

**DRILL CORE RELOGGING AND RESAMPLING REPORT  
ON THE  
CUNNINGHAM CREEK PROPERTY**

Black Martin 1-3, Donna, Louise, Jim, PG 1 & 2, Sidewinder 1-3 Claims  
Cariboo Mining Division  
93A/14W

For

Cathedral Gold Corporation  
420-355 Burrard Street  
Vancouver, B.C. V6C 2G8

Mark Tindall B.Sc., P.Geo.  
August, 2000

Tindall Geoservices Inc.  
4658 Clinton Street  
Burnaby, B.C. V5J 2K7  
GEOLOGICAL SURVEY BRANCH

26,327

## TABLE OF CONTENTS

	Page No.
SUMMARY AND RECOMMENDATIONS	1
1.0 LOCATION AND ACCESS	2
2.0 PROPERTY DESCRIPTION	2
3.0 PHYSIOGRAPHY	3
4.0 HISTORY	3
5.0 REGIONAL GEOLOGY	4
5.1 Wells Lode Gold Deposits	4
6.0 PROPERTY GEOLOGY	5
6.1 Mineralization	5
7.0 2000 EXPLORATION PROGRAM	6
8.0 CONCLUSIONS AND RECOMMENDATIONS	6
STATEMENT OF QUALIFICATIONS	
SELECTED REFERENCES	

### LIST OF APPENDICES

Appendix 1	Statement of Expenditures
Appendix 2	Drill Logs
Appendix 3	Analytical Results

## LIST OF FIGURES

Figure 1	Property Location Map	after page 2
Figure 2	Location and Access Map	after page 2
Figure 3	Claim Map	after page 2
Figure 4	Drillhole Location Map	after page 6

## SUMMARY AND RECOMMENDATIONS

A recent discovery of strong gold mineralization over wide intervals of altered wallrock (Bonanza Ledge) of the BC vein on the Cariboo Gold Quartz property in Wells, B.C. prompted Cathedral Gold Corporation to examine the potential for similar style mineralization at their nearby Cunningham Creek property. With this objective, it was decided to re-log drillcore from selected drillholes on the property and to sample intervals of alteration, quartz stockwork veining and/or sulphide mineralization from those drillholes.

Three drillholes from three separate mineralized targets on the Cunningham Creek property were selected based on drill log descriptions of strong alteration, multiple intervals of quartz veining and sulphide mineralization. All three drillholes were relogged. Two of the holes were completely sampled with the exclusion of those intervals sampled during the original drill program. Samples were collected only from intervals of quartz veining, alteration and sulphide mineralization in the third drillhole. A total of 49 core samples were collected and analyzed for 36 elements by ICP and for gold by fire assay with an AA finish.

The strongly gold mineralized intervals of altered wallrock surrounding the BC vein at the Cariboo Gold Quartz property display strong to intense sericite-ankerite alteration, moderate to strong quartz stockwork veining and silicification, variable quantities of fuschite (mariposite) and between 5% and 25% pyrite. Higher gold values are associated with the strongest alteration and with high sulphide content.

At Cunningham creek, all of the feldspathic rocks display moderate to strong sericite alteration caused by regional, greenschist facies, metamorphism. The hydrothermal alteration observed in drillcore from the Cunningham creek property consists of strong ankerite flooding and veining with zones of quartz stockwork veining and patchy silicification. Silicification is notably weaker than at the Bonanza Ledge, even in zones of multiple quartz stockwork veining. Mariposite was not observed in the Cunningham Creek drillcore and the total sulphide content of altered and veined rock rarely exceeds 1-2%.

None of the drillcore sampled from drillholes 84-4 or 84-20 were anomalous for base or precious metals. Short intervals from 84-22, in the hangingwall and footwall of a quartz-sulphide vein zone, were anomalous for gold, silver, lead and zinc. Review of the logs from other drillholes indicates that most of the zones of alteration, veining and sulphide mineralization were thoroughly sampled. It was concluded that Bonanza Ledge style gold mineralization is absent in areas of previous drilling at Cunningham Creek.

Many hundreds of drillholes have been completed on the Wells gold properties in the past. Those drillholes failed to identify Bonanza Ledge style gold mineralization. The recent discovery of the Bonanza Ledge was a fortuitous accident while drilling the BC vein.

The style of veining, alteration and mineralization on the Cunningham Creek property is very similar to that found in the Wells gold camp. It is possible that Bonanza Ledge style, high grade gold mineralization is also present on the Cunningham Creek property. It is recommended that all of the available exploration data from the property be re-evaluated for a Bonanza Ledge type target.

## **1.0 LOCATION AND ACCESS**

The Cunningham Creek property is located approximately 25 kilometres southeast of the town of Wells in south-central British Columbia (figure 1). Wells is located 80 kilometres east of Quesnel. Daily scheduled flights are available from Vancouver to Quesnel. The property is centred at 52°54' north latitude, 121° 21' west longitude on NTS map sheet 93A/14.

Access is by four-wheel drive vehicle from Wells (figure 2). A well maintained forestry road (line 3100) branches from the Wells-Barkerville highway at the Bowron Lakes turnoff, 1 kilometre west of Barkerville. A rough, secondary road, branches from the forestry road, 14 km from the highway, at the Yanks Peak - Keithly Creek turnoff. The right fork in the Yanks Peak road, 13.8 km from the forestry road, leads to the centre of the property. The turnoff to the camp is a further 2.4 km along the road. The road into camp is washed out approximately 350 metres above the camp and the Yanks Peak road is impassable to four wheeled vehicles south of the property boundary.

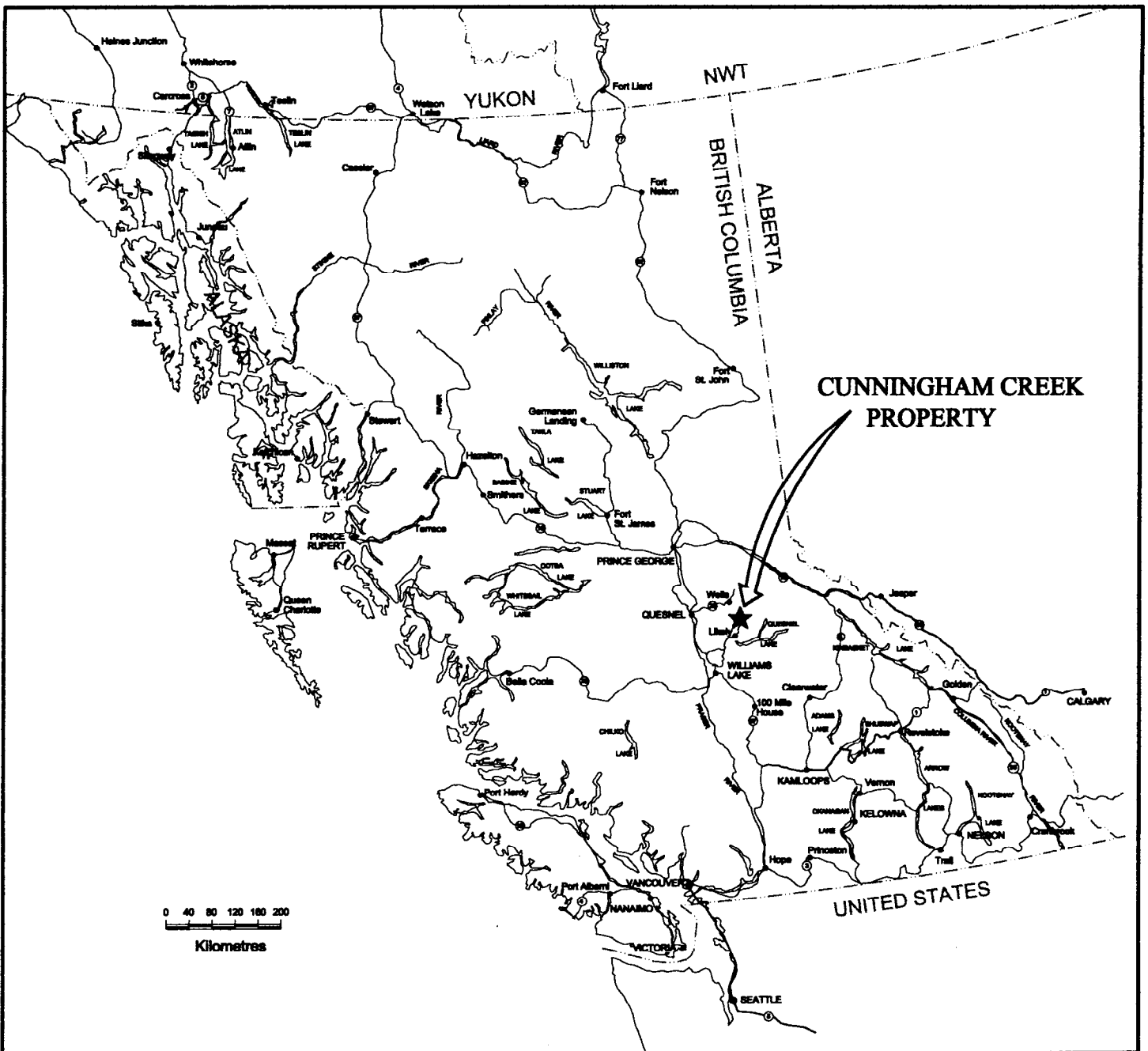
The camp is located at the junction of Pearce and Peter creeks and is comprised of two, relatively intact, wooden buildings and a third building which is derelict. Water is available in the creeks year round. All of the drill core from preceding drill programs is stored in camp. All of the 1986 drill core has been lost due to collapse of the core racks. The remainder of the core is relatively intact although some of the core boxes have been dumped and others are beginning to rot.

