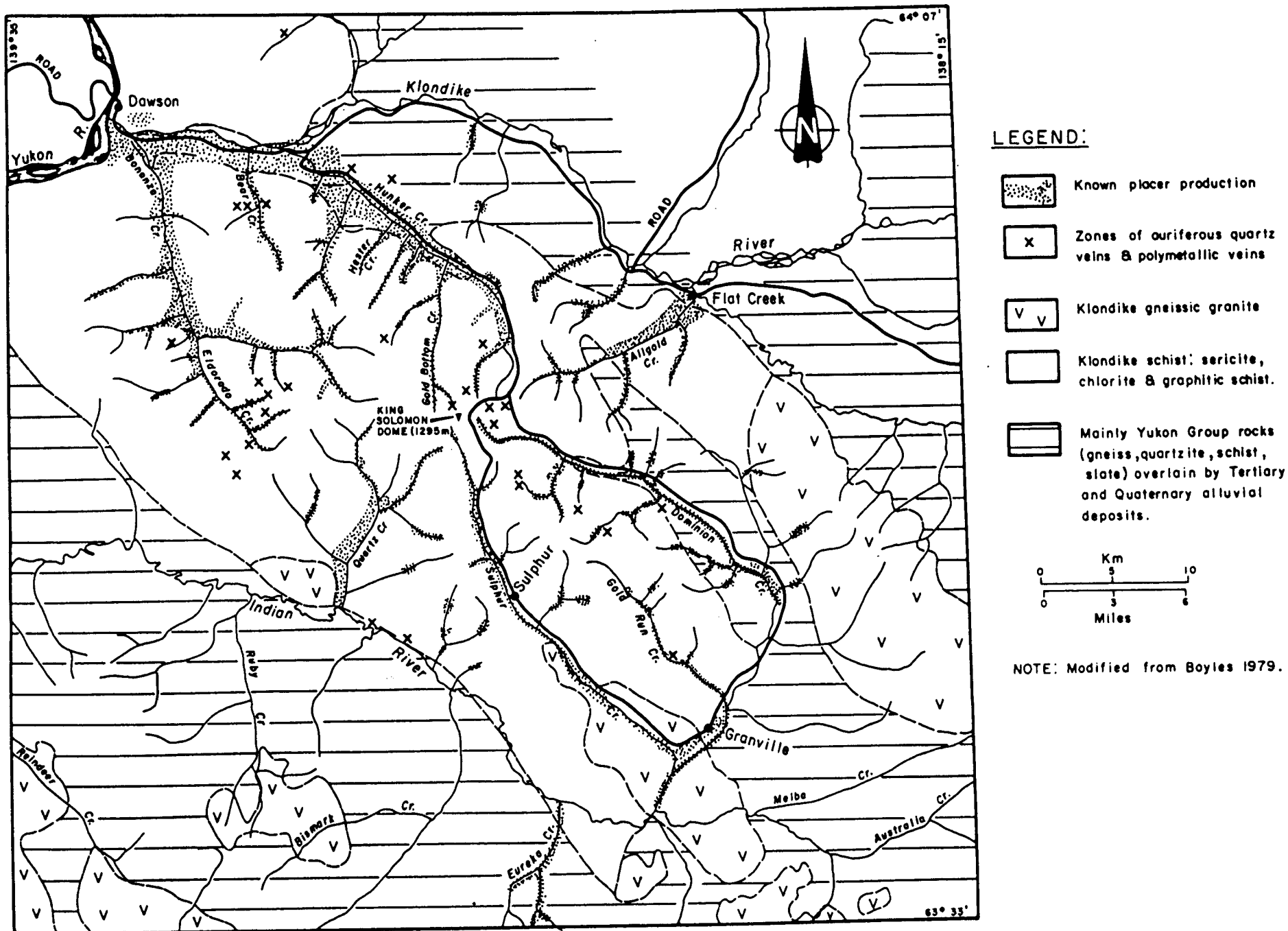


FIGURE 2: Generalized geology of the Klondike Mining District, Yukon Territory.

## 2.2 ECONOMIC GEOLOGY AND DISCUSSION

With few exceptions, economic geology of the area has always been focused on the placer deposits. Since production began in 1896, the Klondike district southeast of Dawson City has been the source of more than half the placer gold produced in Western Canada and amounted to over 11 million ounces which at today's price represents approximately five billion Canadian dollars at current prices.

There is little doubt that most of the Klondike gold is detrital in origin. However, the source of the placer gold has long been debated, and for nearly eighty years the only source considered has been the myriad of supposedly auriferous quartz veins within the Klondike Schist. Further, because of the extensive cover of gold-bearing White Channel gravels that blanket the area from the Yukon River to King Solomon Dome, the source of most of the gold has been thought to be centred near King Solomon Dome. Although the quartz veins seem to be the logical source for the gold, and in fact some veins contain spectacular amounts of gold, a recent sampling of over 1200 previously unsampled quartz veins (sampled in 1983 by the Dept. of Indian and Northern Affairs) failed to detect more than trace amounts of gold.

The earliest reported study on the lode deposits was by Cairnes (1911) in which he briefly described the development work on some of the more promising quartz veins in the district. One property near the head waters of Victory Gulch, a tributary of Bonanza Creek, has long been considered the source of the gold in the gulch and along part of Bonanza Creek. The principal vein, with its associated surrounding mineralized zone, varies in thickness from 1 to 3 metres (3 to 10 feet) and is traceable along strike for 120 metres (400 feet) but may extend another 200 metres (600 feet). Cairnes failed to indicate the grade of this deposit, but he suggested that the gold content is in excess of 0.25 ounces per ton. Reserves in this vein indicate approximately 1500 tons per metre containing about 400 ounces per metre. McConnell (1905) reported that ten 500 foot wide claims along the gulch and Bonanza Creek produced over 200,000 ounces; the inference is that all the gold recovered in the placers could not have come solely from this vein.

Very little work has been done regarding the lode potential of the area since the original work done by Cairnes. Gleeson's report (1970) gives useful information concerning possible geochemical exploration techniques and contains spectrographic analyses of gold from a number of the creeks. Such information is useful for identifying pathfinder elements. All stream samples reported the presence of Ag, Cu, Hg, Ti, Mg, Al, and Fe, and some contain traces of Pb, As, Sb, V, Ba, and Sn.

The origin of the gold in the Klondike placers has long been debated because few sizeable, rich, primary gold-bearing deposits have ever been found in the district. McConnell originally considered that the gold came from the quartz deposits in the district. While this is partially true but this source cannot account for more than a small fraction of the known gold. In addition, the volume of quartz in the

White Channel gravels as estimated by Boyle (1979) should exceed  $6 \times 10^9$  tons but this amount of material could not possibly have come from the myriad of narrow quartz veins impregnating the Klondike Schist. From the character of the gold and its varying fineness within a given drainage it is apparent that the source is local. In addition to the chemically precipitated gold, the most important source for gold is believed to be in pyrite and pyritiferous graphitic schist layers or beds within the Klondike Series.

### 3.0 DIAMOND DRILLING

A drilling programme consisting of five "NQ" wire line size holes (core size-4.76 cm) totalling 370.94 metres (1217 feet) was completed by 22 December, 1984. Drill holes 84-04 and 84-05 were contracted to Phil's Diamond Drilling of 100 Mile House. Drill holes 84-06, 07, and 08 were contracted to Artic Diamond Drilling of Whitehorse.

When holes were abandoned, the casing was pulled, and the drill site was cleared of any timbers or litter. The location of the drill hole collar was, unfortunately, not marked for possible future reference.

All drill core was sent to Dawson for logging and splitting. One half of the split core was sent to Chemex Labs in North Vancouver for gold and/or silver assaying. The remaining core was stored, under a tarpaulin, at an outdoor rental facility in Dawson. A summary of the drill hole information is presented in Table II, and detailed diamond drill logs and assaying sampling intervals are presented in Appendix A.

**TABLE II**  
**SUMMARY OF DIAMOND DRILLING**

HOLE NO.	LOCATION UTM CO-ORDINANTS	CLAIM NAME	AZIMUTH	DIP	LENGTH (METRES)
84-04	7090350N 582200E	SYNDICATE-22	110°	-50°	107.29
84-05	7090350N 582200E	SYNDICATE-22	000°	-90°	73.76
84-06	7089850N 581850E	SYNDICATE-77	110°	-60°	92.05
84-07	7089900N 582100E	SYNDICATE-28	110°	-75°	76.50
84-08	7090300N 580500E	SYNDICATE-60	120°	-60°	21.34

### 3.1 DRILL HOLE GEOLOGY

The interpretation of the airborne INPUT EM survey outlined several anomalous areas of which the strongest conductors were further delineated by ground IP and horizontal loop EM surveying techniques. Two coincident IP and EM anomalies were targeted for two holes each.

#### DDH 84-04 AND 84-05

Drill holes 84-04 and 05 were collared at the same location and were designed to test a N20°W trending geophysical anomaly. Hole 84-04 was drilled at an azimuth of 110° and a dip to -50°; the azimuth was considered to be perpendicular to the strike direction of bedrock. Hole 84-05 was a vertical hole and designed to test the geophysical anomaly at depth. Figure 5 shows a diagrammatic cross section of the geology in both holes. Core consisted mainly of medium-to light-greenish grey chlorite-quartz-sericite schist and narrow band or sections of graphitic schist. The chlorite-quartz-sericite schist contained pervasive pyrite consisting of disseminated grains and cubes. The total pyrite content is probably less than 2%; however, some sections are reported to contain up to 25% pyrite over narrow width. The graphitic-quartz schist is reported to contain up to 50% graphite.

The core contains sufficient sulfides to account for the IP anomaly and enough graphite to explain the EM response. Detailed drill logs and sampling intervals are included in Appendix A.

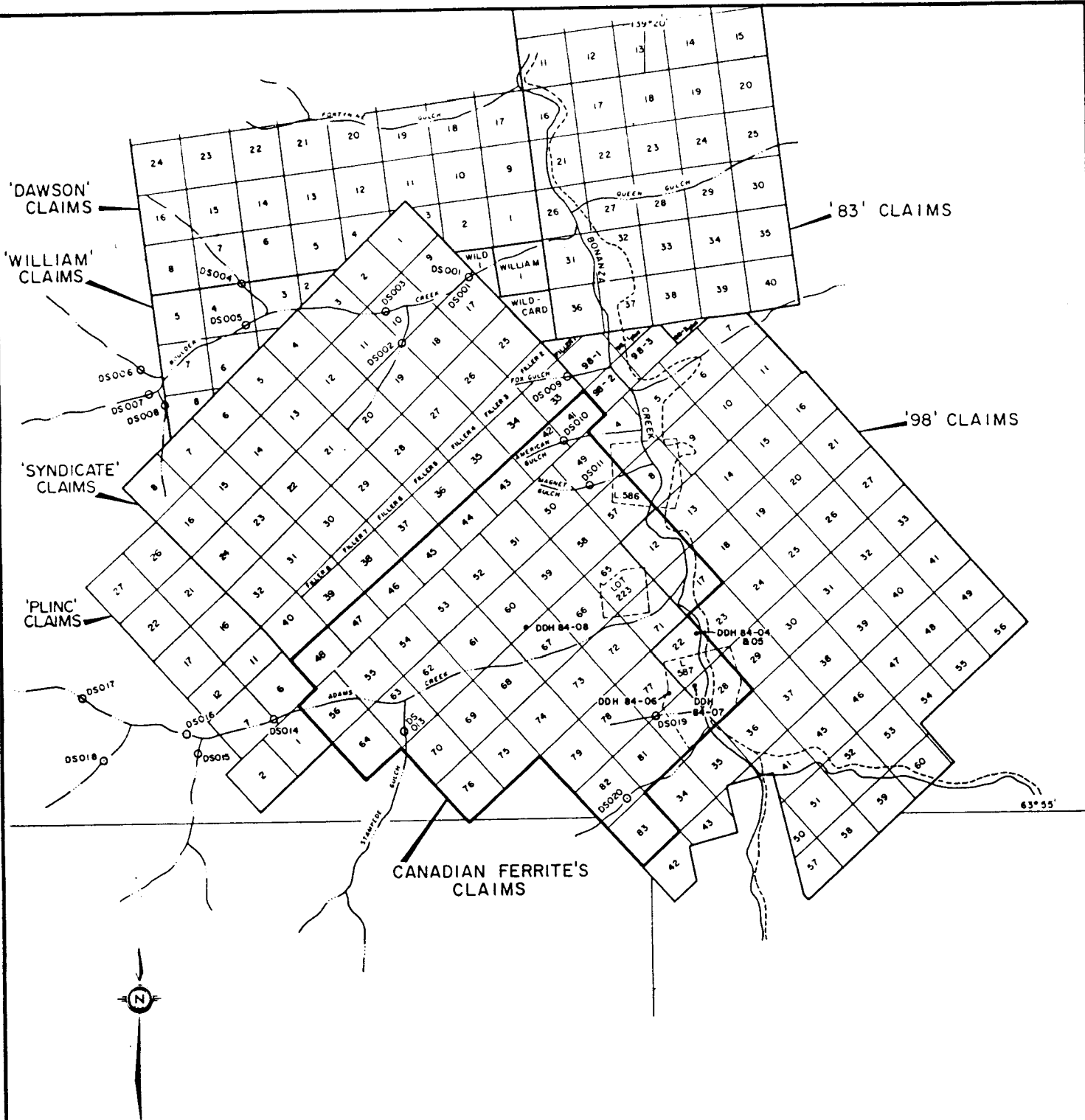
#### DDH 84-06 AND-84-07

Both of these two holes were originally design to test two separate geophysical anomalies approximately 300 m apart. However, the present interpretation indicates that 84-07 tested the southern extension of the same anomaly tested in holes 84-04 and 84-05. It also appears that hole 84-06 tested the faulted extension of the same zone encountered in the three previous holes (84-04, 05, and 07). Cross section of holes 84-06 and 84-07 are presented on Figures 6 and 7, respectively.

