#### 1995 SUMMARY REPORT

on the

#### SPRUCE CLAIMS

(Spruce #1, #2, #3, #4, #5, #6, Spruce #7FR, Spruce #8)

Annual Work Approval Number KAM 94-0400366-1696 Reclamation Permit MX-14-15

TRAIL CREEK MINING DIVISIONS
British Columbia

North Latitude 49° 11' West Longitude 118° 04'

Map Sheet 082E 01E UTM Zone 11

Prepared for

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January 1995

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SPRUCE CLAIMS

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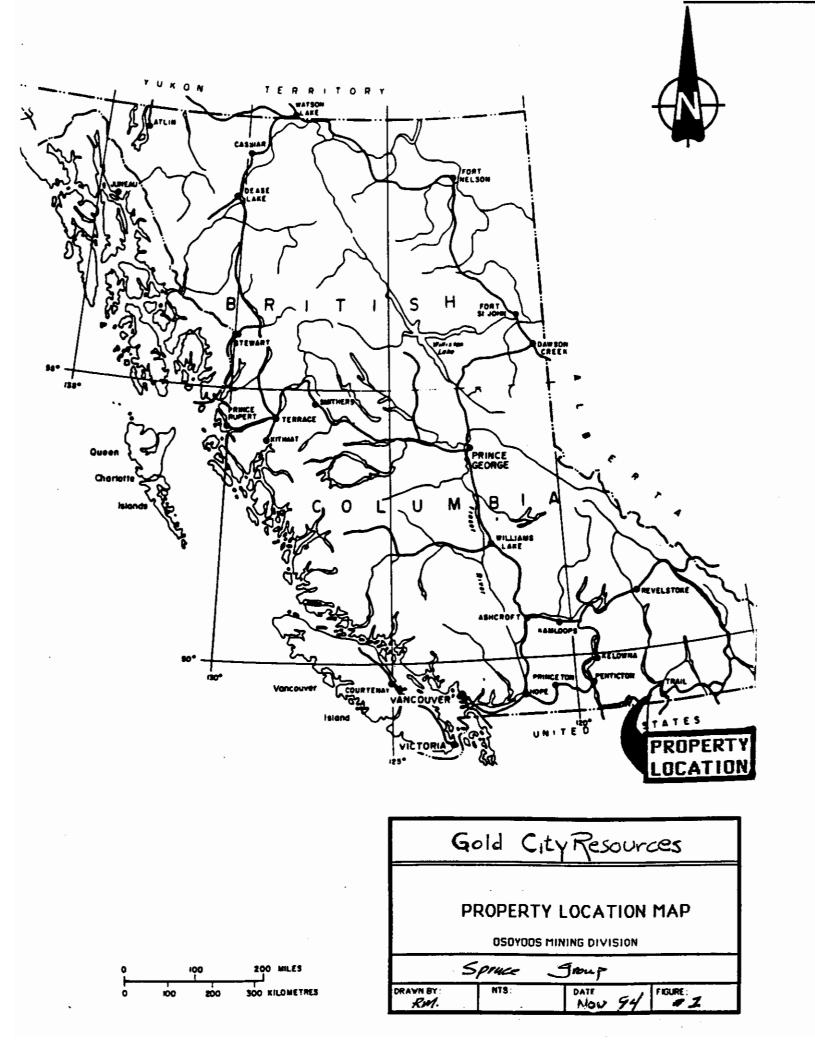
#### 1.0 INTRODUCTION

This report describes the second phase of the 1994 Spruce Mineral Claim exploration program based on the recommendations in the 1994 SUMMARY REPORT on the Spruce Claims filed earlier this year on behalf of Gold City Resources Ltd. Mr. R.E. Miller P.O. Box 2941, Grand Forks, British Columbia VOH 1HO, conducted the phase two exploration work for Gold City Resources Suite 902, 626 West Pender Street, Vancouver, British Columbia V6B 1V9. Field work took place in late November and early December 1994. The Spruce claims are located 40 km east of Grand Forks, B.C.. Exploration work consisted of locating, cleaning out, and sampling two old adits.