## **2.0 PROPERTY DESCRIPTION**

The Cunningham Creek property consists of five reverted crown grants and five modified grid system claims totalling 65 units and covering an area of approximately 825 hectares. A table of claims is shown below and a claim map is included as figure 3.

**Cunningham Creek Claims**

<b>Claim Name</b>	<b>Title No.</b>	<b>Units</b>	<b>Record Date</b>	<b>Expiry Date</b>
Black Martin 1 & 2	204177	1	8/14/1979	11/21/2000
Black Martin 3	204176	1	8/14/2000	11/21/2000
Louise	205247	20	8/19/1986	11/21/2000
Jim	203991	3	9/7/1976	11/21/2000
Donna	205276	12	9/18/1986	11/21/2000
PG 1	375260	16	4/9/2000	11/21/2000
PG 2	375259	9	4/10/2000	11/21/2000
Sidewinder 3	204755	1	7/11/1983	11/21/2004
Sidewinder 2	204754	1	7/11/1983	11/21/2004
Sidewinder 1	204753	1	7/11/1983	11/21/2004



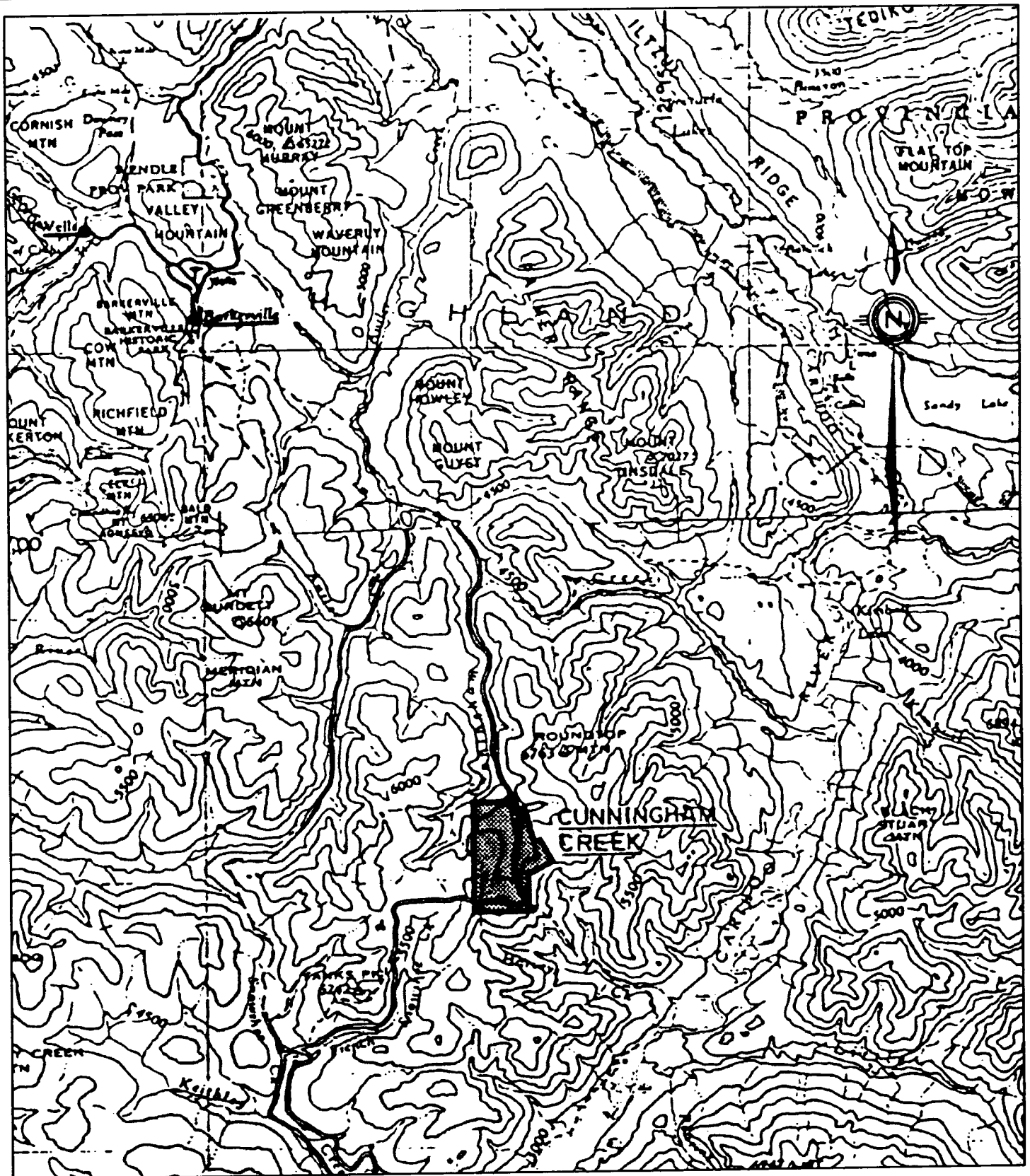
**CATHEDRAL GOLD CORPORATION  
CUNNINGHAM CREEK PROJECT**

**PROPERTY LOCATION MAP**

Drawing File:  
CC\_LCTN.DWG

Date:  
August, 2000

Figure:  
1



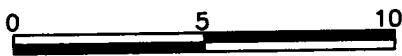
**CATHEDRAL GOLD CORPORATION**

**CUNNINGHAM CREEK**

CARIBOO MINING DIVISION, B.C.

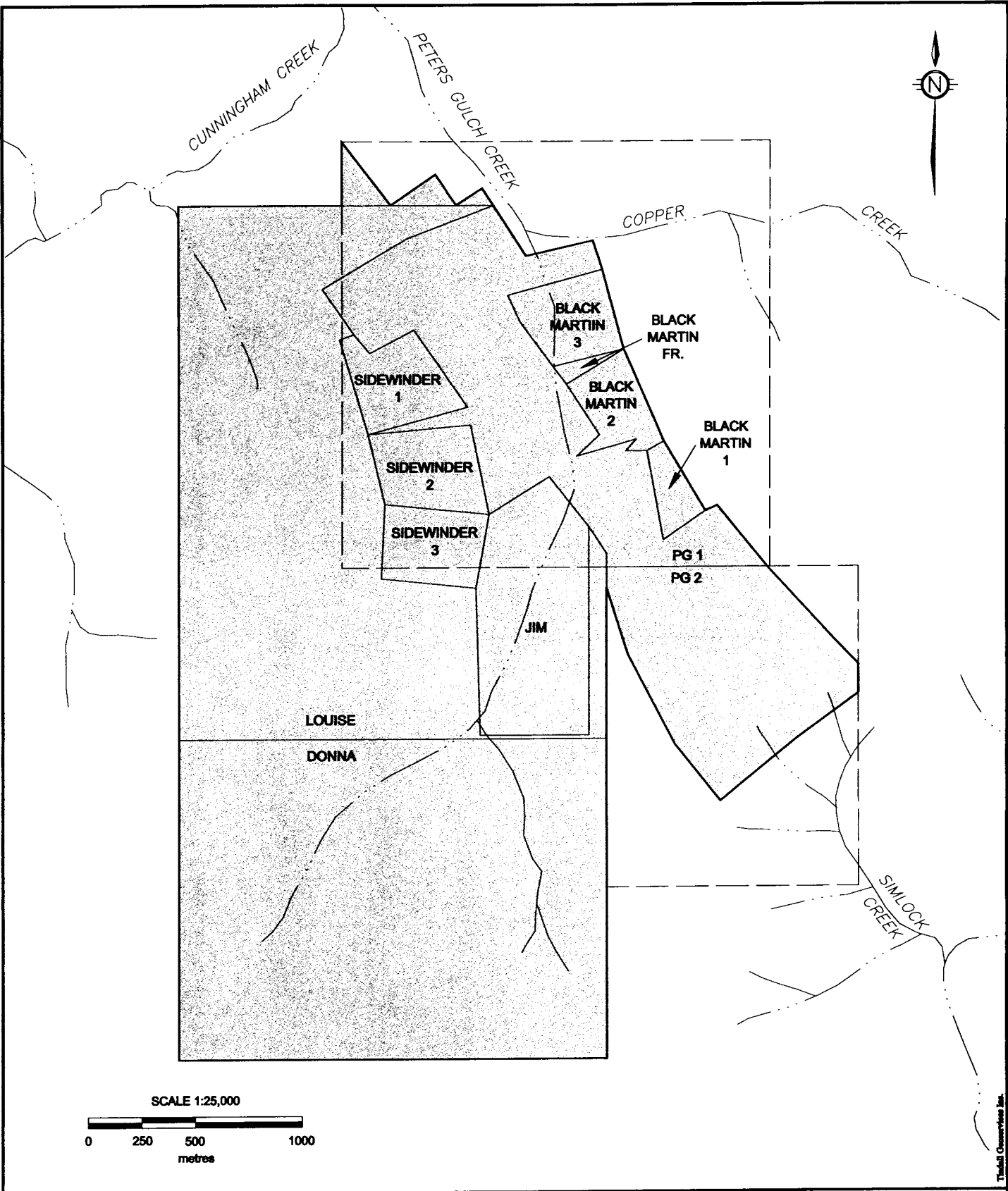
**LOCATION MAP**

SCALE 1:200,000 (APPROX.)



kilometres

FILE NAME CG1.DWG	MADE TMS	SCALE: approx 1:200,000	DATE: August, 2000	FIG 2
----------------------	-------------	----------------------------	-----------------------	----------



**CATHEDRAL GOLD CORPORATION**  
**CUNNINGHAM CREEK PROJECT**

**CLAIM MAP**

Drawing File:  
**CLAIM\_MAP.DWG**

Date:  
**August, 2000**

Figure:  
**3**



### **3.0 PHYSIOGRAPHY**

The claims lie on the Snowshoe plateau at an average elevation of 1,370 m above sea level. The terrain consists of moderate slopes which are covered in thick spruce forest at lower elevations and more open, alpine vegetation at the highest elevations. During the present program, logging was in progress in the Cunningham Creek valley, approximately 5 kilometres below the property.