#### DDH 84-08

Hole 84-08 was originally identified during the airborne programme. Follow-up ground IP and EM surveys indicated a coincident geophysical anomaly. No outcrop was known in the area and soil geochemistry failed to detect any anomalous metal values. The hole was abandoned before its designated depth; however, the core consisted of

approximately 10 metres of graphitic schist and minor pyrite which was sufficient to cause the geophysical response.



○ HEAVY MINERAL CONCENTRATE SAMPLE SITE

● DIAMOND DRILL HOLE LOCATION

**CANADIAN FERRITE CORPORATION**  
**SYNDICATE AND "98" MINERAL CLAIMS**

DAWSON M.D., Y.T.      NTS 115-0-14

**CLAIM MAP**  
 SHOWING DRILL HOLE LOCATIONS

0      5000      FEET

BY: R.B. P.Eng./ rwr C.E.T.  
 DATE: JAN., 1988

FIGURE 3

NW ←

Az. 110° → SE

(surface elevation approx. 1700')

OVERBURDEN

CHLORITE, QUARTZ SCHIST & FEW NARROW GRAPHITIC BANDS

GRAPHITE, QUARTZ, CHLORITE SCHIST

GRAPHITE, QUARTZ SCHIST

SHEAR ZONE

CHLORITE, QUARTZ, MINOR SERICITE SCHIST & QUARTZ BANDING

SHEAR

INCREASED CHLORITIZATION ALONG SHEAR ZONES

SHEAR

CHLORITE, QUARTZ, MINOR SERICITE SCHIST

QUARTZ CHLORITE SCHIST

251'

DDH 84-7

CANADIAN FERRITE CORPORATION

98-28 MINERAL CLAIM

DAWSON M.D. - Y.T.

NTS 115-0-14

CROSS SECTION

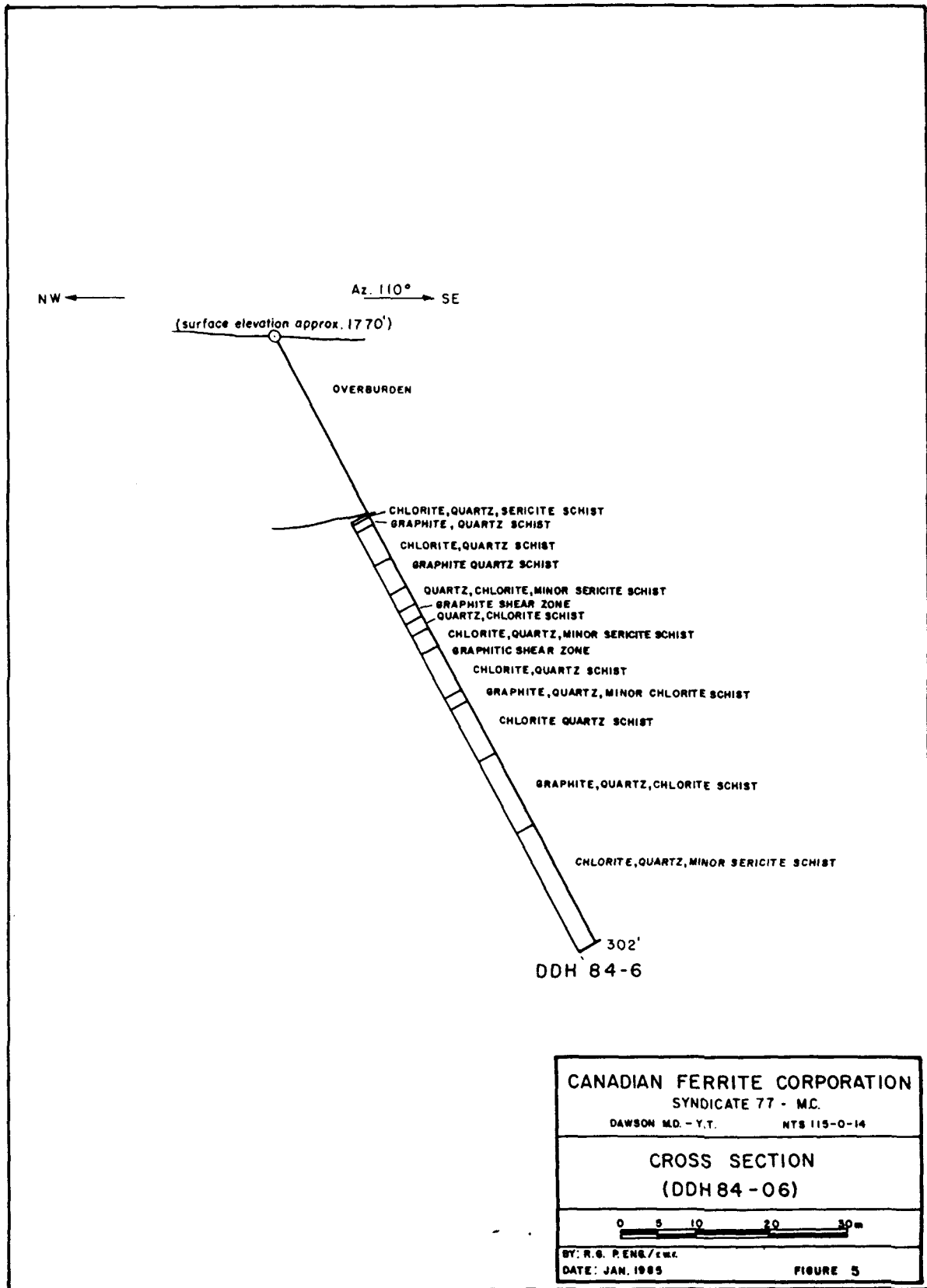
(DDH 84-07)

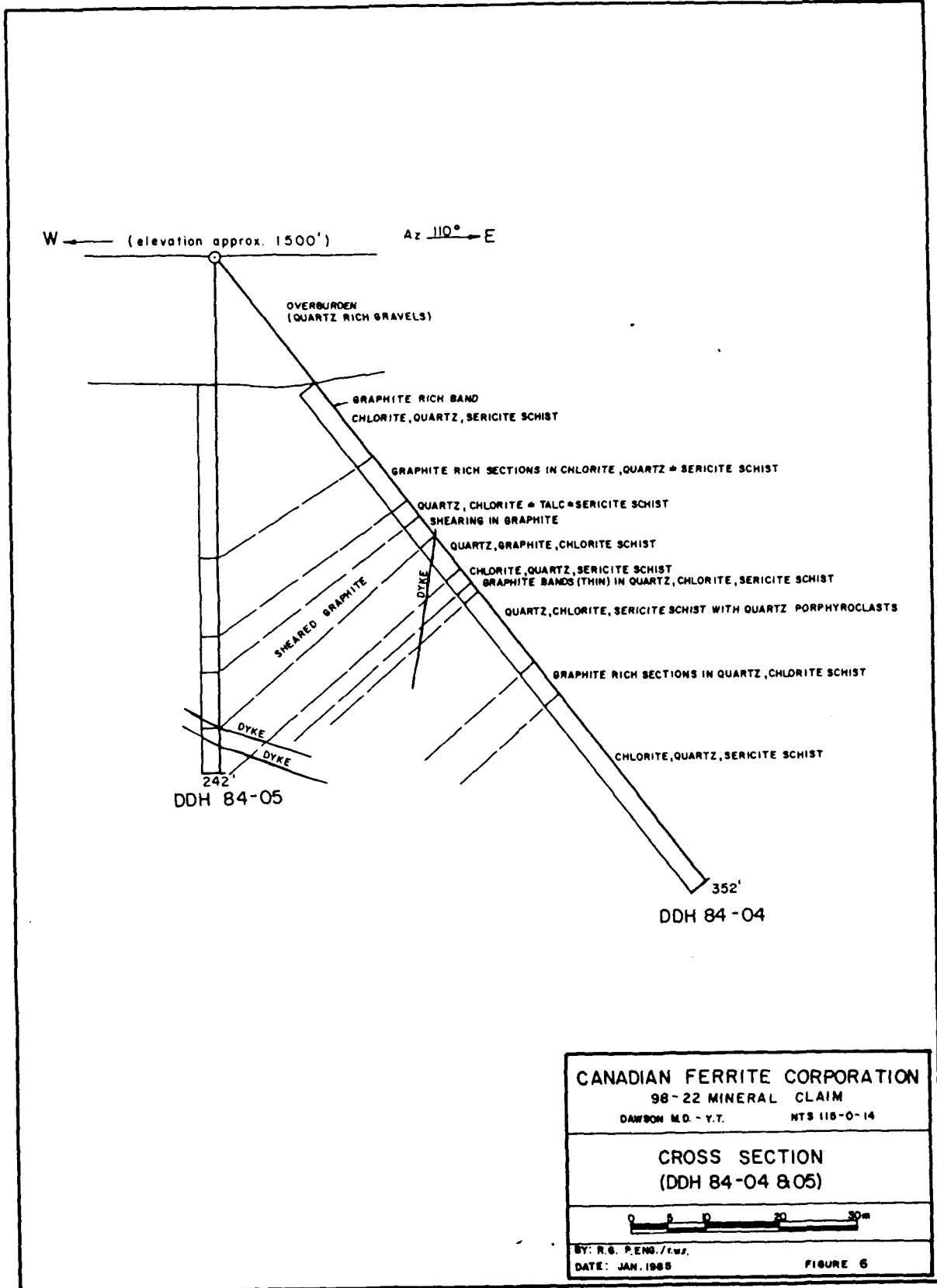
0 5 10 20 30m

BY: R.G. PENG./cmc

DATE: JAN. 1988

FIGURE 4





#### 4.0 CONCLUSIONS

The preliminary diamond drilling by **Canadian Ferrite Corp.** has been successful in extending our knowledge of the bedrock geology in the Klondike. Drilling results also confirm the accuracy of our regional mapping programme and subsequent geologic interpretation of the stratigraphy and economic potential of the area.

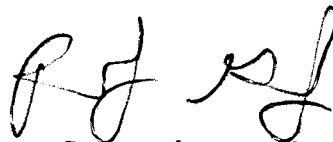
Drilling has been successful in explaining the source of the coincident IP and EM anomalies west of Bonanza Creek. Furthermore, it appears that at least one of the geophysical conductors is offset along strike by faulting and that the total potential strike length of the conductor could represent a significant host for economic mineralization.

The presents of significant amounts of sulphides in the core are encouraging, and additional anomalies on the property should be tested by drilling as soon as possible.

Respectfully submitted,  
ARCHEAN ENGINEERING LIMITED



R.A. Gonzalez. M.Sc., F.G.A.C., P.Eng.



Perry Grunenberg, B.Sc.

## 5.0 REFERENCES

Bostock, H.S., 1957; Yukon Territory-Selected Field Reports of the Geological Survey of Canada, 1893 to 1937: Geol. Surv.of Canada, Memoir 284.

Boyle, R.W., 1979; The Geochemistry of Gold and its Deposits: Geol. Surv. of Canada, Bulletin 280, p. 350-357.

Cairnes, D.D., 1912; Quartz Mining in the Klondike District: Geol. Surv. of Canada, Sum. Rept. for 1911, pp. 4, 17-40: Also Geol. Surv. of Canada, Memoir 284, p. 343-351.

Desborough, George A., 1970; Silver Depletion Indicated by Microanalysis of Gold from Placer Occurrences, Western United States: Econ. Geol., v. 65, no. 3, p. 304-311.

Fraser, D.C., 1969; Contouring of VLF-EM Data: Geophysics, v. 34, no. 6, p. 958-967.

Gleeson, C.F., 1970; Heavy Mineral Studies in the Klondike Area, Yukon Territory: Geol. Surv. of Canada, Bull. 173, 63 pp.

Gonzalez, R.A., 1983; Report on the Syndicate 1 to 40 Claims, Dawson Mining District, Yukon Territory: Eng. Report, 25 pp.

McConnell, R.G., 1905; Report on the Klondike Gold Fields: Geol. Surv. of Canada, Annu. Rep., pt. B, v.14, p. 1-71.

