

ASSESSMENT REPORT

1998 WORK PROGRAM

TRENCHING, GEOLOGY AND PHYSICAL WORK

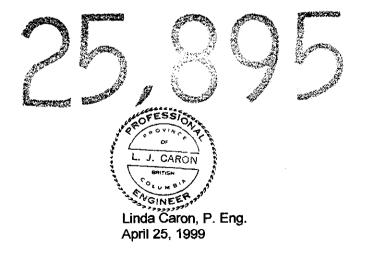
on the

Golden Crown Property

NTS 82E/2 E

Lat: 49° 04' 30" N Long: 118° 34' 30" W

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT



for: Century Gold Corp. #63 - 590 17th St. West Vancouver, B.C. V7V 3S7

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Linda Caron, P. Eng. April 25, 1999 TABLE OF CONTENTS

1.0	SU	MMARY	Page 1
1.0	00.		•
2.0	INT	RODUCTION	4
	2.1	Location, Access and Terrain	4
	2.2		5
	2.3		7
		2.3.1 Regional Exploration History	7
		2.3.2 History of Exploration, Golden Crown Property	9
	2.4	Summary of 1998 Work Program	11
3.0	GE	OLOGY and MINERALIZATION	13
	3.1	Regional Geology and Structure	13
	3.2		14
	3.3		16
		3.3.1 Property Geology, Mineralization & Rock Sample Results	16
		3.3.2 Metallurgy	26
		3.3.3 A Summary Comparison to Rossland, B.C.	27
4.0	TR	ENCHING	30
5.0	RE	COMMENDATIONS	38
6.0	RE	FERENCES	40
		LIST OF FIGURES	
			Page
Figure) 1 -	Location Map	aft p.4
Figure		Claim Map – Golden Crown Property	aft p.5
Figure		Claim Map – For filing assessment work	aft p.6
Figure		Gold Production in B.C.	aft p.7
Figure	95-	Historical Production and Recent Exploration Successes	
		(Greenwood - Republic - Rossland Area)	aft p.8
Figure		Gold Production and Reserves (Greenwood – Republic – Rossland Area)	aft p.8
Figure		Geology & Trench Location Map	in pocket
Figure		Tiara Trench Map (Trenches 98-10, 11, 12, 13)	aft p.30
Figure		Queen Vein Trench Map (Trenches 98-1, 3)	aft p.32
		Samaritan Vein Trench Map (Trenches 98-2, 9)	aft p.34
Figure	€ 11 -	South Zone Trench Map (Trenches 98-4, 5)	aft p.34

Figure 11 -South Zone Trench Map (Trenches 98-4, 5)Figure 12 -Princess Vein Trench Map (Trench 98-14)

Figure 13 - Powerline West Trench Map (Trenches 98-6, 7, 8) Figure 14 - Au & Cu Soil Geochemistry (1990) and Proposed Trench Locations

LIST OF APPENDICES

aft p.35

aft p.36 in pocket

APPENDIX 1 - Rock and Trench Sample Descriptions

- APPENDIX 2 Analytical Results APPENDIX 3 Cost Statement
- **APPENDIX 4 Statement of Qualifications**

1.0 SUMMARY

The Golden Crown property is centred about 7 km east of Greenwood, in southern B.C. (see Figure 1). The property consists of two crown granted mineral claims and nineteen 2-post mineral claims (a total of 21 units), owned outright or held under option to Century Gold Corp. and shown in Figure 2.

The Greenwood area is a highly mineralized district and ranks as the sixth largest gold producing camp in B.C., with a total production of 1.2 million oz Au (see Figure 4). The majority of this gold production is from the Phoenix copper-gold skarn, located 2.5 km northwest of the Golden Crown property.

The Republic district in northern Washington, located 50 km south of the Golden Crown property, is well known for it's epithermal gold deposits and has produced in excess of 2.5 million oz Au, at an average grade of better than 0.5 oz/t.

Recent exploration nearby in northern Washington in an area of about 40 km square, immediately south of the International border has resulted in the discovery of nine new deposits within the past 10-15 years (Figure 5), with a total contained gold content in excess of 4 million oz. Deposits include:

Crown Jewel8 million tons@0.18 oz/t AuLamefoot2.2 million tons@0.2 oz/t AuGolden Eagle11 million tons@0.1 oz/t Au

The total gold (produced + known reserves), in an area measuring 50x40 km which includes the Greenwood and Republic Districts, exceeds 7.4 million oz Au, as shown on Figure 6. Together the Greenwood, Curlew and Republic areas have produced, and continue to produce, attractive gold and copper-gold deposits, making this an excellent area for further exploration.

Recent work on the Golden Crown property has revealed a new style of mineralization in the Greenwood district - Rossland gold-copper veins. The identification of this new style of mineralization is important and exciting because of the size and grade potential of such systems. Rossland is B.C.'s second largest gold camp, producing close to 3 million ounces of gold and is situated only 50 km due east of Greenwood (Figure 4,5). Other B.C. examples of this style of deposits include Snip, Scottie Gold and Johnny Mountain. Snip, which began production in 1991, was formerly ranked as B.C.'s largest gold producer, with an annual production of over 100,000 oz of gold, at an average grade of 0.78 oz/t Au. Clearly, this type of deposit is an attractive exploration target. The Greenwood camp is seen as a particularly attractive area for such exploration because of the recent advances in the understanding of the geology, structure and metallogeny of the district, the excellent access and infrastructure, and the proven capability of the area to producing economically viable deposits.

In such a model, parallel, en echelon gold bearing massive pyrrhotite-pyrite-chalcopyrite and quartz veins are related to the intrusion of a multi-phase Jurassic-Cretaceous intrusive. At Rossland more than 20 veins are recognized in an area of only about 1200 x 600 metres, from which over 6 million tons of ore, grading 0.47 oz/t Au, was produced. The Golden Crown property is an example in the Greenwood camp where mineralization, geological setting and host rocks are consistent with the Rossland vein model.

A series of medium to coarse grained, dark green diorite to monzodiorite sills occurs in the eastern portion of the Golden Crown property. This diorite is believed to be analogous to one phase of the Rossland monzonite. A coarse grained, dark green amphibolite phase of the intrusive is seen in drill core from the property, which is startlingly similar to amphibolite seen at Rossland. A third phase of the

intrusion occurs in the central and western parts of the property. This pale grey, porphyritic monzonite phase is typically strongly altered and highly sulfidic, and is spatially closely associated with many of the zones of known mineralization. It is again remarkably similar to the porphyrite phase of the composite Rossland monzonite in the Rossland camp. The composite diorite-monzodiorite is intrusive into fine grained pyroclastic volcanics and volcanics of unknown age, and into a fine grained, massive dark green microdiorite.

In a regional sense, the composite intrusion in the Golden Crown area is situated along the Lind Creek thrust, an east-west Jurassic aged thrust fault which is commonly marked by serpentinite and listwanite. Outcrops of serpentine are rare on the property, however serpentine is common in underground workings as well as in drill core. The serpentine is believed to represent parts of a disrupted Permian ophiolite suite, emplaced along various structures. A flat lying, undulating blanket of serpentine, approximately 50 metres thick and situated about 75 metres below surface, underlies the central portion of the property. The upper contact of the serpentinite shows a particularly important association with mineralization. A significant steepening in the serpentine contact corresponds to the location of the King Vein ore shoot and to the Tiara vein. Other serpentine contacts on the property show a similar association with mineralization, but lack the same degree of exploration and hence ability for interpretation. Higher grade and thicker portions of cross-cutting veins are located where the veins intersect serpentine contact, as seen at the King Vein. Mineralization may also be concordant with the serpentine contact, as at the Tiara.

The presence of late, shallow dipping, mineralized detachment type faults has been recently recognized on the property. As well as indicating the possibility for more gently dipping zones of mineralization, it is important to recognize that the detachments may offset the earlier steeper veins, and that well directed exploration may be successful in identifying the continuation of these veins where historical exploration had failed.

In the order of \$4 million has been spent on exploration and development work on the Golden Crown property, including 223 diamond drill holes and a 1100 metre long 9x12 exploration drift. The bulk of this exploration was completed between 1983 and 1990.

At least 15 different zones of mineralization are recognized to date on the property, representing probably 12 discrete veins. The veins vary in mineralogy from massive pyrrhotite-pyrite veins, with lesser chalcopyrite, and with a total sulfide content in excess of 60%, to quartz veins with a very low sulfide content. Both vein types can have high gold values. Typical widths are in the order of 1 - 2 metres, although thicknesses in excess of 5 metres occur in ore shoots. In general, the veins are roughly parallel, with an average orientation of 300-330°, and with generally steep south dips.

Reserves on the property are quoted at 37,100 tons at a grade of 0.999 oz/t Au (uncut) and 1.12% Cu (cut grade = 0.536 oz/t Au) (Ford, 1990). It should be emphasized that this estimate is based on drill hole information only. The drill data has not been substantiated by drifting or raising on the veins, and furthermore, no attempt has been made to demonstrate the economic viability of the deposit. Prior to classifying these as reserves, rather than as a resource, the feasibility and economics of mining and processing the ore needs to be addressed. Ford's estimate is best classified as an "Inferred Resource".

In addition, it must be emphasized that the resource estimated by Ford does not represent one block of potential ore, but rather is a composite of a number of small, often isolated blocks from several different veins. That said, however, the blocks are in many cases isolated because of a lack of data on the adjoining portion of the vein, not because they are closed off by existing data. In addition, the current interpretation suggests that of the 37,100 tons estimated by Ford, 27,100 tons are in fact located along a 400 metre strike length on one vein, rather than on three different veins as in Ford's interpretation. There

is significant potential to add reserves within this 400 metre section of the vein, as well as on strike and on other veins.

A program of geological mapping, grid work for control, trenching and underground rehabilitation was completed during 1998, and is discussed in this report.

It is clear that the lack of a clear model or understanding of geology and structure on the property, as well as the lack of attention to detail, has hampered previous exploration. Now that these are better understood, and many errors in the geological database have been identified and corrected, the property represents a good, advanced stage gold-copper prospect with considerable up-side potential. The next phase of exploration should continue to focus on understanding the geological and structural controls on the property, through additional surface and underground mapping, re-logging of select drill core, and further trenching. Trenching is recommended to follow-up zones of anomalous gold in soils, and to attempt to trace out zones of known mineralization on strike.

An effort should be made to understand variations in vein mineralogy, as well as to gain an understanding of the nature and distribution of the gold within the veins, through detailed geochemical work and through studies of polished sections from the various vein types.

It is also recommended that a series of longitudinal sections be generated, in an attempt to better understand the nature and controls to the known veins.

2.0 INTRODUCTION

2.1 Location, Access and Terrain

The Golden Crown property is located about 7 km east of Greenwood and 10 km northwest of Grand Forks in southern B.C. (see Figure 1). Access to the property is excellent, with an 11 km long, year round maintained gravel road from Highway 3 to the western edge of the claim block. Grand Forks has a population of about 4,000 and the necessary services and support for an exploration or mining operation.

Access to the Golden Crown property is west and north from Grand Forks on Highway 3 about 20 km to the Phoenix road, then west to the historic Phoenix mine, a distance of about 8 km. Alternate access to Phoenix is east from Greenwood for about 5 km on the Twin Creek – Phoenix Road. At Phoenix, turn south on the Lone Star Road for 3 km to the western edge of the property at Hartford Junction. From here, follow the eastern fork for about 1.5 km to the historic Winnipeg and Golden Crown workings, and a further 1 km to the portal of the main drift.

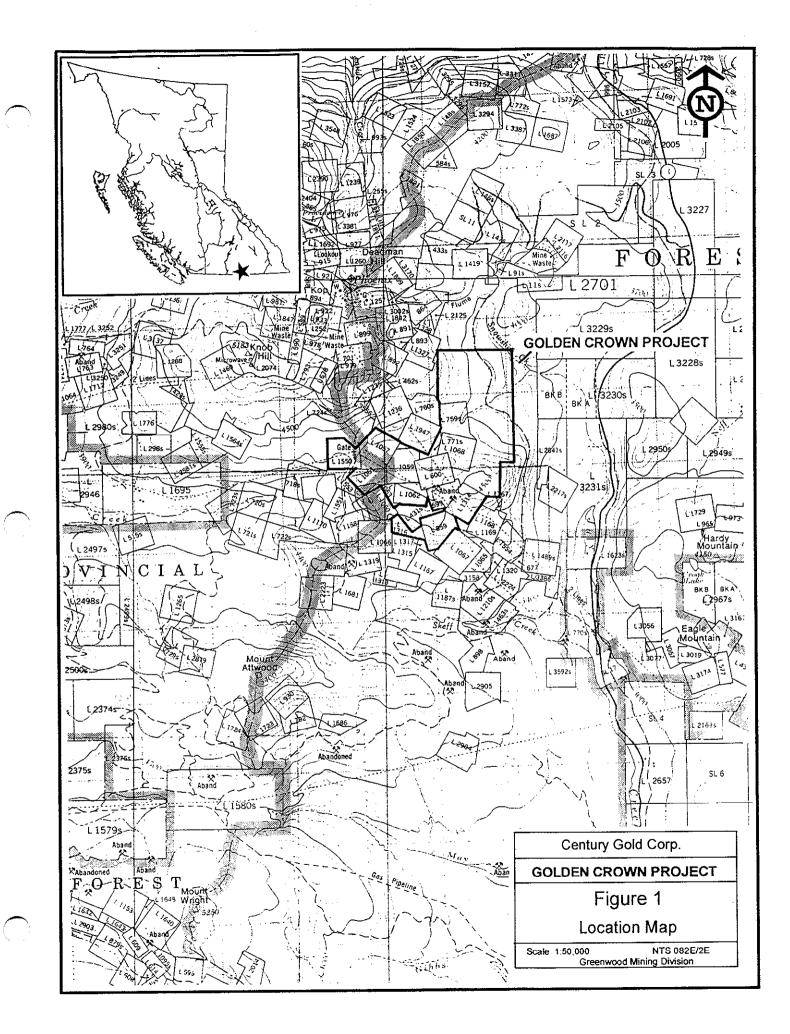
The property is crossed by a major powerline, which provides good access through the claims, while numerous old mining and logging roads provide additional access. In general, there is road access to most parts of the claim block.

The topography of the majority of the claim block claims is generally subdued, with low relief, however the eastern portion of the property is situated on the moderate to steep east facing slope of the July Creek valley. Elevation ranges from about 1290 metres at the portal, to about 1400 metres in the southeast portion of the claims, near the South Zone.

Outcrop is highly dependent on underlying rock type. Areas underlain by diorite exhibit a high percentage of outcrop, while areas underlain by more altered intrusive phases, serpentine and volcanics typically have minimal to no outcrop. Overburden ranges from 0 to about 8 metres.

Vegetation consists of moderate to open mature fir and larch forest, with minimal undergrowth in most places. Certain portions of the property have been logged in recent years and the timber tenure holder plans to log the majority of the remaining portion of the claim block within the next five years.

The climate is moderately dry, with generally hot summers and little rainfall. Snowfall is in the order of 2-3 metres. The claims are situated north of Skeff Creek and west of July Creek, both known placer gold creeks. While there are no major creeks or ponds on the property, there is abundant water available for drilling from flooded old workings, or from discharge from the main drift.



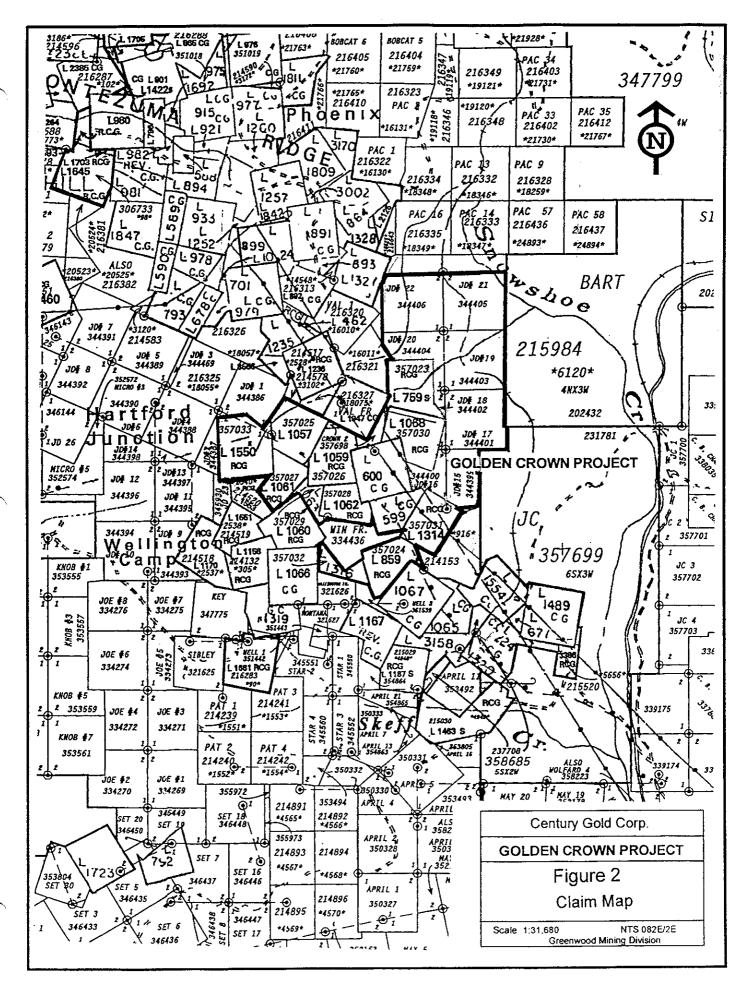
2.2 Property and Ownership

Work described in this report was completed on the Golden Crown property, which consists of two Crown Granted mineral claims, and nineteen 2-post mineral claims (a total of 21units), as shown in Figure 2 and summarized below. Expiry dates shown are after filing this report.

	TENURE #	UNITS	EXPIRY DATE
Century Claims			
Joe Joe (L 759s)	357023	1	2008/06/26
Hecla (L 859)	357024	1	2008/06/26
Hartford (L 1057)	357025	1	2008/06/26
J & R (L 1059)	357026	1	2008/06/26
Hartford Fr. (L 1061)	357027	1	2008/06/26
Hard Cash (L 1062)	357028	1	2008/06/26
Nabob Fr. (L 1063)	357029	1	2008/06/26
Sissy (L 1068)	357030	1	2008/06/26
Calumet (L 1314)	357031	1	2008/06/26
War Cloud Fr. (L 1316)	357032	1	2008/06/26
Silver Star (L 1550)	357033	1	2008/06/26
Attwood Option			
Golden Crown CG	CG 599	1	
Winnipeg CG	CG 600	1	
Kemp Option			****
JD #15	344399	1	2001/03/21
JD #16	344400	1	2001/03/21
JD #17	344401	1	2001/03/21
JD #18	344402	1	2001/03/21
JD #19	344403	1	2001/03/21
JD #20	344404	1	2001/03/21
JD #21	344405	1	2001/03/21
JD #22	344406	1 1	2001/03/21

For assessment purposes, the claims comprising the Golden Crown property were grouped together with contiguous claims also owned by Century Gold (see Figure 3). In addition to those listed above, work has been applied to the following claims:

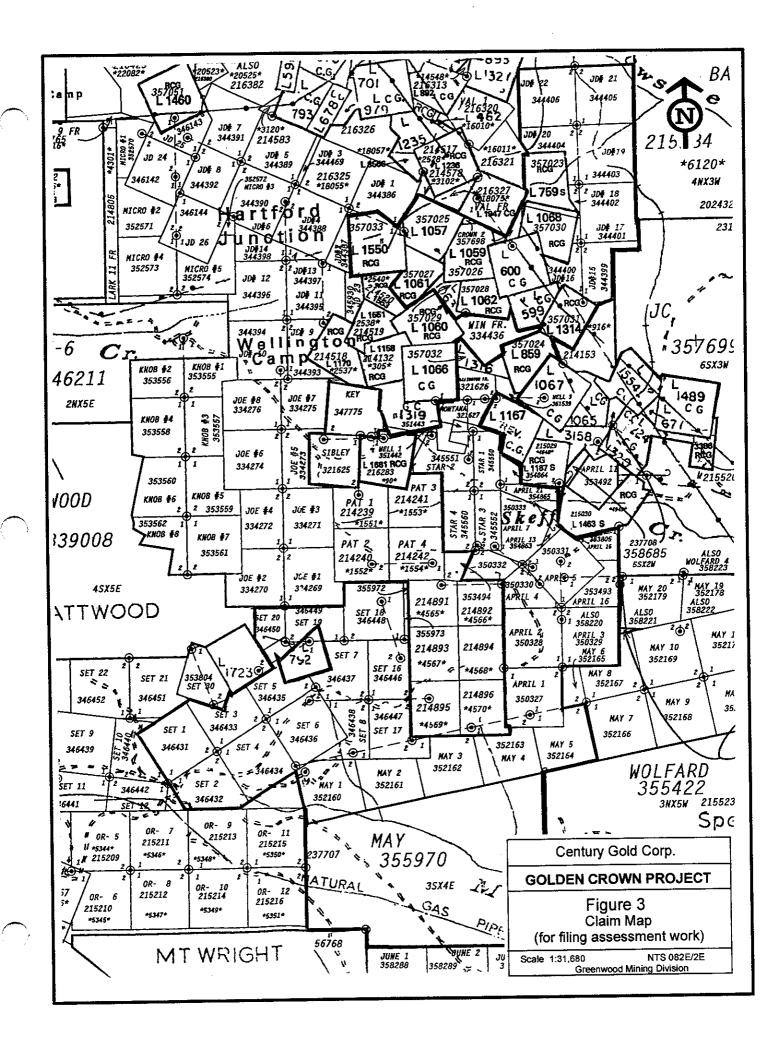
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CLAIM NAME	TENURE #	UNITS	EXPIRY DATE
Cot 1	246424		2001/05/07
Set 1	346431		2001/05/27
Set 2	346432		2001/05/27
Set 3	346433		2001/05/27
Set 4	346434		2001/05/27
Set 5	346435	1	2002/05/27
Set 6	346436	1	2002/05/27
Set 7	346437	1	2007/05/27
Set 8	346438	1	2002/05/27
Set 16	346446	<u> 1 </u>	2007/06/01
Set 17	346447	1	2002/06/01
Set 18	346448	1	2007/06/04
Set 19	346449	1	2007/06/04
Set 20	346450	1	2005/06/04
Set 21	346451	1	2002/06/05
Set 30	353804	1	2002/02/19
Set 31	355972	1	2004/05/13
Set 32	355973	1	2004/05/13
May	355970	12	2002/05/14
April 1	350327	1	2002/08/29
April 2	350328	1	2002/08/29
April 3	350329	1	2002/08/29
April 4	350330	1	2002/08/29
April 5	350331	1	2002/08/29
April 6	350332	1	2002/08/29
April 7	350333	1	2002/08/29
April 13	354863	1	2004/04/02
April 20	354864	1	2004/04/10
April 21	354865	1	2004/04/10
May 1	352160	1	2003/10/14
May 2	352161	1	2003/10/14
May 3	352162	1	2003/10/14
May 4	352163	1	2003/10/14
May 5	352164	1	2003/10/14
97 Windfall	358685	10	2004/08/25
Bombini Option			
Sibley	321625	1	2001/10/18
Wellington Fr.	321626	1	2001/10/18
Montana	321627	1	2001/10/18
Star 1	345550	1	2001/05/06
Star 2	345551	1	2001/05/06

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cont ...

CLAIM NAME	TENURE #	UNITS	EXPIRY DATE
Star 3	345552	1	2001/05/06
Star 4	345560	1	2001/05/06
Key	347775	1	2001/07/12
Well 1	351442	1	2001/10/08
Well 2	351443	1	2001/10/08
Well 3	351539	1	2001/10/08

2.3 History of Exploration

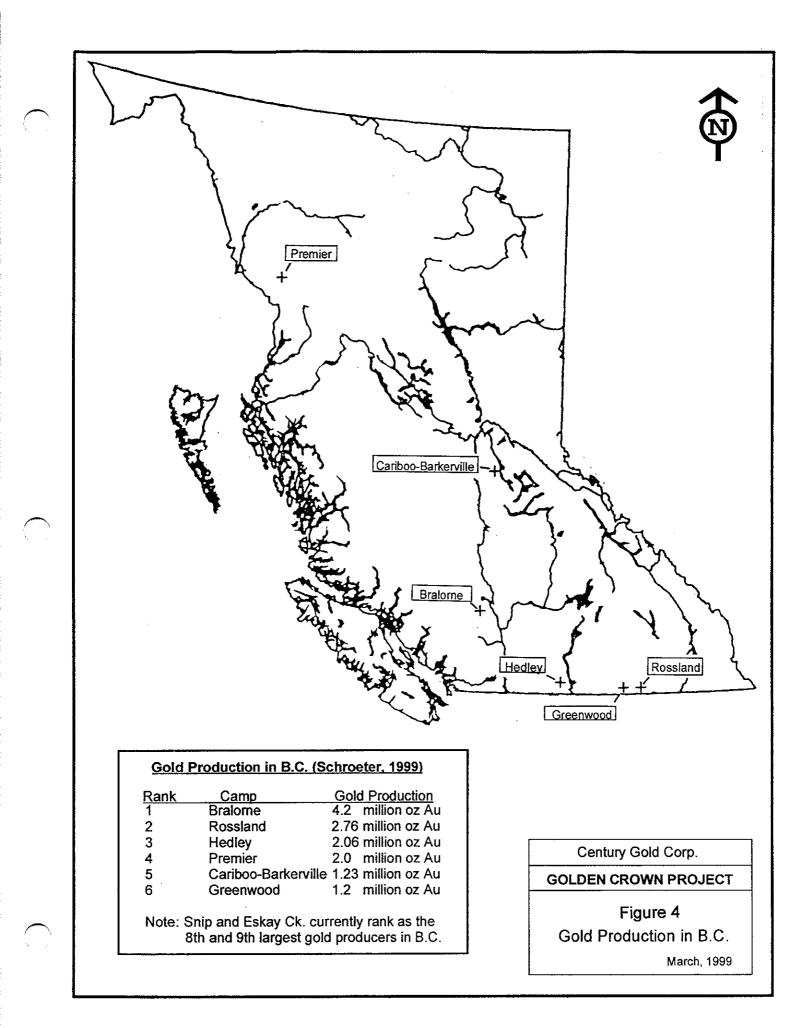
2.3.1 Regional Exploration History

The Greenwood camp, which ranks as the 6th largest gold producing camp in B.C. (see Figure 4), has a long history of exploration and mining activity. Excellent historical accounts of the general Greenwood area are provided by Peatfield (1978) and Church (1986), and of the Phoenix area by (Caron, 1992); the following is taken in part from these sources. The reader is referred to these reports for further detail pertaining to the regional exploration and development history of the area.