The climate is typical for central British Columbia with mild, sometimes wet summers and cold winters. Snowfall can be heavy in the winter and accumulations on the property may exceed two metres. Most parts of the property are clear of snow by the middle of June.

Rock exposures on the property are limited and are generally confined to stream channels.

### **4.0 HISTORY**

The Cariboo region of central British Columbia has been the site of extensive gold exploration and exploitation since the early 1860's when placer gold was discovered near present day Barkerville. Placer gold has been recovered from many creeks in the area surrounding the Cunningham creek property. Cunningham Creek itself is the source of historical and recent placer gold production.

In the vicinity of the Cunningham Creek property, lode gold has been commercially mined from the Cariboo Gold Quartz and Island Mountain mines at Wells, and the QR mine near Likely. Gold is presently being recovered as a by-product of copper mining at the Mount Polley property southwest of Likely. Limited quantities of gold and silver were recovered from quartz-sulphide veins on the Cunningham Creek property when it was known as the Cariboo-Hudson mine.

A brief history of the Cunningham Creek property is summarized below.

- Gold bearing quartz veins were discovered on the property in the early 1920's.
- Between 1937 & 1939, 2440 m of underground workings were developed on 6 levels. and 11,927 tonnes of vein material was processed to produce 161,565 grams of gold and 77,929 grams of silver.
- 1940-1947 saw extensive surface stripping and diamond drilling.
- A scheelite occurrence discovered in 1942 was intermittently exploited until 1953 by surface stripping and 170 m of underground development.
- In the early 1970's, Resourcex Ltd. carried out detailed soil geochemical and geophysical surveys and limited diamond drilling over 6 target areas.
- Since 1978, Imperial Metals Corp. or Cathedral Gold Corp. have completed extensive soil and IP surveys, rehabilitation of the 200 level of the Cariboo-Hudson mine, 1395 m of trenching and 3973 m of diamond drilling in 54 drillholes.

Exploration outlined three significant quartz-sulphide vein systems (Shasta, 605, Cariboo-Hudson) and the Moneta, Sulphide and Gossan replacement style showings.

## **5.0 REGIONAL GEOLOGY**

Mapping by the GSC shows the geology of south-central British Columbia to be composed of four, fault bounded, terranes; from west to east they are Quesnelia, Slide Mountain, Barkerville and Cariboo.

The Wells-Barkerville gold camp and the Cunningham Creek property lie within the Downey Creek formation of the Snowshoe Group in the Barkerville Terrane. The Snowshoe Group is comprised of highly deformed metasedimentary rocks of undetermined age. The Downey Creek formation is composed of phyllites, slates, micaceous quartzites, limestone, marble and green meta-tuffs.

Regionally, the Snowshoe Group has been folded into the Lightning Creek anticline which plunges approximately 20° to the northwest. All of these rocks have been subjected to regional scale, greenschist facies metamorphism.

Within the Barkerville Terrane the most economically significant mineral deposits discovered to date are the placer and lode gold deposits of the Wells-Barkerville camp.

### **5.1 Wells Lode Gold Deposits**

Between 1933 and 1986, approximately 1.2 million ounces of gold were recovered from the Island Mountain, Arum and Cariboo Gold Quartz mines at the town of Wells. At the Island Mountain and Arum mines, Gold mineralization is hosted in quartz-pyrite veins and within pyrite replacement bodies. At the Cariboo Gold Quartz mine, the bulk of the gold ore was hosted in quartz-pyrite veins with only minimal amounts of production from replacement style ore bodies.

The quartz-pyrite veins are hosted by shear zones with three distinct structural trends; northwesterly, northeasterly and easterly. Gold mineralization within the veins averaged between 0.35 and 0.39 oz/t and was recovered from short strike length ore shoots within the veins.

The replacement ore bodies consist of narrow, rod shaped zones of semi-massive to massive pyrite in a matrix of calcite and ankerite with minor blue silica. Replacement mineralization is concentrated along the contact of the Baker and Rainbow members of the Main Band limestone on Island Mountain. The replacement ore shoots plunge parallel to the local lineation at 20°-22° to the northwest. Gold grades from replacement ore averaged 0.63 oz/t over the life of the mines.

In the spring of 2000, International Wayside Gold Mines Ltd. intersected strong gold values over wide intervals of drillcore in the footwall of the unmined, B.C. vein on the Cariboo Gold Quartz property.

ddh BC2K-10 0.719 oz/t over 84.7 ft  
ddh BC2K-12 0.606 oz/t over 57.7 ft

They have named this new zone the Bonanza Ledge.

The Bonanza Ledge gold mineralization is hosted in a zone of pervasive sericite alteration which contains quartz-ankerite-pyrite stringers. The following description of the Bonanza Ledge mineralization is excerpted from a report by Panterra Geoservices Inc. (Appendix 4).

The abundance of stringers is highly variable and range from 0-50% of the overall rock volume. The stringers are often folded and highly contorted. The pyrite content is also highly variable. In lower grade zones (< 10 g/t Au ) pyrite occurs as stringers, while in the high grade zones semi-massive pyrite intervals are developed.

## **6.0 PROPERTY GEOLOGY**

Detailed descriptions of the geology of the Cunningham Creek property are available in earlier exploration reports. The claim area is underlain by a northwest trending belt of quartzites, sericitic quartzites, sericitic schists, limestones and chloritic schists of the Snowshoe group. The rock units are often intercalated and contacts may be gradational. Ankerite veining and flooding, accompanied by minor amounts of disseminated pyrite, is often associated with the quartzites and micaceous schists.

The rock units which cross the property strike approximately 320° and dip between 70° and 80° to the northeast. Deformation has resulted in development of a strong foliation, crenulations, and small amplitude isoclinal folding. Foliation is generally at a low angle to the bedding.

### **6.1 Mineralization**

To date, Several types of mineralization have been discovered on the property. The most heavily explored are auriferous, quartz-ankerite-sulphide veins. The veins range from a few centimetres to a few metres in width and from a few metres to several hundred metres in length. The veins display three predominant strike directions; northerly, northeasterly and easterly. The north trending veins are the most prospective for gold mineralization. They occupy faults or shears which strike northerly and dip steeply to the east. The veins pinch and swell and commonly branch. The Shasta, Hudson and 605 veins are the strongest vein systems recognized to date.

The quartz veins are comprised of a gangue of quartz with variable amounts of ankerite. The sulphide content of the veins is variable. Pyrite, and less commonly, sphalerite, galena and chalcopyrite occur as irregular masses, bands and disseminations within the veins. Gold-silver mineralization is associated with the sulphides and gold content generally increases with increasing sulphide content. Gold and sulphide mineralization is concentrated in shoots within the veins which plunge steeply and appear to be controlled by the intersection of structures.

"Replacement" style mineralization was recognized on the property in 1983. The Sulphide and IP showings on the property are found within limestone and argillites north of the junction of Pearce and Peter creeks. They are characterized by small pods and irregular masses of pyrrhotite, pyrite and galena. High but erratic gold values accompany the sulphides. Massive iron oxide float was discovered

in 1986 in a narrow valley west of the Shasta vein. Surface samples returned erratic but highly anomalous gold values. Drilling intersected semi-massive pyrite and pyrrhotite with disappointing gold values.

Tungsten mineralization is found on the property near the intersection of Pearce and Peter creeks. The tungsten occurs as scheelite in quartz veins.

## **7.0 2000 EXPLORATION PROGRAM**

The styles of mineralization on the Cunningham Creek property are similar to those historically mined in the Wells gold deposits. Following the discovery of the Bonanza Ledge it was decided to re-evaluate the Cunningham Creek property for the potential to host Bonanza Ledge style mineralization. With this purpose, three drillholes were selected to be relogged and resampled. Drillhole selection was based on descriptions in the original drill logs of quartz-ankerite stockwork veining, pyrite mineralization and strong sericite alteration. Drillholes 84-4, 84-20 and 84-22 were chosen and represent a sampling of mineralization from the Shasta and 605 veins and the IP replacement zone respectively. A drillhole location map is shown in figure 4.

A two man crew was engaged on the program of relogging and resampling during the period of August 3 to August 7, 2000.