#### 1.1 SUMMARY

Literature search and reconnaissance geology, geochemistry, and ground geophysics in April and May 1991, indicated that geology favorable to the development of bulk tonnage gold drill targets existed in the area around the old Canadian Pacific rail station at Paulson, some 40 km east of Grand Forks, B.C.. (Figure #1)

Minor high grade gold production west south west of Paulson, has been associated with sulfide and magnetite bearing, siliceous skarnification of select limestone beds.



East of Paulson, gold silver ore has been obtained from quartz monzonite hosted quartz veins.

Based on the recommendations in the "1994 SUMMARY REPORT ON THE SPRUCE CLAIMS, GOLD CITY RESOURCES.", two old, caved adits within the gold bearing structural zone were accessed and sampled.

#### 1.2 PROPERTY AND OWNERSHIP

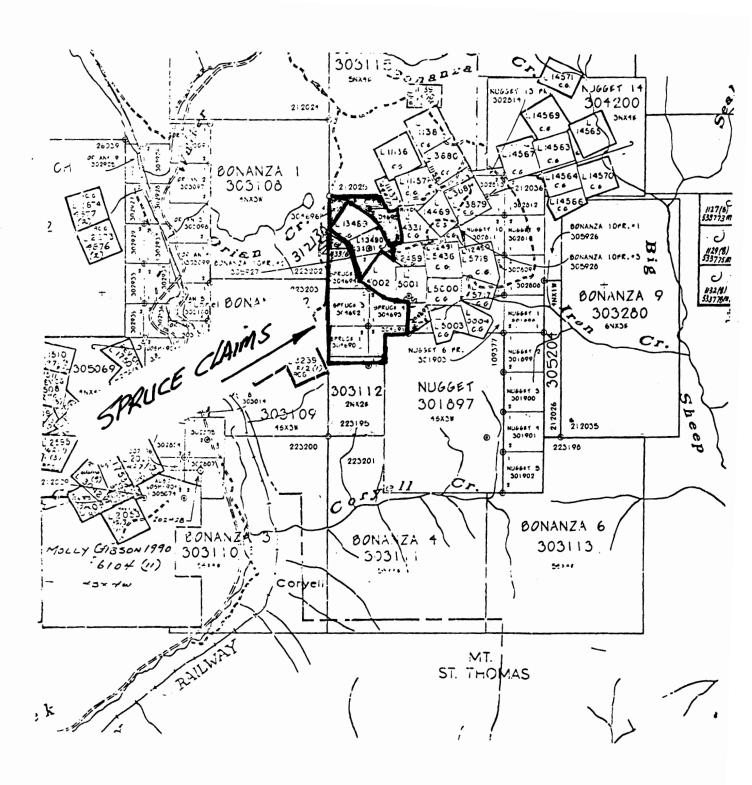
The Spruce property is comprised of 8 (eight) two post claims totalling 8 units and are owned by Gold City Resources. The properties are located in the Trail Creek Mining Division of south eastern British Columbia (Figure #2).

The following table summarizes the pertinent claim data.

#### SPRUCE CLAIMS

UNITS	CLAIM NAME	TENURE NUMBER	EXPIRY DATE*
1 1 1 1 1 1 1	Spruce #1 Spruce #2 Spruce #3 Spruce #4 Spruce #5 Spruce #6 Spruce #7 FR	304690 304691 304692 304693 304694 304695 304696	Sept 28, <del>2000</del> 1999 RC
1	Spruce #8	304697	•

<sup>\*</sup>Pending acceptance of this report



Spruce Group Claim Map

#### 1.3 LOCATION. ACCESS AND PHYSIOGRAPHY

The Spruce claims are situated in the Trail Creek Mining Division of Southern British Columbia near Bonanza Pass on Interprovincial Highway #3, 7.0 km east of Paulson, an old Canadian Pacific rail station. Grand Forks is approximately 40 km to the west and Castlegar is about 35 km to the east. Granville Mountain is near the northeast side of the property at Latitude 49° 11' N Longitude 118° 04' W. McRae Creek is near the west boundary of the property and Big Sheep Creek lies to the east.