Exploration dates back to the early 1880's, with this first phase of exploration and development focused on high grade gold and silver veins, such as the Skylark, Providence, City of Paris, and Jewel (Dentonia) Mines. With the discovery and development of the Phoenix area in the 1890's, exploration shifted largely to a copper focus, although work continued sporadically on the various precious metal vein properties over the next 50 years. Significant producers were the Jewel, with about 135,000 tons averaging 0.32 oz/t Au, the Winnipeg – Golden Crown (61,000 tons @ 0.23 oz/t Au), and the Athelstan (36,000 tons @ 0.17 oz/t Au) (Church, 1986).

The first claims in the Phoenix area were staked in 1890 and in 1896 the original Granby Company was formed to work in the area. By 1899 the Canadian Pacific Railway had extended a branch line to Phoenix and underground mining of copper and gold ores began. Later, open pit mining methods were developed and the Ironsides Mine became one of the first open pit mines in Canada. In 1900 the City of Phoenix was incorporated and the Granby Smelter in Grand Forks was completed. Ore was also produced in the mining camp by the Consolidated Mining and Smelting Company, primarily from the Snowshoe Mine. Production rates from the camp at this time varied widely with a maximum rate of approximately 3000 tons per day achieved. In 1919, the Granby mine and smelter closed due to low copper prices, lower ore grades and a shortage of coking coal for the smelter furnaces.

The 1930's and 1940's saw a revival of mining activity in the camp, with the reopening of the Jewel and Providence Mines and then, in 1956, the Granby Company re-evaluated the Phoenix property with the intent of mining by open pit trackless mining methods. Open pit production at Phoenix began in 1960 at a rate of 900 tons per day, was increased to 2000 tons per day in 1961 and further increased to 3000 tons per day in 1972. By 1973, declining production was supplemented by processing low grade copper ore stockpiled in previous years. Mill feed was further augmented by ore trucked from the Lone Star Mine, 20 km to the south in Washington State. Granby terminated mining operations at Phoenix in 1976, and later dismantled and moved the Phoenix mill. Total production at Phoenix during the period 1900 - 1976 is reported at 27 million tons at a grade of 0.9% Cu and 0.04 oz/t Au, from a number of different ore bodies (Church, 1986). The Motherlode copper skarn deposit just west of Greenwood follows a



similar history to the Phoenix, with production until 1918 by underground methods, and then reopening as an open pit operation in 1956. Production from the Motherlode is reported at 5.5 million tons at a grade of 0.7% Cu and 0.03 oz/t Au.

Exploration in the camp was rekindled in the early 1980's with the discovery of the Sylvester K gold bearing sulfide zone immediately north of the Phoenix pit. The zone ranges up to 40 feet in width, with grades in the order of 0.25 to 0.3 oz/t Au, from both massive pyrite and from underlying pyritic volcanic siltstones. The Sylvester K is contained within a very characteristic, repeatable sequence of Brooklyn sediments and volcanics (the upper portion of the regionally mapped sharpstone unit), sitting just below massive Brooklyn limestone. The deposit shows characteristics of both structurally and stratigraphically controlled replacement mineralization and of volcanogenic massive sulfide mineralization, and the origin is still hotly debated. Complex faulting offsets mineralization and has hampered exploration.

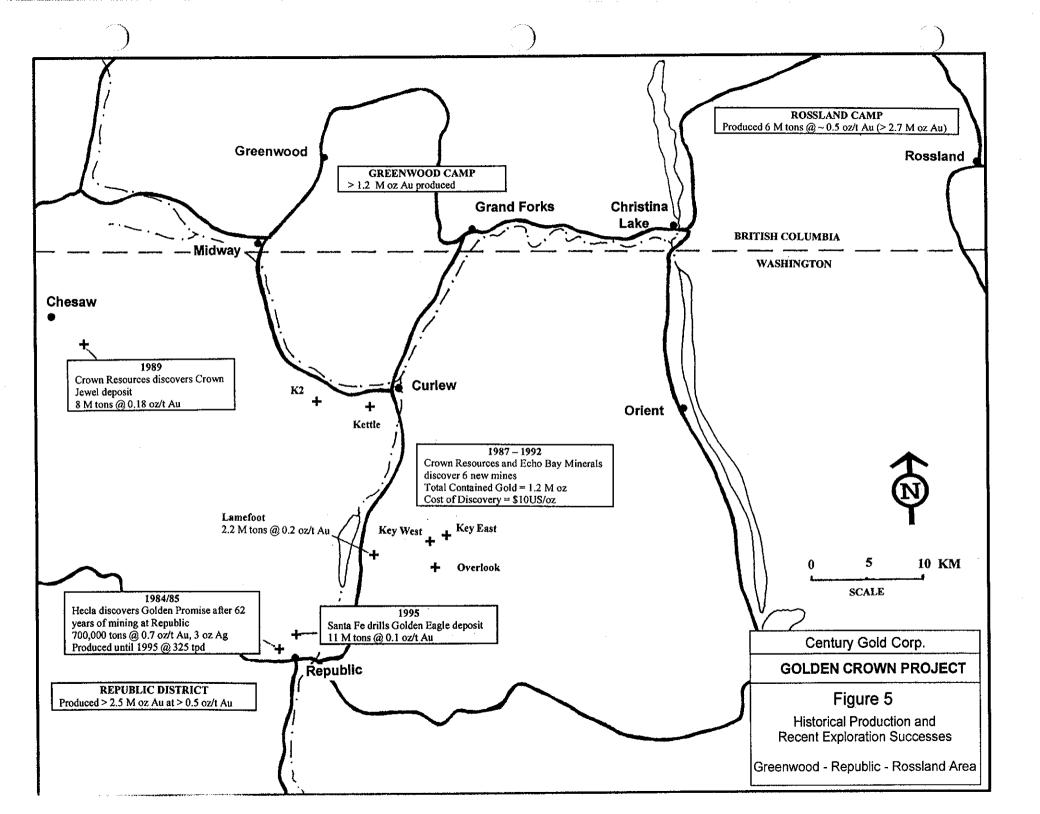
The discovery of numerous gold mines in the late 1980's and early 1990's, nearby in Washington State, revived exploration in the Greenwood camp somewhat, although not to the extent that could be expected. Figure 5 shows the location of recent discoveries in Washington State.

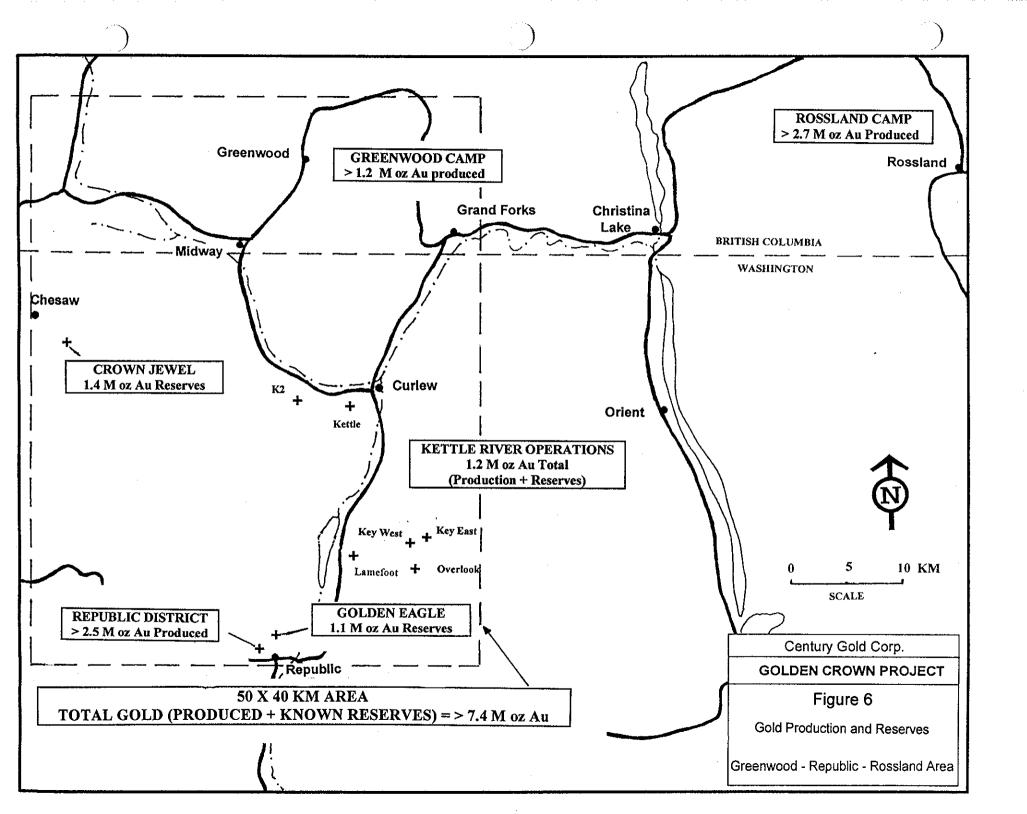
Crown Resources/Battle Mountain's Crown Jewel deposit at Chesaw is a gold skarn deposit with reserves of in the order of 8 million tons @ 0.18 oz/t Au. The deposit occurs in probable Triassic rocks near a Cretaceous intrusion, similar to the geological setting of the major skarn deposits (Phoenix, Motherlode, Oro Denoro) in the Greenwood area (Hickey, 1992). It's discovery resulted in a brief re-examination of the Greenwood camp by several major and numerous junior companies with a gold skarn model, although the exploration completed was less than exhaustive.

Crown Resources and Echo Bay have been successful in the past decade or so, at discovering a new style of gold deposit in the Belcher District, just south of Greenwood in Washington State (Figure 5). The Greenwood area is highly prospective for similar style of mineralization, although recent exploration for this deposit type has been very limited. Rasmussen (1993) describes this type of deposit as a gold-bearing, magnetite-pyrrhotite-pyrite syngenetic volcanogenic deposit. The deposits are hosted within rocks which may be correlative with the Triassic Brooklyn rocks in the Greenwood area, or may belong to the Permian Attwood Group. At least part of the gold mineralization is attributed to a later stage epigenetic event. The gold bearing massive magnetite and sulfides at Overlook, Lamefoot (about 2.2 million tons @ 0.2 oz/t Au) and Key West deposits all occur at the same stratigraphic horizon, with a stratigraphic footwall of felsic volcaniclastics and a massive limestone hangingwall, and with auriferous quartz-sulfide and sulfide veinlets in the footwall of the deposits. Echo Bay Minerals completed a limited exploration program in the Greenwood area during 1997, under a joint venture agreement with Kettle River Resources, aimed at finding additional reserves for their mill.

Tertiary epithermal type mineralization also occurs in the Greenwood area, although there has been limited efforts to explore for this type of deposit in the camp. The successes of Hecla and Echo Bay in developing gold bearing, Eocene epithermal vein and bulk tonnage deposits in the Curlew and Republic areas (ie. Kettle, K2, Golden Promise, Golden Eagle (11 million tons @ 0.1 oz/t Au) have similarly not been repeated north of the border.

The total gold (produced + known reserves), in an area measuring 50x40 km which includes the Greenwood and Republic Districts, exceeds 7.4 million oz Au (see Figure 6). While the Greenwood camp has a long history of exploration, the same is true of the geologically similar area south of the border, where new discoveries have been prolific in the past decade, and where new models of mineralization are being applied. Exploration in the Greenwood areas needs to be done with the same thoroughness and level of understanding of geology, structure and mineralization processes, and with an attention to new mineral deposit models.





2.3.2 History of Exploration, Golden Crown Property

The Golden Crown property has a long history of exploration and development work, which is described in some detail by previous workers (ie. Robb, 1990; Sookochoff, 1984a; Kim, 1987c, Keyte and Saunders, 1980). The present database on the property consists of 233 diamond drill holes, totalling over 16,000 metres, drilled between 1968 and 1990. Numerous historical underground workings exist on the property, as well as a recent exploration drift which exceeds 1100 metres in length and was rehabilitated in 1998. The following account of the property history is taken from various sources, including those listed above, from the Minister of Mines Annual Reports (1895-1905, 1938-41, 1967-68), and from the Minfile references (082ESE032, 033).

Winnipeg and Golden Crown claims were staked in 1894, and crown granted in 1896. Historically, these two claims were under separate ownership and were developed independently. By 1899, a 300 foot deep, 8x4' two compartment shaft was reported on the Golden Crown, with cross-cuts on the vein on the 100 and 150 foot levels, and drifting on the 300 foot level for 20 feet each side of the shaft. The majority of the historical production from the Golden Crown occurred during 1900, with about 2,200 tons produced that year. The total production from the Golden Crown is reported at 2,743 tons at an average grade of 0.45 oz/t Au and 1.5% Cu. By 1901 500 feet of sinking and raising and nearly 2,000 feet of drifting and cross-cutting is reported, with the main shaft said to be 322 feet deep. Production was apparently from three stopes on the 100 level, located within a 55 metre long mineralized zone centred about the shaft. The stopes are reported to exceed 20 metres in back height, and the vein is said to average 1.5 metres in width, with a steep south dip. An adit was driven on the Golden Crown claim, approximately 100 metres in length, apparently to provide alternate access to the veins developed by the shaft. It is not known when this adit, which was never completed, was driven to it's present length.

A second 300 foot deep shaft is reported on the Winnipeg by 1899, with 275 feet of drifting completed on the 100' level. Two parallel veins are reported on the Winnipeg, 80-100 feet apart, with the shaft being sunk on one of these. By 1902, the Winnipeg is reported to have had nearly 1,000 feet of sinking and raising and 3,000 feet of drifting and cross-cutting. A "disastrous fire" in May 1902, followed by a period of financial difficulty resulted in operations being suspended on the Winnipeg for some time. The 1903 Minister of Mines Annual Report states that "It is a pity that such a promising property as the Winnipeg should be so heavily handicapped." There is minor production reported during the period 1900-1903, but the majority of the production was done from 1910-1912. No work is recorded then until 1940-41, when the property was operated under lease and a very minor amount of production is reported. The total production reported for the Winnipeg is 58,771 tons, at an average grade of 0.2 oz/t Au and 0.16% Cu. The production reported for the Winnipeg and Golden Crown claims appears to be in discrepany with the extent of underground workings on the two claims. It is suspected that the breakdown in distribution of production between the two claims is in error.

No further work is recorded on the property from this period of contract leasing in the early '40's, until 1965-68 when Sabina Mines and Scurry Rainbow completed a program of geophysics and diamond drilling aimed at exploring the serpentine for nickel and chromite potential (Kim, 1987c). A total of 16 BQ diamond drill holes were apparently completed (1650 metres), although records for only 10 of these holes (about 1000 metres total) currently exist.

In 1976 5 drill holes were completed by the Grand Forks syndicate, for a total of just over 200 metres, and in 1977-78 Con Am Resources optioned the property and drilled a further 12 holes.

Boundary Exploration Ltd. (later Consolidated Boundary Exploration) acquired the property in 1979 and drilled 4 holes, totalling just over 300 metres.

In 1980 Mundee Mines optioned the property and completed a program of surface mapping and sampling. Old workings and drill holes were surveyed, and the Golden Crown shaft was de-watered to the 100 foot level. The 100 foot level was surveyed, mapped and 56 chip samples were taken. Sixteen drill holes were drilled, totalling about 1500 metres (Keyte and Saunders, 1980).

Grand Forks Mines Ltd. optioned the property in 1983, to earn a 50% interest. A significant amount of exploration and development work was completed on the property during the period 1983 – 1990, including drilling 137 surface (> 8000 metres) and 53 underground (> 3000 metres) diamond drill holes, resulting in the discovery of 9 mineralized zones.

In 1987 a compilation of previous data was completed, including converting the database into digital format. Preliminary drill indicated reserves were estimated at 77,602 tons at an average grade of 0.44 oz/t Au, 0.513 oz/t Ag and 0.66% Cu. A \$1.3 million program was recommended and carried out, including an EM survey, a 10 hole surface drilling program, and an underground exploration program. The recommendation was made to drive an exploration drift to: a) allow for underground drilling on the known veins, b) serve as a future haulage level, c) allow for bulk samples to be collected from the veins for metallurgical purposes (Kim, 1987b). The main drift was collared and 750 metres of drifting and crosscutting was completed in Phase 1. The Golden Crown workings were de-watered to the 150 foot level and a ventilation raise was driven to connect from the King crosscut to the old 100 foot level. Preliminary metallurgical testing was initiated on a 150 lb sample collected from the King drift (Broughton, 1988).

A \$1 million follow-up program was recommended and work continued in 1988, including 48 underground diamond drill holes, 12 surface drill holes, and 365 metres of additional drifting and crosscutting. Drilling was successful in discovering the main ore shoot on the King Vein, below the drift level and raking to the southwest (Kim, 1989a).

In 1989, Grand Forks Mines underwent a share consolidation and change of name, becoming Attwood Gold Corp. Attwood Gold earned a 50% interest in the property under the terms of an earlier option agreement, and acquired the remaining 50% of the property in exchange for shares. Five additional underground drill holes were completed in 1989, and an updated reserve estimate was completed. A drill indicated reserve of 62,270 tons averaging 0.455 oz/t Au, 0.52 oz/t Ag and 0.7% Cu, including a dilution of 25%, was estimated, with the possibility of adding perhaps an additional 39,000 tons at similar grade (Seraphim, 1989). The recommendation was made to more accurately determine the reserves by drifting and raising on the veins, and by driving a decline to 100 feet vertically below the main drift to access the King Vein shoot. A \$1.9 million program was recommended, but was not carried out. A major change in management of the property occurred at this time.

In 1990, Attwood undertook a program of surface drilling (34 holes), geochemistry, geophysics, as well as surveying all identifiable drill hole collars. A thorough review of data was initiated by a new exploration team, which uncovered many errors in the original database. An independent reserve estimate was completed, and reserves were estimated at 37,200 tons at an average grade of 0.536 oz/t Au (cut) (or 1.0 oz/t Au (uncut)), and 1% Cu. The discrepancy between this and previous estimates was deemed to be largely the result of inaccurate drill hole locations. Attwood Gold initiated legal action against Consolidated Boundary in 1990, for negligence in supervision of the exploration on the Golden Crown property, after the 1990 program indicated significantly lower mineral reserves than previously estimated. The dispute was settled in 1991. A change in management of Attwood Gold took place, and the property become dormant.

In 1996 eleven reverted crown grants were inadvertently allowed to lapse, including the Calumet on

which the first 500 metres of the main drift is located. Under regulations in effect at the time, the reverted crown grants were placed up for auction in June 1997, at which point they were acquired by Donald Rippon for a sum of \$28,652. The claims were subsequently transferred to Century Gold. Attwood Gold still held title to the Winnipeg and Golden Crown crown grants, the two claims which would complete the Golden Crown property. Century then negotiated a deal with Attwood Gold, to acquire a 100% interest in these two remaining claims.

During 1998 Century completed a preliminary review of data, followed by a program of grid work, geological mapping, and rock sampling. This program resulted in a better understanding of the geology and structural controls of the property and the recognition that the geology and mineralization on the property was consistent with a Rossland vein model. This has been useful in guiding exploration, as well as demonstrating the potential size and grade of target which the property could produce. Past exploration on the property was done without the benefit of a clear model.

A trenching program was initiated late in the season. A total of about 700 metres of trenching was completed in 22 trenches on 11 different targets, as detailed in this report. Highlights of the program were:

• The discovery of the gold bearing Tiara massive sulfide vein, with two potentially important zones, untested by drilling

	Width	Grade		Dilution (for 4 ft minimum)	Diluted Grade	
Northern Zone (28 m)	0.73 m	44.9 g/t Au	1.31 oz/t Au	40%	26.9 g/t Au	0.79 oz/t Au
Southern Zone (25 m)	0.9	34.0 g/t Au	0.99 oz/t Au	26%	25.2 g/t Au	0.74 oz/t Au

- An understanding of the significance of serpentine contacts in controlling mineralization
- The identification of late, shallow dipping mineralized fault zones which were previously unrecognized
- New exposures or significant extensions of the Golden Crown, Princess and South Zones

During 1998, the main drift was rehabilitated for access for geological mapping.

2.4 Summary of 1998 Work Program

During 1998, a grid was established in the central portion of the property, for control during mapping and trenching, as shown on Figure 7. The cut and surveyed adit trace on surface was re-established as a baseline. Cross-lines were put in at 50 metre intervals, with stations established every 20 metres. Stations were marked with pickets labelled with metal tags. Lines were marked by blazing, slashing out, and flagging between stations. A total of 9.64 km of line was done. Grid work was done by John Kemp of Grand Forks, B.C., from July 1 to July 30, 1998. A total of 10 man days was spent.

Geological mapping was completed by Linda Caron, from May 15 – August 5, 1998. A total of 27 rock samples were collected from old workings, existing trenches and from outcrop, as shown on Figure 7. Rock sample descriptions are included in Appendix 1, with analytical results in Appendix 2. Trench layout, supervision, sampling and mapping was also by Linda Caron, between October 28 and November 11, 1998. In total, 40 days were spent on the property.

The trenching program was completed between Oct 31 and Nov 5, 1998 using a 2800Q LinkBelt

excavator owned by W. Bosovich of Rock Creek, and operated by G. Best. Twenty-two trenches were dug on 11 different targets, for a total of 706 metres of trenching. Fifty-one rock samples were collected from the trenches.

Rehabilitation of underground workings was undertaken during 1998, under contract by Jackpot Mining of Greenwood, B.C. This work was completed between October 28 and November 15, 1998. Rehabilitation work included re-timbering the portal, scaling the main drift and Winnipeg and King cross-cuts, removing caved material from the floor of the drift and returning the floor to a suitable grade, re-timbering and screening a serious cave-in, and selective rock bolting. A total of 50' of extensive rehabilitation was required to make the workings comply with safety concerns of the Inspector of Mines in order that underground mapping, sampling and examination of veins could be done.

Exploration during 1998 was under the direction and supervision of Donald Rippon of West Vancouver.

3.0 GEOLOGY AND MINERALIZATION

3.1 Regional Geology and Structure

The Greenwood area has been mapped on a regional basis by Fyles (1990), and prior to this, by Little (1983) and Church (1986). The distribution of rocks in the Greenwood area is controlled by a series of faults, including both Jurassic thrust faults and Tertiary extensional and detachment faults, hence an understanding of the structure of the area is critical to understanding the geology. The reader is referred to Fyles (1990) for an in-depth description of the regional geology and structure.

Fyles' mapping shows the pre-Tertiary rocks form a series of thrust slices, which lie above a basement high grade metamorphic complex. The thrusting event is felt to be an effect of the development of the Okanagan gneiss domes, which also results in the regional northward dip of rock units (Fyles, 1990). A total of at least five thrust slices are recognized, all dipping gently to the north, and marked in many places by bodies of serpentine. Fyles' interprets these serpentinite bodies as representing part of a disrupted ophiolite suite, belonging to the Knob Hill Group of late Paleozoic age. Commonly, these serpentinite bodies have undergone Fe-carbonate alteration to listwanite, as a result of the thrusting event.

The oldest rocks in the camp belong to the late Paleozic Knob Hill Group of dominantly volcanic affinity, and consist mainly of chert, greenstone and related intrusives, and serpentine. Unconformably overlying these rocks are sediments and volcanics (largely argillite, siltstone, limestone and andesite) of the late Paleozoic Attwood Group. Rocks of the Knob Hill and Attwood Groups are in turn unconformably overlain by the Triassic Brooklyn Formation, represented largely by limestone, clastic sediments and pyroclastics. In many cases in the Greenwood area, evidence for thrusting is seen by the older Knob Hill Group rocks resting over the younger Attwood Group or Brooklyn Formation rocks. The historically important skarn deposits in the Greenwood area (i.e. Phoenix, Oro Denoro, Motherlode-Greyhound) are hosted within the Triassic rocks.

Three separate intrusive events are known regionally to cut the above sequence, the Jurassic aged Lexington porphyry, the Cretaceous Nelson intrusives, and the Eocene Coryell dykes and stocks.

Tertiary sediments and volcanics unconformably overly the older rocks with the distribution of these Tertiary rocks largely controlled by a series of faults. Regionally, three Tertiary fault sets are recognized, an early gently east dipping set, a second set of low angle west dipping, listric normal detachment type faults, and a late, steep dipping, north to northeast trending set of right lateral or west side down normal faults (Fyles, 1990). Detailed mapping has shown that in many cases the regionally mapped Tertiary faults are accompanied by a series of less significant, sympathetic faults, with lesser amounts of offset than the regionally mapped structure. For example, the Snowshoe fault near Phoenix has at least 3 parallel, sympathetic faults located in a 150 metre section in the hanging wall of the fault, with offsets of in the order of 100 metres on each of the sympathetic faults, compared to an offset on the Snowshoe fault of one or more kilometres.