All three of the selected drillholes were relogged. The interval from 116.5 - 157 feet in ddh 84-4 which was missing. Drillholes 84-20 and 84-22 were completely resampled with the exception of those intervals sampled in 1984. Only intervals of sulphide mineralization, strong alteration or quartz-ankerite veining were sampled in ddh 84-4. The drillholes were logged in feet for ease of comparison between the old and new logs. The 1984 and 2000 drill logs are presented in appendix 2.

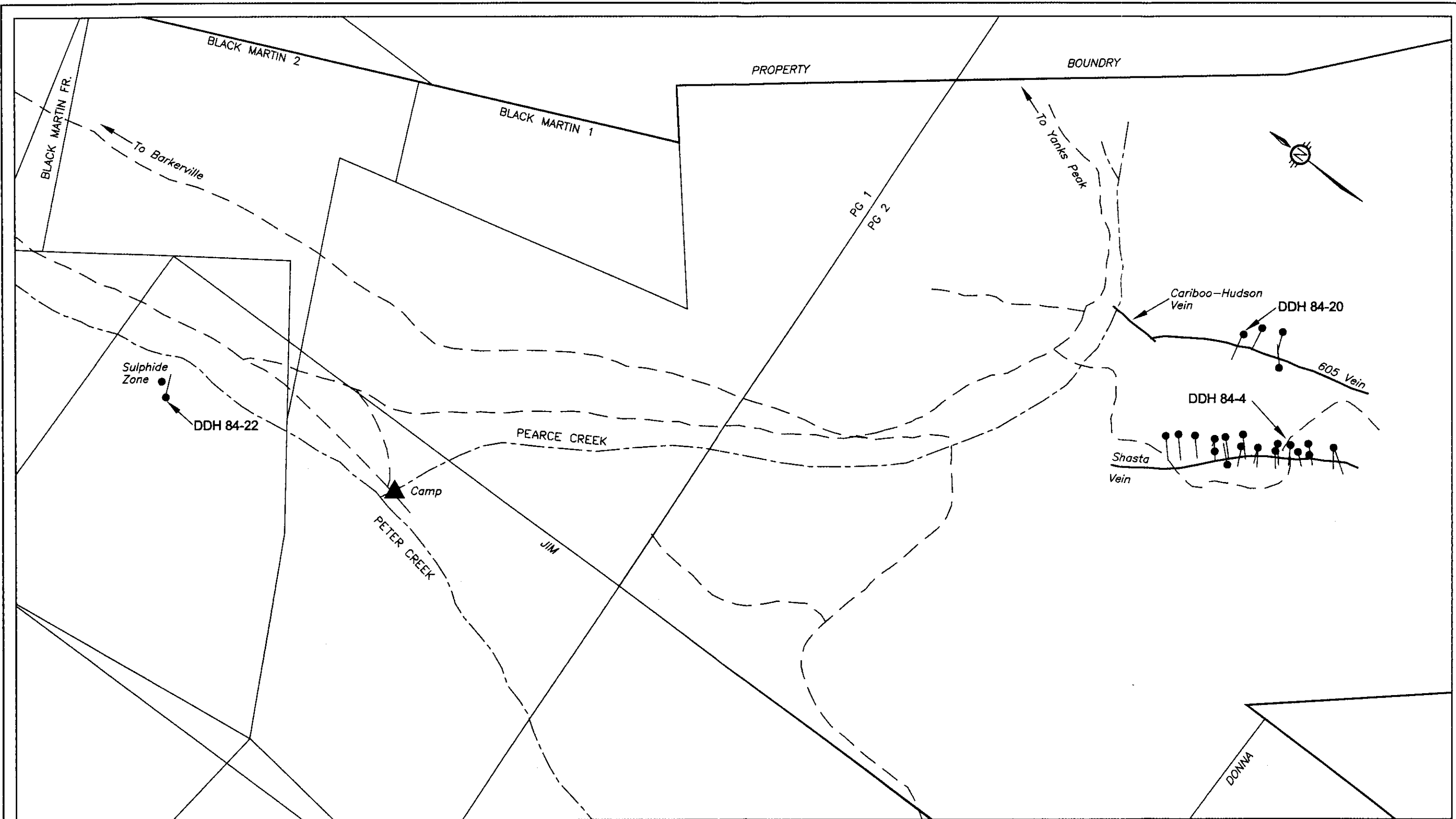
Those intervals selected for sampling were split with a core splitter and one-half was bagged for assaying. The split but unsampled half of the core was returned to the core boxes and the boxes re-stored in the core stacks on the property. A total of 49 samples of drill core were collected. Total expenditures were approximately \$8,250 (Appendix 1).

Drillcore samples were submitted to Bondar-Clegg in Vancouver for analysis of 36 elements by ICP and for gold by fire assay with an atomic absorption finish. Analytical results are included in this report as appendix 3.

## **8.0 CONCLUSIONS AND RECOMMENDATIONS**

None of the core sampled from drillholes 84-4 and 84-20 was anomalous in gold, silver or base metals.

In drillhole 84-22, a one foot wide quartz-ankerite vein, from 100.0 - 101.0 feet downhole, assayed 1544 ppb (1.544 g/t) gold but was not anomalous in silver or base metals. The interval from 103.4-



SCALE 1:5000 (APPROX.)



**CATHEDRAL GOLD COPORATAION  
CUNNINGHAM CREEK PROPERTY  
DRILLHOLE LOCATION MAP**

SCALE 1:5000	DATE August, 2000	FILE NAME DDHFIG4.DWG
MADE BY Tindall Geoservices Inc.	REVISED	FIG 4

110.5 feet returned strongly anomalous values for silver (6.2 ppm), lead (3557 ppm) and zinc (4567 ppm) but not for gold. From 123.0 to 128.2 feet, the analytical results were anomalous for gold (317 ppb) and silver (6.8 ppm) but not for base metals. The anomalous intercepts are in the hangingwall and footwall of a quartz-ankerite-sulphide vein zone from 110.5 to 123.0 feet which, when assayed in 1984, was strongly anomalous in gold silver, lead and zinc. The highest gold assay from this vein zone was 1.91 oz/t from 111.5-113.0 feet. The remainder of drillcore sampled from drillhole 84-22 was not anomalous in base or precious metals.

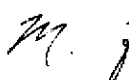
The 2000 program of resampling of old drillcore on the Cunningham Creek property failed to find indications of Bonanza Ledge style mineralization. The hydrothermal alteration observed in the drillcore consists of strong ankerite flooding with relatively narrow zones of quartz stockwork veining. Silicification of wallrock was generally weak and patchy, even in zones of quartz veining. The total sulphide content of altered rocks rarely exceeded 1-2% by volume. Mariposite is mentioned in the original drill logs, however, this was a misidentification of light green talc. Mariposite was not observed in the three drillholes which were relogged.

Review of all of the 1984 and 1986 drill logs indicate that, wide zones of strong alteration, stockwork veining and sulphide mineralization were generally thoroughly sampled. Gold values from those samples were almost always below anomalous levels. It is concluded that Bonanza Ledge style gold mineralization is absent in areas of previous drilling on the Cunningham Creek property.

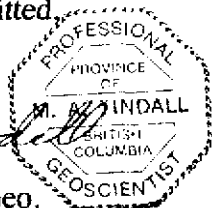
Many hundreds of drillholes have been completed on the Island Mountain and Cariboo Gold Quartz properties during their history. None of those drillholes identified Bonanza Ledge style mineralization. The recent discovery of the Bonanza Ledge on the Cariboo Gold Quartz property was a fortuitous accident while drilling the BC vein. Since its discovery, additional drilling has indicated that the Bonanza Ledge mineralization is extremely variable in width and possibly discontinuous along the dip. Although the Bonanza Ledge, where drilled, is in the footwall of the BC vein, it appears that it may be oblique to the structure hosting the BC vein and may possibly be unrelated. Substantial additional drilling will be required to evaluate the nature and extent of this new type of gold mineralization.

The style of veining, alteration and mineralization on the Cunningham Creek property is very similar to that found in the Wells gold camp. It is entirely possible that high grade gold mineralization similar to the Bonanza Ledge is present on the Cunningham Creek property. It is recommended that all of the available data, including trenching and soil geochemical and geophysical surveying, be re-evaluated for a Bonanza Ledge style target.

Respectfully submitted,



Mark Tindall P.Geo.



## STATEMENT OF QUALIFICATIONS

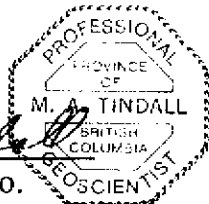
I, Mark A. Tindall, of 4658 Clinton Street, Burnaby, B.C. V5J 2K7 state that:

- 1) I am a 1981 graduate of Queen's University, Kingston Ontario with an Honours B.Sc. degree in Geology.
- 2) I am a Fellow of the Geological Association of Canada.
- 3) I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists in the Province of British Columbia.
- 4) I have been employed in mineral exploration prior to graduation and have practised my profession, continuously, since 1981.
- 5) I am a consulting geologist employed by Tindall Geoservices Inc. and am vice president of Tindall Geoservices Inc.
- 6) I am the author of this report which is based on private and public reports plus on-site investigations.
- 7) I have no interest, direct or indirect, in the property discussed in this report or in the securities of Cathedral Gold Corporation.
- 8) I am the owner of 146 shares of Imperial Metals Corporation, which in turn is a major shareholder in the securities of Cathedral Gold Corporation.
- 9) This report may be used for the development of the property, provided that no portion of it is used out of context or in such manner as to convey meanings different from that set out in the whole.

signed and sealed at Burnaby, British Columbia this 29<sup>th</sup> day of

August, 2000

Mark Tindall  
Mark Tindall P. Geo.