Tuck, R., 1968; Origin of the Bedrock Values of Placer Deposits: Econ. Geol., v. 63, no. 2, p. 191-193.

## 6.0 STATEMENT OF PROFESSIONAL QUALIFICATIONS

R.A. GONZALEZ, M.Sc., P.Eng.

### ACADEMIC

1965	B.Sc. in Geology	The University of New Mexico, U.S.A.
1968	M.Sc. in Geology	The University of New Mexico, U.S.A.

### PROFESSIONAL

1983	Archean Engineering Limited	Overseas Manager
1980-1983	Placer Development y Cia. Ltd. (Chile)	Ass't Exploration Manager
1977-1980	Consultant: attached to the Geological Survey of Malaysia	Ass't Project Manager on a C.I.D.A. supported mineral exploration survey over Peninsular Malaysia
1975-1977	Province of Manitoba	Resident Geologist for the Manitoba Dept. of Mines.
1971-1975	Giant Mascot Mines Limited	Senior Geologist
1970-1971	New Jersey Zinc (Canada) Ltd.	Exploration Geologist
1968-1970	Anaconda American Brass Ltd.	Research Geologist
1965-1966	Mex-Tex Mining Co. (U.S.A)	Geologist

**STATEMENT OF PROFESSIONAL QUALIFICATIONS (continued)****PERRY GRUNENBERG, B.Sc.****ACADEMIC**

1982	B.Sc. in Geology	The University of British Columbia
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**PROFESSIONAL**

1984	Mark Management Limited	Project Geologist
1983	Strato Geological Engineering Ltd	Geologist
1982	Self Employed	Geologist

**SUMMER EMPLOYMENT**

1981	Mark Management limited	Senior Assistant
1980	Kennco Explorations	Senior Assistant
1979	Riocanex	Junior Assistant
1978	Riocanex	Junior Assistant

**APPENDIX A DETAILED DIAMOND DRILL LOGS AND SAMPLING INTERVALS**

## Diamond Drill Record

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS	
from	to		from	to		Thickness mm	Angle to Core
0'	74'	Overburden					
74'	75'	Qtz chlorite schist			< 2% dssm Py Blebs		
		85% Qtz			Blebs < 0.3 mm <sup>3</sup>		
		10% Chlorite					
		5% 2nd Brn Biotice					
		5 Chistocity $\approx 5^{\circ}$ to core axis					
75'	75'4"						10 cm wide bull Qtz vn at $\approx 80^{\circ}$ to core axis. < 0.5% dssm Py in VN and along contact. At least 2 stages of deformation as lower contact is offset by movement along direction parallel to core axis.

HOLE NO. 84 - 04	Page 1 of 14
PROPERTY: Canadian Ferrites (Dawson)	CLAIM NO.
CONTRACTOR: Phil's Diamond Drilling	SECTION NO.
LOGGED BY: S. Lau/P. Grunenberg	STARTED: 22 November 1984
DATE: 28 November 1984	COMPLETED: December 11, 1984

LOCATION: CH-0 187E
AZIMUTH: 110
ELEVATION:
LENGTH: 352 feet
CORE SIZE: NQ

DIPS - collar -50 °
- m °
- m °
- m °

PURPOSE: Drilling conductor from ground geophysical results

## Diamond Drill Record

HOLE NO. 84 - 04 Page 2 of 14

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
75'4"	81'	Recovery: 80%			up to 15% dssm Py blebs			
		Qtz chlt scht. Lightly Frt			mostly within the chlt-rich			
		Limonite along frt. Frt 70° to			bands. Py is "stretched-out"			
		core axis.			along schistosity. Possibly Primary			
		75% Qtz			However, some blebs contain			
		20% Chlt			Chlt flakes therefore suggesting a			
		5% talc (?)			secondary origin.			
		Abundant Qtz vn (<0.5 cm wide)			No other sus.			
		Highly convoluted, folded						
		schistosity ≈ 75° to core axis						
81'	81'10"							25cm wide highly frt Qtz
								vn. Cavities present with
								submedral Qtz. Insignificant
								sus present. Frt lightly stand
								with Fe.
81'10"	87'	Qtz chlt scht			up to 15% dssm Py. no			
		highly convoluted and folded.			Preverance for either Qtz-rich or			
		general fold axis approximately			Chlt-rich bands. 2 Types of Py size/			
		70° to core axis very lightly			colour occurrence. Larger, first type,			
		Frt.			is bright yellow in colour. Is the larger			
		Recovery = 100%			in size. is 2nd in nature because of			



## Diamond Drill Record

HOLE NO. 84 - 04

Page 4 of 14

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
89'6"	115'6"	Qtz- chlt Scht			up to 20% Py. but Aug 15%			
		Qtz up to 75% in places but			occur mostly as discontinuous			
		averaging 60%. Highly convoluted			bands of Py blebs following			
		and folded. General fold axis			schistosity within chlt-rich			
		approx 80° to core axis. very			bands. blebs < 1 mm in longest			
		lightly frt.			dimension. Occasional larger			
		Recovery = 100%			Blebs (< 2mm in longest dimension)			
					but not common			
			99'6"		10cm wide section of graphite -			
					rich bands. Again, an intimate			
					relation between graphite & Py			
					as Py occurrence here reaches			
					20%. Py as stringers and			
					blebs of up to 4mm in longest			
					dimension			
115'6"	141'2"	Graphite-rich section up to 30%			Py % increases around & within	124'8"		15cm wide qtz vn. ≈ 60° to
		in places highly convoluted & folded			graphite-rich sections up to 25%			core axis. bullish competent
		Recovery = 100%			but Aug 15% up to 1 cm in			but moderately frt. no sus.
		very lightly frt except within			longest dimension for dssm Py.			
		Graphite-richer section where			mostly < 1mm dssm blebs			
		core is moderately broken-up						
		120'-123'6" graphite poor sectn 5'	120'	123'6"	Py are dssm blebs < 1mm in longest	dimension	copper	bronze (niccolite) in colour.

## Diamond Drill Record

HOLE NO. 84 - 04

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
141'2'	144'	Highly broken-up core Qtz-chlt scht <1% dissm Py Recovery: 35%			up to 50% qtz, 20% banded Graphite & 10% dssm Py blebs			
		(sericite)						
144'	150'	Qtz-chlt scht moderately folded. Schistosity Approx 70° to core azix up to 75% qtz Recovery: 100%			up to 8% py as discontinuous bands of dssm blebs & occasionally, cubes along chlt-rich bands			
150'	151'1"	Qtz-chlt scht Moderately folded graphitic up to 20% lower contact with a graphite-rich fault. Wall Rx Brxx seen within 1st 2 cm of fault Recovery: 100%			up to 18% dssm Py blebs Longest dimension <0.5 cm small euhedral cubes (<0.3cm <sup>3</sup> ) also present making up to 20% of total Py.			
151'1"	158'6"	7'5" wide fault/shear zone hanging wall 40° to core axis footwall attitude unknown mostly graphite-coated Qtz Grains with minor chlt. Recovery: 40%			≈ 5% py. cubes (?!?)			

## Diamond Drill Record

HOLE NO. 84 - 04 Page 6 of 14

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
158'6"	170'6"	Moderate to highly folded Qtz chlt scht small scale recumbent and overturned folds in places small scale fold axis $-10^{\circ} - 35^{\circ}$ to core axis schistosity: $5^{\circ} - 20^{\circ}$ to core axis up to: 65% Qtz 25% graphite (up to 50% in places) 10% chlt core lightly to highly broken-up Recovery: 158'6" - 170': 80% 170' - 190'1: 100%			up to 25% Py. Aug 18% - 20% Py consists of dssm blebs up to 0.5cm in longest dimension & discontinuous stringers stringers follow schistosity but may also x-cut it 60% of Py occur as stringers Py has a tarnished, bronzy Appearance Again, Sections of high graphite contain also contain High Py occurrence. Most of the stringers are found within graphite bands.			A few minor Qtz vn. Aug 1cm wide. Bullish. <1% Py within Largest vn at 172'6" (4cm wide).
170'6"	172'	Aphanitic to fine- grained mafic intrusive. Contact to core axis. Distinct 0.4cm wide chill margin on hanging wall. Frt $40^{\circ}$ to core axis to contact attitude. Frt surface lined with Py coating (up to 30% of surface area)						
172'	190'1"	same as 158						
190'1"	194'1"	Qtz-chlt-sericite scht. Little to no folding for first 3' No graphite contact abrupt. Schistosity	15 $^{\circ}$		frt $40^{\circ}$ sub// to schistosity	$\approx 50\%$	Qtz	
						$\approx 250\%$	chlt pg	

cont next page

25% seric



## Diamond Drill Record

HOLE NO. 84 - 04 Page 8 of 14

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
199'7"	200'3"	Qtz graphite schist, minor chlorite banding to core axis schistosity 70°			< 0.5% Sus. pockets.			
		Total Rock 75% graph, 20% qtz 5% chl						
		Contact: 65° to core axis						
200'3"	202'4"	Qtz - chl - seric schist 1mm to 1" plastically deformed qtz bands to 60% of rock Schistosity 75° to core axis. This segment of rock grades to next by decreasing abundance of quartz Gradational contact			No distinguishable sus.			
202'4"	230'8"	Qtz - chl - seric schist	212'	213'		1mm	20°	fairly uniform fracture filling veinlets of qtz
		Qtz as warpy folded bands, as well as porphyroblasts oversome segments, to Ave 35% total Rk		213'		3"	55°	bull white qtz vein
		Structure 214' to 215' schistosity/core axis = 5° crenulated, abrupt change M schistosity direction over 1 ft		222'		1½"	65°	qtz - carbonate white vein 80% qtz 20% carbonate
		224' - very thin (1/8") graphitic bands over 3" of core, to 20% of rock						
		226' - dark green mineral (chl) makes spotty texture over /ft of core						

## Diamond Drill Record

HOLE NO. 84-04

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
230'8"	232'1"	Contact 47° to core axis			sulfide pockets, preferred			
		Graphite - Qtz schist			orientation parallel to qtz lenses			
		60% Graph - 40% Qtz			& on boundary between qtz and			
		4 Qtz lenses to ½" thick, 1" long			graphite, with diss Py, tot. to 3%			
		parallel Qtz lense orient to C.A. 67°						
		most Qtz disoriented in schistosity,						
		highly disontiuous, fractured						
		Recovery 232' to 252' = 93%						
232'1"	233'8"	Contact (orientation) undiscernable						
		Qtz - 35%						
		chl - 45% schist						
		Seric - 20%						
		medium green-grey			sulphide blobs throughout to			
		Acute angled folding with axial plane			< 1%			
		near ⊥ to core axis, qtz bands to						
		¼" thick						
		Average schistosity 60° to core axis	233'7"	233'8"	Graphite along contact with next			
		but mostly highly variable			rock type, thin bands (1/32")			
		contact? - to C.A. = 70°						
233'8"	235'2"	more equally grained texture, medium				1/32"	50° and	thin qtz filled stringers and
		grey-green Chl 50% seric 30%			< 0.5% finely disseminated	to 3/32"	25° &	tension gashes all along
		qtz 20% schist			sulfides		70°	
		schistosity C.A. = 70°						
		only 1 highly folded discontinuous						
		quartz band to ½" thickness						

## Diamond Drill Record

HOLE NO. 84 - 04

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
235'2"	241'6"	medium to dark grey-green qtz chlorite, minor graphite schist, qtz to 50%, few graphite laminaes to 1% of total rock schistosity folded, axial plane Average schistosity angle to CA = 55°			<0.5% sulfides as small pockets of fine grains.			
241'6"	248'6"	higher % (to 40%) of graphite in graph - qtz - chl-(little seric) schist. Qtz is highly crenulated to completely disoriented through rock, and contains small amounts of calcite			very little sulfides noted Few grains diss			
248'6"	251'4"	More evenly textured variety of qtz-chl-seric schist Fairly even schistosity 70° to CA medium grey-green Brown tinted (layering) in some areas (muscovite?) somewhat pervasive along section, to ~ 5% total Rk Recovery 252 - 262 = 92% 262 - 272 = 89%			few (<0.5%) sulfide pockets to 1mm diameter			
251'4"	273'	Medium to dark green chlorite 50%, qtz 40%, sericite 5-10%						

schist (cont)

## Diamond Drill Record

HOLE NO. 84 - 04

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
251'4"	273'	Schistosity not consistent through section;			<0.5% sus, pockets and cubes to ~ 5mm diameter	1 to 2	45° & 90°	qtz filled fracturing, displaced or offset in places, somewhat discontinuous, 5 or 6 through whole section
		to core axis      footage			little or no finer disseminated			discontinuous, 5 or 6 through whole section
		65°                      253'						discontinuous, 5 or 6 through whole section
		50°                      257'						discontinuous, 5 or 6 through whole section
		15° (local folding) 258'	to 259'			to 10	60°	parallel to schistosity qtz-cakite lenses, folded, discontinuous
		60°                      272'						lenses, folded, discontinuous
		few small zones are richer in chlorite (to 75%), others are higher in qtz (to 60%)						
		Recovery 272' - 282' = 85%						
		282' - 292' = 77%						
273'	274'2"	chlorite - qtz schist, minor sericite, with lathic translucent secondary mineralization (Feldspar) over some sections, Fspar to 1cm in length, and up to 15% of particular specimens, pooled and not oriented in any particular direction Qtz - blobs with no orientation, to 2 cm diameter, & to 20% of total rock no schistosity orientation			little sulfides, some stringer type py adjacent of feldspar Laths, along margins < 0.5% sus.			
274'2"	290'6"	medium to dark green chlorite - qtz - serite schist						

cont.