3.2 Metallogeny of the Greenwood Camp

Peatfield (1978) and Church (1986, 1997) describe the metallogeny of the Greenwood area, although recent exploration in the Greenwood camp and in northern Washington State has resulted in some further advances to the metallogenic model. A wide range of deposit types is known to occur in the Greenwood area, including:

- 1. Precious metal vein deposits
 - 1.1 Intrusion related or structurally controlled precious metal vein deposits (ie.Providence, Jewel)
 - 1.2 Rossland-type massive sulfide or quartz-sulfide veins, associated with Jurassic-Cretaceous intrusives and structures. (ie. Athelstan-Jackpot, City of Paris – No. 7, Winnipeg-Golden Crown)
 - 1.3 Tertiary epithermal veins and structurally controlled Tertiary detachment type veins or sulfide zones (ie. Tam O'Shanter, Rainbow, Crown-Hartford area, San Jacinto – Marshall, Summit)
- 2. Skarn deposits (related to Cretaceous intrusions)
 - 2.1 Triassic hosted copper (+/- gold) skarn deposits (ie. Phoenix, Oro Denoro, Motherlode)
 - 2.2 Triassic hosted iron (+/- gold) skarn deposits (ie. Emma)
 - 2.3 Triassic hosted zinc skarn deposits (ie. Cyclops, Rathmullen)
 - 2.5 Permian hosted skarn deposits (ie. Jewel Creek, Kimberly Camp)
- 3. Permian or Triassic (precious metal enriched) stratigraphically controlled massive sulfide/oxide deposits Lamefoot type (ie. Sylvester K, Croesus, Keno Extension, Keystone)
- 4. Porphyry type copper (ie. Buckhorn) or copper-gold (Lexington) deposits.
- 5. Magmatic copper deposits (ie. Sappho)

In developing a metallogenic model for the camp, one feature of particular importance appears to be the presence of Jurassic-Cretaceous intrusives and/or Jurassic thrust faults. The Jurassic thrust faults are commonly marked by large bodies of serpentine, which may have undergone alteration to listwanite. The Jurassic-Cretaceous intrusives are to a large degree localized along these thrusts and many of the known precious metal enriched deposits in the Greenwood Camp have a very close spatial association to the faults. In a regional sense, the Lind Creek thrust seems to be of particular importance with the majority of known gold mineralization and production in the camp occurring in the immediate hangingwall of the fault. In addition, the presence of the Jurassic-Cretaceous intrusive event is central to the Rossland vein model, and discussed in further detail in the following section of the report.

It has become clear recently that the regional geology of the Greenwood Camp and of the adjacent part of northern Washington is still open to re-interpretation. Until recently the Lamefoot deposit was believed to be hosted within Permian Attwood Group rocks, however fossil evidence now suggests that host rocks may in fact be Triassic Brooklyn equivalent (Rasmussen, 1993: personal communication). In light of the fact that this is an operating mine, with ongoing exploration and research, it would seem to be clear that a very open minded approach must be taken when exploring these camps. A late stage epigenetic event is thought to have deposited at least some of the gold at Lamefoot. A possible Jurassic age to mineralization is suggested from dating sericite in alteration envelopes to veins, the implication being that it may be important to be near Jurassic aged structures in order to have gold in earlier massive sulfides.

With regards to skarn type mineralization, exploration in the Greenwood camp has traditionally targeted copper (and more recently gold) skarn mineralization in Brooklyn limestone and sharpstone. There has been little exploration for mafic volcanic hosted copper(+gold) skarns (ie. QR, Ingerbelle type), although

examples of such mineralization are known to occur. Alteration and mineralization in this type of deposit are unimpressive in appearance, and occurrences may have been overlooked and underexplored in the past.

In the Republic area, epithermal veins formed in a hot spring environment after deposition of the Sanpoil (Marron) volcanics, but before the deposition of the Oligocene Klondike Mountain Formation (Tschauder, 1986; Muessig, 1967). In many places the Klondike Mountain Formation has been eroded away, exposing the paleosurface, however a number of the Republic deposits are blind deposits beneath post mineral sediments of the Klondike Mountain Formation. Vein orientation is between about 330° and 030° ; dips are generally moderate to steep. The Republic veins typically extend to depths of 200 - 250 metres, although some have reached depths in the order of 500 metres. Ore is not continuous along the veins, but occurs in high grade shoots, ranging from 30 to 180 metres in strike length. Near the contact of the Sanpoil volcanics and the Klondike Mountain Formation, the veins grade into stockwork zone. These stockworks are locally capped by silicified breccias with low grade gold and with locally disseminated pyrite which make potential bulk tonnage gold targets. In the Greenwood area, there are vast areas of Tertiary cover which are poorly mapped and have had little to no prospecting. Occurrences of Tertiary epithermal alteration and mineralization are known within the camp, but have seen little attention.

New mineral deposit models being applied to the Cordillera, include Carlin type deposits and Intrusion Related Au-W-Bi veins deposits. The geological setting in the Greenwood area is such that there is potential for either of these deposit types to occur.

3.3 Property Geology and Mineralization

3.3.1 Property Geology, Mineralization & Rock Sample Results

During 1998, a grid was established in the central portion of the property, for control during mapping and trenching. Geological mapping was completed by Linda Caron, from May 15 – August 5, 1998. A total of 27 rock samples were collected from old workings, existing trenches and from outcrop, as shown on Figure 7. Rock sample descriptions are included in Appendix 1, with analytical results contained in Appendix 2. Results are also included on Figure 7.

The geology of the Golden Crown property is shown in Figure 7. In the eastern portion of the property, the dominant rock type in outcrop is a medium to coarse grained, dark green diorite to monzodiorite. Excellent rock exposures of this unit are seen along the powerline, from the Winnipeg shaft towards the east. Outcrops are step-like in nature, both in this area and on the hill south of the main drift, and are suggestive of a series of diorite sills. Patterns observed in cross section from drill logs are consistent with this interpretation. Church (1986) dated a sample of diorite from drill core at the Winnipeg Mine, which returned a date of 258 +/- 10 Ma, and hence maps this unit as Old Diorite of the Permian Knob Hill Group. It is not known where this sample was obtained from, which unit it represents, nor the distribution of the unit. Höy (personal communication) comments on the similarity between the Golden Crown diorite and a phase of the composite Rossland monzonite intrusion in the Rossland Camp.

In drill core, a coarse grained, dark green amphibolite occurs, which is believed to be a phase of the diorite intrusion. In cross section, a large body of the amphibolite is seen in the vicinity of the old Winnipeg workings, and is in close spatial association with veining in this area. This unit is startlingly similar to an amphibolite seen adjacent to old stopes on the Centre Star claim at Rossland. The amphibolite is observed in outcrop in the extreme southeast portion of the Golden Crown property, and is known to outcrop on the adjoining Ophir-Keno claims.

A third intrusive phase occurs in the central and western parts of the property. This pale grey, porphyritic monzonite is typically strongly altered and highly sulfidic, and is spatially closely associated with many of the zones of known mineralization. It is believed that this "porphyrite" is a third phase of the composite diorite to monzodiorite intrusive. It tends to be more recessively weathering than the coarser grained diorite phases, and is most commonly seen in drill core and in old trenches and pits. This unit is, again, remarkably similar to intrusive rocks in the Rossland camp, where a genetic link between it and the Au-Cu veins has been suggested (Höy and Dunne, 1997).

On lithological grounds, the multi-phase diorite-monzodiorite intrusive is correlated with the Jurassic-Cretaceous Rossland monzonite (pers communication, T. Höy). Whole rock chemistry is underway which will test chemical similarities between the units. The Rossland monzonite is believed to represent the metallogenic event responsible for the Au-Cu veins in the Rossland Camp (6 million tons @ 0.46 oz/t Au). In a regional sense, these intrusives in the Golden Crown area are situated along the Lind Creek thrust, an east-west Jurassic aged thrust fault which is commonly marked by serpentinite and listwanite. Elsewhere in the Greenwood area, a similar spatial association between Jurassic thrust faults and similar intrusive rocks is seen (ie. Lexington-Lone Star, Rainbow).

On the Golden Crown property, the multi-phase diorite-monzodiorite is intrusive into a variety of volcanics, including fine grained pyroclastics and a fine grained rhyodacite. Undifferentiated greenstone is very common, particularly in drill core, and an augite porphyry also occurs. The age of the volcanics is uncertain at this point. They may be analogous to the Elise Group of the Jurassic Rossland volcanics (Little, 1983), or alternately may belong to either the Knob Hill or Brooklyn Formations (Church, 1986;

Fyles, 1990). In any event, they appear to be older than the mineralizing intrusive and represent a potential host to veins. The fine grained pyroclastic volcanics are typically sulfidic (po-py) and strongly altered to chlorite and sericite. Greenstone and augite porphyry are strongly chloritic, with local minor disseminated pyrite.

The multi-phase diorite-monzodiorite cuts a fine grained, massive dark green microdiorite in the western portion of the property. Good exposures of this microdiorite occur in road and railway cuts in the Hartford Junction area, and regionally this unit is referred to as the Hartford Junction Microdiorite (Church, 1986). K-Ar dating of similar microdiorite in the Providence Lake area returned an age of 206+/- 8 Ma, while the Hartford Junction microdiorite apparently returned a 194? Ma date (Church, 1986; pers communication, M.Rassmussen). Fyles (1990) refers to the microdiorite as feeders to the overlying volcanic rocks, and includes both the microdiorite and overlying volcanics as part of the Triassic Brooklyn Formation. The microdiorite is typically altered to chlorite, and commonly weak to moderately carbonate altered.

Outcrops of serpentine are rare on the property, due to the recessive nature of the rock, however there are several areas where trenches do expose serpentine, as well as rare outcrops in the extreme eastern portion of the property. Serpentine is common in underground workings, however, as well as in drill core, In a regional sense, the serpentine is believed to represent parts of a disrupted Permian ophiolite suite, emplaced along various structures. A flat lying, undulating blanket of serpentine, approximately 50 metres thick and situated about 75 metres below surface, underlies the central portion of the property in the vicinity of the Golden Crown workings and near the northern end of the main drift. The upper contact of the serpentine can be traced on cross-section towards the east. At about Section 4790, the contact becomes steeply north dipping for a distance of approximately 100 metres, before flattening and becoming more moderate and undulating again to the east. This steepening in the serpentine contact corresponds to the location of the King Vein ore shoot. A further 200 metres or so to the east, the contact again becomes very steeply dipping and comes to surface in the vicinity of the Tiara vein, where high grade Au mineralization is exposed in trenches. This particular contact between the serpentine and other rock types shows an especially important association with mineralization on the property. Other serpentine contacts on the property show similar associations, but lack the same degree of exploration and hence ability for interpretation. Higher grade and thicker portions of cross-cutting veins are located where the veins intersect serpentine contacts, as seen at the King Vein. Mineralization may also be concordant with the serpentine contact, as at the Tiara.

Numerous gold bearing massive sulfide veins (pyrrhotite, pyrite, chalcopyrite) and quartz-sulfide veins occur on the property. The veins are hosted both by the volcanics, by various intrusive phases, and by serpentine.

Previous workers have stated that in the eastern portion of the property the veins trend at about 295° and that at about the position of the Golden Crown workings, the strike of veins appears to swing to about 315°. On the main vein system, dips are stated to be near vertical at surface and flattening to 60-70° S at depth. There is also significant discussion regarding different vein types and the mineralogy, location and grade of these types of veins (Robb, 1990; Minfile 082ESE032, 33; Ford, 1990). Neither the trends in orientation or in vein type and grade described by previous workers are corroborated by exploration completed during 1998. In fact, vein orientation seems to be fairly consistently between about 300° and 330°. The main veins seem to be very steeply dipping to the south, approximately 80°, while on surface, several veins appear to have steep north dips (Princess, Golden Crown). Mineralization is locally controlled to a very strong extent by serpentinite contacts, which can have highly variable orientations.

Variations in vein mineralogy are noted, and at least two distinct mineralizing events with significantly different fluid chemistries are suggested. The lack of multi-element data from samples collected prior to

the 1998 program makes any detailed discussion of this premature. It can however be said that in a very regional sense, veins to the east tend to be more Au-As rich, while those to the west are more Au-Cu rich. In samples collected during 1998, two distinct geochemical associations were noted, namely Au-As (+/- Sb) and Au-Ag-Cu (+/- Bi, Mo, Co, As). In some samples, both events would appear to be present. In many cases there does not appear to be any direct correlation, either positive or negative, between Au and Cu, nor can one discuss the Au:Ag ratio on the property as a whole with any degree of confidence. Much further work needs to be done to understand the fluid chemistry and mineralizing events. It may be that one chemical signature is attributed to a distinctly later mineralizing event than the second, perhaps controlled by a distinct set of structures. A better understanding of the mineralization process will most certainly aid in exploration.

One important feature noted on surface which does not seem to be recognized from past work, is the presence of late, shallow dipping, detachment type faults. These Tertiary detachments are common elsewhere in the Greenwood area, particularly near Phoenix where there has been sufficient exploration to document movement and displacement. In a regional sense, the detachments are commonly stacked. with a series of parallel faults on which movement is smaller scale, sitting above a more significant fault of more regional significance. Movement on the faults is most often top to the west. During the 1998 trenching program, the presence of these detachment faults was recognized on the Golden Crown property (Queen, Samaritan, Tiara). It also became clear during compilation of previous data that previously unrecognized detachment faults were suggested by drill data. More importantly, it was recognized that these detachments could be mineralized (as is the case on the adjacent Crown claims to the west of the Golden Crown property), thus the possibility for more gently dipping zones of mineralization must be considered. It is also important to recognize that the detachments may offset the earlier steeper veins, and that well directed exploration may be successful in identifying the continuation of these veins where historical exploration had failed. The recognition of these shallow structures has enabled a better interpretation of existing data than was previously possible. In several cases, where previous data suggested a lack of continuity to a particular zone, the recognition of low angle structures shows that there may indeed be room for significant areas of additional mineralization.

At least 15 different zones of mineralization are known to occur on the property, representing probably 12 discrete veins. Because of the close spaced, parallel nature of the veins, and because of a lack of continuous exploration data between drill intercepts, it is often not possible to determine with certainty which vein a particular intercept belongs to. This has been a particular problem in the past, and has been exacerbated by poor survey control of drill holes prior to the 1990 program, and by errors in hole location or orientation which had been propagated in the database. With more accurate and more detailed information, a better understanding of the number of veins present on the property and the spatial relationship between the veins is evolving over time.

The veins vary in mineralogy from massive pyrrhotite-pyrite-chalcopyrite veins, with a total sulfide content of > 60%, to quartz veins with a relatively low sulfide content. Both vein types can have high gold values. A third style of mineralization has been noted in trenches on surface in the Tiara zone, where massive, fine grained, black, sooty pyrite is associated with very high gold values. Veins average 1-2 metres in width and typically have very steep dips. Alteration adjacent to veins is highly dependent on rock type. In diorite, microdiorite, augite porphyry and serpentine, there is very little wall rock alteration adjacent to veins. Fine grained pyroclastic volcanics and porphyrite intrusive tend to be strongly sericitized and sulfidic regionally, although this may become more intense in alteration envelopes adjacent to mineralized zones.

A total of 78 rock samples were collected from the property during 1998, 27 during the mapping program and an additional 51 from trenches dug later in the season. Samples were shipped for Chemex Labs in North Vancouver for preparation and analysis for Au (30 gram, FA/AA finish), and for 32 element ICP. Over limit samples were assayed for Au or Cu. Rock sample locations are shown on Figure 7, with trench sample locations shown on Figures 8-13. Sample descriptions are contained in Appendix 1 and analytical results in Appendix 2. Sample results for Au, Ag and Cu are also included on Figure 7.

Results of the surface sampling program are discussed in the following description of zones of known mineralization on the property. Trench sample results are discussed in Section 4.0 of this report.

Central Zone

The main area of known mineralization, referred to as the Central Zone, includes the King, Winnipeg, McArthur, George and Golden Crown veins and is centered roughly along the main drift.

<u>King</u>

The King Vein is unexposed at surface, or perhaps poorly exposed in old workings on the knoll immediately west of the Winnipeg Shaft. The surface expression of the vein would be situated about 40 metres north of the open stopes along the road on the Golden Crown claim, however drilling suggests that the vein may not be well developed near surface at this point, or may be offset by faulting near surface. The vein is defined by numerous drill intercepts, and is exposed underground over a 38 metre strike length in the King drift. The vein is narrow and splaying where exposed underground. Previous sampling from the drift is well documented on old maps, with results ranging up to a high of 1.7 oz/t Au and 1% Cu over 0.4 m. More typical values from vein samples in the drift are in the order of 0.1 to 0.3 oz/t Au.

An average trend for the vein is 300°, with a dip of about 81° to the south. An ore shoot developed on the vein, between Sections 4780E and 4950E, rakes at about 40° to the west. Ford (1990) has estimated a reserve of 21,700 tons @ 1.64 oz/t Au and 1.3% Cu from this ore shoot on the King Vein, with approximately one third of this reserve above drift level.

The vein is hosted in greenstone and in serpentine, with a marked thickening of the vein occurring near the serpentine contact. This bulging is most apparent within the serpentine, within about 15 metres of the upper contact. Much of the prospective serpentine contact remains untested and there has been essentially no deep drilling to test for the presence of the vein at depth.

The current interpretation suggests that the King, Golden Crown (as defined by Ford) and Winnipeg Veins may all in fact be the same structure, as seen in longitudinal section. A strike length on the structure of about 400 metres has been tested in part, with good potential to add reserves on the vein both within this known strike length, and on strike in both directions. The vein is tested to a depth of about 125 metres for a 50 metre strike length in the vicinity of the King shoot. Elsewhere along the 400 metre known strike, drilling is generally restricted to within 75 metres of the surface.

Golden Crown

The Golden Crown Vein was mined, explored and developed in the late 1800's and early 1900's. A shaft was sunk, and drifts established on the 100 and 150 foot levels. The ventilation raise from the King cross-cut connects to the historic 100 level workings, and these workings are still accessible via the shaft (although some ladders may need attention). The workings were mapped and sampled in detail in 1980, and stope locations identified.

Historic production is reported at 2,743 tons at an average grade of 0.45 oz/t Au and 1.5% Cu, although the extent of workings and size of the dumps suggests a discrepancy in production records between the Winnipeg and the Golden Crown. It would appear likely that significantly more production may have occurred from the Golden Crown than is reported, and less from the Winnipeg. Production from the Golden Crown workings was apparently from three stopes on the 100 level, located within a 55 metre long mineralized zone centred about the shaft. The stopes are reported to exceed 20 metres in back height, and the vein is said to average 1.5 metres in width, with a steep south dip (Keyte and Saunders, 1980).

On surface, trenching in 1998 exposed a vein over a 19 metre strike length just northwest of the Golden Crown shaft dump. This is believed to be the surface expression of the Golden Crown vein (which is developed on the 100 level workings). The vein trends 324°/75°NE, and averages 1-2 metres in width where exposed on surface. It is primarily a quartz vein, with 20%, to locally 90%, sulfides (dominantly pyrite and chalcopyrite, with local pyrrhotite), with local pods of massive sulfides. On surface, the vein is hosted in a siliceous fine grained green intrusive or porphyritic volcanic and is open on strike in both directions. Snow conditions were such that detailed mapping and sampling could not be done, however two grab samples were collected, with results to 3550 ppb Au (0.10 oz/t Au). Detailed mapping and sampling of the trench is recommended. Further trenching is also recommended to follow the vein on strike to the west and to follow-up untested gold soil anomalies in this area.

Ford (1990) estimates a reserve of 2,650 tons at 0.35 oz/t Au and 2.28% Cu for the Golden Crown vein. There is excellent potential to add to this reserve. As mentioned in the discussion above regarding the King Vein, it appears that Ford's Golden Crown Vein is the western on-strike extension of the King Vein. It does not appear that the stopes on the Golden Crown 100 level workings are developed on this vein, but rather seem to be developed on a second vein (the "true" Golden Crown vein) located about 30 metres into the footwall of the one exposed in the drift (and the one on which Ford's reserves are situated).

<u>Winnipeg</u>

The Winnipeg Vein was developed in the early days by the Winnipeg shaft, now caved, and by a series of drifts about which little is known. A cross-cut was driven from the main drift, which breaks into old flooded workings developed from the Winnipeg shaft. The main drift itself breaks into other old flooded workings, however the exact location and extent of these workings is unknown. Recorded production is 58,771 tons at a grade of 0.2 oz/t Au, 0.16% Cu from the Winnipeg, however as discussed above with respect to the Golden Crown Vein, there may be a production from the Golden Crown recorded in this figure.

Ford (1990) estimated a reserve of 2,750 tons at 0.29 oz/t Au and 0.16% Cu from the Winnipeg Vein, which appears to be the eastern on-strike extent of the King Vein. The ground in between the King Vein Shoot and the "reserves" on the Winnipeg Vein is poorly tested. As at the King Vein, the serpentinite contact seems to be important in localizing mineralization.

<u>McArthur</u>

The McArthur Vein is located about 40 metres in the hangingwall of the King Vein, and approximately parallel to it. At drift level, the McArthur Vein is situated approximately 15 metres south of the main drift, at the point where the King cross-cut leaves the main drift. On surface, open stopes near the road and old core storage area on the Golden Crown claim are developed on the McArthur vein.

A 5,000 ton reserve was estimated by Ford (1990) on the McArthur Vein, with a grade of 0.62 oz/t Au and 1.2% Cu, however this is based on only 4 drill hole intercepts, with the best intercept being ddh 85-1 (3.4 m @ 1.37 opt Au). The vein has a nice average grade and reasonable width, but it's proximity to many old workings about which little is known makes it difficult to assess the validity of the reserves.

There is essentially no drilling at depth to test for continuity of the zone below drift level, nor is the vein well tested on strike. Historical accounts for the Winnipeg refer to two parallel veins in the Winnipeg shaft area, some 150 metres east of the tested portion of the McArthur Vein. It may be that, since the Winnipeg and King Veins appear to represent a common structure, that the second vein referred to in the Winnipeg area may represent a continuation of the McArthur Vein to the east, and may imply a reasonable strike potential.

George

The George Vein is situated about 15 metres into the hangingwall of the King Vein and is known from drill data only. The vein is developed between Sections 4810E and 4860E, and includes drill intercepts U88-18 (1.25m @ 0.86 oz/t Au) and U88-23 (0.91m @ 1.25 oz/t Au). The George Vein shows similar patterns to the King, thickening near the serpentine contact, and being most strongly developed on the same sections that the King Vein is strongly developed on. In general, however, it is a relatively narrow, splaying vein system. There are no reserves estimated on the George Vein, although there is good exploration potential.

Other Zones

<u>Portai</u>

The Portal System is located in the eastern portion of the property, near the portal of the main drift. Ford (1990) has estimated a resource of 5,000 tons averaging 0.41 oz/t Au, 0.03% Cu for the Portal System, which includes ddh 88-3 (2.35 m @ 1.2 oz/t Au, 0.27% Cu). The continuity of the system, and hence the confidence in the reserve estimate, based on Ford's interpreted geometry, is very poor. The estimated 5,000 tons is based on 3 drill intercepts only, of which one (using Ford's interpreted geometry) is clearly on a separate vein.

That said, however, a review of the available data suggests that the Portal Vein is not in fact a steeply dipping structure, as Ford suggests, but represents a shallow dipping, mineralized detachment type fault trending about 320°/30°S, similar to that seen at the Queen, Tiara and Samaritan trenches. Anomalous gold values in soil (to 173 ppb Au, 124 ppb Au) may represent the surface expression of a mineralized detachment fault in this area and trenching is recommended to test this. The possibility of a steep mineralized structure in the footwall of the detachment (such as seen at Queen and Tiara) is also open, and should be tested.

Calumet

The Calumet zone is located on the southern edge of the cleared powerline right-of-way, about 50 metres north of the portal to the main drift. Several old pits and trenches have been dug on a massive pyrrhotite and quartz-sulfide vein system, hosted in altered volcanics. Surface grab samples collected from dumps of the old workings during 1998 returned values to 0.47 oz/t Au. There are no good exposures of the vein in the old workings, and it's thickness and extent are unknown. The system has been tested with 4 drill holes over a 60 metre strike length, and returned gold grades to 0.155 oz/t Au over narrow widths. The vein could be tested on surface by trenching without serious difficulty.

<u>Tiara</u>

An overgrown, old trench immediately south of the main access road and about 150 metres east of the Winnipeg shaft exposed a massive pyrrhotite body with poorly exposed contacts. Initial sampling of the exposed sulfide zone during 1998 returned values to 0.35 oz/t Au. Several short drill holes had attempted to test the zone in the past, had returned thick intercepts of massive sulfides with very low gold values, and no further work had been done.

During the fall of 1998, the zone was trenched, as described in more detail in Section 4.0 of this report. The previously exposed massive pyrrhotite zone was discovered to be a relatively flat lying blanket, occurring along a shallow dipping detachment fault, at the point where this fault cut a moderate to steeply dipping mineralized serpentinite-diorite contact. The contact zone was exposed for about 110 metres and found to be mineralized for about 90 metres of this. The main area of mineralization exposed has a somewhat variable orientation. At the north end of the trench, the zone trends about 335°/40°W. The dip steepens to the south (away from the detachment fault), and the zone becomes more northerly trending. At the southern end of the trench, the average orientation of the mineralized contact zone is 355°/90°.