## SELECTED REFERENCES

DeLancey, P., 1987; Summary Report of the Cunningham Creek Gold Property; in-house report for Imperial Metals Corporation

Hawkins, T.G., 1987; Report on the Cunningham Creek Property; in-house report for Cathedral Gold Corporation

Quinn, S., 1984; Drilling Report on Cunningham Creek Claims; in-house report for Imperial Metals Corporation

Rhys, D.A. & Ross K.V., 2000; Report on Petrography, Check Sampling and Geological Interpretation of Drill core at the Bonanza Ledge Zone, Cariboo Gold Quartz Property, British Columbia; in-house report for International Wayside Gold Mines Ltd.; Appendix 4 of this report

Struick, L.C., 1981; Bedrock Geology Cariboo Lake, Spectacle Lakes, Swift River and Wells Map Areas, Cariboo District, British Columbia; GSC OF858



**APPENDIX 1**  
**STATEMENT OF EXPENDITURES**

## STATEMENT OF EXPENDITURES

Personnel			
Mark Tindall - geologist	August 1-8, 21-27	8.75 days @ \$425	\$ 3,719
Richard Ney - core splitter	August 3-8	5.5 days @ \$200	1,100
Vehicle Rental & Operation	August 2-8		762
Accommodations - 2 men	August 3-7		555
Meals - 2 men	August 3-7		332
Equipment Purchase & Rental			145
Assays & Sample Prep.		49 samples @ \$24.80	1,215
Drafting, Reproduction			<u>421</u>
<b>Total Expenditures</b>			<b>\$8,249</b>

**APPENDIX 2**

**DRILL LOGS**

TINDALL GEOSERVICES INC.		PROPERTY: <i>Cunningham Creek</i>	PAGE <i>1</i> OF <i>5</i>	HOLE NO: <i>84-4</i>
PROJECT: <i>Relog &amp; Resample</i>		LOGGED BY: <i>M. Tindall</i>	DATE: <i>Aug 6/00</i>	DEPTH: <i>157'</i>
LOCATION: <i>South Grid</i>		SURVEYED BY:	DATE:	CORE SIZE: <i>NQ</i>
CONTRACTOR:		DATE COLLARED: <i>23/7/84</i>	DATE COMPLETED: <i>24/7/84</i>	

COORDINATES:		HOLE SURVEY						EQUIPMENT TYPES USED	
NORTHING:	<i>1425</i>	DEPTH	<i>0</i>						
EASTING:	<i>3103 E</i>	INCLINATION	<i>-60°</i>						
ELEVATION:	<i>1729m</i>	AZIMUTH	<i>225°</i>						
METHOD:		INSTRUMENT							

**HOLE SUMMARY / COMMENTS**

*- Hole was originally drilled to test the Shesta Vein*

*- Select intervals with alteration and quartz veining were chosen for additional sampling*

*Samples 27143 - 27149*

*Core boxes 798 were missing*

*Box 9, the final box of the hole, is on site*

FOOTAGE		LOG	ROCK TYPE	ALTERATION, MINERALIZATION AND STRUCTURE	% SULPH	SAMPLE No.	ASSAYS						
FROM	TO						FROM	TO	LENGTH	Au PP6	Ag PPM	Cu PPM	Zn PPM
0	9'		Overburden										
9	116.5		Siltstone + waterlain Tuff	9-31 core broken highly weathered strongly linearly									
			fine-med grained lt green, mdtly chloritized probably volcanic- clastic tuff andesitic in composition	possible fault with partings @ 65° to C.A. minor narrow 8x2 veinlets  Below 31 core is lt green mdtly chloritized w weak - mdt ankerite banding along weak - mdt foliation (@ 60° to L.A.)									
				34.6-38.2 ~ 6-7% quartz 2-3x2 8x2 as 3 narrow veinlets to relief py adjacent to veinlets		27143	34.6	38.2	3.6	<5	0.2	37	107
				38.2-41.2 ~ 20% quartz narrow veinlets + 10% patches ~ 10% ankerite along foliation & in veins tr - 1% py & sphalerite in veinlets		27144	38.2	41.2	3.0	<5	<2	38	75











FOOTAGE FROM	TO	LOG	ROCK TYPE	ALTERATION, MINERALIZATION AND STRUCTURE	% SULPH	SAMPLE No.	ASSAYS						
							FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Zn ppm
0	1		Overburden	1-12' ~ 55% core recovery									
1	161		Siltstone?	1-23.5 core serpyly black to tan-to green w strong massive to finely bedded, fine-med grained tan to lt green sandy siltstone/wacate		27118	1	12	11	10	4.2	2	31
				14.3-19.8 Qtz vein w 5% ankerite no visible sculpides		27119	12	14.8	2.8	22	4.2	22	51
				14.8-19.8 minor 3.5 cm Qtz veinlets and small patches		27120	14.8	19.8	5.0	<5	0.2	3	38
				19.8-23.7 3-4% Qtz as narrow veinlets		27121	19.8	23.9	4.1	<5	4.2	5	41
				23.5-25.0 gradual decrease in intensity of alteration									
				Below 25.0 weak med ankerite along foliation and as irregular patches weak serpyite-talc with.									
				23.9-27.0 ~ 5% ankerite		27122	23.9	27.0	3.1	6	4.2	14	90
				27.0-31.3 7-8% Qtz as + 1 cm-10 cm Qtz ankerite veinlets, no sculpides noted		27123	27.0	31.3	4.3	59	4.2	41	49

FOOTAGE FROM TO	LOG	ROCK TYPE	ALTERATION, MINERALIZATION AND STRUCTURE	%	SAMPLE No.	ASSAYS						
						FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Zn ppm
			31.3-35.0 7-8% Qtz as 6 1cm - 5cm Qtz ankerite veinlets no sulphides noted		27124	31.3	35.0	3.7	70	4.2	<1	3
			35.0-39.9 ~ 5-7% ankerite along mt foliation @ 70° E C.A. minor narrow Qtz veins		27125	35.0	39.9	4.9	6	4.2	27	49
			39.9-46.0 ~ 15% Qtz as 1-8 cm Qtz - ankerite veins and large patches < 1% diss. to Sphalerite? in veinlet.		27126	39.9	46.0	6.1	23	4.2	13	45
			46-51' previously sampled									
			51-58.3 1-3 cm Qtz vein 5-7% ankerite along foliation		27127	51.0	58.3	7.3	45	4.2	35	73
			58.3-66.0 ~ 5% Qtz as 2 irregular veinlets small patches of sulfidation 5-7% ankerite along foliation and in veinlets no sulphides noted		27128	58.3	66.0	7.7	45	4.2	24	57



FOOTAGE		LOG	ROCK TYPE	ALTERATION, MINERALIZATION AND STRUCTURE	%	SAMPLE No.	ASSAYS						
FROM	TO						FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Zn ppm
				102.5 - 110.0 WKly - mdly alkalitized, mdly - strongly sericitized.		27135	102.5	111.7	9.2	<5	4.2	41	82
				minor sparse patches of silicification		27136	111.7	118.0	6.3	<5	4.2	9	74
				118.0 - 123.0 previously sampled									
				123.0 - 128.9 Strongly sericitized 10% gr 2 as veinlets and irreg patches <5% alkoxide no sulphides noted		27137	123.0	128.9	5.9	<5	4.2	17	54
				128.9 - 135.3 minor gr 2 as narrow veinlets <3% alkoxide strongly sericitized		27138	128.9	135.3	6.4	<5	4.2	23	79
				135.3 - 139.3 10% gr 2 as 4 3cm - 20cm gr 2 alkoxide veinlets no sulphides noted		27139	135.3	139.3	4.0	<5	4.2	17	59
				139.3 - 142.0 strongly sericitized <2% alkoxide no gr 2 no sulphides		27140	139.3	142.0	2.7	<5	4.2	13	56
				142.0 - 146.0 20% gr 2 10% alkoxide as multiple narrow veinlets to py		27141	142.0	146.0	4.0	<5	4.2	12	56









FOOTAGE FROM TO	LOG	ROCK TYPE	ALTERATION, MINERALIZATION AND STRUCTURE	% SULPH	SAMPLE No.	ASSAYS						
						FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Zn ppm
61.5	76.0	Sandy waste bleached, to grey - green, med grained w/ky foliated w variable quartzizing ankerite bands w/ky siltd w minor gcs veins	61.5-68.7 trace diss py ~ 10% ankerite		27103	61.5	68.7	7.2	<5	<.2	23	74
			68.7-76.0 15-20% ankerite, 1-2% 1mm diss py cubes	1-2	27104	68.7	76.0	7.3	<5	<.2	23	50
76.0	106.5	Siltstone/ Sericite schist blk to dk silvery- grey v. p g	Moderately to strongly foliated strongly foliated is schistose w 75% sericite; fol. @ 20% to c.a.									
			76.0-82.5 7-8% ankerite along foliation < 1% diss py 45 cubes	<1	27105	76.0	82.5	6.5	<5	<.2	50	47
			82.5-86.0 prev sampled									
			86.0-86.9 same as 76.0-82.5	<1	27106	86.0	86.9	0.9	8	<.2	39	19
86.9	88.1	Quartz Ankerite Un	86.9-88.1 40% ankerite 1-2% coarse py blebs	1-3	27107	86.9	88.1	1.2	43	<.2	30	33
			88.1-93.8 strongly foliated @ 50% to c.a w ~ 7-8% gcs Unlit 5-7% ankerite along foliation < 1% diss py.	<1	27108	88.1	93.8	5.7	6	<.2	52	42