## Diamond Drill Record

HOLE NO. 84 - 04 Page 12 of 14

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
274'2"	290'6"	(cont) most noticeable						
		differences along section are in			Py, fresh cubes with recognizable			
		structure changes. Relatively			striations, as well as pockets of			
		even schistosity abruptly changes			sulfide, either eroded, or agglomerated			
		to high highly disorganized, dorray			fine grains	to 15	55°	Qtz - cc lenses eyeshaped
		of broken laminae, brittle de			to 25% of rock locally, but			plastically deformed
		formation, cataclastic			<1% oversection			some (few) tension gashes infilled
		schistosity to core axis = 55°						
		where it exists						
		apparent contact schist to cataclastic						
		to core axis = 35°						
		Cataclastic zones to w/ft length,						
		mostly gradational from schist,						
		2 zones - 1 at 281'						
		1 at 283'						
290'6"	290'11"	3 white (bull) quartz veins,			No distinguishable sus.			
		2", 1" and ½" in width,						
		separated by chlorite - Qtz schist						
290'11"	292'	dark grey green chlorite-						
		quartz (little sericite) schist						
		Qtz to 15%, mostly chlorite						
		schistosity to C.A. = 70°						
292'	293'7"	Bull white Qtz vein containing a few			No distinguishable sus.			
		fragments of chlorite schist						

contact to C.A. = 85°

## Diamond Drill Record

HOLE NO. 84 - 04 Page 13 of 14

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to Core	minerals in decreasing abundance
293'7"	297'8"	medium grey green chlorite			various shapes of sulfide			
		quartz (minor sericite) schist			pockets up to 2mm in			
		60% chl, 35% qtz, $\leq$ 5% sericite			diameter, no preferred orien-			
		schistosity to CA = Ave. $55^{\circ}$	295'	297'	tation in core	2 to 3	$50^{\circ}$ to $60^{\circ}$	5 or 6 qtz-cc stringers, 1
		in most cases schistosity very						set fracture filling $\perp$ to other set
		poorly defined, highly crenulated,						which is along schistosity and is
		or plastically broken up to a great						more folded/lenticular
		degree.	298'	299'		30	$0^{\circ}$	core has caught an edge of
		Recovery 292' = 312' = 100%						a qtz rich zone, not a
297'8"	298'4"	medium green grey with patches						coherent vein, fragments of
		of dark green, chlorite 50%						chl schist within. no sus.
		qtz 40%, sericite $\leq$ 10%, with						
		massive chlorite patches up			- massive chlorite	>35 (?)	$0^{\circ}$	
		to 50% of core, may be an alter-			- little or no sus.			
		ation vein with contact parallel						
		to core axis						
298'4"	300'	Qtz - cc rich zone containing						
		fragments of chlorite schist, or			few cubic sulfide blebs up			
		massive chlorite, appear to be			to 5% over given area of core,			
		portion of vein - contact to CA			but $<$ 0.5% overall			
		= $40^{\circ}$						
300'	303'4"	much the same as 297'8" 298'4"						
		chlorite zones are patchy within						
		chl-qtz schist, up to 50%	301'	302'2"		$\geq$ 30	0 to $5^{\circ}$	broken qtz cc chunks, portion of
		of core = massive chlorite						vein containing chl schist.



DAWSON Drill '84  
Assay Data Sheet

CAN. Femites

HOLE NO 84-04 Page of 4

From m ft.	To m ft.	Length m ft.	Ag g/l	Au g/t NA	Au g/t FA	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
74	75'4"	1'4"									Q-chl sch	67501		
75'4"	79'	3'8"									Q-chl sch	67502		
79'	83'	4'									Q-chl sch	67503		
83	87	4'									Q-chl sch	67504		
87	89'6"	2'6"									graph sch	67505		
89'6"	93'	3'6"									Q-chl sch	67506		
93'	97'	4'									Q-chl sch	67507		
97	101	4'									Q-chl sch	67508		
101	105	4'									Q-chl sch	67509		
105	109	4'									Q-chl sch	67510		
109	113'6"	4'6"									Q-chl sch	67511	missing bag on sample 525	
113'6"	119'	5'6"									sch graph sch	67512		
119	123	4'									graph sch	67513		
123	127	4'									graph sch	67514		
127	131	4'									g, sch, sch	67515		
131	135	4'									g, sch, sch	67516		
135	139	4'									g, sch, sch	67517		
139	141'2"	2'2"									g, sch, sch	67518		
141'2"	144	2'10"									Q, chl, sch	67519	35% recovery broken	
144	147	3'									Q, chl, sch	67520	folded	
147	150	3'									Q, chl, sch	67521		
150	151'2"	1'2"									Q, chl, sch	67522	graphitic	
151'2"	158'6"	7'5"									Sault	67523	40% recovery	
158'6"	162'6"	4'									Q, chl, sch	67524		

## Diamond Drill Record

HOLE NO. 84 - 04 Page 13 of 14

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
293'7"	297'8"	medium grey green chlorite			various shapes of sulfide			
		quartz (minor sericite) schist			pockets up to 2mm in			
		60% chl, 35% qtz, $\leq$ 5% sericite			diameter, no preferred orien-			
		schistosity to CA = Ave. $55^{\circ}$	295'	297'	tation in core	2 to 3	$50^{\circ}$ to $60^{\circ}$	5 or 6 qtz-cc stringers, 1
		in most cases schistosity very						set fracture filling $\perp$ to other set
		poorly defined, highly crenulated,						which is along schistosity and is
		or plastically broken up to a great						more folded/lenticular
		degree.	298'	299'		30	$0^{\circ}$	core has caught an edge of
		Recovery 292' = 312' = 100%						a qtz rich zone, not a
297'8"	298'4"	medium green grey with patches						coherent vein, fragments of
		of dark green, chlorite 50%						chl schist within. no sus.
		qtz 40%, sericite $\leq$ 10%, with						
		massive chlorite patches up			- massive chlorite	>35 (?)	$0^{\circ}$	
		to 50% of core, may be an alter-			- little or no sus.			
		ation vein with contact parallel						
		to core axis						
298'4"	300'	Qtz - cc rich zone containing						
		fragments of chlorite schist, or			few cubic sulfide blebs up			
		massive chlorite, appear to be			to 5% over given area of core,			
		portion of vein - contact to CA			but $<$ 0.5% overall			
		= $40^{\circ}$						
300'	303'4"	much the same as 297'8" 298'4"						
		chlorite zones are patchy within						
		chl-qtz schist, up to 50%	301'	302'2"		$\geq$ 30	0 to $5^{\circ}$	broken qtz cc chunks, portion of
		of core = massive chlorite						vein containing chl schist.



DAWSON Drill '84  
Assay Data Sheet

CAN. Femites

HOLE NO 84-04 Page of 4

From m ft.	To m ft.	Length m ft.	Ag g/l	Au g/t NA	Au g/t FA	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
74	75'4"	1'4"									Q-chl sch	67501		
75'4"	79'	3'8"									Q-chl sch	67502		
79'	83'	4'									Q-chl sch	67503		
83	87	4'									Q-chl sch	67504		
87	89'6"	2'6"									graph sch	67505		
89'6"	93'	3'6"									Q-chl sch	67506		
93'	97'	4'									Q-chl sch	67507		
97	101	4'									Q-chl sch	67508		
101	105	4'									Q-chl sch	67509		
105	109	4'									Q-chl sch	67510		
109	113'6"	4'6"									Q-chl sch	67511	missing bag on sample 525	
113'6"	119'	5'6"									sch graph sch	67512		
119	123	4'									graph sch	67513		
123	127	4'									graph sch	67514		
127	131	4'									g, sch, sch	67515		
131	135	4'									g, sch, sch	67516		
135	139	4'									g, sch, sch	67517		
139	141'2"	2'2"									g, sch, sch	67518		
141'2"	144	2'10"									Q, chl, sch	67519	35% recovery broken	
144	147	3'									Q, chl, sch	67520	folded	
147	150	3'									Q, chl, sch	67521		
150	151'2"	1'2"									Q, chl, sch	67522	graphitic	
151'2"	158'6"	7'5"									Sault	67523	40% recovery	
158'6"	162'6"	4'									Q, chl, sch	67524		

## Assay Data Sheet

HOLE NO 84-04 Page 2 of 4

From m	To m	Length m	Ag g/l	Au g/l NA	Au g/l FA	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
143'6"	115'6"	2'									Q,chl/sch	67525	py	
162'6"	166'6"	4'									Q,chl/sch	67526		
166'6"	170'6"	4'									Q,chl/sch	67527		
170'6"	172'	1'6"									mafic intrusive	67528		
172'	175'2"	3'2"									q,chg,sch	67529	qtz vein to 7cm	
175'2"	179'2"	4'									q,chg,sch	67530		
179'2"	183'2"	4'									q,chg,sch	67531		
183'2"	187'2"	4'									q-gr,sch	67532		
187'2"	190'1"	2'11"									q,chg,sch	67533		
190'1"	194'1"	4'									q,seq,sch	67534		
194'1"	197'8"	3'7"									q,seq,sch	67535		
197'8"	199'4"	1'3"									q,s,g,sch	67536		
199'4"	199'7"	3"									q,s,chg,sch	67537		
199'7"	200'3"	8"									q,gr,sch	67538	minor chlt.	
200'3"	202'4"	2'1"									q,sh,s,sch	67539		
202'4"	206'4"	4'									q,chg,s,sch	67540		
206'4"	210'4"	4'									q,s,s,sch	67541		
210'4"	214'4"	4'									q,s,s,sch	67542		
214'4"	218'4"	4'									q,chg,s,sch	67543		
218'4"	222'4"	4'									q,s,s,sch	67544		
222'4"	226'4"	4'									q,s,s,sch	67545		
226'4"	230'8"	4'4"									q,chg,s,sch	67546		
230'8"	232'1"	1'5"									q,gr,sch	67547	small qtz lens	
232'1"	233'8"	1'7"									q,s,s,sch	67548	4' lens	

## Assay Data Sheet

HOLE NO 84-07 Page 3 of 4

From m ft	To m ft	Length m ft	Ag g/t	Au g/t NA	Au g/t FA	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
233'8"	235'2"	1'6"									C, S, g sch	67549	thin	qtz stringers
235'2"	238'2"	3'									g, c, g sch	67550		
238'2"	241'6"	3'4"									g, c, g sch	67551		
241'6"	245'	3'6"									g, g, c sch	67552		
245'	248'6"	3'6"									g, g, c sch	67553		
248'6"	251'4"	2'10"									g, c, s sch	67554		
251'4"	255'4"	4'									c, g, s sch	67555		
255'4"	259'4"	4'									c, g, s sch	67556		
259'4"	263'4"	4'									c, g, s sch	67557		
263'4"	267'4"	4'									c, g, s sch	67558		
267'4"	271'4"	4'									c, g, s sch	67559		
271'4"	273'	1'8"									c, g, s sch	67560		
273'	274'2"	1'2"									c, g, s sch	67561	minor sericite	F <sup>+</sup> spur lathes
274'2"	278'2"	4'									c, g, s sch	67562		
278'2"	282'2"	4'									c, g, s sch	67563		
282'2"	286'2"	4'									c, g, s sch	67564		
286'2"	290'6"	4'4"									c, g, s sch	67565		
290'6"	290'11"	5"									qtz	67566	close spaced veining	
290'11"	292'	1'1"									chlg sch	67567		
292'	293'7"	1'7"									qtz	67568	qtz veining	
293'7"	297'8"	4'1"									g, c, sch	67569	minor sericite	
297'8"	298'4"	1'4"									c, g, sch	67570	increased calcite	
298'4"	300'	1'8"									qtz zone	67571	fragmental	
300'	303'4"	3'4"									chlg sch	67572	chlg rich	



Diamond Drill Record

LOCATION: CH-0 187E	DIPS - collar 90 °		HOLE NO. 84 - 05	Page 1 of 7
AZIMLTH: Vertical (none)	CONTRACTOR: Phil's Diamond Drilling		PROPERTY: Canadian Ferrites (Dawson)	
ELEVATION: - 125' m	LOGGED BY: P. Grunenberg		CLAIM NO.	
LENGTH: 242'	DATE: December 11, 1984		SECTION NO.	
CORE SIZE: NQ			STARTED: December 11, 1984	
PURPOSE: Tie in with hole 84-04 for geological trends.			COMPLETED: December 12, 1984	