The northern portion of the mineralized contact zone averages 1.31 oz/t Au over 0.73 m, for a strike length of 28 metres. For a distance of about 10 metres, the contact is narrower and weakly mineralized. The grade and width then increase again, with the next 25 metres of strike length averaging 0.99 oz/t Au over 0.9 metres.

	Width	<u>Grade</u>		Dilution (for 4 ft minimum)	Diluted Grad	le
Northern Zone (28 m)	0.73 m	44.9 g/t Au	1.31 oz/t Au	40%	26.9 g/t Au	0.79 oz/t Au
Southern Zone (25 m)	0.9	34.0 g/t Au	0.99 oz/t Au	26%	25.2 g/t Au	0.74 oz/t Au

It is important to recognize that in the southern part of the exposed zone the massive pyrrhotite (up to 7 metres in width) has only moderately anomalous levels of Au, while both the hangingwall and footwall contacts of the massive sulfides are faulted and grade considerably higher than the more massive core. The serpentine-diorite contact swings radically to the west at the south end of the trench. It continues to be mineralized with grades of about 0.15 oz/t Au over a true thickness of about 1 metre, and remains untested on strike to the west.

The Tiara zone has a Au:Ag ratio of about 10:1, is highly anomalous in arsenic, and contains only about 0.1-0.2% Cu. While samples of massive pyrrhotite-pyrite from the zone can carry good gold values, other areas of similar mineralogy are only weakly anomalous. Where very fine grained, black sooty pyrite is present within the zone, gold values are consistently very high.

Additional trenching should attempt to further trace out the serpentine-diorite contact, and should also test gold soil anomalies (187 ppb Au, 380 ppb Au, 450 ppb Au) on strike of the Tiara vein to the north and south, for the continuation of the zone.

<u>Queen</u>

The large, deep old trench (opposite the Winnipeg shaft road) was re-dug from the vein exposure at the west end, to the main road at the east end. The Queen vein was exposed over about a 5 metre strike length in the old trench. Sampling during 1998 returned grades to 0.52 oz/t Au and > 2% Cu from the exposed portion of the vein. Several large massive pyrrhotite boulders were situated in the trench about

30 metres to the east, and assayed up to 0.18 oz/t Au and 1.1% Cu from samples collected during 1998. Vein contacts and host rocks were unclear. A minor amount of drilling had been done in an attempt to trace the Queen Vein, on the assumption that it was a steeply dipping vein, and were successful in intersecting only very narrow veins which did not correlate well with those seen on surface.

At the west end, where the Queen vein was well exposed, trenching during 1998 was done along the strike of the vein, for a distance of 26 metres. The trench exposed a complex zone at the intersection of 2 faults. A near vertical north trending fault is cut by a north trending, shallow west dipping mineralized fault zone (the Queen "vein"). The shallow dipping fault zone is at least 2.5 metres thick, consisting of rusty, intensely altered intrusive rocks with pods of quartz-sulfide and massive sulfide material. Samples from this shallow dipping mineralized fault zone returned grades to 4890 ppb Au (0.14 oz/t Au) across the thickness of the structure. Mapping suggests that this low angle fault may be the same as that exposed in the Tiara and Samaritan trenches. The recognition of these flat structures is critical for a correct interpretation of the geology.

Samaritan Vein

The Samaritan vein is located near surface, about 20 metres south of the main zone on the King Vein, just south of the point where the South Zone road leaves the main access road. The vein was based primarily on the ddh 76-2 intersection (0.51oz/t Au over 4.9 m). Minor follow up drilling had been to a large part unsuccessful at showing any continuity to the vein, based on a steeply dipping interpretation.

Trenching during 1998 exposed a shallow south dipping, mineralized (but highly oxidized) fault zone which appears to represent the Samaritan "vein". This may be the same structure as the Queen fault – a late, low angle detachment type fault (with regional movement in a top to the southwest direction). A thickness of 0.75 to 1 metre was exposed, which returned a value of 1050 ppb Au, but the fault may be wider than this. There is good exploration potential for mineralization along this shallow dipping detachment.

Princess

Several old pits and workings immediately south of the main access road to the Golden Crown – Winnipeg area exposed a quartz-sulfide vein hosted within microdiorite. Very limited drilling has been done to test this vein and during 1998, a new trench was dug to expose the vein on strike. The vein is variably a massive sulfide (pyrite-pyrrhotite-chalcopyrite) or quartz-sulfide vein, averages about 1 metre in width, and trends 320°/75°NE. It has now been exposed over a strike length of 34 metres, at which point the structure continues and the vein splays into a stringer zone. Additional trenching could trace this stringer zone on strike to test for additional vein development along the structure. The vein is also open on strike to the southeast and could be tested by trenching in this direction. Gold grades are relatively low, with samples returning a maximum of 3.36 g/t Au (0.098 oz/t Au).

<u>J&R</u>

The J&R zone is situated about 500 metres northwest of the Golden Crown shaft. Numerous shallow old workings exist on a knoll of porphyrite and microdiorite which is located about 200 metres north of the main access road, north of a swampy clearing. Some more modern trenching has attempted to expose the zone to the east of the knoll, however depth of overburden has hampered previous exploration. A strong gold soil anomaly occurs, 300+ metres long, with values to 650 ppb Au and with a coincident Cu

soil anomaly. Several other soil anomalies occur on strike to the west. The zone may represent the western strike extent of Golden Crown system, with approximately 300 metres of unexplored ground between the two zones.

Nine diamond drill holes were known in this area prior to this program, with the best intercept being ddh 90-25 (2.5 m @ 0.46 oz/t Au, 2.8%Cu). Partial records for 17 additional holes in this area were discovered during recent compilation of data and have been added to the database. They include intersections such as ddh 84-3 (1.52 m @ 0.538 oz/t Au), ddh 84-9 (5.36 m @ 0.159 oz/t Au) and ddh 84-10 (1.52 m @ 0.45 oz/t Au). While assay data is available, the geological logs for these "new" holes are missing and it is difficult to understand the orientation and controls of mineralization. It is recommended that an effort be made to find the J&R core and to relog all available drill holes, in an attempt to better understand the system. Trenching should be done to try to expose the system on surface.

South Zone

The South Zone is located near the height of land north of the Skeff Creek valley, about 300 m south of the main access road, and approximately 50 metres higher in elevation. The vein system was discovered in 1986 by drill testing a strong EM conductor, and appears to consist of two close spaced, parallel veins. Eight diamond drill holes have been drilled on the zone. Where tested, the main vein averages 0.75–1 metre in width, with grades of 0.1-0.3 oz/t Au. The best drill intercept is 1.26 oz/t Au over 1.2 metres.

Trenching late in 1998 was successful in exposing a 2 metre wide, strongly oxidized zone, as well as a narrow zone of quartz-sulfide veining about 15 metres to the south. Grades to 9520 ppb Au (0.28 oz/t Au) were returned from trench samples. Gold soil anomalies on strike to the east and west indicate further exploration potential. Additional trenching is recommended to explore the zone on strike and to attempt to break through the zone of near surface oxidation.

It is important to recognize that the South Zone is situated in the upper plate of the Samaritan-Queen detachment fault, while all the other known veins occur within the lower footwall plate of the fault. There is potential for all the known veins to be offset and repeated within this upper plate. Strong gold soil anomalies to the south of the South Zone may indicate potential for additional veining in this upper plate.

Swamp Zone

The Swamp Zone is situated about 250 metres north of the Golden Crown shaft, in cedar forest with low relief and no rock exposure except in minor old workings and trenches. The zone is accessed by a road heading north from the Golden Crown ore bin. A strong gold soil anomaly (to 1010 ppb Au) with a coincident linear Cu anomaly exists in this area. A minor amount of trenching has been done, which exposes a vein system hosted within highly silicified, pyritic porphyrite intrusive. There are also minor old workings on the vein system.

The Swamp Zone is a high copper system, with values to 8% Cu. Four diamond drill holes have tested the zone, with results to 0.9 m @ 0.122 opt Au and 6.45% Cu. A second parallel untested Au-Cu soil anomaly is located about 100 metres to the north, under the powerline, and the area has good exploration potential. Trenching could be done to trace the known vein along strike and to test geochemical anomalies in the area.

Powerline Area- Golden Crown Adit

The Golden Crown adit is collared about 50 metres north of the powerline and about 250 metres northeast of the Golden Crown shaft. The adit is some 100 metres in length, and cuts 3 or 4 narrow veins. Grades to 0.34 oz/t Au were returned from samples of the veins collected during 1998. The adit was apparently started to provide alternate access to the Golden Crown veins, but was never completed.

A short inclined shaft and several pits located on the powerline right-of-way probably test the same veins. Grab samples from the dumps of these workings have returned values to 2.83 oz/t Au. During 1998 trenching was done under the powerline in an attempt to trace veining on surface. A strongly oxidized fault zone, 1.5 metres in width, was exposed to the north, approximately on strike of the vein, however gold grade was very low (165 ppb Au).

It may be that this system is the southern strike extent of the Swamp Zone. There is no record of any drilling on this zone.

Other Geochemical Anomalies

A soil survey was completed over the property in 1990 (Robb, 1990), with samples collected at 25 metre intervals on lines oriented at 045° and spaced 100 metres apart. This data is included in Figure 14. In general there is a NW trend to both Au and Cu anomalies, parallel to the strike of known veins. Copper seems to increase to the northwest, although the Cu-Au correlation seems to decrease. Numerous soil anomalies remain to be followed up.

Many of the known veins have no geochemical expression, or are marked by single station anomalies only. A value of 50 ppb Au is considered to be anomalous, and >100 ppb Au in soils is considered strongly anomalous. Trenching is recommended to test anomalous gold in soils which remain unexplained. In particular, these anomalies include:

Golden Crown Area:

Anomalous gold in soils (to 109 ppb Au) occurs on strike of the Golden Crown vein to the west, and is untested by trenching or drilling. A further area of anomalous gold and copper in soils north of the Golden Crown dumps and ore bin remains untested. There is no outcrop in this area. Trenching is recommended.

South Zone Area:

A gold soil anomaly, 400 metres in length, is located about 100 metres south of the South Zone. The anomaly includes values to 1290 ppb Au, 1020 ppb Au and is untested by drilling or trenching.

North of South Zone:

North and northeast of the South Zone, a gold soil anomaly occurs. The anomaly is potentially 300 metres long and includes values to 600 ppb, 90 ppb, 97 ppb, 142 ppb Au. There is no coincident Cu anomaly, and the area is untested by drilling or trenching.

South of J&R:

Approximately 175 metres south of the J&R zone a gold soil anomaly with strong broad coincident copper occurs. The anomaly includes spotty gold values (460 ppb Au, 540 ppb Au, 260 ppb Au, 270 ppb Au, and 580 ppb Au) over an area of about 200x150 metres. There is no outcrop in this area, and the anomaly is untested.

Portal System:

Anomalous gold in soils (including 173 ppb Au, 124 ppb Au) may indicate the surface expression of a low angle detachment fault north of the main drift. This should be tested by trenching.

Tiara System:

Anomalous gold in soils occurs to the north and south of the Tiara vein, with values to 187 ppb Au, 380 ppb Au and 450 ppb Au. These anomalies remain untested.

3.3.2 Metallurgy

Some preliminary metallurgical test work has been done on the property, however there is a need for additional work. No polished sections of the various ore types have been studied, and it is not known how the gold occurs. Mineralization on the property is diverse, however there is no good understanding of the distribution of these different ore types, nor is there an understanding of how the different types of ore behave metallurgically. Sulfide content in the veins can ranges from <10% to >90%, although both types of veins can apparently carry good gold values, and copper content can vary from nil to + 8%. In general, however, veins appear to be predominantly massive sulfide veins, with typically 50-70% sulfides (pyrrhotite>pyrite>chalcopyrite +/- arsenopyrite) in a quartz gangue.

A lack of multi-element data prior to the 1998 sampling program, and a lack of detailed descriptions of vein intercepts makes it difficult to get a good understanding of the variations in vein type. In very general terms, there appear to be at least two stages of gold mineralization represented. There are veins or sections of veins which are Au-As rich (and low in Cu), those that are Au-Ag-Cu rich, and still others where both phases of mineralization appear to be present. Very high gold grades (>70 oz/t Au) from the King Vein ore shoot may suggest that some free gold is present. In studying the metallurgy of the deposit, attention must be given to the mineralogy of the veins, to determine whether or not all ore types can be treated in a similarly metallurgical fashion. An understanding of the nature and distribution of the gold is critical.

Coastech Research completed some preliminary metallurgical test work, as described by Broughton (1988). Work was completed on a composite sample from the King Drift which graded 0.71 oz/t Au, 0.59 oz/t Ag, 0.98% Cu and 37.7% Fe. Differential flotation to produce a copper concentrate and a gold/pyrite concentrate achieved high copper, gold and silver recoveries, however weight recovery was also very high (66% of the original sample). Upon cleaning the concentrates (to 30% by weight of the original sample) recoveries dropped, to about 87% for Au, 80% for Ag and 93% for Cu.

Preliminary metallurgical work by Bacon Donaldson (Beattie, 1990) was completed on a composite sample of ore, grading 0.13 oz/t Au, 0.28 oz/t Ag, 0.98% Cu and 0.34% As. It is not known where this sample was collected from. This work showed that gold was not associated with the copper, and that as copper grade increased in a copper flotation concentrate, gold recovery decreased. A copper concentrate was produced, with gold recovery of approximately 90% achieved in the rougher concentrate (about 22% by weight of the original sample). In the process of cleaning the concentrate to achieve a concentrate grade of about 30% Cu and to reduce the volume of the concentrate to about 4.25% by weight of the original sample, the gold recovery dropped to about 50%. Cyanidation of the cleaner tails to recover the balance of the gold was attempted. This combination resulting in an overall recovery of about 88-90% Cu and 75% Au.

In summary, further test work is required to achieve the right balance between reducing the volume of the concentrate and achieving appropriate metal recoveries. An understanding of the nature and distribution of the gold is necessary, as is an understanding of the variation in ore types.

3.3.3 A Summary Comparison to Rossland, B.C.

The recognition of a suitable geological model for a property is useful for guiding effective exploration, as well as for demonstrating the potential tonnage, grade and size of target which the property could produce. Past exploration at the Golden Crown was done without the benefit of such a model. Recent advances in the geology and modeling of mineralization at Rossland can be used to show how the Golden Crown property fits this Rossland vein model. The Rossland Camp is situated 50 km due east of Greenwood and ranks as B.C.'s second largest producing gold camp, with over 2.7 million ounces of gold produced from a series of pyrrhotite rich Au-Cu veins.

The General Geological Model

- · mineralization consists of a series of parallel massive sulfide veins and/or bull quartz veins
- · veins are emplaced in a set of en echelon fractures around the periphery of a subvolcanic pluton
- veins may be hosted along the margins of the intrusion, within early intrusive phases, or within tuffs and turbidites peripheral to the intrusives
- veins may be massive sulfide veins, dominated by pyrrhotite and/or pyrite with lesser chalcopyrite, galena, sphalerite, etc, or they may be bull quartz type veins with minor calcite and only minor disseminated or knots of sulfides. Along a single vein, these two types of veining may grade into each other, or they may occur in adjacent but separate veins
- Gold:silver ratios are in the order of 1:1 and typical grades are 10 to 20 g/t Au
- regional chlorite alteration occurs, with proximal sericite + pyrite alteration halos up to several meters wide surrounding veins.
- All recognized examples of this type of deposit in B.C. are Jurassic Early Cretaceous in age; examples include Rossland, Snip, Johnny Mountain and Scottie Gold

Rossland	6.2 million tons	0.47 oz/t Au	1% Cu	(2.7 million oz Au)
Snip	1.4 million tons	0.81 oz/t Au	?	(1.1 million oz Au)
Scottie Gold	0.3 million tons	0.51 oz/t Au	?	(160,000 oz Au)
Johnny Mountain	0.2 million tons	0.53 oz/t Au	0.23% Cu	(110,000 oz Au)

Rossland

Vein character:

 historical production is 6.2 million tons, averaging 0.47 oz/t Au, 0.6 oz/t Ag and 1% Cu. The Rossland Camp is the second largest gold camp in B.C.

Golden Crown

- historical production is 61,500 tons, averaging 0.22 oz/t Au, 0.63 oz/t Ag and 0.2% Cu, primarily from one zone along one vein.
- current reserves are quoted at 37,200 tons at an uncut grade of 1 oz/t Au and 1% Cu (cut grade 0.536 oz/t Au), which is in line with historical grades at Rossland. There is excellent potential to add reserves on known veins as well as for the discovery of additional veins.
- in the central area, more than 20 individual veins occur
 - more than 12 discrete veins are known at this point, of which 9 have produced ore grade/width intercepts

Rossland

- majority of production came from 4 claims, covering an area of 4,000 by 2,000 feet
- both massive sulfide (po-cpy-py) veins and

 quartz / quartz-sulfide veins occur
- veins are en echelon in character;
 correlation of individual veins for significant distance along strike is often difficult
- at high levels veins consist of quartz

 carbonate Pb-Zn-Ag veins
- at Rossland, the Main Zone Au-Cu veins
 grade on strike (to the east) into Cu-Au-As veins

Host rocks:

- mineralization is a result of hydrothermal solutions related to the intrusion of the Jurassic-Cretaceous Rossland monzonite. This is a composite intrusion with mineralization most closely related to the porphyrite phase.
- the intrusion is spatially associated with an east-west Jurassic aged thrust fault which is locally marked by massive serpentinite
- rocks hosting and in the vicinity of the

 Rossland veins are as follows:
 - Jurassic-Cretaceous monzonite (porphyrite)
 - diorite and related amphibolite
 - pyroclastics
 - augite porphyry

Golden Crown

- the known veins occur within an area of 3,700 by 1,600 feet. Only the core of this area is well tested by drilling.
- both massive sulfide (po-cpy-py) veins and quartz / quartz-sulfide veins occur
- veins are en echelon in character; correlation of individual veins for significant distance along strike is often difficult
- these upper level veins may be represented in the Golden Crown area by the Kenö and Joe veins to the west.
- a similar trend is observed by the high arsenic in massive sulfide veins on the Athelstan Jackpot property southeast of the Golden Crown vein system. A variation in Cu content is seen on a property scale, with low Cu in the east, and high Cu values in the more western veins.
- in the Greenwood area, an analogous multiple phase intrusion occurs. In the Golden Crown area, the three main phases of the intrusion occur (coarse monzodiorite, amphibolite and porphyrite). As at Rossland, mineralization seems to be most closely associated with the porphyrite phase.
- the intrusion is spatially associated with the Lind Creek thrust, an east-west Jurassic aged thrust fault which is commonly marked by serpentinite and listwanite. Elsewhere in the Greenwood area, there is a good spatial association between Jurassic thrusts and similar intrusive rocks. rocks hosting and in the vicinity of the Golden Crown veins are as follows:
 - porphyritic dacite/monzonite (seen cutting Triassic microdiorite)
 - large sill like diorite intrusives are seen on surface and in core which can host veins. A coarse grained amphibolite at the Golden Crown is startlingly similar to that adjacent to veins at Rossland
 - rhyodacite, fine bedded tuff
 - greenstone and augite porphyry

Rossland

- widespread chlorite alteration of the volcanics and pyroclastics occurs, with strong sericite-pyrite alteration proximal to veins
 - at deeper levels veins are associated with K and Si skarn wallrock alteration and disseminated sulfides, which grade into massive pyrrhotite-chalcopyrite veins at higher levels

 an association exists between with Cu+/-Mo+/-Au porphyry mineralization and intrusion related veins

- there is an additional association with Cu-Au skarns
- there is a genetic association between intrusion related veins and moly breccias at Rossland. The Mo breccia complex is associated with quartz diorite dykes and breccias, and with intense hornfelsing and local skarn alteration. Anomalous Co, Bi, As and U occur with the Mo mineralization.

Golden Crown

- similar widespread regional chlorite alteration occurs on the property, with strong sericite-pyrite alteration of the pyroclastics and porphyrite. Alteration is particularly intense proximal to veins
- silicification is noted in many cases in drill logs, often with disseminated or blebby sulfides. A wide area of intensely silicified volcanics and intrusives is seen in the Swamp zone area.
- the Lexington Lone Star Cu-Au porphyry is the best example of a Jurassic aged porphyry system in the Greenwood Camp. Reserves are quoted at 19.5 million tonnes grading 0.56% Cu and 0.55 g/t Au, with minor molybdenum
- numerous examples of Cu-Au skarn mineralization occur in the Greenwood area (Phoenix, Oro Denoro, Motherlode).
 Cu skarn in the Midway window is related to a large exposure of Lexington intrusive
- in the Greenwood Camp, moly occurs in veins hosted in the Golden Fleece intrusive, probably correlative with the Lexington and Rossland monzonites. Moly also occurs near Ingram Creek, associated with a quartz diorite of unknown age, and with a siliceous pyrrhotite rich skarn. North of Grand Forks numerous Mo-Cu showings occur which are described as being skarns, and in several cases, associated uranium is noted. In addition, molybdenum is present in the Lexington-Lone Star Cu-Au porphyry deposit.

The similarities in geological setting and mineralization between the Rossland and Golden Crown areas provides confidence that application of the Rossland vein model to the Golden Crown property is valid and may be useful in guiding exploration on the property.

Associated Deposits:

Alteration:

4.0 TRENCHING

A total of 706 metres of trenching was completed between Oct 31 and Nov 5, 1998 using a 2800Q LinkBelt excavator owned by W. Bosovich of Rock Creek, and operated by G. Best. Twenty-two trenches were dug on 11 different targets. A total of 51 samples were collected from the trenches, as described below. Analytical results are contained in Appendix 2 and shown on Figure 7. Trench locations are also shown on Figure 7. Where results warrant, more detailed trench maps are included (Figures 8-13). Trench layout, mapping and sampling was done by Linda Caron, from Oct 28 to November 11, 1998.

Highlights of the program were:

- the discovery of the Tiara massive sulfide vein
- an understanding of the significance of serpentine contacts in controlling thickenings in the veins
- the identification of late shallow dipping mineralized fault zones (the Queen and Samaritan) which
 had not been recognized prior to this program and which will aid in interpretation of existing drill data
- new exposures and/or significant extensions of the Golden Crown, Princess and South zone systems

<u> Tiara Vein</u>

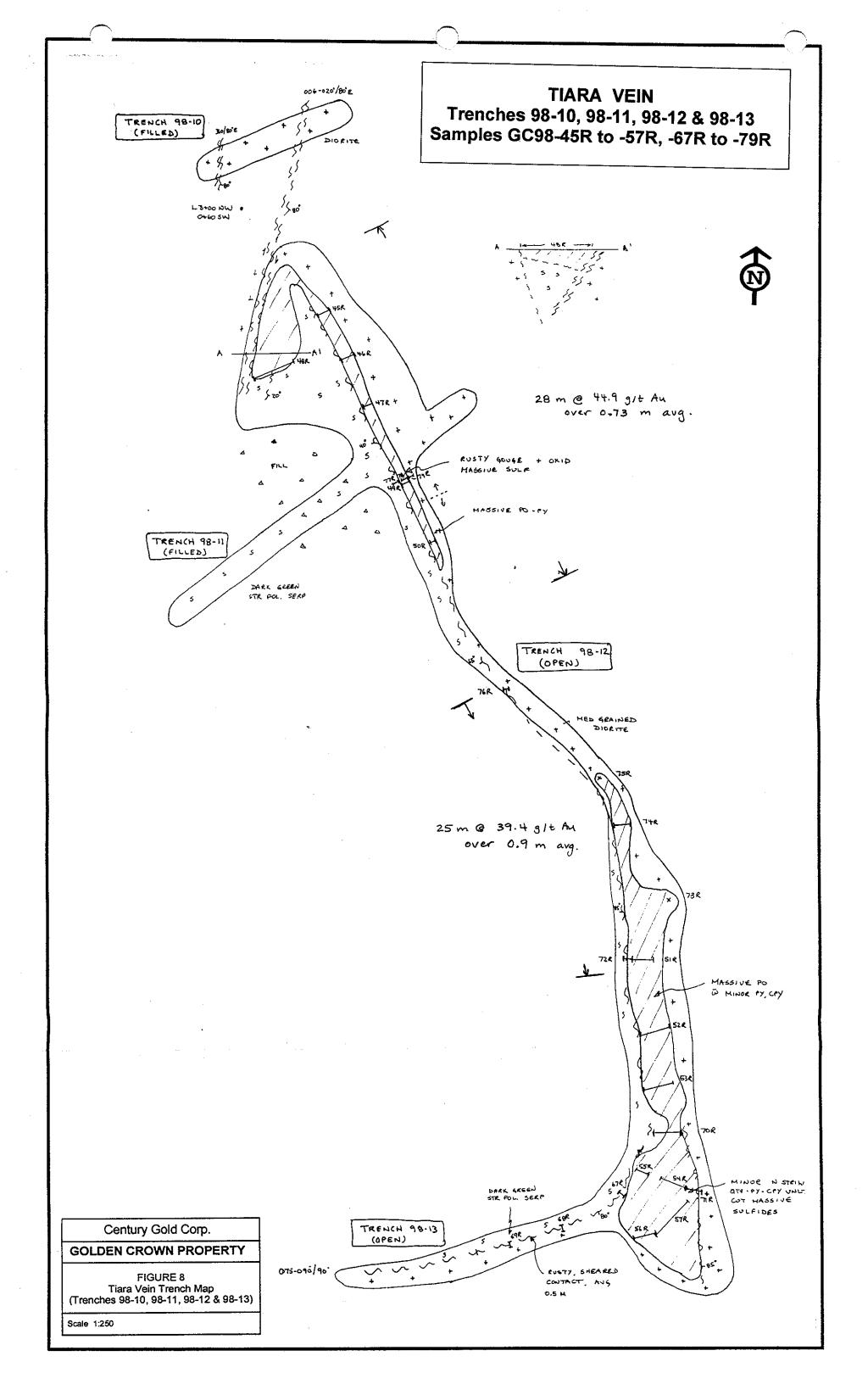
(see Figure 8)

Trenches 98-10, 11 (both filled) and Trenches 98-12, 13 (left open)

- 152 metres total trenching
- Exposes a strong vein at the serpentine/diorite contact.
- the serpentine contact is exposed for about 110 metres and mineralized for about 90 metres of this
- previous vein exposure was 3 metres
- 26 samples collected (GC98-45R to -57R, -67R to -79R)
- serpentine contact should be trenched in both directions to test for additional mineralization

Two cross trenches (Trenches 98-10 and -11) were dug on either side of the old trench which exposed a massive pyrrhotite vein (the Hug vein), in an attempt to trace this vein on strike. These trenches showed that mineralization was developed along the northwest trending, moderate to steeply SE dipping fault contact of serpentine and underlying diorite. The contact was then trenched on strike between the 2 cross trenches, and then followed to the southeast (Trench 98-12) until it became narrowed and lost the intensity of visible mineralization. Another cross trench was then dug, about 75 metres southeast of this, in the vicinity of ddh 83-10 and 83-12 (which had intersected several metres of massive sulfides at shallow depth). This trench intersected a 7 metre wide zone of massive pyrrhotite, again at the serpentine-diorite contact. The mineralized zone was then trenched on strike to connect with Trench 98-12. At the southeast end of this trench a massive sulfide vein is exposed for 41 metres along strike, and averages 2 to 3 metres in width. There is a gap of about 20 metres of narrow, but mineralized contact zone before connecting with the mineralized zone at the NW end of the trench. In total, the serpentine-diorite contact is exposed for about 110 metres, and is variably mineralized essentially throughout the strike length. The contact could be tested by additional trenching in both directions on strike.