FOOTAGE		LOG	ROCK TYPE	ALTERATION, MINERALIZATION AND STRUCTURE	%	SAMPLE No.	ASSAYS							
FROM	TO						FROM	TO	LENGTH	Au ppb	Ag ppm	Cd ppm	Zn ppm	
				93.8 - 100.0 Strongly foliated Siltstone & minor Qtz veining 2-3% ankerite & clay foliate L170 diss py	<1	27109	93.8	100.0	6.2	17	0.3	45	47	P6 PP3
100.0	101.0		Qtz-Ankerite Vein	100.0 - 101.0 ~ 10% ankerite no sulphides noted		27110	100.0	101.0	1.0	1544	4.2	97	26	
106.5	151.0		Sandy Wacke	101.0 - 103.4 Strongly foliated Siltstone w ~ 20% fine ankerite bands @ 103.4 core abruptly becomes mdly - strongly ankeritized w large irregular sections of strong ankerite replacement		27111	101.0	103.4	2.4	45	0.2	22	32	
			It grey-green med grained w/ky- mdly foliated; mdly sulcitized mdly - intensely ankeritized											
				103.4 - 110.5 med - strong Qtz veining & irregular masses ~ 15% Qtz + 15% ankerite L190 diss py	<1%	27112	103.4	110.5	7.1	21	6.1	21	3557	45E
				110.5 - 123.0 previously sampled										
				123.0 - 128.2 Intensely ankeritized w fine laminae & large irreg. patches 60-70% ankerite 5-7% Qtz as narrow veins & irreg. patches, 1-5% py as dissmas & large irreg clots	1.5	27113	123.0	128.2	5.2	317	6.8	70	92	



# DRILL RECORD

# IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	1	OF	3
HOLE NO.	84-4	LAT.	3+02E, 1+42S	TRUE BRG	225°	LOGGED BY	S.P. Quin		
COMMENCED	23/7/84	DEP.		SURVEY AT	157' - 72°	DATE	25/7/84		
COMPLETED	24/7/84	ELEV.	+1729m	% RECOVERY		CORE STORED	Camp		
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	157'	UNUSUAL FEAT.			

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb									
								Cu	Pb	Zn	Ag	As	Au				
0	9'		Casing. No core.														
9	32	S	Coarse, poorly sorted, dirty sandstone mostly heavily weathered and iron stained to 30'. 30-32' fairly pale grey sandstone with 10-15% lmm quartz fragments.  20-27' core broken and possible fault @ 23'.														
32'	102'	M	Mudstone, sericitic with alternating bands of mudstone and coarser poorly sorted sericitic sandstone. Locally heavily silicified. 1-2% disseminated pyrite especially associated with sericitic mudstone bands.  Heavily silicification 55' - 56', 65' - 68'6", 73' - 74', 75'6" - 76'.	A38	74'	77'	3'	19	43	68	.1	24	5				
				A39	87'	90'	3'	38	23	60	.1	28	5				
102'	122'	S	Dirty sericitic sandstone with 20-30% lmm blue-grey quartz grains in fine sandy-matin with sericitic partings.  2-3% pyrite blebs, fine grained disseminated throughout but with local bands of less than lmm thick pyrite often along minor sericitic partings. Also 1-2' bands of mudstone with	A43	119	122'	3'	22	4	38	.1	65	100				













# DRILL RECORD

# IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-50°	PAGE	2	OF	3
HOLE NO.	84-22	LAT.	11+00W 0+96N	TRUE BRG	065	LOGGED BY	S.P. Quin		
COMMENCED	2/8/84	DEP.		SURVEY AT		DATE	3/8/84		
COMPLETED	2/8/84	ELEV.	+1505m	% RECOVERY		CORE STORED	Camp		
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.O.	LENGTH	151'	UNUSUAL FEAT.			

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/					
								Cu	Pb	Zn	Ag	As	Au
			84'-85' quartz vein minor calcite and 2-3% pyrite throughout.	C4	82'6"	84'	1'6"	.01	.01	.01	.01	.01	.00
				C5	84'	85'	1'	.01	.01	.01	.03	.01	.00
				C6	85'	86'	1'	.01	.01	.01	.03	.01	.00
			87'-88'2" quartz calcite vein with 1-2% pyrite mostly @ contact with mudstone 50% each calcite and quartz.										
			90'-90'6" calcite - quartz vein with about 75% calcite.										
			90'6"-95' chlorite schist banded with 30-40% siltstone stringers appear to be bandinaged along foliation into lenses bands up to 1cm.										
			97'-101' quartz veining about 50% of rock.										
			102'-105' lighter grey mudstone with 30-40% dark chloritic bands.										
			105' quartz calcite vein approx. 2cm wide with galena along contact with mudstone.										
106'6"		L	Wormy limestone with minor chloritic mudstone band @ 111'-112' with 4-5% pyrite-coarse and euhedral.	C7	110'6"	111'6"	1'	.01	.01	.01	.01	.01	.01
				C8	111'6"	113'	1'6"	.01	1.25	1.24	2.14	0.51	1.9
					34.0	34.4							



**APPENDIX 3**  
**ANALYTICAL RESULTS**

TITLE 14-08-00 13:17:14 V00-01543.0 M. TINDALL 09/08/00

CLIENT CATHEDRAL GOLD CORPORATION

PROJECT CUNNINGHAM CRK #SAMPLES: 49

SPECIAL VALUES

IS Insufficient Sample

-9 No Value Recorded

Values above the upper limit are shown as +uplimt

Values below the lower limit are shown as -lolmt (ie not detected)

DETERMINATIONS

ELNAME METHO ECO UNI #SAM LOLMT UPLMT COMMENTS

01 Au30	FA-30	EH3	PPB	49	5	10000	Results Reported				
02 Ag	ICP	EA1	PPM	49	0.2	200.0	Results Reported				
03 Cu	ICP	EA1	PPM	49	1	10000	Results Reported				
04 Pb	ICP	EA1	PPM	49	2	10000	Results Reported				
05 Zn	ICP	EA1	PPM	49	1	10000	Results Reported				
06 Mo	ICP	EA1	PPM	49	1	10000	Results Reported				
07 Ni	ICP	EA1	PPM	49	1	20000	Results Reported				
08 Co	ICP	EA1	PPM	49	1	20000	Results Reported				
09 Cd	ICP	EA1	PPM	49	0.2	2000.0	Results Reported				
10 Bi	ICP	EA1	PPM	49	5	2000	Results Reported				
11 As	ICP	EA1	PPM	49	5	10000	Results Reported				
12 Sb	ICP	EA1	PPM	49	5	2000	Results Reported				
13 Hg	CV AA	EA1	PPM	49	0.010	50.000	Results Reported				
14 Fe	ICP	EA1	PCT	49	0.01	10.00	Results Reported				
15 Mn	ICP	EA1	PPM	49	1	20000	Results Reported				
16 Te	ICP	EA1	PPM	49	10	2000	Results Reported				
17 Ba	ICP	EA1	PPM	49	1	2000	Results Reported				
18 Cr	ICP	EA1	PPM	49	1	20000	Results Reported				
19 V	ICP	EA1	PPM	49	1	20000	Results Reported				
20 Sn	ICP	EA1	PPM	49	20	2000	Results Reported				
21 W	ICP	EA1	PPM	49	20	2000	Results Reported				
22 La	ICP	EA1	PPM	49	1	2000	Results Reported				
23 Al	ICP	EA1	PCT	49	0.01	10.00	Results Reported				
24 Mg	ICP	EA1	PCT	49	0.01	10.00	Results Reported				
25 Ca	ICP	EA1	PCT	49	0.01	10.00	Results Reported				
26 Na	ICP	EA1	PCT	49	0.01	10.00	Results Reported				
27 K	ICP	EA1	PCT	49	0.01	10.00	Results Reported				
28 Sr	ICP	EA1	PPM	49	1	2000	Results Reported				
29 Y	ICP	EA1	PPM	49	1	2000	Results Reported				
30 Ga	ICP	EA1	PPM	49	2	10000	Results Reported				
31 Li	ICP	EA1	PPM	49	1	20000	Results Reported				
32 Nb	ICP	EA1	PPM	49	1	10000	Results Reported				
33 Sc	ICP	EA1	PPM	49	5	2000	Results Reported				
34 Ta	ICP	EA1	PPM	49	10	1000	Results Reported				
35 Ti	ICP	EA1	PCT	49	0.010	5.000	Results Reported				
36 Zr	ICP	EA1	PPM	49	1	5000	Results Reported				