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
0'	58'	Overburden						
		52' to 58' cored						
		contains ~ 50% qtz pebbles						
		and 50% sandy, green colored,						
		eroded chlorite schist mud.						
		Recovery 58' - 62' = 92%						
58'	58'8"	medium to light green-grey			Rusty colored limonitic zones			
		chlorite (60%), qtz 25%			along fractures			
		Sericite 15% schist			sub alignment parallel to schistosity			
		-wavy qtz bands, but average			in 10mm stringers, as well as			
		schistosity to CA = 55°			very fine disseminate, total to <1%			
58'8"	59'4"	quartz, minor carbonate				5 to 70	parallel to schistosity,	1-70mm vein with
		vein zone with contacts parallel			fine granular Su <sup>s</sup> (py) in folded			about 15 5mm parallel bands in schistosity
		to schistosity, total veining			short stringers to 15cm in length			-folded, and pinched out common.
		to 80% of core length,			Total of section <1%, but			
		plastically deformed,			locally up to 5%			
59'4"	71'10"	Chlorite (60%) quartz (20 to 40%)						
		sericite (10%) schist			Folding - Axial plane ~ 60° to C.A.			
		Qtz band folded along schistosity			sulfides (py) stringers adjacent to			
		Average schistosity to C.A. = 45°			qtz bands, and poddy disseminate			

Locally to 5%, <1% through section

## Diamond Drill Record

HOLE NO. 84 - 05 Page 2 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
	Recovery	62' to 72' = 97%						
		72' to 82' = 100%						
		82' to 92' = 97%						
71'10"	78'6"	same general rock type (chl, qtz, seric., schist) with higher % (to 50%) of plastically folded qtz bands. schistosity, where it exists, is $\sim 45^\circ$ to C.A.			< 0.5% sus overall, pyrite pockets, and some stringers aligned adjacent to qtz bands			
78'6"	83'5"	chlorite (60%) quartz (20 to 30%) sericite schist. Qtz makes a mottled texture over core, with little quartz banding, and no detectable schistosity			sulfides undetected by viewing outer surface of core, but broken ends contain 5 to 10% finely disseminated py, apparently aligned within the more siliceous areas of core			
83'5"	85'9"	Core highly fragmented here, darker green in color, higher chlorite % (to 70%) striations along fracture boundary indicates some shearing in a plain about $5^\circ$ off C.A.			some rusty zones, no preferred orientation, boxworks indicate zones of sulfide of up to 30%, but overall sulfide content looks to be < 2%			
85'9"	127'5"	Qtz-chlorite minor sericite schist. Warpy qtz bands (Folded) constitute up to 60% of						

(cont)

## Diamond Drill Record

HOLE NO-84 - 05

Page 3 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION. MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
85'9"	127'5"	core in places. Foliation seems fairly consistent, but folding becomes quite plastically twisted in places average schistosity to C.A. - 35° to 40° Few places richer in chlorite, ie thicker chloritic bands Recovery 92' - 132' = 100% 132' - 142' = 97%			-rusty zones along some fractures - finely grained sulfides (Py) oriented mostly along schistosity boundaries beside qtz rich sections, some blebs Total 2 to 3%, but some lengths of 1 ft may contain up to 10% sulfides			
127'5"	128'1"	-Core broken up in this section -rusty brown coloring along all surfaces, chlorite (50%) qtz (50%) little sericite schist. Recovery 142' - 152' = 97%			limonitic fracture surface with 10 to 20% boxworks, sulfides to 5% through section			
128'1"	137'	light grey - green colored chlorite (40%), qtz 40% sericite (20%) schist schistosity somewhat uneven du to folding, but average angle to C.A. = 50° Recovery 142' to 152' - 97% 152' to 162' = 100% 162' to 172' = 100%			some limonite on fracture sur- -faces, fq. py along schistosity plains as well as disseminated, total to ~5%			

## Diamond Drill Record

HOLE NO. 84 - 05

Page 4 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
137'	154'6"	slightly darker green than previous section due to higher chlorite (60%) and possibly very thin graphitic bands Qtz constituent very warpy plastic folding leads to irregular schistosity			up to 10% pyrites, average over section about 3%, oriented mostly within schistosity, but some blebs within qtz			
154'6"	156'5"	Graphitic rich zone (to 50%) within chl schist, qtz down to ~ 10% in this section			slightly limonitic brown- orange in places appears to be less sulfides, down to 2% in this zone			
156'5"	168'9"	chlorite, quartz, minor sericite schist with a low percentage graphite bands Qtz bands plastically folded, Average schistosity to CA = 45° Recovery 172' - 182' = 99%			low percentage Py ( $\leq 5$ ) over- all, but may be up to 20% locally, banded cubes (poorly formed) along schistosity - one small bleb of blueish-green soft, mica - (mariposite)			
168'9"	177'5"	light green-grey chlorite- qtz- sericite schist with no graphitic bands, Swirly qtz bands plastically deformed. No schistosity orientation.			diss., f.g pyrite throughout, with few blebs of pyrite, total to 2 to 3% throughout			

## Diamond Drill Record

HOLE NO. 84 - 05 Page 5 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
177'5"	178'5"	Qtz rich zone (vein) with some chl schist inclusions uneven, folded contact, but Average to core axis = 30°			pyrite rich zone along margin of Qtz - c.c. vein (to 35% locally), no apparent mineralization within vein	200	20°	Qtz - C.C.
178'5"	182'8"	Qtz - chlorite (minor sericite) schist, pervasive silicification to almost 50% of rock, light colored = low chlorite concentration schistosity to CA = 40° to 45°			f.g. diss, Py throughout, some alignment of grain within schistosity, average concentration of 5 to 10%, some blebs at bottom end of core section			
		Recovery 182' to 192' = 53%						
		192' to 202' = 46%						
		202' to 212' = 43%						
182'8"	186'1"	Crumbly core, broken to various sized fragments (½" to 3" diam) light grey colored, powdery coating on surfaces, semi-soapy feel (talk F sericite to 35%) chlorite, Qtz (~ 10%) schist  - nearing contact to thick graph- itic unit, contact to C.A. unknow due to fragmented nature of core			finely disseminated pyrite to 3 or 4% throughout			

## Diamond Drill Record

HOLE NO. 84-05

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Comparison  
Hole 84-04  
151' - 158'

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
186'1"	213'11"	Crumbly to powdery core, (ave. <50% recovery) black with mottled sections of white - Graphite schist containint remnant rounded blebs of quartz, approximately 3 zones where rock has been ground to black powder (note under alt'n, etc.)			Sheared zones 202' to 204' 204'6" to 206' 211' to approx 212' - py disseminated throughout section of core, no apparent order; to 2%			
		Recovery 212' - 222' = 57%						
		222' - 232' = 83%						
		232' - 242' = 85%						
213'11"	214'5"	medium grey, F.G. matrix with broken white phenos (F-spar and broken mafics (pyroxene 3%) low siliceousness - dyke rock (Andesite)	25%		no apparent related mineralization - no contact orientation possible			
214'5"	221'11"	Qtz (50%) Graphite (20 to 30%) chlorite (20 to 30%) schist, warpy, segmented, somewhat lenticular quartz sections from 2mm to as much as 10mm thickness. Uneven schistosity, cleaves along from 40° to 70° to C.A.			Uneven distribution of sulfides from <1%, to 5% in places, average about 1%, some alignment of grains along schistosity, to about 3mm length.			

Diamond Drill Record

HOLE NO. 84-05

Page 7 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
221'11"	222'11"	same as 213'11" to 214'5"			no related mineralization			
		f.g. andesite, chill margin						
		at lower contact about 2mm						
		wide light grey in color						
		chill margin to C.A. = 70°						
222'11"	242'	To end of hole						
		Qtz (40%), Graphite (25 to 35%)			f.g. diss, sulfides throughout			
		chlorite (25 to 35%), warpy			some alignment along schistosity			
		plastically folded quartz sections			to lengths up to 10mm, to 5%			
		from 2mm to as much as 90mm			total in places, overall average			
		in width (2 segments), very			1 to 2%			
		slight and gradual change						
		from higher chlorite % to						
		higher graphite %						
		- 2 sections (around 232', and						
		234') quite broken up and						
		slightly richer in graphite						
		Warpy schistoisty, average						
		to core axis angle = 40 to 50%						

84 - 04  
relate to  
170'8" to 172'

Dawson Drill '87

Bondar Clegg

Assay Data Sheet

Can. Ferrites

HOLE NO 84-05 Page 1 of 3

From ft. <sup>m</sup> in	To ft. <sup>m</sup> in	Length ft. <sup>m</sup> in	Ag g/t	Au g/t NA	Au g/t FA	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
58'	58' 8"	8"									c, g, s, sch	67589	< 1% py	
58' 8"	59' 4"	8"									qtz, c.c.	67590	veining, < 1% py	
59' 4"	63' 4"	4'									c, g, s, sch	67591	py stringers to 5%	
63' 4"	67' 4"	4'									c, g, sch	67592		
67' 4"	71' 10"	4' 6"									c, g, s, sch	67593		
71' 10"	75' 10"	4'									c, g, s, sch	67594		
75' 10"	78' 6"	2' 8"									c, g, s, sch	67595		
78' 6"	80'	1' 6"									c, g, s, sch	67596	5-10% py	
80'	81' 6"	1' 6"									c, g, s, sch	67597	5-10% py	
81' 6"	83' 5"	1' 11"									c, g, s, sch	67598		
83' 5"	84' 5"	1'									c, g, s, sch	67599	higher chlorite	
84' 5"	85' 9"	1' 4"									c, g, s, sch	67600	< 2% su s	
85' 9"	89' 9"	4'									q, ch, sch	67601	≤ 2% su s	
89' 9"	93' 9"	4'									q, c, sch	67602		
93' 9"	97' 9"	4'									q, c, sch	67603		
97' 9"	101' 9"	4'									q, ch, sch	67604		
101' 9"	105' 9"	4'									q, ch, sch	67605		
105' 9"	109' 9"	4'									q, ch, sch	67606		
109' 9"	113' 9"	4'									q, ch, sch	67607		
113' 9"	117' 9"	4'									q, ch, sch	67608		
117' 9"	121' 9"	4'									q, ch, sch	67609		
121' 9"	124' 9"	3'									q, ch, sch	67610		
124' 9"	127' 5"	2' 8"									q, ch, sch	67611		
127' 5"	128' 1"	8"									ch, q, sch	67612	rusty section	



## Assay Data Sheet

HOLE NO 84-05 Page 2 of 3

From Ft 10'	To Ft 10'	Length Ft 10'	Ag g/l	Au g/l N.A.	Au g/l T.A.	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
128'1"	131'1"	3'									c, g, sch	67613		
131'1"	134'1"	3'									c, g, sch	67614		
134'1"	137'	2'11"									c, g, sch	67615		
137'	141'	4'									c, g, sch	67616	≤ 3% diss. py.	
141'	145'	4'									c, g, sch	67617	"	
145'	148'	3'									c, g, sch	67618	"	
148'	151'	3'									c, g, sch	67619	"	
151'	154'6"	3'6"									c, g, sch	67620	"	
154'6"	155'6"	1'									graphich	67621		
155'6"	156'5"	11"									graphich	67622		
156'5"	160'5"	4'									c, g, sch	67623	mariposite, minor py	
160'5"	164'5"	4'									c, g, sch	67624	mariposite, minor py	
164'5"	168'9"	4'4"									c, g, sch	67625	"	
168'9"	171'9"	3'									c, g, sch	67626	2% diss. py.	
171'9"	174'9"	3'									c, g, sch	67627	"	
174'9"	177'5"	2'8"									c, g, sch	67628	"	
177'5"	178'5"	1'									qtz	67629	mat vein	
178'5"	182'8"	4'3"									g, c, sch	67630		
182'8"	186'1"	3'5"									c, g, sch	67631	talcazerite, 4% py	
186'1"	190'	3'11"									graph sch	67632	shearing	
190'	194'	4'									graph	67633	"	
194'	198'	4'									graph	67634	"	
198'	202'	4'									graph	67635	"	
202'	206'	4'									graph	67636	"	