The northern portion of the contact zone averages 44.9 g/t Au over 0.56 m, for a strike length of 28 metres. The central portion is narrower and lower in grade. The grade and width increases again, with the next 25 metres of strike averaging 34.0 g/t over 0.9 metres. At this point, the southern massive pyrrhotite zone occurs. Both contacts are faulted and grade considerably higher than the massive sulfide core zone. There is limited information from the eastern contact, but grades in the order of 2 to 5 g/t Au are indicated. The core of sulfides (dom pyrrhotite) typically runs less than 1 g/t Au, but the western contact zone, which averages 1 metre in width, grades between 5 and 15 g/t Au. This is best illustrated



on the attached map.

In summary, it would appear that there are 2 potentially viable ore zones, each averaging about 25 metres in strike. This gives an idea not only of the length of ore zone to expect, but also an indication of what percent of the structure we can expect to be "ore". In this case, it would imply 50-60% of the mineralized structure is ore. This is course is based solely on surface data - the presence or lack of ore along the entire structure needs to be tested at depth by drilling.

	Width	Dilution (for 4 ft	Grade	Diluted	d Grade
		minimun)			
Northern Zone (28 m)	0.73 m	40%	44.9 g/t Au	26.9 g/t Au	0.79 oz/t Au
Southern Zone (25 m)	0.9	26%	34.0 g/t Au	25.2 g/t Au	0.74 oz/t Au

Summary of S	Samples:	(se	e map)
	Au	Au	
	(ppb)	<u>(g/t)</u>	Tranch 09.40. Chin correct 0.9 m wide such contact choos win. Durth source
GC98-45R:		13.37	Trench 98-12. Chip across 0.8 m wide rusty contact shear vein. Rusty gouge, alt'd serp, oxid and massive sulfides.
GC98-46R:		35.11	Trench 98-12. Chip across 0.5 m wide rusty contact shear, as in -45R.
GC98-47R:	4,870		Trench 98-12. Chip across 1 m, as in -45R.
GC98-48R:		19.54	Trench 98-12. Chip across 4 m of flat lying massive po-py (Hug vein exposure) sitting above a shallow dipping fault.
GC98-49R:		98.74	Trench 98-12. Chip across 0.75 m in contact shear - rusty gouge and oxid and massive sulfides.
GC98-50R:		78.45	Trench 98-12. Random chips across 0.5 m width, over a 4 m strike length. Massive po-py - very difficult to sample.
GC98-51R:	450		Trench 98-12. Sawed channel sample across massive po-py at contact of serp
6030-01N.	400		and diorite, 35 m SE of -50R. Sample is 1.7m wide. TW of massive sulfides is 2.6 m here.
GC98-52R:	660		Trench 98-12. Sawed channel sample across massive po-py at contact of serp
9090-02N.	000		and diorite, 6 m SE of -51R. Sample is 3.1m wide, across tw of massive sulfides.
GC98-53R:	630		Trench 98-12. Sawed channel sample across massive po-py at contact of serp
			and diorite, 4 m SE of -52R. Sample is 2.2m wide. TW of massive sulfides is 2.8 m here.
GC98-54R:	715		Trench 98-12. Sawed channel sample across massive po-py at contact of serp
0000 044.	710		and diorite, 7 m SE of -53R. Sample is 2 m wide. TW of massive sulfides is 5.5 m here.
GC98-55R:	2650		Trench 98-12. Sawed channel sample across massive po-py at contact of serp
	2000		and diorite, in same section as -54R. Sample is 1m wide. TW of massive sulfides is 5.5 m here.
GC98-56R:	335		Trench 98-12. Sawed channel sample across massive po-py at contact of serp
			and diorite, 3 to 5 SE of -54, 55R. Sample is 2m wide. TW of massive sulfides is 6 m here.
GC98-57R:	300		Trench 98-12. Sawed channel sample across massive po-py at contact of serp
3000 0111			and diorite, 3 to 5 m SE of -54, 55R (oblique to strike of vein). Sample is 3.8m wide. TW of massive sulfides is 6 m here.
GC98-67R	5540		Trench 98-13. 1 m wide rusty gouge and al'td serp. Locally while bleached alt'c

				rx. Locally pods and lenses of mass sulfides or ox ms (mainly py).
•	GC98-68R	4800		Trench 98-13. 1 m wide rusty alt'd sheared serp and gouge.
(GC98-69R	160		Trench 98-13. 1 m wide rusty oxidized serp + green serp gouge, near vert strike
				slip flt. At W end of well exposed serp-dior contact.
(GC98-70R	1875		Trench 98-12. 2 m chip at intersection of fault zones. Rusty and green gouge
				and rusty sheared serp. Poddy massive sulfides and rusty fine grained diorite.
(GC98-71R	5390		Trench 98-12. 2 m sample of white bull type quartz, rusty gouge and sheared
				serp, with local massive sulfides (dom fng py), adjacent to sample 54R (to E)
(GC98-72R		15	Trench 98-12. 0.5 m sample adjacent to -51R (to W), across rusty and green
				sheared serp and gouge zone, adjacent to massive po zone.
(GC98-73R	1990		Trench 98-12. Random chips from area of > qtz gangue. Qtz sulfide vning -
				white qtz, locally vuggy, with 10% diss py and cpy and up to 40% knots and
				zones of massive py-po-cpy (with 70+% sulfides). Small sample. Difficult to
				chip.
(GC98-74R		60	Trench 98-12. 1.8 m chip acrosss rusty altered sheared serp and gouge contact
				zone with grey py rich sheared, intensely clay altered rx and sulf rich gouge.
				Locally minor pods of massive sulfides.
(GC98-75R		73	Trench 98-12. Grab of fine grained black massive po-py. Strongly magnetic,
				75% sulfides in sheared serpentine. At N end of southern massive sulfide zone.
(GC98-76R	9490		Trench 98-12. 0.3 m chip across sheared serp contact, weakly rusty. 12m S of
				-50R and 11m N of -75R.
	GC98-77R	300		Trench 98-12. Serpentine hangingwall at sample -78R. 0.5 m wide
(GC98-78R		64	Trench 98-12. Resample -49R. 0.9m wide. Rusty gouge and sheared serp,
				with fine grained black sulfides (py, po)
(GC98-79R	950		Trench 98-12. Diorite footwall at sample -78R. 0.5 m wide

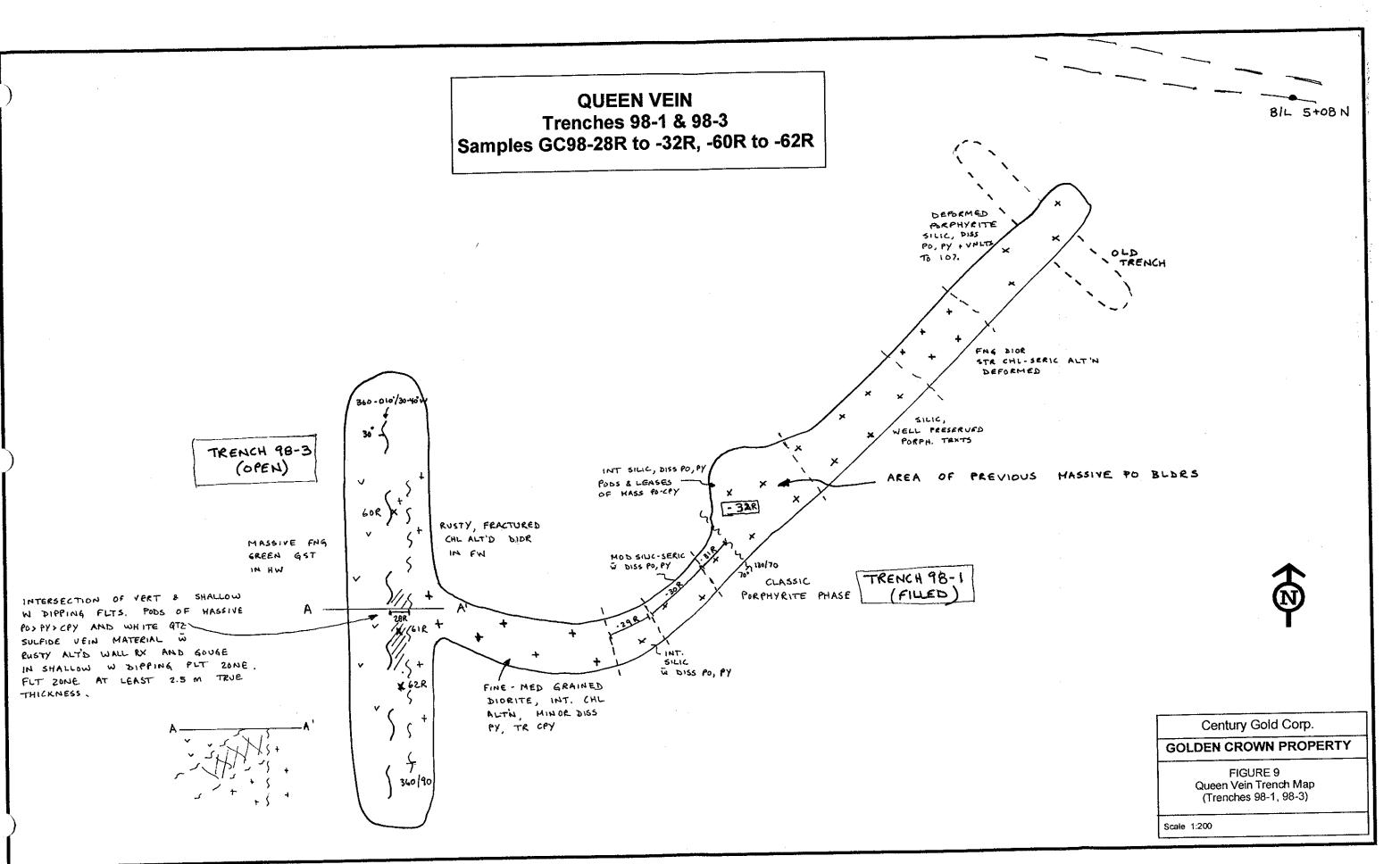
Queen Vein (see Figure 9)

Trench 98-1 (filled) and Trench 98-3 (left open),

- 81 metres total trenching
- 26 metre exposure of mineralized fault zone (previous exposure was 5 metres)
- zone could be further tested on strike in 2 directions if results warrant this
- 8 samples collected (GC98-28R to 32R, 60R to 62R)

The large, deep old trench (opposite the Winnipeg shaft road) was re-dug from the Queen vein exposure at the soutwest end, to the main road at the northeast end, a distance of 55 metres (Trench 98-1). The old trench had exposed the Queen vein, over about a 5 metre strike length, and then several large massive pyrrhotite boulders about 30 metres to the northeast. Vein contacts and host rocks were unclear. Upon retrenching, bedrock was reached along the entire length of the trench and consisted primarily of silicified, sulfidic "porphyrite" phase of the monzonite, intruding the chloritic altered coarser grained diorite phase. In the vicinity of the massive pyrrhotite boulders, the porphyrite phase contained numerous pods, lenses and veinlets of massive pyrrhotite with chalcopyrite.

At the southwest end of the trench, where the Queen vein was exposed, a second trench was dug along the strike of the vein, for a distance of 26 metres (Trench 98-3). The trench exposes a complex zone at the intersection of 2 fault zones. A near vertical north trending fault intersects (is cut by?) a north trending, shallow west dipping mineralized fault zone (the Queen "vein"). The shallow dipping fault zone is at least 2.5 metres thick, consisting of rusty, intensely altered intrusive rocks with pods of quartz-sulfide and massive sulfide material.



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Summary of Samples:

	Au	
	(ppb)	
GC98-28R:	4890	Trench 98-1. Chip across 1-1.3 m, in plane of flat lying Queen fault zone, at intersection with
		steep fault. Massive po-py-cpy + white qtz vn with up to 20% py+cpy, local gouge and alt'd intrusive.
GC98-29R:	15	Trench 98-1. Chip over 3 m of intensely silicified porphyrite intrusive with diss py, po
GC98-30R:	45	Trench 98-1. Chip over 4 m of mod silic-seric alt'd porphyrite with diss py,po.
GC98-31R:	20	Trench 98-1. Chip over 2 m of silic-seric alt'd porphyrite and gougey fault zone
GC98-32R:	155	Trench 98-1. Random chips over 10 sq m from intensely silic'd porphyrite, with diss py and pods and lenses of massive sulfides (dom py-cpy). From area of former massive po boulders.
GC98-60R:	185	Trench 98-3 (along strike of Queen fault zone). Vertical chip across tw of fault zone (entire thickness not exposed). 1 m chip at 7.5 m south from N end of trench. Rusty, intensely altered intrusive.
GC98-61R:	410	Trench 98-3. Vertical chip across 2m tw of fault zone at 14 m south in trench (a intersection with cross trench).
GC98-62R:	1110	Trench 98-3. Vertical chip across 2.5 tw of fault zone (at 19 metres south in trench).

<u>Golden Crown</u>	
	Trench 98-19 (left open)
	 19 metres total trenching
	 19 metres vein exposure (previous vein exposure was 2 metres)
	 vein is open on strike and requires further trenching as well as more detailed
	mapping and sampling

2 samples collected (GC98-58R, -59R)

Late in the trenching program, a trench was dug on the Golden Crown vein, to expose the vein tested by drill hole 76-5 (0.4 oz/t Au over 6.1m). An old cat trench poorly exposed the vein prior to this program. The vein was followed on strike for 19 metres, trends 324°/75°NE, and averages 1-2 metres in width where exposed. It is primarily a quartz vein, with 20%, to locally 90%, sulfides (dominantly pyrite and chalcopyrite, with local pyrrhotite), with local pods of massive sulfides. It is hosted in a siliceous fine grained green intrusive or porphyritic volcanic and is open on strike in both directions. Snow conditions were such that detailed mapping and sampling could not be done. Further trenching is recommended to follow the vein on strike to the north (away from the Golden Crown dumps), as well as mapping and sampling of the trench.

Summary of Samples:

GC98-58R: GC98-59R:	Au (<u>ppb)</u> 1420 3550	Trench 98-19. Grab of qtz vein material with 20-60% sulfides (dom py, cpy). Trench 98-19. Grab of massive po-py (+cpy) vein material, with 5-10% patchy white qtz, from trench.
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<u>Samaritan Vein</u>

(see Figure 10)

Trenches 98-2, 98-9 (both filled)

- 75 metres total trenching
- 6 samples collected (GC98-33R to 35R, 39R to 41R)
- · shallow dipping fault zone exposed, could be tested on strike if results warrant
- no previous surface exposure

Two trenches were dug in the vicinity of ddh 76-2 (collar not located) in an attempt to expose the Samaritan vein near this drill hole intersection (0.51oz/t Au over 4.9 m). The first trench exposed a steeply dipping, northeast trending faulted contact between silicified porphyrite and green chloritic microdiorite. The fault zone was rusty, sheared and contained chunks of quartz-sulfide vein material and narrow oxidized veinlets. A second trench was then dug to the east (along the South Zone access road), in an attempt to intersect the Samaritan vein above this fault zone. A shallow south dipping fault zone was exposed in this trench which appears to represent the Samaritan vein. This may be the same structure as the Queen fault - a late, low angle detachment type fault (regionally movement is top to the west). A thickness of 0.75 to 1 metre was exposed, but the fault may be wider than this.

Summary of Samples:

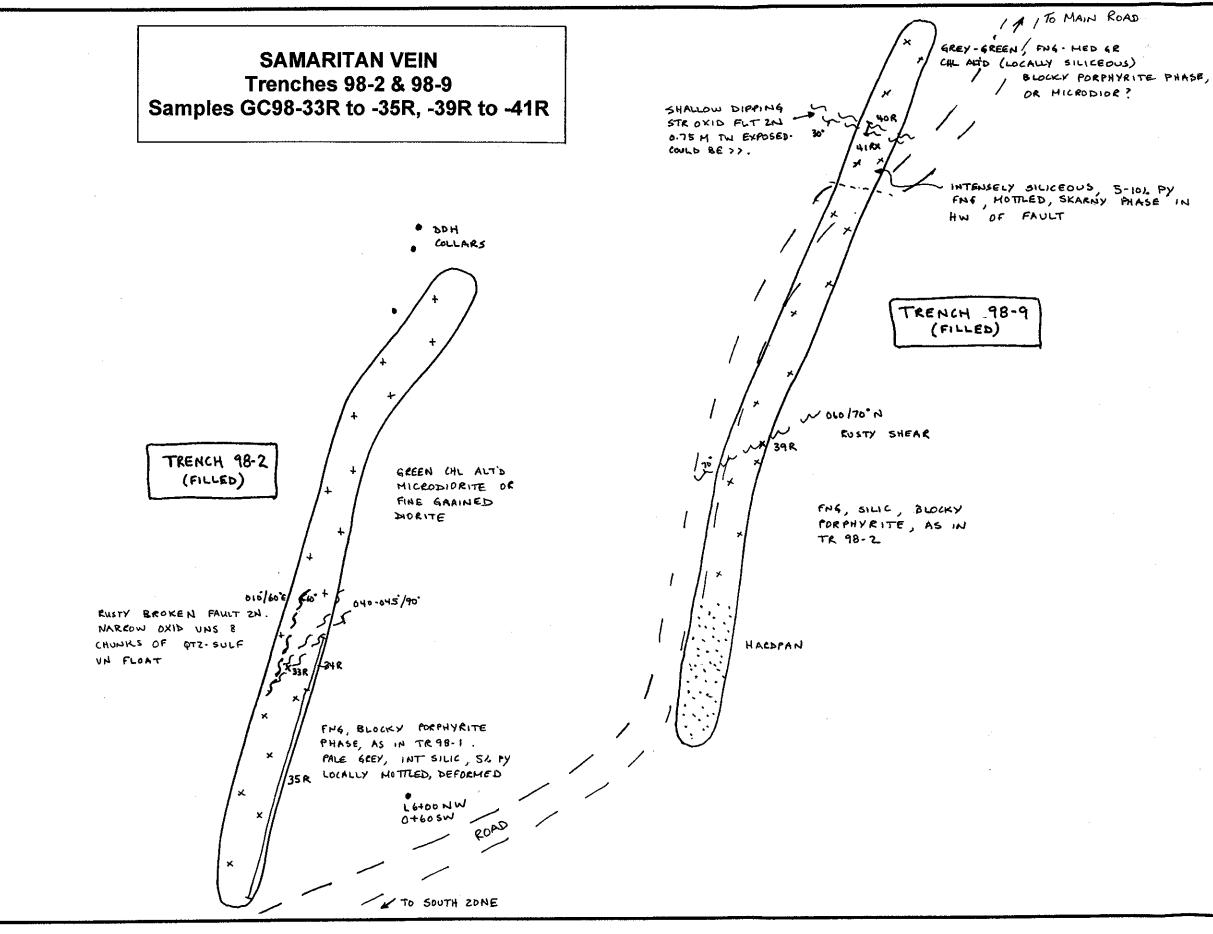
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	Au	
	<u>(ppb)</u>	
GC98-33R:	165	Trench 98-2. Grab of qtz-sulfide vein material from fault zone.
GC98-34R:	45	Trench 98-2. Chip over 3 m in steeply dipping rusty, broken fault zone.
GC98-35R:	15	Trench 98-2. Chip over 12 m of silic'd intrusive
GC98-39R:	90	Trench 98-9. Grab from steeply dipping rusty shear zone, in hw of Samaritan fault.
GC98-40R:	1050	Trench 98-9. Vertical chip over 0.75 metre exposed width of rusty, oxidized shallow dipping Samaritan fault zone (true exposed thickness - may be thicker) Remnant massive sulfide pods.
GC98-41R:	25	Trench 98-9. Grab of intensely silic'd rx. Mottled "skarny" phase, with 5-10% py - diss and blebby. In hw of shallow dipping fault.

South Zone	(see Figure 11) Trenches 98-4, 98-5 (both filled)
	 74 metres total trenching

- 2 metre wide oxidized vein/fault zone exposed, requires trenching on strike
 - no previous vein exposures
- 3 samples collected (GC98-42R to -44R)

Two trenches were dug in an attempt to expose the South Zone. There had been no previous trenching in this area, although a strong EM conductor had been tested by drilling which returned grades to 1.26 oz/t Au over 1.2 metres. Drilling suggested that 2 parallel vein systems were present. Both trenches started near the top of the north facing slope and exposed fine grained greenstone, under relatively shallow overburden (less than 1.5 metres). At the base of the slope the depth of overburden increases significantly and it was difficult to break through the hardpan layer. A major oxidized zone was exposed in the easternmost trench (Trench 98-5), which is believed to represent the top, oxidized portion of the South Zone. The oxidized zone was 2 metres in width. Additional trenching should attempt to trace this zone on strike, digging to a sufficient depth to expose fresh material if at all possible. A second smaller zone of faulting and quartz-sulfide veining was exposed in this trench, about 15 metres to the south (about ½ way up the north facing slope).



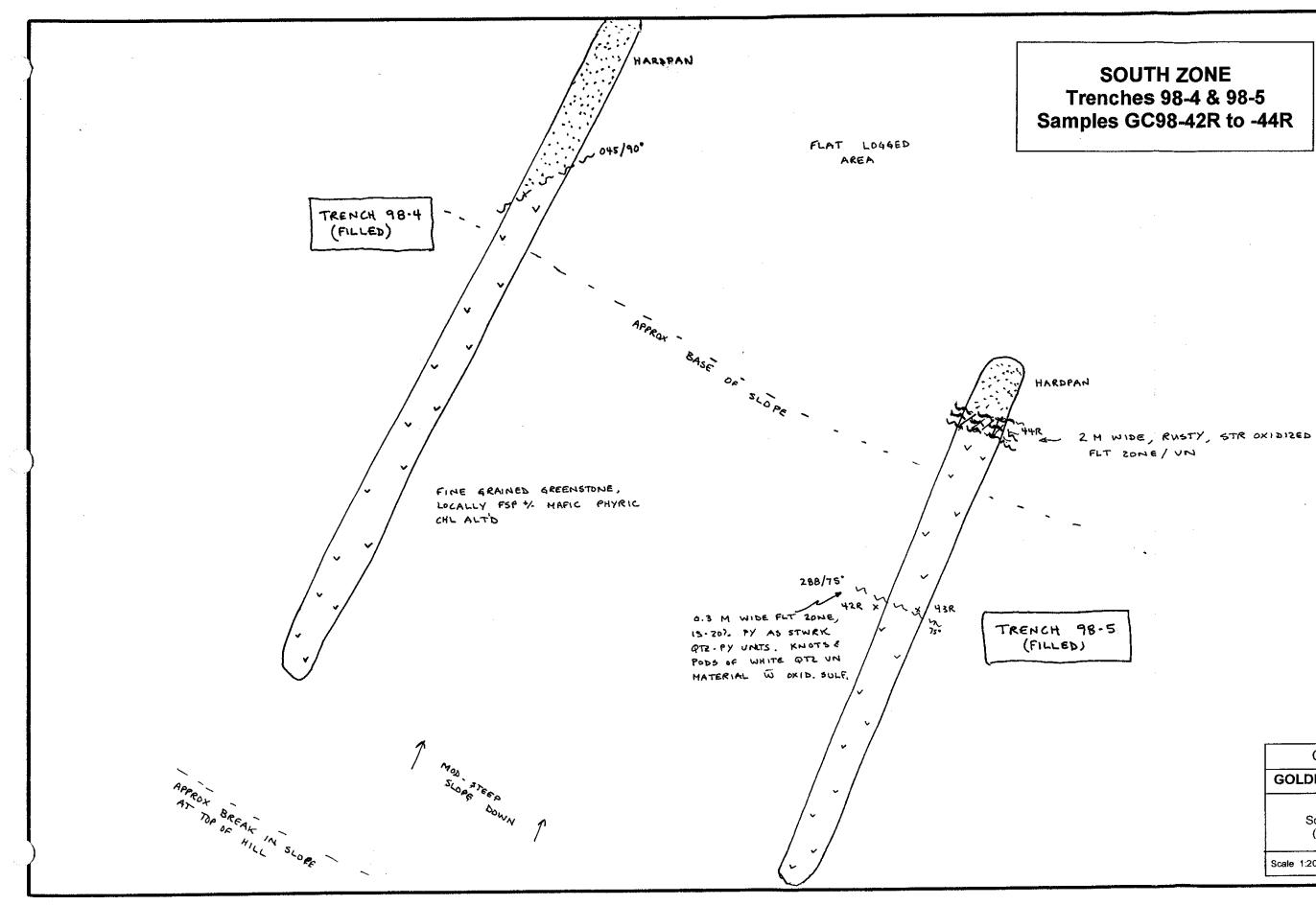


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FIGURE 10 Samaritan Vein Trench Map (Trenches 98-2, 98-9)

Scale 1:200





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FIGURE 11 South Zone Trench Map (Trenches 98-4, 98-5)

Scale 1:200

Summary of Samples:

	Au	
	(ppb)	
GC98-42R:	9520	Trench 98-5. Grab of white xtalline qtz vein with oxidized sulfides from narrow flt/vn zone, $\frac{1}{2}$ way up slope.
GC98-43R:	1475	Trench 98-5. Chip across 0.3 metre wide fault zone with 15-20% py. Stockworking qtz-py vnlts in gst and knots and pods of white xtalline qtz vein material with oxidized sulfides.
GC98-44R:	3170	Trench 98-5. Chip across 2 metres of very rusty oxidized fault/vein from north end of trench, at break in slope at base of hill.