Sample ID	Au30 ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Mo ppm	Ni ppm	Co ppm	Cd ppm	Bi ppm
27101	-5	-0.2	36	10	62	2	37	17	0.5	-5
27102	-5	0.2	67	12	84	7	52	20	0.6	-5
27103	-5	-0.2	23	4	74	2	40	13	0.3	-5
27104	-5	-0.2	23	7	50	2	40	12	0.2	-5
27105	-5	-0.2	50	9	47	7	43	16	0.3	-5
27106	8	-0.2	39	4	19	7	39	10	0.2	-5
27107	43	-0.2	30	77	33	-1	5	7	0.3	-5
27108	6	-0.2	52	22	42	6	47	16	0.3	-5
27109	7	0.3	45	19	47	8	45	18	0.3	-5
27110	1544	-0.2	9	3	26	10	19	4	-0.2	-5
27111	-5	0.2	22	2	32	2	32	14	0.3	-5
27112	21	6.1	21	4567	3557	-1	12	15	37.8	-5
27113	317	0.8	70	114	92	2	15	33	0.9	-5
27114	39	0.3	97	92	202	-1	14	28	2.1	-5
27115	50	0.3	37	14	48	-1	13	21	0.4	-5
27116	31	0.3	-1	3	49	2	19	30	0.2	-5
27117	19	0.5	32	27	43	-1	15	19	0.3	-5
27118	10	-0.2	2	8	31	3	14	5	0.2	-5
27119	22	-0.2	22	8	51	-1	31	12	-0.2	-5
27120	-5	0.2	3	14	38	2	21	8	-0.2	-5
27121	-5	-0.2	5	7	41	2	21	7	0.4	-5
27122	6	-0.2	14	6	90	-1	50	16	0.6	-5
27123	59	-0.2	-1	4	49	-1	30	10	0.3	-5
27124	70	-0.2	-1	3	34	3	22	7	-0.2	-5
27125	6	-0.2	27	3	49	1	44	14	0.2	-5
27126	23	-0.2	13	8	45	-1	46	14	0.2	-5
27127	-5	-0.2	35	7	73	2	47	16	0.4	-5
27128	-5	-0.2	24	29	57	-1	54	16	-0.2	-5
27129	-5	-0.2	10	2	39	-1	37	13	-0.2	-5
27130	-5	-0.2	15	-2	56	2	45	14	-0.2	-5
27131	-5	-0.2	47	6	74	-1	52	21	-0.2	-5
27132	9	0.5	33	205	96	-1	33	13	0.2	-5
27133	-5	-0.2	34	11	73	-1	44	15	-0.2	-5
27134	8	-0.2	13	8	35	3	34	11	0.2	-5
27135	-5	-0.2	-1	6	82	-1	62	22	0.2	-5
27136	-5	-0.2	9	5	74	-1	66	21	0.2	-5
27137	-5	-0.2	17	7	54	3	42	17	-0.2	-5
27138	-5	-0.2	23	7	79	-1	42	15	-0.2	-5
27139	-5	-0.2	17	5	59	-1	42	14	-0.2	-5
27140	-5	-0.2	13	3	56	2	33	11	-0.2	-5
27141	-5	-0.2	12	-2	56	-1	35	14	0.3	-5
27142	-5	-0.2	16	3	45	-1	45	12	-0.2	-5
27143	-5	0.2	37	4	107	2	62	22	-0.2	-5
27144	-5	-0.2	38	14	75	-1	55	19	-0.2	-5
27145	16	-0.2	71	44	77	-1	25	19	0.2	-5
27146	47	-0.2	100	49	195	-1	16	38	0.4	-5
27147	-5	-0.2	21	15	50	-1	38	13	-0.2	-5
27148	17	-0.2	24	8	52	-1	45	19	0.2	-5
27149	-5	-0.2	33	14	71	2	51	18	-0.2	-5

Sample ID	Au30 ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Mo ppm	Ni ppm	Co ppm	Cd ppm	Bi ppm
27101	-5	-0.2	36	10	62	2	37	17	0.5	-5
27102	-5	0.2	67	12	84	7	52	20	0.6	-5
27103	-5	-0.2	23	4	74	2	40	13	0.3	-5
27104	-5	-0.2	23	7	50	2	40	12	0.2	-5
27105	-5	-0.2	50	9	47	7	43	16	0.3	-5
27106	8	-0.2	39	4	19	7	39	10	0.2	-5
27107	43	-0.2	30	77	33	-1	5	7	0.3	-5
27108	6	-0.2	52	22	42	6	47	16	0.3	-5
27109	7	0.3	45	19	47	8	45	18	0.3	-5
27110	1544	-0.2	9	3	26	10	19	4	-0.2	-5
27111	-5	0.2	22	2	32	2	32	14	0.3	-5
27112	21	6.1	21	4567	3557	-1	12	15	37.8	-5
27113	317	0.8	70	114	92	2	15	33	0.9	-5
27114	39	0.3	97	92	202	-1	14	28	2.1	-5
27115	50	0.3	37	14	48	-1	13	21	0.4	-5
27116	31	0.3	-1	3	49	2	19	30	0.2	-5
27117	19	0.5	32	27	43	-1	15	19	0.3	-5
27118	10	-0.2	2	8	31	3	14	5	0.2	-5
27119	22	-0.2	22	8	51	-1	31	12	-0.2	-5
27120	-5	0.2	3	14	38	2	21	8	-0.2	-5
27121	-5	-0.2	5	7	41	2	21	7	0.4	-5
27122	6	-0.2	14	6	90	-1	50	16	0.6	-5
27123	59	-0.2	-1	4	49	-1	30	10	0.3	-5
27124	70	-0.2	-1	3	34	3	22	7	-0.2	-5
27125	6	-0.2	27	3	49	1	44	14	0.2	-5
27126	23	-0.2	13	8	45	-1	46	14	0.2	-5
27127	-5	-0.2	35	7	73	2	47	16	0.4	-5
27128	-5	-0.2	24	29	57	-1	54	16	-0.2	-5
27129	-5	-0.2	10	2	39	-1	37	13	-0.2	-5
27130	-5	-0.2	15	-2	56	2	45	14	-0.2	-5
27131	-5	-0.2	47	6	74	-1	52	21	-0.2	-5
27132	9	0.5	33	205	96	-1	33	13	0.2	-5
27133	-5	-0.2	34	11	73	-1	44	15	-0.2	-5
27134	8	-0.2	13	8	35	3	34	11	0.2	-5
27135	-5	-0.2	-1	6	82	-1	62	22	0.2	-5
27136	-5	-0.2	9	5	74	-1	66	21	0.2	-5
27137	-5	-0.2	17	7	54	3	42	17	-0.2	-5
27138	-5	-0.2	23	7	79	-1	42	15	-0.2	-5
27139	-5	-0.2	17	5	59	-1	42	14	-0.2	-5
27140	-5	-0.2	13	3	56	2	33	11	-0.2	-5
27141	-5	-0.2	12	-2	56	-1	35	14	0.3	-5
27142	-5	-0.2	16	3	45	-1	45	12	-0.2	-5
27143	-5	0.2	37	4	107	2	62	22	-0.2	-5
27144	-5	-0.2	38	14	75	-1	55	19	-0.2	-5
27145	16	-0.2	71	44	77	-1	25	19	0.2	-5
27146	47	-0.2	100	49	195	-1	16	38	0.4	-5
27147	-5	-0.2	21	15	50	-1	38	13	-0.2	-5
27148	17	-0.2	24	8	52	-1	45	19	0.2	-5
27149	-5	-0.2	33	14	71	2	51	18	-0.2	-5

Sample ID	As ppm	Sb ppm	Hg ppm	Fe %	Mn ppm	Te ppm	Ba ppm	Cr ppm	V ppm	Sn ppm
27101	19	-5	-0.01	5.28	1663	-10	46	62	13	-20
27102	18	-5	-0.01	4.52	788	-10	77	71	7	-20
27103	15	-5	-0.01	3.25	463	-10	33	39	4	-20
27104	13	-5	-0.01	3.49	706	-10	34	42	5	-20
27105	10	-5	-0.01	4.31	703	-10	45	18	4	-20
27106	16	-5	-0.01	3.64	2409	-10	39	27	5	-20
27107	15	-5	-0.01	5.38	4572	-10	13	70	2	-20
27108	8	-5	-0.01	4.72	1817	-10	36	35	4	-20
27109	9	-5	-0.01	4.22	812	-10	41	37	5	-20
27110	5	-5	-0.01	4.65	3058	-10	52	67	8	-20
27111	15	-5	-0.01	4.5	1383	-10	42	35	7	-20
27112	26	-5	0.052	9.59	5094	-10	36	18	6	-20
27113	63	-5	-0.01	8.66	2639	-10	37	24	11	-20
27114	47	-5	-0.01	10	4340	-10	38	9	13	-20
27115	24	-5	-0.01	7.35	2002	-10	49	12	11	-20
27116	43	-5	-0.01	6.92	1290	-10	101	139	19	-20
27117	30	-5	-0.01	5.9	1823	-10	50	14	9	-20
27118	-5	-5	-0.01	1.66	550	-10	20	81	5	-20
27119	10	-5	-0.01	3.47	832	-10	24	40	4	-20
27120	15	-5	-0.01	2.38	801	-10	21	51	4	-20
27121	21	-5	-0.01	2.69	843	-10	27	55	5	-20
27122	56	-5	-0.01	4.65	862	-10	40	29	6	-20
27123	38	-5	-0.01	5.38	1849	-10	32	42	6	-20
27124	27	-5	-0.01	4.11	1343	-10	46	69	8	-20
27125	18	-5	-0.01	4.12	741	-10	46	33	5	-20
27126	27	-5	-0.01	3.95	1041	-10	42	43	4	-20
27127	11	-5	-0.01	4.51	1284	-10	58	52	5	-20
27128	12	-5	-0.01	4.58	891	-10	45	43	4	-20
27129	17	-5	-0.01	3.71	1068	-10	31	34	3	-20
27130	14	-5	-0.01	4.09	1300	-10	40	53	6	-20
27131	24	-5	-0.01	4.49	1177	-10	42	26	4	-20
27132	20	-5	-0.01	4.27	1892	-10	45	70	3	-20
27133	18	-5	-0.01	5.08	1570	-10	36	46	3	-20
27134	16	-5	-0.01	3.34	952	-10	41	88	5	-20
27135	31	-5	-0.01	4.81	2095	-10	49	27	4	-20
27136	15	-5	-0.01	4.6	1849	-10	52	26	4	-20
27137	20	-5	-0.01	4.4	953	-10	41	68	5	-20
27138	14	-5	-0.01	4.58	628	-10	48	40	4	-20
27139	11	-5	-0.01	4.11	908	-10	40	60	8	-20
27140	9	-5	-0.01	3.24	534	-10	36	87	13	-20
27141	32	-5	-0.01	3.41	876	-10	32	52	5	-20
27142	14	-5	-0.01	3.81	649	-10	38	63	12	-20
27143	17	-5	-0.01	5.48	588	-10	45	46	6	-20
27144	17	-5	-0.01	5.24	721	-10	99	49	6	-20
27145	18	-5	-0.01	5.79	1195	-10	51	45	27	-20
27146	29	-5	-0.01	9.65	1532	-10	78	24	79	-20
27147	21	-5	-0.01	3.77	869	-10	31	38	4	-20
27148	54	-5	-0.01	4.7	682	-10	32	36	4	-20
27149	51	-5	-0.01	4.58	570	-10	37	42	5	-20