LOCATION: CH - 45 475 W				Diamond Drill Record				HOLE NO. CF.84.6		Page 1 of 9	
AZIMUTH: 110°		DIPS - collar 60°		CONTRACTOR: Arctic Diamond Drilling		PROPERTY: Canadian Ferrites (Dawson)		CLAIM NO.		SECTION NO.	
ELEVATION:		-		LOGGED BY: B.P. Butterworth		DATE: 12/12/84		STARTED: 12/12/84		COMPLETED: 14/12/84	
LENGTH: 302'		-		-		-		-		-	
CORE SIZE: NO		-		-		-		-		-	
PURPOSE:		-		-		-		-		-	
Section		ROCK DESCRIPTION		Interval		ALTERATION, MINERALIZATION etc.		VEINLETS		minerals in decreasing abundance	
from m	to m	from m	to m	from m	to m	Thickness	Angle to core				
0'	88'2"	Few qtz, pebbles @ top of hole									
		Overburden leading into eroded chlt.sclt									
		mud and rock fragments									
88'2"	89'8"	Recovery = 67%									
		Medium green, chlt (60%) - Qtz						minor limonite staining in some localized areas			
		(30%), Serc (10%) scht.						Very broken throughout entire interval			
		faint banded texture									
89'8"	92'9"	Recovery 89' 8" 97' = 87%									
		89' 8" - 91' Black, Graphitic rich mud.									
		91' - 92'9" Black and white intermixed qtz and graphite		91'	92'9"	< 1% diss Py	1/4"	90°	Qtz vein 2 to core axis		
		schist 70% graphite; 30% qtz							No visible sulf		
		shistosity ranges from 65°-80°c/a									
92'9"	102'3"	Recovery 97'-101'6" = 93%									
		dark grey - green chlt (70%)									
		qtz (20%) scht									

## Diamond Drill Record

HOLE NO. CF 84.6

Page 2 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
92'9"	102'3"	con't. Contact w/ Graphitic schist is marked by ½" wide intensely chloritized zone @ 60% c/a	93'1"	93'1½"	Intensely chloritized fault gouge	½"	50°	Qtz vein no visible sulph @ 97'5"
		Qtz bands appear uniform w/ little deformation 70-80° c/a	96'4"	97'5"	Zones within chlt. qtz. scht with up to 50% boxwork texture. Py within these zones	1 3/4"	80°	Bull white qtz vein; no sulph fragments of chlt scht. contained within
		Some localized creas show limonitic staining on many surfaces	98'4"	101'4"	up <2% diss throughout some localized areas show moderate-strong kaolonitization			
102'3"	108'	Recovery 101'6" - 105' = 97% 105' - 108' = 50%	@	104'	Qtz blebs maasvie 1½" in diam. no visible sulfs			
		Dark green Chlt-qtz scht qtz 20% - Extremely fractured and broken			Intense chloritization throughout most of section			
		schistosity is poorly developed average: 70% C/A. Fairly uniform throughout; few signs of plastic define	103'6"	103'10"	Qtz vein shows plastic define and minor ruggy texture no sulfs			
108'	111'3"	Recovery 108'-111' = 83%						
		dark green chlt (90%) qtz (30%) scht. Schistosity relatively uniform in upper portion of section but defors increases						

## Diamond Drill Record

HOLE NOCF 84.6

Page 3 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
108'-	111'3"	con't. down the hole. Schistosity	Average	60°	Qtz vein density and size	½"	-	Qtz vein @ 110'7" shows intense
		Minor seneite on schistosity			increases towards base of			plastic define
		planes			section. No sulfs.			
111'3"	124'	Recovery 111' - 113' = 67%						
		113' - 117' 6" = 52%						
		117'6" - 120' = 60%						
		120' - 124' = 94%						
			116'3"	120'	Almost entirely graphite very			
111'3"	124'	Intermixed, black and white			little qtz			
		graphite and qtz 70% graphite			<1% diss. Py throughout			
		30% qtz Qtz within graphite			section			
		shows intense deformation						
		Recovery 124' - 129' = 100%						
		129' - 130' = 75%						
		130' - 135' = 78%						
124'	134'3"	Lt. grey-green Qtz (65%) -	124'	125'11"	dk green chlt (65%) - Qtz			
		Chlt (30%) - Minor secicite			(35%) Schistosity shows			
		Scht. Schistosity: 65° C/A			plastic defm 55° C/A			
		limonite staining on surfaces						
		throughout most of section	125'2"	125'2"	½" wide graphite bed Resembles			
					fault gouge. Contact 60° C/A			

## Diamond Drill Record

HOLE NO. CF 84-6 Page 4 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
124'-134'3"		Con't.	129'4"	129'8"	Graphite bed; poor competency			
		125'11" - 129' - Greater Qtz content						
		Qtz (70%) - Chlt (20%) - Saac (10%)	132'9"	133'5"	8" wide interval highly fractured and broken; limonitic staining on all surfaces			
134'3"	190'0"	graphitic shear zone Brecciated	135'8"	137'3"	Chlorite rich zone highly sheared			
		Qtz fragments < 1/4" in diam occupy 20% of zone						
		Recovery 135' - 141' = 92%						
		141' - 146' = 78%						
		146' - 151' = 88%						
140'	140'8"	Qtz vein; few chlt. fragments throughout upper contact: 50C/A Possible Qtz rich zone						
140'8"	148'3"	White & green intermixed			1% diss Py throughout entire section			
		Qtz (60%) Chlt (35%) scht			Some localized areas contain narrow Py bands (< 1mm) which in most cases either parallel schistosity planes ( ) or occur along			
		No recognizable schistosity orientation						
		Qtz appears as blobs and as narrow stringers throughout entire section						
		Some plastic defm is visible within Qtz rich sections Chlt-rich fragments within Qtz are highly warped and folded			Qtz - chlt. contacts This Py is figr and locally up to 2%			

## Diamond Drill Record

HOLE NO. CF 84.6

Page 5 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
140'8"	148'3"	Con't. Moderately broken throughout	145'6"	145'9"	Fault gouge. Intensely chloritic			
		Most of interval	150'9"	151'				
		Recovery 151' - 156' = 99%						
148'3"	151'1"	" Lt green - green chlt (60%) Qtz (35%) minor sericite scht Schistosity: 80° C/A			<1% diss throughout entire interval. Few Py bonds <1/16" wide // schistosity @ base of section			
		Recovery 156' - 160'6" = 65%						
155'11"	160'10"	Highly sheared dark green-black chlt-Qtz scht. Minor graphite Qtz completely brecciated. Chlorite almost gouge. Moderate competency remains						
		Recovery 106'6" - 164" = 62%						
		164' - 170'6" = 35%						
160'10"		170'6" - 176' = 88%	170'6"	171'4"	Graphitic shear zone Qtz			
160'10"	173'	10" Intermixed lt grey & green Chlt (60%) - Qtz (40%) scht Entire interval is very broken-up Some zones within section are intensely chloritized. Narrow zones (up to 3") of fault gouge throughout			extremely brecciated (15%); chlt (20%); Graphite (65%) No visible sulfs			

## Diamond Drill Record

HOLE NO. CF 84.6 Page 6 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
100'10"	173'10"	con't. Schistosity almost completely	172'9"	173'10"	Slight increase in graphite			
		obliterated or highly deformed			within this interval. Narrow			
		90° C/A			graphite beds // schistosity(80° C/A)			
		Qtz rich zones within section			some slow slight defm.			
		show plastic defm .						
		Recovery 176' - 179' = 83%						
173'10"	177'8"	Grey-green Chlt (70%) - Qtz			<1% Py diss or as blebs			
		(30%) scht. Schistosity is			throughout section. Few narrow			
		uniform throughout section: 85° C/A			< (1/16") Py. bonds			
		Recovery 179'-182' = 83%						
177'8"	182'11"	Black & White graphitic (60%)	177'8"	178'3"	Highly fractured interval w/			
		Qtz (35%) minor chlt scht			1" wide Py band Contact w/			
		Qtz bands show moderate			graphitic schist is sharp @ 10° C/A			
		Plastic defm & in some places			10% qtz 90% Py			
		ore brecciated Au Schistosity=80° C/A			< 1% Py diss, blebs, or bands			
					throughout remainder of interval			
		Recovery 182' - 187' = 97%						
		187' - 192' = 97%						
182'11"		Green, chlt (70%) - Qtz (30%)			1% diss & blebs of Py.			
		scht, Med gr., schistosity						
		well developed (75° C/A)						
		Granulated throughout entire section)						

Diamond Drill Record

HOLE NO. CF 84.6 Page 7 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
182'1"	206'9"	Cont. Qtz bands throughout section do not exceed 1/4" in width Defm . increases towards the base of section with increased plastic defm . Recumbent folds and possibly overturned folds from 192' - 206'9" giving rise to mottled texture and Qtz blebs						
		Recovery 192' - 197' = 100%						
		197' - 201'6" = 100%						
		201'6" - 206'6" = 100%						
206'9"	217'4"	Graphitic - Qtz scht. Schistosity well developed (65° C/A) upper Contact with chlt scht is abrupt (70° C/A) Chlt (50%) Qtz (40) Graph (10%)			<1% diss Py			
		Recovery 206'6" - 211'6" = 88%						
		211'6" - 215' = 100%						
		215' - 220' = 100%						
		220' - 221' = 100%						
		221' - 226' = 100%						

## Diamond Drill Record

HOLE NO. CF 84.6

Page 8 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
206'9"	217'4"	Granulated qtz - chlt- graphite layers throughout entire section Graphite content increases towards base of section						
217'4"	227'4"	Black, graphitic (60%) - qtz (30%) Chlt (10%) Scht. Plastic defm. throughout. Schistosity obliterated where plastic defm is intense but in other areas average schistosity is 80° C/A  Recovery 226' - 231' = 83% 231' - 236' = 87% 296' - 241' = 90% 241' - 246' = 82%			<1% Py as diss and blebs throughout section			
227'4"	245'7"	Intermixed black and white Qtz (45%) - graph (35%) - chlt (20%) scht. Schistosity well developed and uniform throughout most of section (70° C/A)  very broken from 243'5" - 246"			<1% sulphides	55°, 65°  4"	Bull, white, qtz bands 3/8", 1/2", 1/4", @ 228', 228'2", and 228'3", respectively Highly convoluted Qtz band 1/2" wide between 37' and 37'7" no sulph Bull, white qtz blob 3" across @ 241'7".	

## Diamond Drill Record

HOLE NO. CF 84.6

Page 9 of 9

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
246'7'		Recovery 246' - 251' = 83%						
		251' - 256' = 18%						
		* 256' - Miss-latch						
		256' - 261' - 77%						
246'7'	302'	Lt grey - green chlt (60%) - Qtz (35%) - minor sericite scht Schistosity average: 70° C/A Some intervals throughout section show increased plastic deformation Qtz bands <1/16" wide throughout most of section			<1% Py diss or blebs throughout section. Few localized crews where Py is concentrated along fracture surfaces or // 's schistosity Minor Py as blebs within chlt bands adjacent to Qtz bands	1/4"	85°	Qtz band 1/4" wide @ 363' 1", Bull, white, contains a few chlt Fragments
		Recovery 261' - 266' = 100%	264'2"	264'8"	Qtz rich interval. Contact poorly defined. At base of interval			
		266' - 270' = 114% (?)			chlt. scht. contains angular			
		270' - 275' = 100%			brecciated, qtz fragments up to			
		275' - 280' = 92%			3/4" across			
		280' - 285' = 100%						
		285' - 288' = 86%	285'	288'	Moderately broken-up in this interval. Good recovery			
		288' - 293' = 100%						
		293' - 298' = 95%						
		298' - 300' = 100%	281'5"		Increased plastic deformation Qtz. Chlt bands are highly granulated			
		E.O.H.			Schistosity @ 296' 65° C/A			

Dawson Drill '84  
Bondar - Clegg  
Assay Data Sheet

CDN. Ferrites

HOLE NO 84-06 Page 1 of 3

From ft in	To ft in	Length ft in	Ag g/l	Au g/l NA	Au g/l (EA)	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
0	88'2"										Overburden	—		
88'2"	89'8"	1'6"									c, g, s, sch	67648		
89'8"	92'9"	3'1"									g, g, sch	67649		
92'9"	97'	4'3"									g, g, sch	67650		
97'	102'3"	5'3"									c, g, sch	67660		
102'3"	106'	3'9"									c, g, sch	67651		
106'	108'	2'									c, g, sch	67652		
108'	111'3"	3'3"									c, g, sch	67653		
111'3"	115'	3'9"									g, g, sch	67654		
115'	119'6"	4'6"									g, g, sch	67655		
119'6"	124'	4'6"									g, g, sch	67656		
124'	127'	3'									g, c, sch	67657	minor sericite	
127'	130'	3'									g, c, sch	67658	"	"
130'	134'3"	4'3"									g, c, sch	67659	"	"
134'3"	135'8"	1'5"									graph.	67661	shear zone	
135'8"	140'	4'4"									graph	67662	"	"
140'	140'8"	8"									qtz	67663	vein	
140'8"	145'	4'4"									g, c, sch	67664		
145'	148'3"	3'3"									g, c, sch	67665		
148'3"	151'9"	3'6"									c, g, sch	67666	Sericite <del>minor</del>	
151'9"	155'11"	4'2"									c, g, sch	67667	minor sericite	
155'11"	158'	2'1"									g, c, sch	67668	graph, sheared	
158'	160'10"	2'10"									g, c, sch	67669	"	"
160'10"	170'6"	9'8"									c, g, sch	67670		