Princess Vein	(see Figure 12)
	Trench 98-14 (left open)
	 50 metres total trenching
	 34 metres of continuous vein exposure
	 previous vein exposure was 3 metres of vein over a strike length of 15 metres
	additional trenching could further test vein on strike if results warrant this

3 samples collected (GC98-63R to 65R)

Two old trenches had exposed a massive sulfide vein in two places, 15 metres apart on strike. A new trench as dug to test the vein on-strike, connecting the two old trenches and continuing to trace the vein to the northwest. The vein is variably a massive sulfide (py-po-cpy) or quartz-sulfide vein, averages about 1 metre in width, trends 320°/75°NE and is hosted in fine grained microdiorite with minor disseminated pyrite. The vein has now been exposed over a strike length of 34 metres, at which point the structure continues and the vein splays into a stringer zone. Additional trenching could trace this stringer zone on strike to test for additional vein development along the structure. The vein is also open on strike to the southeast and could be tested by trenching in this direction.

Summary of Samples:

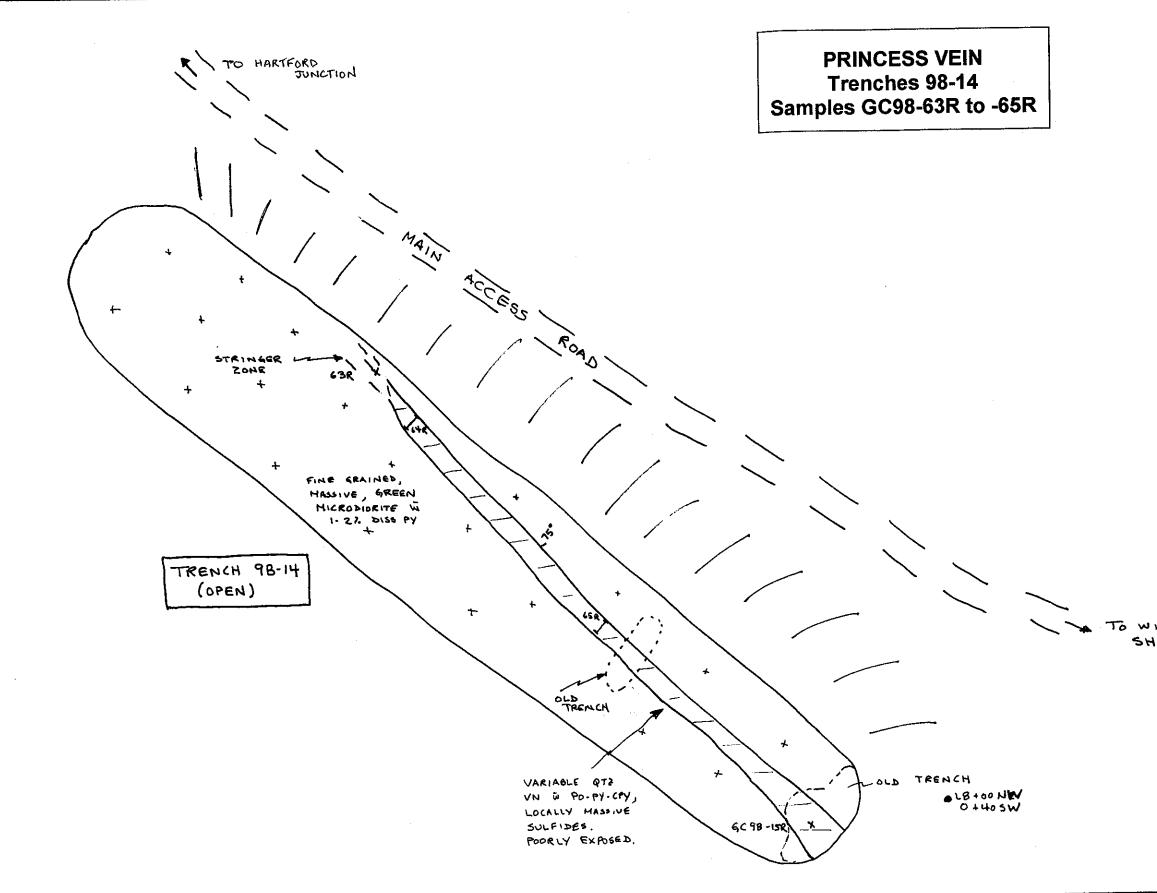
	Au (ppb)	
GC98-63R:	540	Trench 98-14. Grab of vein material at 32 m from SE end of trench, where vein
GC98-64R:	315	splays into stringer zone. Trench 98-14. Grab of vein material at 30 m from SE end of trench.
GC98-65R:	30	Trench 98-14. Chip across 1 m tw of vein, at 17 m from SE end of trench.

Winnipeg Vein

Trench 98-18 (freshen up old trench, left open)

- 30 metres total trenching
- requires mapping and sampling in spring

The old trench immediately NW of the Winnipeg shaft was re-dug to freshen up the exposure of the Winnipeg vein. The vein is hosted within the altered porphyrite phase of the monzonite. Where cross-cut by the trench, the vein is steeply dipping, and about 0.5 metres in width. The trench has been neither sampled nor mapped, due to weather, but has been left open for further examination next season.





TO WINNIPEG SHAFT

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FIGURE 12 Princess Vein Trench Map (Trenches 98-14)

Scale 1:200

Powerline (West)

(see Figure 13)

Trench 98-6, 98-7, 98-8 (all filled)

- 85 metres total trenching
- 1.5 metre wide oxidized fault zone/vein exposed, could be traced on strike
- 3 samples collected (GC98-36R to -38R)

Three trenches were dug on the powerline right of way, west of the Winnipeg shaft road (near the power shack), to test for the continuation of veins exposed in several old pits on the knoll on the powerline (and exposed in the Golden Crown adit north of the powerline). Grab samples of vein material from the dumps of these workings had returned grades to >3 oz/t Au. The southern most trench (Trench 98-6) was dug to a depth of 15-20 feet and did not reach bedrock. Trench 98-7 was dug about 50 metres north of this, and about 30 metres south of the old workings. The trench exposed silicified-sericitized pyritic tuffaceous volcanic throughout it's length, with no significant structures or veins. Trench 98-8 was dug about 50 metres further north. A rusty oxidized shear zone, approximately 1.5 metres in width was exposed near the west end of the trench. The remainder of the trench exposed altered volcanics, as in Trench 98-7.

Summary of Samples:

	Au	
	<u>(ppb)</u>	
GC98-36R:	175	Trench 98-7. Grab of silic'd, sericitized, tuffaceous volc with 10% diss py.
GC98-37R:	55	Trench 98-8. 1.5 m chip across trench wall. Very rusty, oxidized material from shear zone.
GC98-38R:	165	Trench 98-8. From dump. Grab of fault material, similar to -37R.

Calumet continuation

Trench 98-15,16 (both filled)

- 40 metres total trenching
- no new vein exposures and no additional testing required in this area

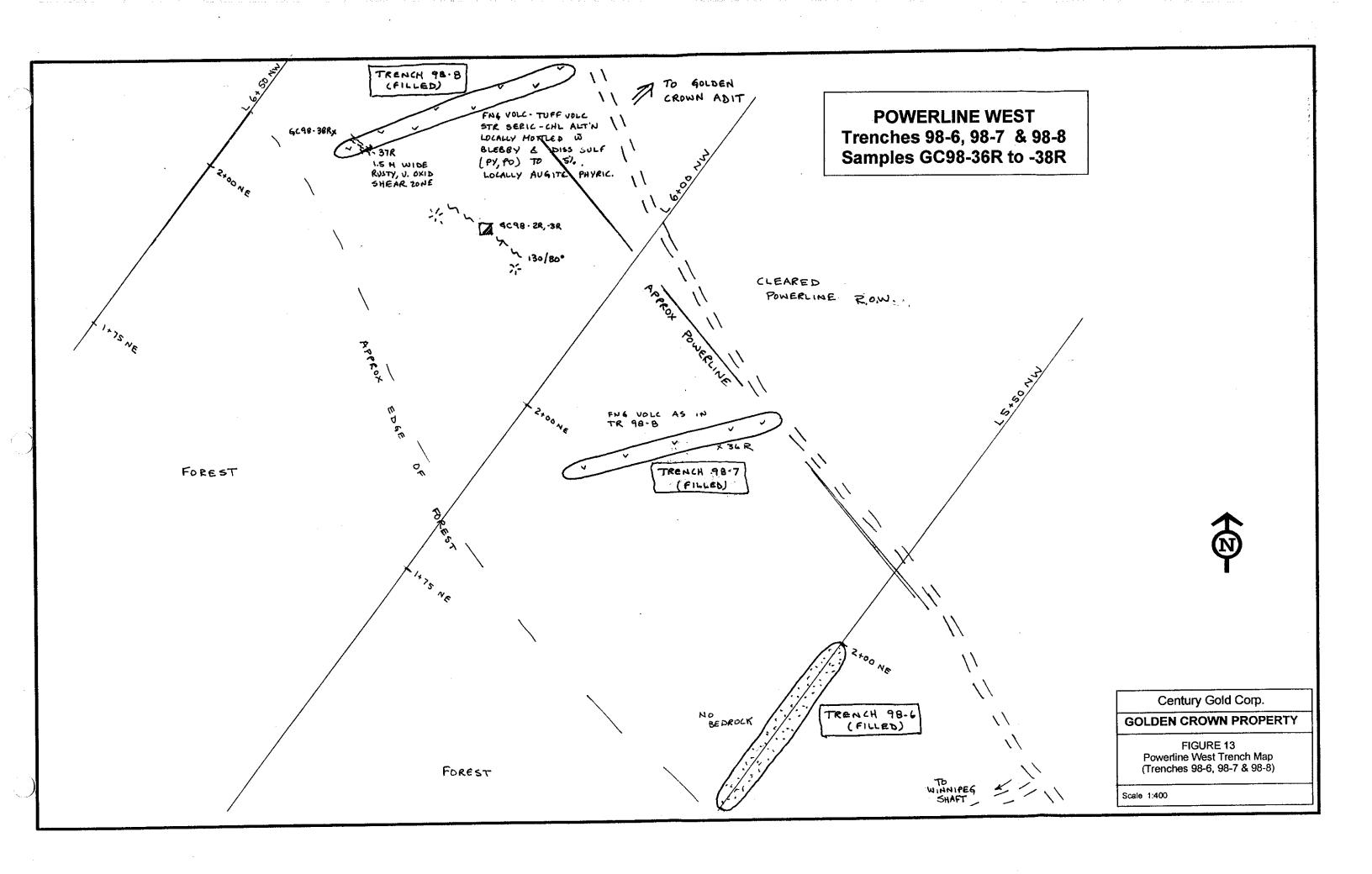
Two trenches were dug across the draw SW of the powerline near L 2+00 NW, where there was evidence of past trenching activity and oxidized vein material on dumps, but where rock exposure was poor. This area is on-strike of the Calumet vein system, which is exposed further to the east at the edge of the powerline near the portal. Both trenches exposed essentially unaltered diorite throughout their length, with only very minor narrow discontinuous quartz-sulfide veinlets in Trench 98-16. No samples were collected.

Powerline (East)

Trench 98-17 (filled)

- 30 metres total trenching
- no further work recommended

One trench was dug on the powerline right of way, to test for the on strike extension of an arsenopyrite rich quartz vein, hosted within diorite, which is exposed in an old pit on L2+50NW at the western edge of the cleared right-of-way. The trench exposed unaltered diorite throughout it's length. No samples were collected.



DDH 83-14 Area

Trenches 98-20, 21 22 (all filled)

- 70 metres total trenching
- no further work recommended

Three trenches were dug in the presumed vicinity of ddh 83-14, which had intersected several metres of massive sulfides, apparently about 100 metres southeast of the Tiara vein. The drill site was not located. Three trenches were dug, all exposing massive, unaltered diorite throughout their length. The location of the drill hole is somewhat suspect, especially due to plotting errors noted for other nearby holes (83-11).

5.0 RECOMMENDATIONS

The Golden Crown property has a long history of exploration, yet the understanding of the geology, ore controls, and mineralogy of the veins lags behind the quantity of drill data. Prior to undertaking a drill or underground development program aimed at identifying additional reserves or proving up known reserves, it is recommended that further efforts be made to glean all available information from the available data and drill core and from an extensive trenching program. A three part program is proposed which would include:

- Surface exploration, including trenching, re-logging select drill holes and detailed geological mapping in specific areas.
- Studying the mineralogy of the veins, through polished sections, as a precursor to further metallurgical test work
- Generation of a series of close spaced longitudinal sections, parallel to the King Vein longitudinal section, and continued updating of the geological database as necessary.

A Phase 1 exploration budget for 1999 of about \$50,000 is proposed, as detailed below. The proposed computer work could be initiated immediately, while the remainder of the proposed work could likely begin in mid to late May.

Proposed Phase 1 Budget:	
Surface Exploration, including trenching	\$46,000
Polished section work	\$ 2,000
Generation of longitudinal sections, etc	\$ 2,000
.	\$50,000

Specific recommendations for the proposed surface exploration program are:

<u>Tiara</u>

Additional trenching should attempt to further trace out the serpentine-diorite contact, and should also test gold soil anomalies (187 ppb Au, 380 ppb Au, 450 ppb Au) on strike of the Tiara vein, to the north and south, for the continuation of the zone.

Portal

Available drill core should be re-logged and detailed surface and underground mapping should be done, to test for the presence of a shallow dipping, mineralized detachment type fault. Trenching of anomalous gold in soils (to 173 ppb Au, 124 ppb Au) should then be done to test for the surface expression of a mineralized detachment.

Golden Crown

Detailed mapping and sampling of the 1998 trench should be completed, and further trenching should be carried out to follow the vein on strike to the west and to follow-up untested gold soil anomalies in this area. An additional area of anomalous gold and copper in soils north of the Golden Crown dumps and ore bin should also be tested by trenching.

Calumet

Trenching is recommended to attempt to provide good exposures of the vein explored by old workings.

Queen - Samaritan

Additional trenching is recommended to test for mineralization along a shallow west dipping detachment fault. Trenching should attempt to trace the fault on surface to the east, towards the Tiara zone.

<u>J&R</u>

An effort should be made to find the J&R core and to re-log all available drill holes, in an effort to better understand the system. Trenching should then be done to try to expose the system on surface.

South Zone

Trenching is recommended to explore the oxidized zone discovered during the 1998 trenching program on strike and to attempt to break through the zone of near surface oxidation. Strong gold soil anomalies (1290 ppb Au, 1020 ppb Au) to the south of the South Zone should also be tested by trenching.

Swamp Zone

A strong gold soil anomaly (to 1010 ppb Au) with a coincident linear Cu anomaly exists in this area. A second parallel untested Au-Cu soil anomaly is located about 100 metres to the north, under the powerline, and the area has good exploration potential. Trenching could be done to trace the known vein along strike and to test geochemical anomalies in the area.

North of South Zone

North and northeast of the South Zone, a gold soil anomaly occurs. The anomaly is potentially 300 metres long, includes values to 600 ppb, 90 ppb, 97 ppb, 142 ppb Au, and should be tested by trenching.

South of J&R

Approximately 175 metres south of the J&R zone a gold soil anomaly with strong broad coincident copper occurs. The anomaly includes spotty gold values (460 ppb Au, 540 ppb Au, 260 ppb Au, 270 ppb Au, and 580 ppb Au) over an area of about 200x150 metres. There is no outcrop in this area, and the anomaly is untested. Trenching is recommended.

It should be emphasized that all samples collected should continue to be analyzed for 31 elements by ICP, in addition to assays for gold and copper, in an attempt to better understand the mineralizing events.

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APPENDIX 1

ROCK AND TRENCH SAMPLE DESCRIPTIONS

1998 Rock and Trench Sample Descriptions

Sample Number	Description
GC98-1R	Powerline area between Winnipeg and Calumet workings - water filled pit about 20'? deep. Qtz vn material on dump. Sample is white-grey qtz- silica with about 50% finely diss and patchy sulfides. Dom apy with minor cpy and py. Minor vugs with qtz druse. Hosted in med grained diorite.
GC98-2R	GC98-2R and -3R from powerline area west of Winnipeg road. Inclined "stope" on S side of powerline on rusty knoll. Pit is about 10' deep and drifts along vein for 15-20'. Qtz vn 130°/80°SW, 0.75-1 m wide. Host rx is fng, bluey-grey, intensely siliceous volc with rem fsp. 5% qtz-po vnlts with seric altn envelopes. Rock has v rusty weathering surfaces2R is sample of massive po and massive py from dump.
GC98-3R	-3R is qtz vn with drusy terminated qtz xtals and 5-10% apy + py, po from dump.
GC98-4R	On powerline right of way, about 50 metres on strike to E of -1R pit. In recessive zone near dior o/c is subcropping massive apy + siliceous qtz vn, sim to -1R.
GC98-5R	J&R area. Old shaft and pits on knoll. Grab sample from dump. Massive py (+po, cpy) and py-qtz vn in fine grained equigranular microdiorite with minor diss py and rusty fracs.
GC98-6R	Silver Star? GC98-6R and -7R from shaft on listwanite (Lind Creek Fault?) south of phone line SW of Hartford Junction. Structure trends about 300°6R is white bull type qtz vning in mariposite rich rx and green alt'd monz? (Lex type intrusion?). Minimal diss py. From shaft wall.
GC98-7R	-7R is same loc as -6R, grey qtz sulfide vning, 5-10% fine diss py in grey qtz from dump.
GC98-8R	Old Golden Crown adit north of powerline8R is sample of vn near face of adit. 2' vn/shear trends 355°/65°W. Qtz-py-po shear about 100 m from portal. Adit trends towards shaft on powerline. This vein may be the same one as -2,3R?
GC98-9R	Old Golden Crown adit north of powerline. $-9R$ is sample of qtz+massive po vn, trends $308^{\circ}/60^{\circ}S$, irreg vn about 8" wide, about 50 m from portal.
GC98-10R	On new Snowshoe Rd, at 2km - at Snowshoe Creek. Qtz shear vn, white massive qtz in shear trending 100°/90°. 1-2' wide in road cut. Minor py. Hosted in dark green, weakly magnetic, weakly pyritic chl gst.
GC98-11R	Near -10R, about 50 m further up road, in road cut. Qtz shear, trends 320°/85°, prob on strike of sample -10R. About 1 ½ wide rusty qtz vn, white high T qtz with rusty black oxid zones, tr py and cpy.

GC98-12R	Samaratin vein. Trench across road from Winnipeg shaft. Grey qtz with with massive py, py cpy. Sample is 'pod' of sulfides in qtz from wall of trench.
GC98-13R	About 40 m west of Samaratin vein sampled as -12R is another trench with a well exposed vein of massive po and qtz-py-cpy. At least 2-3' wide, orientation is not clear 330°/90°?, 45°W?, within minz'd zone orient shifts from 360° to 020°. Sheared up vein hosted in fng equigranular pale grey silic'd volc with minor diss py and po (host is sim to -19R)
GC98-14R	Vn float from dump of 10' deep pit. Vuggy white high T looking qtz vn, rusty with 5% patchy and fine diss py (locally qtz is grey due to fine diss sulfides).
GC98-15R	Sulfide rich qtz vn in trench. 2-3' exposed width. Qtz vn with 50% sulfides + locally massive sulf. Dom py-cpy, local massive po. Trend is 300°/85°NE but vn poorly exposed. Vn is hosted in pale grey augite phyric dacitic volc, silic'd with diss py (or fng intrusive?)
GC98-16R	20' deep shaft just above rd on old phone line @ about 9+25NW. dump is mainly blocky, dark green fng volc/md with minor diss and vnlts of py. Minor float on dump of qtz vn with 10-50% fine py and of massive po vn with 5% cpy. Sample is mixed grab of 2 vein types.
GC98-17R	Below rd at -16R are 2 backhoe trenches, about 25 m long, heading N down hill17R is from the SW end of the E trench. V siliceous, fng, grey silic'd volc/porphyrite with 5-10% diss and vnlts of py. Rem fsp phenos visible. Intensely silic'd.
GC98-18R	Trench @ 8+55NE along road exposed qtz-sulfide vn trending 295°/82°N, about 2' wide. Varies from qtz vn with 5-10% py and minor cpy to zones of massive po and py with qtz gangue.
GC98-19R	-19R is host rx to vn sampled as -18R. Fng med grey, v siliceous rx - volc or poss porph phase of intrusive. 5-10% diss and vnlts of po and py, Mod magnetic. Looks sim to -17R but slightly coarser grained and slightly less intense silic'n and with po as well as py.
GC98-20R	Swamp zone trench. Fng, med grey, intensely siliceous with 5-10% fine diss and vnlts of py. Looks like int silic'd fng volc, see rem fsp phenos + local fine banding.
GC98-21R	Swamp zone - pit by road (drilled by ddh 90-16). Qtz vn on dump of trench with 30-40% sulfides (dom py), lesser cpy + with chl inclusion in vn. Sim in appearance to -19R. Can't see vn in trench.
GC98-22R	From pit on opposite side of road from -21R and 15 m away. Fng, grey, int silic'd, banded felsic volc or porphyrite with 10% fine py, diss and vnlts. Sim to -20R. Locally has purplish caste.

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GC98-23R	Trench near Golden Crown Shaft dump, W of rd to ore bin. Vn of dump of sloughed trench. Qtz vn with 50%, locally massive, py in silc'd py monzonite.
GC98-24R	From trench on opposite side of rd from -23R. Massive sulf vn poorly exposed in wall of trench (1-2'?) hosted in silic'd py monz or related porph volc. Vn material is str magnetic, 85% grungy br-black colour, fng - prob magnetite, with 15% dull med grained py.
GC98-25R	Water filled shaft, about 20' deep, minz'd shear zone trends 340°/80°N. 30% to massive fng py in qtz of silic'd sheared volc gangue. Shear is 1' wide where exposed above water in shart and cuts rusty weathering, hard, blocky frac int silic py porpyrite or volc, sim to Swamp zone.
GC98-26R	Caved 20'? deep shaft, just N of powerline fence above Golden Crown adit and near pits of -2R and -3R. Sample of massive fng py + lesser cpy from dump. Hosted in int silic, po/py volc.
GC98-27R	Vn in 20m wide x 80 m long x 3 m deep trench near Golden Crown shaft dump, near 76-5 drill pad. Vn trends about 298°/80°N, but not well exposed due to sloughing, organic debris. Width about 3'?, Qtz vn with 50-70% sulfides, dom py, fng and coarse grained + 5% cpy and with local chl volc or dior host rx inclusions in vn. Vn hosted in pale grey, granular, silic'd py porphyrite or porphyritic felsic flow.
GC98-28R:	Trench 98-1. Chip across 1-1.3 m, in plane of flat lying Queen fault zone, at intersection with steep fault. Massive po-py-cpy + white qtz vn with up to 20% py+cpy, local gouge and alt'd intrusive.
GC98-29R:	Trench 98-1. Chip over 3 m of intensely silicified porphyrite intrusive with diss py, po
GC98-30R:	Trench 98-1. Chip over 4 m of mod silic-seric alt'd porphyrite with diss py,po.
GC98-31R:	Trench 98-1. Chip over 2 m of silic-seric alt'd porphyrite and gougey fault zone
GC98-32R:	Trench 98-1. Random chips over 10 sq m from intensely silic'd porphyrite, with diss py and pods and lenses of massive sulfides (dom py- cpy). From area of former massive po boulders.
GC98-33R:	Trench 98-2. Grab of qtz-sulfide vein material from fault zone.
GC98-34R:	Trench 98-2. Chip over 3 m in steeply dipping rusty, broken fault zone.
GC98-35R:	Trench 98-2. Chip over 12 m of silic'd intrusive
GC98-36R:	Trench 98-7. Grab of silic'd, sericitized, tuffaceous volc with 10% diss py.