Sample ID	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li
	ppm	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm
27101	-20	8	0.5	2.11	5.01	-0.01	0.15	118	5	-2	3
27102	-20	8	0.55	1.28	2.33	0.01	0.21	63	3	-2	1
27103	-20	10	0.33	0.94	1.28	-0.01	0.14	33	2	-2	1
27104	-20	10	0.34	1.23	1.91	-0.01	0.14	55	2	-2	1
27105	-20	8	0.33	1.47	2.23	-0.01	0.14	65	2	-2	1
27106	-20	10	0.34	1.09	3.45	-0.01	0.15	57	4	-2	1
27107	-20	-1	0.05	1.61	5.82	-0.01	0.02	74	5	-2	1
27108	-20	6	0.3	1.46	3.41	-0.01	0.13	70	4	-2	1
27109	-20	7	0.3	1.29	1.97	-0.01	0.13	54	3	-2	1
27110	-20	4	0.23	1.79	5.86	-0.01	0.09	106	6	-2	1
27111	-20	6	0.39	1.81	5.17	-0.01	0.16	114	4	-2	1
27112	471	3	0.3	2.65	10	-0.01	0.11	173	7	-2	2
27113	-20	1	0.36	2.12	7.89	-0.01	0.13	156	6	-2	1
27114	887	2	0.37	2.85	10	-0.01	0.13	202	7	-2	2
27115	-20	3	0.39	2.13	6.18	-0.01	0.15	120	5	-2	2
27116	-20	9	0.75	2.27	5.67	0.02	0.26	122	5	-2	2
27117	-20	4	0.38	2.29	7.29	-0.01	0.14	163	5	-2	2
27118	-20	9	0.33	0.63	1.65	-0.01	0.07	37	2	-2	4
27119	-20	9	0.28	1.38	3.65	-0.01	0.11	83	3	-2	2
27120	-20	11	0.27	1.25	3.5	-0.01	0.1	88	3	-2	1
27121	-20	11	0.29	1.34	3.53	-0.01	0.12	85	3	-2	1
27122	-20	21	0.41	1.69	2.49	-0.01	0.19	61	3	-2	2
27123	-20	12	0.38	2.04	3.92	-0.01	0.15	108	6	-2	1
27124	-20	15	0.46	1.38	2.44	-0.01	0.2	75	3	-2	2
27125	-20	13	0.45	1.31	2.02	-0.01	0.18	57	3	-2	2
27126	-20	11	0.35	1.17	1.58	-0.01	0.16	47	3	-2	1
27127	-20	13	0.42	1.21	0.75	-0.01	0.18	28	3	-2	2
27128	-20	12	0.4	1.21	0.82	-0.01	0.16	25	2	-2	2
27129	-20	12	0.29	1.09	1.34	-0.01	0.12	36	2	-2	1
27130	-20	15	0.4	1.13	0.92	0.01	0.17	28	2	-2	2
27131	-20	18	0.42	1.22	0.9	-0.01	0.16	26	3	-2	2
27132	-20	19	0.36	1.19	1.16	-0.01	0.15	39	2	-2	2
27133	-20	17	0.35	1.39	1.08	-0.01	0.14	29	2	-2	3
27134	-20	15	0.4	0.81	0.75	-0.01	0.17	21	2	-2	2
27135	-20	17	0.4	1.85	2.43	-0.01	0.17	65	3	-2	2
27136	-20	16	0.4	1.61	2.07	0.02	0.15	50	3	-2	2
27137	-20	15	0.38	1.23	0.76	0.02	0.13	24	2	-2	3
27138	-20	20	0.48	1.24	0.45	0.02	0.15	16	2	-2	4
27139	-20	12	0.71	1.29	1.34	0.02	0.1	37	2	-2	11
27140	-20	16	1.08	1	0.75	0.01	0.09	20	1	-2	19
27141	-20	11	0.39	1.06	1.3	0.01	0.1	37	2	-2	5
27142	-20	12	1.14	1.13	0.95	0.01	0.11	27	2	-2	17
27143	-20	10	0.42	1.16	2.2	-0.01	0.15	54	2	-2	3
27144	-20	9	0.52	1.23	2.57	0.01	0.15	66	3	-2	5
27145	-20	6	1.16	1.35	3.06	-0.01	0.1	100	3	-2	14
27146	-20	4	2.66	2.05	4.14	-0.01	0.12	144	5	-2	31
27147	-20	13	0.37	1.09	1.56	-0.01	0.15	51	2	-2	2
27148	-20	16	0.34	1.34	1.05	-0.01	0.15	36	3	-2	1
27149	-20	14	0.46	1.22	0.78	-0.01	0.19	25	2	-2	2

Sample ID	Nb ppm	Sc ppm	Ta ppm	Ti ppm	Zr ppm	S %				
27101	-1	-5	-10	-0.01	4	0.27				
27102	-1	-5	-10	-0.01	5	0.66				
27103	-1	-5	-10	-0.01	1	0.3				
27104	-1	-5	-10	-0.01	1	0.39				
27105	-1	-5	-10	-0.01	5	0.88				
27106	-1	-5	-10	-0.01	8	0.6				
27107	-1	-5	-10	-0.01	-1	0.74				
27108	-1	-5	-10	-0.01	3	0.82				
27109	-1	-5	-10	-0.01	5	0.79				
27110	-1	-5	-10	-0.01	2	0.22				
27111	-1	-5	-10	-0.01	2	0.46				
27112	-1	-5	-10	-0.01	-1	0.54				
27113	-1	5	-10	-0.01	-1	1.38				
27114	-1	5	-10	-0.01	-1	0.27				
27115	-1	5	-10	-0.01	-1	0.55				
27116	-1	6	-10	-0.01	-1	0.09				
27117	-1	5	-10	-0.01	-1	0.22				
27118	-1	-5	-10	-0.01	2	0.02				
27119	-1	-5	-10	-0.01	3	0.12				
27120	-1	-5	-10	-0.01	3	0.05				
27121	-1	-5	-10	-0.01	2	0.08				
27122	-1	-5	-10	-0.01	4	0.08				
27123	-1	-5	-10	-0.01	4	0.17				
27124	-1	-5	-10	-0.01	5	0.14				
27125	-1	-5	-10	-0.01	6	0.33				
27126	-1	-5	-10	-0.01	2	0.23				
27127	-1	-5	-10	-0.01	6	0.45				
27128	-1	-5	-10	-0.01	3	0.38				
27129	-1	-5	-10	-0.01	-1	0.1				
27130	-1	-5	-10	-0.01	-1	0.09				
27131	-1	-5	-10	-0.01	6	0.21				
27132	-1	-5	-10	-0.01	4	0.09				
27133	-1	-5	-10	-0.01	3	0.16				
27134	-1	-5	-10	-0.01	3	0.17				
27135	-1	-5	-10	-0.01	3	0.11				
27136	-1	-5	-10	-0.01	2	0.2				
27137	-1	-5	-10	-0.01	2	0.12				
27138	-1	-5	-10	-0.01	3	0.05				
27139	-1	-5	-10	-0.01	-1	0.07				
27140	-1	-5	-10	-0.01	-1	0.03				
27141	-1	-5	-10	-0.01	-1	0.13				
27142	-1	-5	-10	-0.01	-1	0.14				
27143	-1	-5	-10	-0.01	-1	0.31				
27144	-1	-5	-10	-0.01	3	0.29				
27145	-1	-5	-10	-0.01	-1	0.34				
27146	4	6	-10	-0.01	-1	0.47				
27147	-1	-5	-10	-0.01	1	0.17				
27148	-1	-5	-10	-0.01	1	0.22				
27149	-1	-5	-10	-0.01	2	0.26				