## Assay Data Sheet

Assay Data Sheet												HOLE NO 84-06		Page 2 of 3	
From ft. in	To ft. in	Length ft. in	Ag g/l	Au g/l NA	Au g/l FA	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number			
170'6"	171'4"	10"									graph	67671	shear	zone	
171'4"	173'10"	2'6"									C, g, sch	67672			
173'10"	177'8"	3'10"									C, g, sch	67673			
177'8"	178'3"	7"									C, g, sch	67674	highly fractured	Py. band	
178'3"	180'8"	2'5"									g, ch, sch	67675			
180'8"	182'11"	2'3"									g, g, sch	67001			
182'11"	186'11"	4'									C, g, sch	67002			
186'11"	190'11"	4'									C, g, sch	67003			
190'11"	194'11"	4'									C, g, sch	67004	minor	graph	
194'11"	198'11"	4'									C, g, sch	67005			
198'11"	202'11"	4'									S, g, sch	67006			
202'11"	206'9"	3'10"									C, g, sch	67007			
206'9"	210'9"	4'									g, s, sch	67008	graphitic		
210'9"	214'9"	4'									g, g, sch	67009			
214'9"	217'4"	2'7"									g, sch, sch	67010	graphitic		
217'4"	221'4"	4'									g, s, sch	67011	graphitic		
221'4"	225'4"	4'									g, s, sch	67012	graphitic		
225'4"	227'4"	2'									g, s, sch	67013	graphitic		
227'4"	231'4"	4'									g, g, sch	67014			
231'4"	235'4"	4'									g, g, sch	67015			
235'4"	239'4"	4'									g, g, sch	67016			
239'4"	243'4"	4'									g, g, sch	67017			
243'4"	246'7"	3'3"									g, g, sch	67018			
246'7"	251'	4'5"									C, g, sch	67019	minor	sericite	



Diamond Drill Record

LOCATION: 35MN LCH.45 225W	DIPS - collar 75°		CONTRACTOR: Arctic Diamond Drilling	HOLE NO. DDH 84-7	Page 1 of 7
AZIMUTH: 110°	- m °	LOGGED BY: Brian P. Butterworth	PROPERTY: Canadian Ferrites		
ELEVATION:	- m °	DATE: 17/12/84	CLAIM NO.		
LENGTH: 251'	- m °		SECTION NO.		
CORE SIZE: NQ	- m °		STARTED:		
PURPOSE:			COMPLETED:		

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness	Angle to core	minerals in decreasing abundance
0	22'	Overburden. Few fragments of chlt Qtz schts and qtz						
		Recovery 22' - 25' = 86%						
22'	25'	Grey to green chlt (55%) Qtz (40%) minor serc. scht			Limionitic staining along schistosity planes and within	3"		Qtz vein(?) @ 22'3".
		Minor to intense defm. within some Qtz. Chlt bands but overall schistosity is 95° C/A. Schistosity not to apparent.			cavities. Up to 1% Py. throughout section but most sulphides appear to have weathered out.			Minor chlt fragments. No visible sulphs. Cannot distinguish contacts.
		Quite vuggy throughout entire section. Vugs up to 1/8" in diam.						
		Few narrow graphitic-rich zones up to 1 1/4" across within section.						
		Recovery 25' - 27' = 62.5%						
		27' - 31' = 100%						
		31' - 34' = 100%						
		34' - 39' = 70%						

## Diamond Drill Record

HOLE NO. DDH 84-7 Page 2 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness	Angle to core	minerals in decreasing abundance
25'	49'3"	Graph. (50%), Qtz (30%), chlt (10%) scht. Weak to moderate deformation throughout most of section. Some intervals show intense plastic deformation with highly complex fold patterns. Vuggy texture throughout entire section with vug density decreasing towards base. Vugs occupy 2% of section			Limonite showing along schistosity and within most cavities. Limonite appears in vugs within Qtz bands and along Qtz-graphite and Qtz- chlt contacts in most cases Fewer vugs within. Graph end chlt. bands. < 1% sulphides overall			
		Recovery 39' - 45' = 62.5% 45' - 50' = 100%						
49'3"	50'11"	Chlt (40%) - Qtz (35%) minor graph. schist. Schistosity relatively uniform @ 65°C/A Few vugs. Recovery 50' - 55' = 88% 55' - 60' = 93%			< 1% diss. Py			
50'11"	58'3"	Same as 25' - 49'3" Graph - Qtz - Chlt schist. Fewer Vugs. High degree of plastic deformation.			Limonite within vugs. Minor limonite when schistosity planes < 1% diss Py.			

Continued

## Diamond Drill Record

HOLE NO. DDH 84-7

Page 3 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness	Angle to core	minerals in decreasing abundance
50'11"	58'3"	Moderately broken throughout section becoming more competent towards base. Qtz band < 1/16".						
		Recovery: 60' - 65'6" = 82%						
		65'6" - 71' = 82%						
		71' - 76' = 100%						
58'3"	77'11"	Intermixed black and white Graph (55%) - Qtz (40%) minor chlt schist. Deformation not as intense as in previous section. Average Schisto- sity 65°C/A. Qtz bands up to 1" wide. Graphitic rich zones up to 12" wide possibly 70% graph. Poor competency.  Graph content gradually decreases towards base of section. However contact with underlying Chlt.scht is sharp due to the sudden disappearance of graph in the underlying unit Contact: 75°C/A	72'4"	72'7"	Py cubes up to 1/4" across <1% throughout. Up to 2% diss. Py throughout section  Black, extremely fractured-gouge zone f.gr. Py. concentrated along Qtz band-Graph contacts in some places	1/4", 1/8", 1/4", 1"	20°, 90° 65°, 65°	Bull. white. Qtz bands @ 58'6" 63'3", 64'5", 65'1" Numerous bull white Qtz bands < 1/4" wide, many show high degree of plastic deformation, Quite contorted.
		Continued						

## Diamond Drill Record

HOLE NO DDH 84-7

Page 4 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness	Angle to core	minerals in decreasing abundance
58'3"	77'11"	Continuation Recovery 76' - 81' = 97%						
		81' - 86' = 100%						
		86' - 91' = 97%						
		91' - 96' = 100%						
77'11"	179'3"	Lt. grey-green Chlt (60%)			< 1% diss Py throughout			All Qtz rich sections appear
		Qtz (35%) minor sericite			section			to be unmineralized
		schist. Moderate plastic deformation			-Minor blebs of Py. occurring			
		with mild contortions to			randomly throughout section		80°	92' - 92' 9" Qtz rich zone
		Qtz bands. Qtz bands			-Minor f.gr. Py. concentrated			3 closely spaced Qtz bands
		average 1/8"-1/4" wide but			along Qtz-chlt. contacts			Bull, white, separated by narrow
		up to 1" in places						chlt. bands
		Average schistosity 60° C/A						
			119'5"	119'9"	Shear zone, extremely fractured	1/4"	40°	Qtz band w/moderate contortion
		Recovery 96' - 106' = 96%	120'5"	121'	intensely chloritized fault gouge			@ 96'1". Bull, white.
		106' - 111' = 92%	123'3"	124'	Areas adjacent to shear zones			
		112' - 130'2"			show increased chloritization, higher			
		Increasing plastic defm. toward			fracture density and poorer			
		base. Qtz bands average 1/8"-1/4"			competancy. No visible mineral-			
		in width and are becoming moderately			ization			
		to highly folded.						
			86'		An occasional speck of bleb			
					of Py.			
		Continued						

## Diamond Drill Record

HOLE NO. DDH 84-7 Page 5 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness	Angle to core	minerals in decreasing abundance
77'11"	179'3"	Continuation						
		Recovery 111' - 116' = 100%						
		116' - 121' = 92%						
		121' - 124' = 86%						
		124' - 128'6" = 100%						
		128'6" - 134' = 88%						
		134' - 139' = 100%						
		139' - 141' = 92%						
		141' - 149' = 100%						
		130'2" - 179' 3" Schistosity is						
		very uniform throughout this						
		interval. Few areas where Qtz chlc						
		bands show anything greater	166'	167'3"	Moderately fractured w/limonite	70° <sub>80°</sub>	3/4"1"3/4" Bull, white, qtz bands at 149'4",	
		than moderation deformation			stained fracture surfaces $\perp$ to		149'10 1/4", 150'4". First two bands	
		Average schistosity: 60° C/A			schistosity		fairly undeformed, the third is	
							moderately contorted.	
		Recovery 149' - 154' = 100%					No visible sulphs.	
		154' - 159' = 100%					Qtz bands throughout most	
		159' - 161' = 50%					of section range between < 1/12"	
		161' - 166' = 98%					to 1/4" in width. They are poorly	
							to moderately deformed indicated	
		166' - 171' = 98%	175'7"	176'3"	Minor limonite on fracture		by single phase, gentle folding.	
		171' - 176' = 100%			surfaces $\perp$ to schistosity		Underformed Qtz bands show	
		176' - 181' = 97%					average schistosity = 60° - 70° C/A	
		181' - 186' = 97%						

## Diamond Drill Record

HOLE NO. DDH 84-7

Page 6 of 7

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness	Angle to core	minerals in decreasing abundance
179'3"	191'3"	Lt. grey - lt. green chlt(65%)			<< 1% diss Py. A few			
		Qtz (35%) minor serc. Schist			isolated Py. cubes up to 1/16"			
		Schistosity uniform throughout			across			
		Qtz bands < 1/16" in width						
		throughout section except for a						
		few isolated Qtz-rich sections.						
		Average schistosity 85° C/A	184'	186'4"	Qtz-rich zone. Concentration	1 1/2", 2"	80°, 75°	Qtz bands @ 190'5" and
		Recovery 186' - 191' = 100%			of Qtz bands up to 2 1/2" wide			191'1" bull. white. No visible
		191' - 196' = 100%			paralleling. Schistosity			sulphs
		196' - 201' = 97%						
191'3"	251'	Qtz banding almost completely	216'	219'	Qtz rich zone. Series of bull	1 3/4"	50°	Bull, white qtz band. Sharp contacts
		disappears. Faint schistosity			white qtz bands up to 1 1/2" wide;			with chlt.scht. No visible sulph.
		visible as alternation, Lt. green			moderately contorted. No visible			
		Qtz-rich bands and dark green Chlt			sulph.			
		rich bands						
		Recovery 201' - 206' = 100%			<< 1% diss Py. throughout			
		206' - 211' = 100%			section. Random specks or			
		211' - 216' = 100%			blebs of Py. throughout.			
		216' - 221' = 100%						
		221' - 226' = 92%						
		226' - 231' = 97%						
		231' - 236' = 100%						



Dawson Drill Project '84

Bondar-Clegg  
Assay Data Sheet

C.N.W. Ferriter

HOLE NO ~~84-07~~ Page 1 of 3

From ft in	To ft in	Length ft in	Ag g/t	Au g/t NA	Au g/t (FA)	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
0	22'										overburden			
22'	25'	3'									e, g, sch	67141	≤ 1% py	
25'	29'	4'									e, g, sch	67142		
29'	33'	4'									e, g, sch	67143		
33'	37'	4'									e, g, sch	67144		
37'	41'	4'									e, g, sch	67145		
41'	45'	4'									e, g, sch	67146		
45'	49'3"	4'3"									e, g, sch	67147		
49'3"	50'11"	1'8"									c, g, sch	67148	minor graphite	
50'11"	55'	4'1"									e, g, sch	67149		
55'	58'3"	3'3"									e, g, sch	67150		
58'3"	62'3"	4'									e, g, sch	67153		
62'3"	66'3"	4'									e, g, sch	67154		
66'3"	70'3"	4'									e, g, sch	67155		
70'3"	74'3"	4'									e, g, sch	67156		
74'3"	77'11"	3'8"									e, g, sch	67157		
77'11"	82'	4'1"									c, g, sch	67158		
82'	86'	4'									e, g, sch	67159	minor sericite	
86'	92'	6'									c, g, sch	67160		
92'	92'9"	9"									c, g, sch	67161	qtz rich section	
92'9"	96'9"	4'									c, g, sch	67162		
96'9"	100'9"	4'									e, g, sch	67163		
100'9"	104'9"	4'									e, g, sch	67164		
104'9"	108'9"	4'									e, g, sch	67165		

## Assay Data Sheet

HOLE NO 84-07 Page 2 of 3

From ft. # in.	To ft. # in.	Length ft. # in.	Ag g/t	Au g/t NA	Au g/t FA	Cu %	Cu ppm	F ppm	Mo ppm	W ppm	Rock	Sample Number		
108'9"	112'9"	4'									c.g., sch	67166		
112'9"	116'9"	4'									c.g., sch	67167		
116'9"	120'9"	4'									c.g., sch	67168		
120'9"	124'9"	4'									c.g., sch	67169		
124'9"	128'9"	4'									c.g., sch	67170		
128'9"	132'9"	4'									c.g., sch	67171		
132'9"	136'9"	4'									c.g., sch	67172		
136'9"	140'9"	4'									c.g., sch	67173		
140'9"	144'9"	4'									c.g., sch	67174		
144'9"	148'9"	4'									c.g., sch	67175		
148'9"	152'9"	4'									c.g., sch	67176		
152'9"	156'9"	4'									c.g., sch	67177		
156'9"	161'	3'3"									c.g., sch	67178		
161'	165'	4'									c.g., sch	67179		
165'	169'	4'									c.g., sch	67180		
169'	173'	4'									c.g., sch	67181		
173'	177'	4'									c.g., sch	67182		
177'	181'	4'									c.g., sch	67183		
181'	185'	4'									c.g., sch	67184		
185'	188'	3'									c.g., sch	67185	gtz rich section	
188'	191'3"	3'3"									c.g., sch	67186	gtz rich section	
191'3"	195'	3'9"									c.g., sch	67187		
195'	199'	4'									c.g., sch	67188		
199'	203'	4'									c.g., sch	67189		