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	GC98-37R:	Trench 98-8. 1.5 m chip across trench wall. Very rusty, oxidized material from shear zone.
	GC98-38R:	Trench 98-8. From dump. Grab of fault material, similar to -37R.
	GC98-39R:	Trench 98-9. Grab from steeply dipping rusty shear zone, in hw of Samaritan fault.
	GC98-40R:	Trench 98-9. Vertical chip over 0.75 metre exposed width of rusty, oxidized shallow dipping Samaritan fault zone (true exposed thickness - may be thicker). Remnant massive sulfide pods.
	GC98-41R:	Trench 98-9. Grab of intensely silic'd rx. Mottled "skarny" phase, with 5- 10% py - diss and blebby. In hw of shallow dipping fault.
	GC98-42R:	Trench 98-5. Grab of white xtalline qtz vein with oxidized sulfides from narrow flt/vn zone, $\frac{1}{2}$ way up slope.
	GC98-43R:	Trench 98-5. Chip across 0.3 metre wide fault zone with 15-20% py. Stockworking qtz-py vnlts in gst and knots and pods of white xtalline qtz vein material with oxidized sulfides.
	GC98-44R:	Trench 98-5. Chip across 2 metres of very rusty oxidized fault/vein from north end of trench, at break in slope at base of hill.
	GC98-45R:	Trench 98-12. Chip across 0.8 m wide rusty contact shear vein. Rusty gouge, alt'd serp, oxid and massive sulfides.
:	GC98-46R:	Trench 98-12. Chip across 0.5 m wide rusty contact shear, as in -45R.
	GC98-47R:	Trench 98-12. Chip across 1 m, as in -45R.
	GC98-48R:	Trench 98-12. Chip across 4 m of flat lying massive po-py (Hug vein exposure), sitting above a shallow dipping fault.
	GC98-49R:	Trench 98-12. Chip across 0.75 m in contact shear - rusty gouge and oxid and massive sulfides.
	GC98-50R:	Trench 98-12. Random chips across 0.5 m width, over a 4 m strike length. Massive po-py - very difficult to sample.
	GC98-51R:	Trench 98-12. Sawed channel sample across massive po-py at contact of serp and diorite, 35 m SE of -50R. Sample is 1.7m wide. TW of massive sulfides is 2.6 m here.
	GC98-52R:	Trench 98-12. Sawed channel sample across massive po-py at contact of serp and diorite, 6 m SE of -51R. Sample is 3.1m wide, across tw of massive sulfides.

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GC98-53R:	Trench 98-12. Sawed channel sample across massive po-py at contact of serp and diorite, 4 m SE of -52R. Sample is 2.2m wide. TW of massive sulfides is 2.8 m here.
GC98-54R:	Trench 98-12. Sawed channel sample across massive po-py at contact of serp and diorite, 7 m SE of -53R. Sample is 2 m wide. TW of massive sulfides is 5.5 m here.
GC98-55R:	Trench 98-12. Sawed channel sample across massive po-py at contact of serp and diorite, in same section as -54R. Sample is 1m wide. TW of massive sulfides is 5.5 m here.
GC98-56R:	Trench 98-12. Sawed channel sample across massive po-py at contact of serp and diorite, 3 to 5 SE of -54, 55R. Sample is 2m wide. TW of massive sulfides is 6 m here.
GC98-57R:	Trench 98-12. Sawed channel sample across massive po-py at contact of serp and diorite, 3 to 5 m SE of -54, 55R (oblique to strike of vein). Sample is 3.8m wide. TW of massive sulfides is 6 m here.
GC98-58R:	Trench 98-19. Grab of qtz vein material with 20-60% sulfides (dom py, cpy).
GC98-59R:	Trench 98-19. Grab of massive po-py (+cpy) vein material, with 5-10% patchy white qtz, from trench.
GC98-60R:	Trench 98-3 (along strike of Queen fault zone). Vertical chip across tw of fault zone (entire thickness not exposed). 1 m chip at 7.5 m south from N end of trench. Rusty, intensely altered intrusive.
GC98-61R:	Trench 98-3. Vertical chip across 2m tw of fault zone at 14 m south in trench (at intersection with cross trench).
GC98-62R:	Trench 98-3. Vertical chip across 2.5 tw of fault zone (at 19 metres south in trench).
GC98-63R:	Trench 98-14. Grab of vein material at 32 m from SE end of trench, where vein splays into stringer zone.
GC98-64R:	Trench 98-14. Grab of vein material at 30 m from SE end of trench.
GC98-65R:	Trench 98-14. Chip across 1 m tw of vein, at 17 m from SE end of trench.
GC98-66R:	Underground, Golden Crown vein
GC98-67R	Trench 98-13. 1 m wide rusty gouge and al'td serp. Locally while bleached alt'd rx. Locally pods and lenses of mass sulfides or ox ms (mainly py).
GC98-68R	Trench 98-13. 1 m wide rusty alt'd sheared serp and gouge.

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GC98-69R	Trench 98-13. 1 m wide rusty oxidized serp + green serp gouge, near vert strike-slip flt. At W end of well exposed serp-dior contact.
GC98-70R	Trench 98-12. 2 m chip at intersection of fault zones. Rusty and green gouge and rusty sheared serp. Poddy massive sulfides and rusty fine grained diorite.
GC98-71R	Trench 98-12. 2 m sample of white bull type quartz, rusty gouge and sheared serp, with local massive sulfides (dom fng py), adjacent to sample 54R (to E)
GC98-72R	Trench 98-12. 0.5 m sample adjacent to -51R (to W), across rusty and green sheared serp and gouge zone, adjacent to massive po zone.
GC98-73R	Trench 98-12. Random chips from area of > qtz gangue. Qtz sulfide vning - white qtz, locally vuggy, with 10% diss py and cpy and up to 40% knots and zones of massive py-po-cpy (with 70+% sulfides). Small sample. Difficult to chip.
GC98-74R	Trench 98-12. 1.8 m chip acrosss rusty altered sheared serp and gouge contact zone with grey py rich sheared, intensely clay altered rx and sulf rich gouge. Locally minor pods of massive sulfides.
GC98-75R	Trench 98-12. Grab of fine grained black massive po-py. Strongly magnetic, 75% sulfides in sheared serpentine. At N end of southern massive sulfide zone.
GC98-76R	Trench 98-12. 0.3 m chip across sheared serp contact, weakly rusty. 12m S of -50R and 11m N of -75R.
GC98-77R	Trench 98-12. Serpentine hangingwall at sample -78R. 0.5 m wide
GC98-78R	Trench 98-12. Resample -49R. 0.9m wide. Rusty gouge and sheared serp, with fine grained black sulfides (py, po)
GC98-79R	Trench 98-12. Diorite footwall at sample -78R. 0.5 m wide

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APPENDIX 2

ANALYTICAL RESULTS



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SAMPLE	COI)E	g/t	ppm	%	ррш	ppm	ррш	ppm	%	ppm	ppm	ррш	ppm	%	ррш	ppm	%	ppm	%	ррп
3C98-1R	205	226	7.29	~ ~	0.40																
3C98-2R	205			0.8 19.4	0.08	>10000		< 0.5		< 0.01	< 0.5	351	98	418	8.57	< 10		< 0.01	< 10	0.12	45
JC98-3R	205	102	97.05	11.6	0.08	100	< 10	< 0.5	Intf*	0.06	9.5	295		>10000		10		< 0.01	< 10	0.03	30
3C98-4R	205			0.2		348 >10000	10	< 0.5	556	0.04	< 0.5	16	171	1595	4.58	< 10	< 1	0.07	< 10	0.35	75
GC98-5R	205			22.4	0.38	164	10 < 10	< 0.5 < 0.5	10 · Intf*	< 0.01	< 0.5 < 0.5	361 404	68	108 >10000	10.40	< 10	4	0.03	< 10	1.21	345
						104	1 10	× 0.5	THOT.	V.40	× 0.5	****	04	×10000	>12.00	< 10	< 1	0.01	< 10	0.43	95
GC98-6R	205			1.4	0,41	1235	150	< 0.5	< 2	6,12	0.5	36	256	78	3.10	< 10	< 1	0.04	< 10	11.30	1175
GC98-7R	205			65.6	0.11	2700	20	< 0.5	< 2	4.74	19.0	15	216	185	3.19	< 10	1	0.01	< 10	4.68	3200
GC98-8R	205			1.6	2.57	58	20	< 0.5	16	1.43	< 0.5	32	59	481	7.84	10	< 1	0.20	< 10	1.92	270
GC98-9R	205			13.0	0.45	26	< 10	< 0.5	66	0.62	6.5	217	35	9500	>15.00	10	1	0.01	< 10	0.27	165
GC98-10R	205	226	2.01	2.4	1.23	640	10	< 0.5	2	0.08	< 0.5	9	179	340	6.62	< 10	< 1	0.03	< 10	0.55	330
2C98-11R	205	225	1.44	9.4	0.36	1610	10	< 0.5													
GC98-12R	205			92.2	1.18	58	< 10		6	0.08	1.5	96	142		>15.00	< 10		< 0.01	< 10	0.08	190
GC98-13R	205	226	17.73	37.6	0.34	114		< 0.5	Inti*	0.07	22.5	220		>10000		< 10	< 1	0.01	< 10	0.23	70
GC98-14R	205	226	0.36	2.2	0.60	308		< 0.5	Intf* 10	0.20 0.01	4.0	146 20	238	>10000		< 10	1	0.01	< 10	0.22	45
GC98-15R	205			64.2	0.55	202		< 0.5	Intf*	0.01	< 0.5 6.0	145		713 >10000	4.19	< 10	< 1	0.01	< 10	0.39	105
							· •	× 019	1001 -	0.03	0.0	743	οT	>10000	>13.00	< 10	1	0.02	< 10	0.38	165
3C98-16R	205	226	3.36	18.4	0.51	102	< 10	< 0.5	18	0.09	1.0	247	159	5190	>15.00	10	< 1	< 0.01	< 10	0.41	105
3C98-17R	205	226	< 0.03	0.2	0.90	10		< 0.5	< 2	0.28	< 0.5	27	120	377	3.73	< 10	< 1	0.09	< 10	0.42	115
3C98-18R	205	226	0.42	13.8	1.34	34		< 0.5	10	0.06	3.0	166	246		>15.00	10	< 1	0.01	< 10	1.03	190
9C98-19R	205			0.6	3.60	8	10	< 0.5	< 2	0.75	< 0.5	24	150	556	7.41	20	< 1	0.54	< 10	3.22	450
3C98-20R	205	226	< 0.03	1.0	2.49	28	10	< 0.5	2	0.35	< 0.5	29	65	437	7.40	10	< 1	0.14	< 10	2.02	290
3C98-21R	205	226	1.41	80.2	1.55	122	10	< 0.5	Intf*	0.03											
3C98-22R	205	226	< 0.03	0.6	2.75	38	10	< 0.5	< 2	0.03 0.82	1.5 < 0.5	82 25		>10000	9.98	10	< 1	0.08	< 10	1.05	150
JC98-23R	205		1.68	3.0	1.92	686	< 10	< 0.5	10	0.04	1.0	139	75 62	561	5.85 >15,00	10	< 1	0.11	< 10	2.04	275
3C98-24R	205		0.18	7.4	0.13	14	< 10	< 0.5	46	0.03	< 0.5	336	12		>15.00	10 < 10	< 1	0.14	< 10	0.95 0.04	160 25
2C98-25R	205	226	0.33	5.4	1.90	86		< 0.5	34	2.32	0.5	43	99	3620	9.57	10	< 1	0.01	< 10 < 10	1.85	230
C98-26R		000									<u> </u>										
2C98-27R	205		3.21 5.61	62.8 23.0	0.37 2.12	300 226	< 10	< 0.5	Intf*	0.06	6.5	371		>10000		< 10	< 1	0.01	< 10	0.18	75
		~ `	3.01	43.0	4.14	440	< 10	< 0.5	Intf*	0.50	1.5	102	141	>10000	>15.00	10	< 1	0.11	< 10	1.59	290
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SAMPLE	PREP CODE	Mo ppm	Na %	Nİ ppm	p mqq	Pb ppm	Sb ppm	Sc ppm	Sr 1 ppm	i Tl % ppm	U ppm	V ppm	W ppm	Zn ppm		
												27 <u>2</u>		РРш		
C98-1R C98-2R	205 226 205 226	4	0.02	90	< 10	16	118	1	< 1 < 0.0		< 10	3	< 10	< 2		
C98-3R	205 226	3	0.01	63	Intf*	< 2	< 2	< 1	< 1 < 0.0		< 10	< 1	40	486		
C98-4R	205 226	4	< 0.01 0.02	8 75	30	4	< 2	3	< 1 < 0.0	1 < 10	< 10	28	10	22		
C98-5R	205 226	5	0.02	134	30 Intf*	10 < 2	66 < 2	9 1	< 1 < 0.0		< 10	57	< 10	16		
		¥		134	THCT.	× 4	× 4	1	< 1 < 0.0	1 < 10	< 10	29	50	62		
C98-6R	205 226	2	0.01	539	10	152	4	7	527 < 0.0	1 < 10	< 10	28	< 10	74		
C98-7R	205 226	9	0.01	369	100	2340	18	1	495 < 0.0	1 < 10	< 10	12	< 10	2580		
C98-8R C98-9R	205 226	2	0.01	22	90	8	2	10	4 0.0	5 < 10	< 10	102	< 10	32		
C98-10R	205 226 205 226	< 1	0.01	35	< 10	8	< 2	2	< 1 < 0.0		< 10	16	< 10	386		
	405 440	3 ·	< 0.01	11	120	6	< 2	6	3 < 0.0	1 < 10	< 10	48	< 10	34		
C98-11R	205 226	10 -	< 0.01	43	280	8	4	3	< 1 < 0.0	1 < 10	< 10	149	< 10	34		
C98-12R	205 226	8	0.02	26	Intf*	8	< 2	< 1	< 1 < 0.0		30	4	350	1075		
C98-13R	205 226	7	0.01	130	Intf*	2	< 2	< 1	< 1 < 0.0		< 10	3	440	224		
C98-14R C98-15R	205 226		< 0.01	24	30	2	< 2	3	< 1 < 0.0		< 10	32	< 10	18		
390-13K	205 226	3	0.01	58	Intf*	8	2	1	< 1 < 0.0	1 < 10	10	10	< 10	360		
C98-16R	205 226	4	< 0.01	86	30	2	< 2	2	< 1 < 0.0	1 < 10	< 10	21	80	68		
298-17R	205 226	1	0.08	5	360	2 6	< 2	9	3 0.1		< 10	8	< 10	12		
298-18R	205 226	20	0.01	102	30	< 2	< 2	6	< 1 < 0.0		< 10	55	60	156		
298-19R 298-20R	205 226	< 1	0.04	23	110	< 2	< 2	28	5 0.0		< 10	243	< 10	44		
.30-2VR	205 226	1	0.05	20	130	2	< 2	20	8 0.0	2 < 10	< 10	174	< 10	20		
98-21R	205 226	37	0.01	34	Intf*	< 2	< 2	6	< 1 < 0.0	1 < 10	20	60	10	152		
98-22R	205 226	1	0.14	31	140	< 2	< 2	15	11 0.1		< 10	133	< 10	20		
98-23R	205 226	< 1	0.01	35	90	4	< 2	7	< 1 < 0.0		< 10	67	< 10	58		
198-24R 198-25R	205 226	1	0.01	161	10	< 2	< 2	< 1	< 1 < 0.0		< 10	< 1	< 10	6		
96-25K	205 226	2 <	0.01	16	70	2	2	9	2 0.0	9 < 10	< 10	97	< 10	62		
98-26R	205 226	25	0.01	63	Intf*	< 2	< 2	1	< 1 < 0.0	L < 10	10	9	220	650		
98-27R	205 226	25	0.01	42	Intf*	10	< 2	8	< 1 < 0.0		< 10	74	50	114		
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"RFERENCE: Cu on Bi and P * [٢]



Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: CENTURY GOLD CORP.

63 - 590 17TH ST. WEST VANCOUVER, BC V7V 3S7 *

Project : GOLDEN CROWN Comments: ATTN:DON RIPPON Page Number :1 Total Pages :1 Certificate Date: 02-OCT-1998 Invoice No. :19832395 P.O. Number : Account :PEA

P	<u>,</u>					CERTIFIC	ATE OF A	NALYSIS	A9832395					
SAMPLE		REP ODE	Cu %						······································					
GC98-2R GC98-5R GC98-12R GC98-13R GC98-15R	244		1.61 1.26 4.79 2.04 2.74		· · ·									
GC98-21R GC98-26R GC98-27R	244 244 244		2.84 2.30 1.23											
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DVEP TS from A9831743		#	······	L)		I Ci	ERTIFICATION	Said	Ceina	P			



Analytical Chemists * Geochemists * Registered Assayers North Vancouver V7J 2C1 212 Brooksbank Ave.,

British Columbia, Canada PHONE: 604-984-0221 FAX: 604-984-0218 To: CENTURY GOLD CORP.

63 - 590 17TH ST. WEST VANCOUVER, BC V7V 3S7

Project : GOLDEN CROWN Comments: ATTN: DONALD RIPPON

CERTIFICATE OF ANALYSIS

Page Number :1-A Total Pages :1 Certificate Date: 20-NOV-1 Invoice No. : 19835869 P.O. Number PEA Account

A9835869

* PLEASE NOTE

SMELLZ CODE PA+XA g/t ppm x ppm ppm ppm ppm ppm x x		· · · · · · · · · · · · · · · · · · ·	1		· · · ·						••••••										
SAMDLZ CODE PAkhA g/t ppm ppm ppm ppm ppm ppm ppm ppm k ppm ppm k ppm ppm k ppm ppm k ppm ppm k ppm ppm ppm ppm ppm ppm k ppm k ppm k ppm k ppm k <																				_	
283-288 205 226 227 226 226 226 100 110 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120		PREP	Au ppb	Au FA	Ag	A1	As	Ba	Be	Bi	Ca	Cđ	Co	Cr	Çu	Fe	Ga	Ħg	K	La	Mg
393-288 205 226 15	SAMPLE	CODE	га+аа	g/t	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	8
393-288 205 226 15	C98-28R	205 226	4890		75.9	2 82	30	20	< 0.5	Totft	0 10	7 0	4.5	170	N10000	12.05	× 10	< 1	0.14	< 10	1.53
298-308 208 202 203 226 103 44 353 4.79 4.10 4.1 0.17 4.10 4.1 298-318 203 226 30 0.2 4.4 84 0.0 0.5 55 10 44 973 6.06 <10 <11 0.03 10 11 0.03 10 11 0.03 10 11 0.03 10 11 0.03 10 11 0.03 10 11 0.03 10 11 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10 0.03 10	C98-29R																				1.45
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	C98-30R																				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	C98-31R																				4.14
$\begin{array}{c} 99-44R \\ 99-28R \\ 99-38R \\ 99-38R \\ 205 226 \\ 15 \\ 1.2 \\ 225 226 \\ 175 \\ 1.2 \\ 235 -26 \\ 1.5 \\ 295-37R \\ 205 226 \\ 175 \\ 1.2 \\ 235 -26 \\ 1.5 \\ 295-37R \\ 205 226 \\ 105 \\ 1.0 \\ 216 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 22$	C98-32R																				1.16
$\begin{array}{c} 99-44R \\ 99-28R \\ 99-38R \\ 99-38R \\ 205 226 \\ 15 \\ 1.2 \\ 225 226 \\ 175 \\ 1.2 \\ 235 -26 \\ 1.5 \\ 295-37R \\ 205 226 \\ 175 \\ 1.2 \\ 235 -26 \\ 1.5 \\ 295-37R \\ 205 226 \\ 105 \\ 1.0 \\ 216 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 22$	C98-33R	205 226	165 -		2.8	2.71	56	10	< 0.5	6	0.06	< 0.5	50	419	1185	13.10	< 10	< 1	0.12	< 10	1.40
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	C98-34R																				2.64
$\begin{array}{c} 99-36R \\ 99-36R \\ 99-37R \\ 99-37R \\ 99-37R \\ 205 226 \\ 105 \\ 99-37R \\ 205 226 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105$	C98-35R																				2.65
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3C98-36R																				2.48
$\begin{array}{c} 393-39R \\ 393-40R \\ 395-40R \\ 395-40R \\ 395-40R \\ 205 226 \\ 1050 \\ 395-41R \\ 205 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1050 \\ 205 \\ 226 \\ 1000 \\ 205 \\ 226 \\ 1000 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 205 \\ 20$	2C98-37R	205 226	55 -																	< 10	1.77
$\begin{array}{c} 393-39R \\ 393-40R \\ 205 226 \\ 994-41R \\ 205 226 \\ 1050 \\ 994-41R \\ 205 226 \\ 1050 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\ 105 \\$	C98-38R	205 226	165 -		5.4	2.69	38	20	< 0.5	10	0.07	< 0.5	13	77	786	7.36	10	< 1	0.10	< 10	1.85
$\begin{array}{c} \begin{array}{c} 939-40R\\ 939-41R\\ 205 226\\ 939-42R\\ 205 226\\ 9520 - \dots & 0.2 \\ 215 - \dots & 0.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 952 - 0 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 952 - 0 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 952 - 0 \\ 954 - 16.2 \\ 954 - 0 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 \\ 954 - 16.2 $	C98-39R	205 226	90															< 1	0.19	< 10	1.23
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3C98-40R	205 226	1050 -			2.67		20	< 0.5	20	0.14	< 0.5		79	7000	13.15		< 1	0.07	< 10	1.68
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3C98-41R	205 226	25 -		0.2	2.81	6	10	< 0.5	< 2	0.40	< 0.5			494	6.63	10	< 1	0.12	< 10	2.27
998-44R 205 226 3170 3.6 1.2 3670 20 <0.5 36 0.03 <0.5 17 88 1800 s15.00 10 <1 0.04 <10 0.0 998-45R 205 226 >10000 35.11 2.6 2.60 >1000 <0.5	JC98-42R	205 226	9520 -		16.2			40									< 10	< 1	0.01	< 10	0.03
$\begin{array}{c} 998-44R \\ 998-44R \\ 205 \\ 226 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326 \\ 326$	JC98-43R	205 226	1475 -		1.0	3.46	422	10	< 0.5	< 2	< 0.01	< 0.5	22	70	730	9.84	10	< 1	0.18	< 10	1.64
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	C98-44R		3170 -		3.6	1.42		20	< 0.5		0.03	< 0.5		88	1800	>15.00	10	< 1	0.04	< 10	0.08
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2C98-45R	205 226	>10000	13,37	1.4	1.89	2730	< 10	< 0.5	20	0.04			1875	672	>15.00	10	< 1	0.01	< 10	1.21
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2C98-46R	205 226	>10000		2.6	2.60	>10000	< 10	< 0.5		0.04								0.04	< 10	2.73
$\begin{array}{c} y_{98} - 59R \\ y_{98} - 50R \\ y_{96} - 50R \\ z_{05} \ z_{26} \ z_{10} \ z_{10$	3C98-47R	205 226	4870 -		1.0			10	< 0.5	12	0.10	< 0.5	178	1380	752	>15.00	10		0.05	< 10	1.29
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	3C98-48R				1.6	1,18	1920	10	< 0.5	2	0.04	< 0.5	173	1010	1315	>15.00	< 10	< 1	0.02	< 10	2.65
$\begin{array}{c} 98-51R \\ 996-52R \\ 205 \\ 226 \\ 205 \\ 226 \\ 205 \\ 226 \\ 205 \\ 226 \\ 226 \\ 226 \\ 205 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 \\ 226 $	3C98-49R			98.74	11.6	2.39	>10000	20	< 0.5	54	0.20	< 0.5	1495	2570	821	>15.00	20	< 1	0.01	< 10	3.80
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	GC98-50R			78.45	7.0	3.20	>10000	< 10	< 0.5	12	0.05	< 0,5	1220	2050	1380	>15.00	10	< 1 <	0.01	< 10	2.68
198-53R 205 226 630 1.8 0.53 918 < 10 < 0.55 6 0.01 < 0.55 152 458 1850 >15.00 10 < 1 < 0.01 < 10 0.4 998-54R 205 226 715 1.2 0.48 760 < 10 < 0.5 < 2 0.02 < 0.5 137 424 1960 >15.00 10 < 1 < 0.01 < 10 0.4 998-55R 205 226 2650 1.8 0.41 526 < 10 < 0.5 171 437 1695 >15.00 10 < 1 < 0.01 < 10 0.4 <td>3C98~51R</td> <td></td> <td></td> <td></td> <td>1.2</td> <td>0.61</td> <td>986</td> <td>< 10</td> <td>< 0.5</td> <td>12</td> <td>0.03</td> <td>< 0.5</td> <td>137</td> <td>710</td> <td>1725</td> <td>>15.00</td> <td>30</td> <td>< 1 <</td> <td>0.01</td> <td>< 10</td> <td>0.43</td>	3C98~51R				1.2	0.61	986	< 10	< 0.5	12	0.03	< 0.5	137	710	1725	>15.00	30	< 1 <	0.01	< 10	0.43
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	2C98-52R	205 226	660 -		1,4	0.53	884	< 10	< 0.5	8	0.01	< 0.5	128	559	2640	>15.00	10	< 1 <	0.01	< 10	0.37
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3C98-53R				1.8	0.53	918	< 10	< 0.5	6	0.01	< 0.5	152	458	1850	>15.00	10	< 1 <	0.01	< 10	0.41
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3C98-54R					0.48			< 0.5	< 2	0.02	< 0.5	137	424	1960	>15.00	20	< 1 <	0.01	< 10	0.38
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	3C98-55R							< 10	< 0.5	4 -	< 0.01	< 0.5	171	437	1695	>15.00	10	< 1 <	0.01	< 10	0.49
198-58R 205 226 1420 23.4 0.32 390 < 10 < 0.5 550 0.01 < 0.5 106 161 5970 11.75 < 10 < 1 0.03 < 10 0.1 198-59R 205 226 3550 21.4 1.00 428 < 10 < 0.5 132 0.01 1.0 284 100 6460 >15.00 20 < 1 0.03 < 10 0.1 198-60R 205 226 185 21.4 1.00 428 < 0.5 132 0.01 1.0 284 100 6460 >15.00 20 < 1 0.01 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 0.1 < 10 < 10 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>< 2 -</td> <td>< 0.01</td> <td>< 0.5</td> <td>122</td> <td>452</td> <td>2780</td> <td>>15.00</td> <td>10</td> <td>< 1 <</td> <td>0.01</td> <td></td> <td>0.29</td>										< 2 -	< 0.01	< 0.5	122	452	2780	>15.00	10	< 1 <	0.01		0.29
198-59R 205 226 3550 21.4 1.00 428 < 10	3C98-57R	205 226	300 -		1.4	0.87	970	< 10	< 0.5	8	0.03	< 0.5	139	836	1670	>15.00	10	< 1 <	0.01	< 10	0.49
198-60R 205 226 185 1.8 3.36 204 20 < 0.5 < 2 0.14 < 0.5 63 727 1260 9.89 10 < 1 0.13 < 10 2.4 98-61R 205 226 410 2.4 2.65 46 30 < 0.5 2 0.19 < 0.5 23 45 912 7.91 10 < 1 0.21 < 10 1.2 98-62R 205 226 1110 1.2 61 .93 42 10 < 0.5 64 0.23 3.0 93 75 6980 >15.00 10 < 1 0.13 < 10 2.4 198-63R 205 226 540 1.0 1.87 84 10< 0.5 6 0.90 < 0.5 51 155 619 7.77 10 < 1 0.06 < 10 1.4 98-64R 205 226 30 1.0 0.62 26 10< 0.5 2 0.18	C98-58R																				0.14
998-61R 205 226 410 2.4 2.65 46 30 < 0.5 2 0.19 < 0.5 23 45 912 7.91 10 < 1 0.21 < 10 1.2 998-62R 205 226 1110 12.6 1.93 42 10 < 0.5 64 0.23 3.0 93 75 6980 >15.00 10 < 1 0.21 < 10 0.8 998-63R 205 226 540 1.0 1.87 84 10< < 0.5 6 0.90 < 0.5 51 155 619 7.77 10 < 1 0.06 < 10 1.4 98-64R 205 226 315 1.0 0.62 26 10 < 0.5 2 0.18 < 0.5 11 213 308 3.51 < 10 < 1 0.06 < 10 0.4 98-65R 205 226 30 2.4 1.96 74< < 10 < 0.5 78 298 1240 <td></td> <td>0.47</td>																					0.47
98-62R 205 226 1110 12.6 1.93 42 10 < 0.5 64 0.23 3.0 93 75 6980 >15.00 10 < 1 0.19 < 10 0.8 98-63R 205 226 540 1.0 1.87 84 10 < 0.5																					2.46
98-63R 205 226 540 1.0 1.87 84 10 < 0.5																		< 1			1.26
98-64R 205 226 315 1.0 0.62 26 10 < 0.5	1C98-62R	205 226	1110 -		12.6	1.93	42	10	< 0.5	64	0.23	3.0	93	75	6980	>15.00	10	< 1	0.19	< 10	0.89
98-65R 98-66R 205 226 30 2.4 1.96 74 < 10 < 0.5 2 0.09 < 0.5 78 298 1240 >15.00 10 < 1 0.06 < 10 1.2 98-66R 205 226 5820 41.2 0.60 198 < 10 < 0.5 Intf* 4.09 4.5 157 73 >10000 >15.00 < 10 < 1 0.02 < 10 0.5	C98-63R																				1.48
98-66R 205 226 5820 41.2 0.60 198 < 10 < 0.5 Intf* 4.09 4.5 157 73 >10000 >15.00 < 10 < 1 0.02 < 10 0.5																					0.40
Hutbichlen										-											1.28
Hartbuchlen	1C39-00K	205 226	5820 -		41.2	0.60	198	< 10	< 0.5	Intf*	4.09	4.5	157	73	>10000	>15,00	< 10	< 1	0,02	< 10	0.58
CEPTIEICATION Hartfuller																			۴ _		
CERTIFICATION										····· ·			· · · ·				1.1	NE	$\overline{0}$	0	<u> </u>
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CERTIFICATION:



Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

63 - 590 17TH ST. WEST VANCOUVER, BC V7V 3S7

Project : GOLDEN CROWN Comments: ATTN: DONALD RIPPON

CERTIFICATE OF ANALYSIS

Page Number :1-B Total Pages :1 Certificate Date: 20-NOV-Invoice No. :1983586 P.O. Number : Account PEA

A9835869

* PLEASE NOTE

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	PREP	Mn	Mo	Na Ni	Р	Pb	Sb	Sc	Sr	TÌ	Tl	υ	v	W	Zn	
SAMPLE	CODE	-			-								•			
SALE IS		ppm	ppm	% ppm	ppm	ppm	ppm	ppm	ppm	*	ррш	ррш	ppm	ррщ	ppm	
GC98-28R	205 226	215	< 1 < 0.	01 39	Intf*	2	2	5	~ ~ ~	0.01	< 10	< 10	50	<i>c</i> 0	240	
GC98-29R	205 226	260	1 0.		1000	6	2	5	2 < 28	0.01	< 10	< 10	58 93	60	342	
GC98-30R	205 226	235	1 0.		960		-	5	∡o 35		-			< 10	24	
GC98-31R	205 226	830	1 0.		320	< 2 4	< 2	•		0.10	< 10	< 10	85	< 10	20	
GC98-32R	205 226	180	1 0.		910	< 2	< 2 < 2	17	16 28	0.05	< 10	< 10	197	< 10	52	
		100	1 0.1		310	× 4	< 4	4	48	0.07	< 10	< 10	66	20	38	
GC98-33R	205 226	200	3 < 0.	01 40	70	8	2	14	3 <	0,01	< 10	< 10	146	< 10	36	
GC98-34R	205 226	500	1 0.0	01 41	120	6	2	16	9	0.02	< 10	< 10	157	< 10	44	
GC98-35R	205 226	405	< 1 0.0	05 44	110	< 2	< 2	15	7	0.05	< 10	< 10	167	< 10	32	
GC98-36R	205 226	735	1 0.0	2 29	1630	46	< 2	9	23	0.08	< 10	< 10	180	< 10	112	
GC98-37R	205 226	290	1 O.)3 11	280	4	< 2	13	4	0.08	< 10	< 10	173	< 10	26	
GC98-38R	205 226	290	7 0.0	2 8	140	2	< 2	14	5	0.07	< 10	< 10	178	< 10	22	
0C98-39R	205 226	1490	1 0		260	12	2	20		0.07	< 10 < 10	< 10	107	< 10	120	
GC98-40R	205 226	315	16 0.0		140	10			8							
GC98-41R	205 226	420	1 0.0		170	< 2	< 2	12	8	0.03	< 10	< 10	131	< 10	114	
C98-42R	205 226	20	3 < 0.0		50	2	< 2	16	-	0.09	< 10	< 10	174	< 10	34	
			3 1 0.0) <u>1</u> 3	20	4	< 2	< 1	3 <	0.01	< 10	< 10	8	60	< 2	
GC98-43R	205 226	240	1 < 0.0)1 12	90	< 2	2	11	2 <	0.01	< 10	< 10	133	< 10	24	
GC98-44R	205 226	70	< 1 < 0.0)1 5	140	24	18	13	4	0.01	< 10	< 10	156	90	28	
GC98-45R	205 226	200	< 1 < 0.0	1 191	60	14	< 2	7	3 <	0.01	< 10	< 10	57	< 10	30	
GC98-46R	205 226	330	< 1 < 0.0	964	120	8	6	13	5 <	0.01	< 10	< 10	63	< 10	30	
GC98-47R	205 226	265	1 0.0	1015	160	14	2	8	6	0.02	< 10	< 10	61	< 10	34	
GC98-48R	205 226	215	< 1 < 0.0)1 823	120	18	< 2	5	3	0.01	< 10	< 10	40	< 10	22	
GC98-49R	205 226	500	< 1 < 0.0		90	20	2	9	24 <		< 10	< 10	77	< 10	40	
GC98-50R	205 226	500	< 1 < 0.0		40	18	< 2	7	3	0.01	< 10	< 10	66	< 10	48	
GC98-51R	205 226	150	< 1 < 0.0		10	22	< 2	3		0.01	< 10	< 10	20	< 10	34	
GC98-52R	205 226	135	< 1 < 0.0		10	22	2	2		0.01	< 10	< 10	19	< 10	38	
			- 2 - 01			~ ~ ~	` •			0.01	× 10	< 10	19	< 10	38	
GC98-53R	205 226	150	< 1 < 0.0		20	20	< 2	3	< 1 <		< 10	< 10	16	< 10	34	
GC98-54R	205 226	130	< 1 < 0.0		60	24	2	3	1 <	0.01	< 10	< 10	16	< 10	24	
GC98-55R	205 226	130	< 1 < 0,0		40	26	< 2	3	1 <	0.01	< 10	< 10	14	10	24	
9C98-56R	205 226	80	< 1 < 0.0		< 10	20	< 2	3		0.01	< 10	< 10	13	< 10	26	
GC98-57R	205 226	205	< 1 < 0.0	1 1735	50	20	< 2	4	1 <	0.01	< 10	< 10	26	< 10	168	
GC98-58R	205 226	45	6 < 0.0	1 78	< 10	8	8	1	2 <	0.01	< 10	< 10	17	< 10	20	
GC98-59R	205 226	165	33 < 0.0		< 10	34	< 2	2		0.01	< 10	< 10	27	10	148	
GC98-60R	205 226	475	< 1 < 0.0		550	2	8	8		0.01	< 10	< 10	80	< 10	48	·
GC98-61R	205 226	210	4 0.0		940	6	6	Ă		0.01	< 10	< 10	60	< 10	34	
GC98-62R	205 226	170	12 0.0		600	2	< 2	3		0.01	< 10	< 10	44	390	178	
GC98-63R	205 226	470	6 < 0.0	1 36	100					0.01						····
GC98-64R	205 226	240	6 < 0.0		50	< 2 2	< 2	8		0.01	< 10	< 10	77	< 10	36	
GC98-65R	205 226	385	30 < 0.0			-	< 2	3		0.01	< 10	< 10	28	< 10	12	
GC98-66R	205 226	385			80 Tutét	< 2	2	10		0.01	< 10	< 10	111	< 10	36	
		202	18 < 0.0	1 28	Intf*	12	4	1	192 <	0.01	< 10	< 10	13	10	268	
L																4

maistaille CERTIFICATION:_

* INTERFERENCES: Cu ON BI AND P



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: CENTURY GOLD CORP.

63 - 590 17TH ST. WEST VANCOUVER, BC V7V 3S7

Project : GOLDEN CROWN Comments: ATTN: DONALD RIPPON Page Number :1 Total Pages :1 Certificate Date: 24-NOV-19 Invoice No. :19836657 P.O. Number : Account :PEA

	······			CERTIFICATE OF ANALYSIS				A9836657				
SAMPLE	PREP CODE	Cu %										
GC98-28R GC98-66R	212 212	3.66 1.91				· · · · ·						
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WITS from A983586	29)) -				



Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: CENTURY GOLD CORP.

63 - 590 17TH ST. WEST VANCOUVER, BC V7V 3S7

Project : GOLDEN CROWN Comments: ATTN: DONALD RIPPON *

Page Number :1 Total Pages :1 Certificate Date: 24-NOV-1 Invoice No. :19836657 P.O. Number : Account :PEA

				CERTIFIC	A9836657			
SAMPLE	PREP CODE	Cu %						
3C98-28R 3C98-66R	212 212	3.66 1.91						
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MITS from A9835869			``		CERTIFICATION:			

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Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: CENTURY GOLD CORP.

63 - 590 17TH ST. WEST VANCOUVER, BC V7V 3S7

Project : GOLDEN CROWN Comments: ATTN: DONALD RIPPON

CERTIFICATE OF ANALYSIS

Page Number :1-A Total Pages :1 Certificate Date: 01-DEC-199 Invoice No. :19836720 P.O. Number : Account :PEA

A9836720

CERTIFICATION: Wash Rulle

* PLEASE NOTE

r																				
SAMPLE	PREP CODE	Au ppb FA+AA	Àu FA g/t	Ag ppm	A1 %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cđ ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
GC98-67R GC98-68R GC98-69R GC98-70R GC98-70R GC98-71R	205 226 205 226 205 226 205 226 205 226	4810 160 1875		2.4 4.0 0.2 1.4 1.2	0.45 1.52 2.54 0.87 1.91	1395 926 840 7520 1210	< 10 < 10 < 10 < 10 < 10 < 10	< 0.5 0.5 0.5 0.5 < 0.5	4 2 2 12 82	0.03 0.12 0.22 0.03 0.05	< 0.5 < 0.5 0.5 2.5 1.0	50 72 101 598 84	1205 1055 1035 1535 372	393 966 687	>15.00 11.50 7.88 9.22 >15.00	< 10 < 10 < 10 < 10 < 10 < 10	< 1 < < 1 < < 1 <	<pre>< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01</pre>	< 10 < 10 < 10 < 10 < 10 < 10	6.76 10.30 12.25 13.35 1.14
GC98-72R GC98-73R GC98-74R GC98-75R GC98-75R GC98-76R	205 226 205 226 205 226 205 226 205 226 205 226 205 226	1990 >10000 >10000	59.93	5.0 0.8 5.8 6.4 1.6		5110 4630 >10000 >10000 2260	< 10 < 10 < 10 < 10 < 10 10	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	26 96 12 34 8	0.03	3.0 1.0 < 0.5 < 0.5 < 0.5	332 1245 1760 4050 511	1540 408 1790 3030 2980	2150	14.85 7.21 >15.00 >15.00 6.33	< 10 < 10 < 10 10 10	< 1 < < 1 < < 1 <	<pre>< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01</pre>	< 10 < 10 < 10 < 10 < 10 < 10	10.45 0.60 4.63 2.88 12.95
GC98-77R GC98-78R GC98-79R	205 226 205 226 205 226	>10000	64.11	< 0.2 6.8 < 0.2	0.54 3.30 6.92	330 >10000 1985	< 10 10 50	0.5 < 0.5 < 0.5	Intf* 66 < 2	0.10 0.13 0.52	< 0.5 < 0.5 1.0	71 2030 163	987 1900 407	132 1090 130	2.38 >15.00 10.45	< 10 < 10 < 10	< 1 < < 1 < 1	0.01 0.04 0.06	< 10 < 10 < 10	>15.00 4.27 6.05
										+			• •••							

* IN' FERENCE: Mg on Bi and P



Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., British Columbia, Canada North Vancouver V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: CENTURY GOLD CORP.

63 - 590 17TH ST. WEST VANCOUVER, BC V7V 3S7

Project : GOLDEN CROWN Comments: ATTN: DONALD RIPPON

CERTIFICATE OF ANALYSIS

Page Number :1-B Total Pages :1 Certificate Date: 01-DEC-19§ Invoice No. P.O. Number :19836720 PEA Account

A9836720

* PLEASE NOTE

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SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	T1 ppm	U ppm	V ppm	W ppm	Zn ppm	
298-67R 298-68R 298-69R 298-70R 298-71R	205 22 205 22 205 22 205 22 205 22	6 505 6 690 6 260	< 1 < 1 < 1	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	661 828 527 1140 490	60 100 40 50 80	16 18 8 10 < 2	2 6 4 4	4 9 13 7 8	9 < 11 4 <	0.01 0.01 0.01 0.01 0.01 0.01	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	23 29 49 26 48	< 10 < 10 < 10 < 10 < 10 < 10	28 30 58 44 28	
98-72R 98-73R 98-74R 98-75R 98-75R 98-76R	205 22 205 22 205 22 205 22 205 22 205 22	6 160 6 420 6 390	1 < 1 < 1	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	978 538 2830 4780 575	40 10 60 100 60	30 < 2 8 10 4	2 6 4 12 2	7 3 11 11 10	1 < 6 1 <	0.01 0.01 0.01 0.01 0.01	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	28 20 61 60 57	< 10 < 10 10 180 < 10	60 12 40 42 38	
98-77R 98-78R 98-79R	205 220 205 220 205 220	6 585	< 1	< 0.01 < 0.01 < 0.01	1210 3000 283	Intf* 30 40	6 20 < 2	4 6 6	7 10 31	32 <	0.01 0.01 0.06	< 10 < 10 < 10	< 10 < 10 < 10	22 49 192	< 10 < 10 < 10	20 42 66	

* INT ERENCE: Mg on Bi and P

APPENDIX 3

COST STATEMENT

COST STATEMENT

Technical Work:

 $\left(\begin{array}{c} \\ \end{array} \right)$

Labour D. Rippon - project supervision and management L. Caron - Contract Geological Services (geological mapping, trench supervision, mapping and sampling) 40 days @ \$400/day J. Kemp - Contract Grid Work 10 days @ \$274/day + \$260 supplies	\$ 5,000.00 \$ 16,000.00 <u>\$ 3,000.00</u> \$ 24,000.00
<u>Geochemical Analyses</u> 32 element ICP + Au -30 gm Fire Assay - Chemex Labs, North Vancouver 79 rocks @ \$ 22.37/sample including shipping	<u>\$ 1,767.00</u> \$ 1,767.00
Travel and Accommodation Misc Field and Office Supplies Drafting and Report Preparation Total Technical:	\$ 7,712.00 \$ 4,272.00 <u>\$ 4,200.00</u> \$ 16,184.00 \$ 41,951.00
Physical Work:	
Excavator and Operator - W. Bosovich, Rock Creek, B.C. 110 hours @ \$115/hr including mob and demob	\$12,650.00
Contract Underground Work – Jackpot Mining, Greenwood 50' underground rehabilitation @ \$340/ft (including labour, equipment, supplies and mob/demob) Total Physical:	<u>\$17.000.00</u> \$29,650.00
TOTAL:	\$ 71,601.00

APPENDIX 4

Statement of Qualifications

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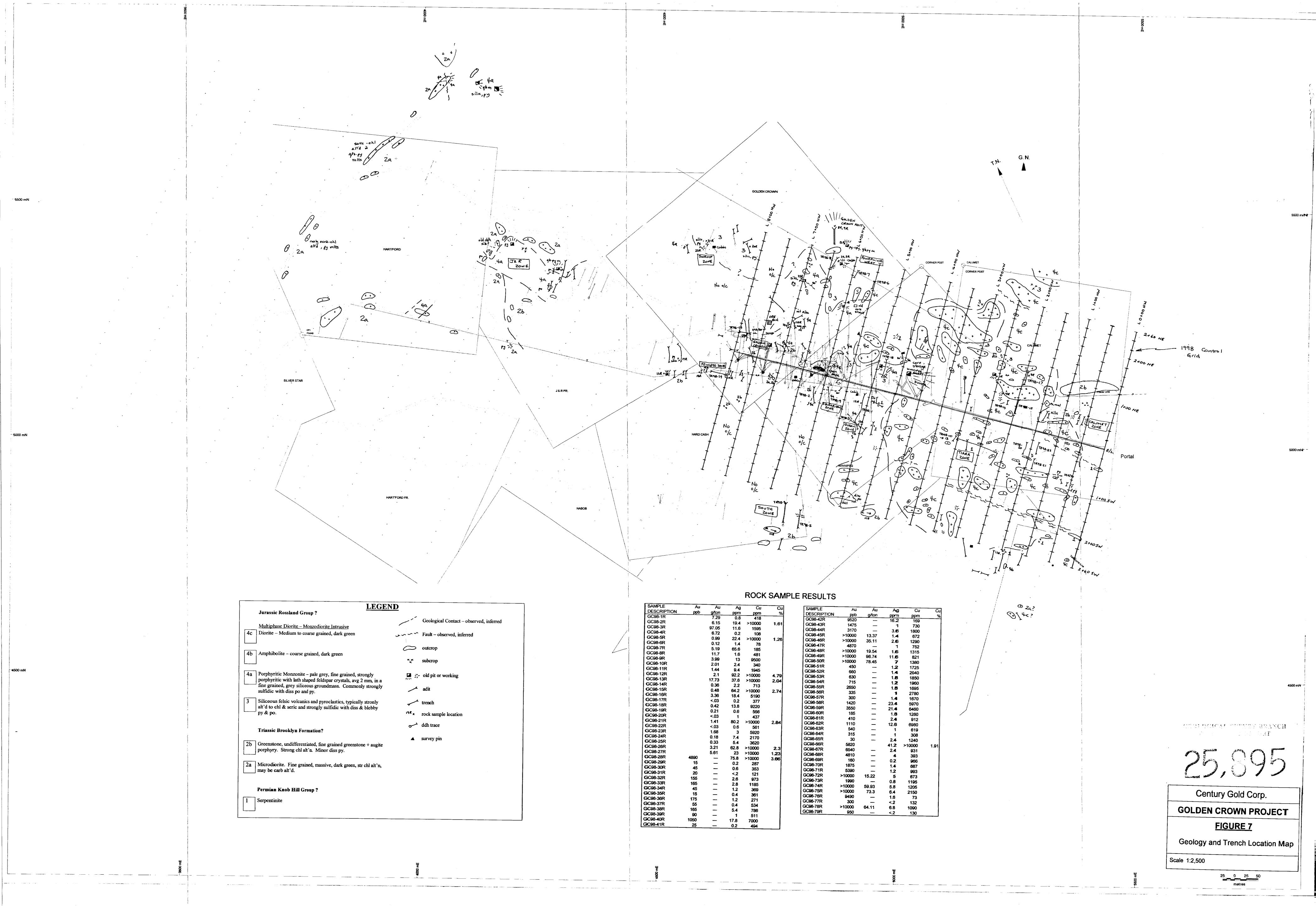
STATEMENT OF QUALIFICATIONS

- I, Linda J. Caron, certify that:
- 1. I am an independent exploration geologist residing at 717 75th Ave (Box 2493), Grand Forks, B.C.
- 2. I obtained a B.A.Sc. in Geological Engineering (Honours) in the Mineral Exploration Option, from the University of British Columbia (1985).
- 3. I graduated with an M.Sc. in Geology and Geophysics from the University of Calgary (1988).
- 4. I have practised my profession since 1987 and have worked in the mineral exploration industry since 1980. Since 1989, I have done extensive work in the Greenwood area.
- 5. I am a member in good standing with the Association of Professional Engineers and Geoscientists of B.C. with professional engineer status.
- 6. I have completed the geological mapping and sampling described in this report, as well as an extensive data review program on the Golden Crown property.
- 7. I have no direct or indirect interest in the property described herein, or in the securities of Century Gold Corp, nor do I expect to receive any.



<u>Hpril 25/</u>99 Date

Linda Caron, P. Eng



Cu	Cu		SAMPLE	Au	Au	Ag	Cu	Cu
ppm	%		DESCRIPTION	ppb	g/ton	ppm	ppm	%
418		1	GC98-42R	9520		16.2	169	
>10000	1.61		GC98-43R	1475		1	730	Í
1595			GC98-44R	3170	_	3.6	1800	
108			GC98-45R	>10000	13.37	1.4	672	
>10000	1.26		GC98-46R	>10000	35.11	2.6	1290	
78			GC98-47R	4870			752	
185			GC98-48R	>10000	19.54	1.6	1315	
481			GC98-49R	>10000	98.74	11.6	821	
9500			GC98-50R	>10000	78.45	7	1380	
340			GC98-51R	450		1.2	1725	
1945			GC98-52R	660	-	1.4	2640	
>10000	4.79		GC98-53R	630		1.8	1850	
>10000	2.04		GC98-54R	715		1.2	1960	l l
713			GC98-55R	2650	<u></u>	1.8	1695	
>10000	2.74		GC98-56R	335		1	2780	
5190			GC98-57R	300		1.4	1670	·
377			GC98-58R	1420		23.4	5970	
9220	1		GC98-59R	3550		21.4	6460	
556			GC98-60R	185		1.8	1260	
437			GC98-61R	410		2.4	912	
>10000	2.84		GC98-62R	1110	_	12.6	6980	
561			GC98-63R	540		1	619	Í
5920	1		GC98-64R	315		1	308	
2170	[GC98-65R	30		2.4	1240	
3620			GC98-66R	5820		41.2	>10000	1.91
>10000	2.3		GC98-67R	6540		2.4	931	1.81
>10000	1.23	Í	GC98-68R	4810	_	4	393	
>10000	3.66		GC98-69R	160		0.2	966	
287		1	GC98-70R	1875	_	1.4	687	
353			GC98-71R	5390		1.2	993	
121			GC98-72R	>10000	15.22	5	673	
973			GC98-73R	1990		0.8	1195	
1185		1	GC98-74R	>10000	59.93	5.8	1205	
369			GC98-75R	>10000	73.3	6. 4	2150	
361			GC98-76R	9490	_	1.6	73	
271			GC98-77R	300	_	<.2	132	
534	1		GC98-78R	>10000	64.11	6.8	1090	Į
786			GC98-79R	950	•••••	<.2	130	
511						<u> </u>		·]
7000								