## Diamond Drill Record

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
LOCATION: LA-1; 300W		DIPS - collar 60 °			HOLE NO. 84-08		Page 1 of 2	
AZIMUTH: 120°		CONTRACTOR: Arctic Diamond Drilling			PROPERTY: Canadian Ferrites			
ELEVATION: 1850 feet		LOGGED BY: P. Grunenberg			CLAIM NO. Syndicate 60/67			
LENGTH: 70 feet		DATE: Jan. 14/85			SECTION NO.			
CORE SIZE: nQ					STARTED: December 19/84			
PURPOSE: Drilling I.P. Conductor					COMPLETED: December 21/84			
0	32	Overburden						
32'	51'	Crumbly, platy, weathered material, black, 90% graphite			weathered			
		10% rusty looking muscovite						
		-recovery 32'-51' - (Core has shifted in box)-estimate						
		85%						
51'	58'	core material washed away in hole; assumed to be the same subsoil type material as above			-	20	unknown	quartz, few rusty box works
		ie. recovery = 0%						
58'	62'	rusty orange brown, platy weathered, muscovite-chlorite schist			weathered			no visible sus
62'	70'	graphite schist, core looks less weathered and has a						



**COST STATEMENT**  
**DIAMOND DRILLING PROGRAMME**  
 15 October - 23 December 1984

**General Costs**

<b>FOOD &amp; ACCOMMODATION (The Eldorado Hotel)</b>		
5 persons, 155 mandays @ \$53.88		\$ 8,351.05
<b>FUEL</b>		3,424.80
<b>SHIPPING &amp; POSTAGE</b>		1,896.70
<b>SUPPLIES</b>		2,497.35
<b>TAXIS</b>		98.50
<b>REPAIRS</b>		1,082.45
<b>RENTALS</b>		
Norcan 4wd PU 1-15Nov, 15days @ \$107.08	\$1,606.21	
Norcan 4wd PU 15Nov-21Dec, 37days @ \$76.06	2,814.05	
Airways 4wd PU 15-31Oct, 17days @ \$43	731.00	
Ezekiel Camp Equipment, 155 mandays @ \$6	<u>930.00</u>	6,081.26
<b>CONSULTANT FEES</b>		
Archean Engineering Ltd.		5,308.50
<b>AIR FARES (Hastings Travel), 7 Vcr-Daw</b>		3,996.50
<b>NOTORIZING DOCUMENTS</b>		15.00
<b>REPORT PREPARATION</b>		4,785.30
<b>TOTAL GENERAL COSTS</b>		<u><u>\$37,537.41</u></u>

**DIAMOND DRILLING COST**

<b>SALARIES &amp; WAGES</b>		
4 persons, 135 mandays @ \$95.65		\$12,912.75
<b>BENEFITS @ 20%</b>		2,582.55
<b>CONTRACTORS</b>		
Phil's Diamond Drilling, 14Oct-22Dec		
1561' @ \$34.54	\$53,921.00	
Arctic Diamond Drilling, 5-22Dec		
623' @ \$63.14	<u>39,334.00</u>	93,225.00
<b>SUPPLIES</b>		
Quik Gel	\$ 400.00	
Mud,Rods,Bits	<u>2,200.00</u>	2,600.00
<b>FOOD &amp; ACCOMMODATION FOR DRILLERS (The Eldorado Hotel)</b>		
10 men, 116.5 mandays		6,334.50
<b>CASUAL LABOUR (Core Splitting)</b>		
Roland Berglund, 17-19Dec, 27hrs @ \$10		270.00
<b>DRILL MOVES</b>		
Gillespie D8 Cat, 58hrs @ \$160	\$ 9,280.00	
Klondike TD25 & Pilot Car	<u>1,725.00</u>	11,005.00
<b>ASSAYS &amp; ANALYSES</b>		
Bondar & Clegg Labs		
514 Core for AU, AG @ \$13.75	\$ 7,067.50	
Chemex Labs		
4 Core for CU,PB,ZN,AG,AU @ \$25.05	<u>100.20</u>	7,167.70

THIN SECTIONS & POLISHING (Vancouver Petrographics)	65.00
CONSULTANT FEES (Field)	
Archean Engineering Ltd.	1,485.00
GENERAL COSTS APPORTIONED	
135/155 X \$37,537.41	<u>32,693.87</u>
<b>TOTAL DIAMOND DRILLING COST</b>	<u><u>\$170,341.37</u></u>

## COST APPORTIONED TO CLAIMS

HOLE	FEET	CLAIM	COST	TOTAL
1	97	"83" 31	\$ 7,565.53	
1A	492	"83" 31	38,373.61	
2	76	"83" 31	<u>5,927.63</u>	\$ 51,866.77
3	302	Syndicate 24		23,554.53
4	352	"98" 22	\$ 27,454.29	
5	242	"98" 22	<u>18,874.82</u>	46,329.11
6	302	Syndicate 77		23,554.53
7	251	"98" 28		19,576.78
8	<u>70</u>	Syndicate 60		<u>5,459.65</u>
<b>TOTALS</b>	2,184			\$170,341.37

**PERSONNEL, CONTRACTORS and SUPPLIERS LIST**

**Mark management Ltd.**

Perry Grunenberg, 19407 62nd Ave., SS#1, Surrey, B.C.  
 15Oct-16Nov, 7-23Dec84  
 Larry Zecchel, 3660 Cameron, Vancouver, B.C.  
 15Oct-2Dec84  
 Steven Lau, 7220 Montana Rd., Richmond, B.C.  
 3Nov-5Dec84  
 Brian Butterworth, 5250 Ash, Vancouver, B.C.  
 7-22Dec84

**CONSULTANTS**

A.G. Troup, Archean Engineering Ltd., 3605 Creery,  
 W. Vancouver, B.C.  
 3-8Dec84

**CASUAL LABOUR**

Roland Berglund, General Delivery, Dawson City, Yukon

**CONTRACTORS**

Phil's Diamond Drilling Ltd., Comp. 239, 108 Ranch,  
 RR#1, 100 Mile House, B.C.  
 Arctic Diamond Drilling Ltd., 184 Industrial Rd.,  
 Whitehorse, Yukon  
 Gillespie Equipment Rentals Ltd., P.O. Box 99,  
 Dawson City, Yukon  
 Klondike Transport Ltd., P.O. Box 206, Dawson City, Yukon

**SUPPLIERS**

The ElDordo Hotel, Box 3238, Dawson City, Yukon  
 Repairs Unlimited, Bag 450, Dawson City, Yukon  
 Dawson City General Store, Box 540, Dawson City, Yukon  
 Yukon Taxi Service, 2157 2nd Ave., Whitehorse, Yukon  
 Airport Chalet, Mile 917 Alaska Hwy., Whitehorse, Yukon  
 Frontier Freight Lines Ltd., 105 Gold Rd., Whitehorse, Yukon  
 Arctic Inland Resources Ltd., Box 105, Dawson city, Yukon  
 Central Klondike Supply, Dawson City, Yukon  
 Vancouver Petrographics Ltd., 8887 Nash, Ft. Langley, B.C.  
 Norcan Rentals, Whitehorse, Yukon  
 E.G. Whalley & Son Ltd., 5791 Beresford, Burnaby, B.C.  
 Hastings Travel Ltd., 744 W. Hastings, Vancouver, B.C.

J&J Emporium, Dawson City, Yukon  
Midnite Sun Drilling, Whitehorse, Yukon  
Franz Paukner, Dawson City, Yukon  
Yellow Cab (Y.T.) Ltd., 106 Main, Whitehorse, Yukon  
Capital City Cabs, Whitehorse, Yukon  
Oriental Restaurant, Whitehorse, Yukon  
Klondike River Lodge Ltd., P.O. Box 69, Dawson City, Yukon  
Northern Metallic Sales, 4244 4th Ave., Whitehorse, Yukon  
The Monte Carlo Ltd., P.O. Box 316, Dawson City, Yukon  
White Pass Petroleum Services, P.O. Box 4070, Whitehorse, Yukon  
Bondar-Clegg & Company Ltd., 136 Industrial Rd.,  
Whitehorse, Yukon  
Chemex Labs Ltd., 212 Brooksbank Ave., N. Vancouver, B.C.  
Airways Truck Rental & Leasing, 2782 Granview, Vancouver, B.C.  
Ezekiel Explorations Ltd., 1500 - 675 W. Hastings,  
Vancouver, B.C.

CANADA )  
 ) In the matter of a geological, geochemical and trenching  
 ) report on the Logan 1-88 (inclusive) mineral claims on  
 ) behalf of Regional Resources Ltd.  
 TO WIT : )

I, Michael A. Stammers, agent for Regional Resources Ltd.

of 1980 - 1055 West Hastings Street, Vancouver, B.C. V6E 2E9

do solemnly declare, - that an exploration program was undertaken on the Logan mineral property during the period June 1 to June 30, 1984 and that the following expenses incurred performing this work and in the later preparation of the report.

<u>WAGES:</u>	Field: Geologist/Supervision	25d x \$120/d x 1.35* ....	\$ 4,050 <sup>P</sup>	
	Cook/Sampler	25d x \$ 88/d x 1.35 ....	2,970 <sup>P</sup>	
	Sampler	25d x \$ 68/d x 1.35 ....	2,295 <sup>P</sup>	
	Sampler	25d x \$ 68/d x 1.35 ....	2,295 <sup>P</sup>	
	Geologist	2d x \$120/d x 1.35 ....	324 <sup>T</sup>	
	Trencher/Sampler	1d x \$100/d x 1.35 ....	135 <sup>T</sup>	
	Office: Geologist/Report Prep	15d x \$150/d	2,250 <sup>P</sup>	\$ 14,319
<u>PROFESSIONAL SERVICES and MANAGEMENT FEES:</u>				20,900 <sup>P</sup>
<u>TRANSPORTATION:</u>	Charter Helicopter incl.fuel	18.7hr x \$475/hr	8,882 <sup>P</sup>	
	Charter Helicopter incl.fuel	5.0hr x \$475/hr	2,375 <sup>T</sup>	
	Trucking		237 <sup>P</sup>	
	Travel and Accommodations		1,005 <sup>P</sup>	
	Truck Rental		206 <sup>P</sup>	12,705
<u>ROOM AND BOARD</u>	Crew	25d x 4 men x \$30/d	3,000 <sup>P</sup>	
	Physical work	23 mandays x \$30/d	690 <sup>T</sup>	3,690
<u>GEOCHEMICAL ANALYSIS</u>	940 Pb,Zn,Ag,Cu,Sn,As @ \$12.70/soil sample			11,938
<u>ROCK ASSAYS:</u>	17 Various Element Rock Assays		500	
	2 Various Element Rock Assays		98 <sup>T</sup>	598
<u>CAMP SUPPLIES:</u>				2,428 <sup>P</sup>
<u>CONTRACT DRAFTING:</u>				5,650 <sup>P</sup>
<u>CONTRACT LINECUTTING:</u>	13.4 km @ \$300/km			4,018 <sup>T</sup>
<u>ORTHO PHOTO MAPPING:</u>				4,300 <sup>P</sup>
<u>EQUIPMENT RENTAL:</u>				2,200 <sup>P</sup>
<u>RADIO RENTAL:</u>				648 <sup>P</sup>
<u>PRINTING AND OFFICE SUPPLIES:</u>				1,229 <sup>P</sup>
<u>TELEPHONE/POSTAGE:</u>				443 <sup>P</sup>
<u>FREIGHT:</u>				857 <sup>P</sup>
<u>GAS/PROPANE:</u>				585 <sup>P</sup>
				<u>TOTAL: \$ 86,508</u>

\*Overtime and Benefits Factor.  
 PDenotes prorated expense  
 TTrenching and linecutting expenses

TOTAL DIRECT COST FOR LINECUTTING AND TRENCHING on	<u>LOGAN 1-36</u>	\$ 7,640
TOTAL COST FOR GEOCHEMICAL, GEOLOGICAL SURVEYS on	<u>LOGAN 1-88</u>	\$ 78,868
PRORATED COST FOR GEOCHEMICAL, GEOLOGICAL WORK on	<u>LOGAN 37-88</u>	\$ 58,229

And I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of The Canada Evidence Act.

Declared before me at Vancouver )  
 in the Province of B.C. this )  
 29 day of January 1984 )

*Michael Stammers*

~~As Commissioner for Yukon Territory~~  
 Territory of Notary Public for Yukon Territory.