Access is via the Bonanza Creek road off of Highway #3 some 7.0 km east of the Paulson Bridge. Numerous logging, mining and bush roads provide excellent access to most of the property.

Granville Mountain is the main topographical feature near the property at a height of 1800+ meters (5838 feet). The topographical low point near the property is located south of Paulson by the old railroad stop at Coryell where the elevation is 1025 meters (3177 feet) for an approximate local relief of 675 meters (2160 feet). Mount St. Thomas, just to the south of the property, is some 2100+ meters (6500+ feet) in elevation and is the most prominent point in the immediate area.

Topography varies from gentle rolling hills in the central up-lands, to precipitous cliffs which extend south along Coryell Creek, east along Big Sheep Creek, and to the west along McRae Creek.

Vegetation consists mainly of conifers and scrub bush.

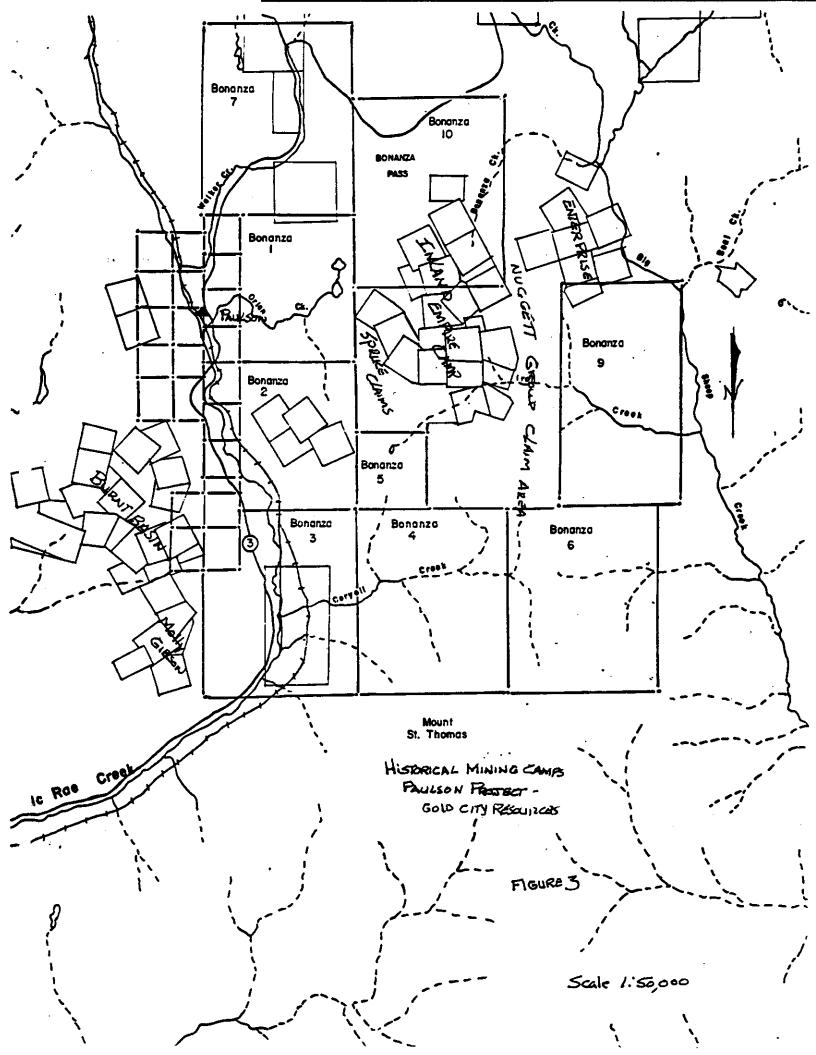
Numerous old clear cut logging areas are located within the group.

#### 1.4 HISTORY

Most of the previous mineral work, near or within the Spruce Claims, has been associated with the Burnt Basin and Inland Empire mining camps of which Paulson was the jumping off point along the old railroad (Figure #3).

Historical mining efforts in the Burnt Basin Camp started in the late 1890's centering around; lead, zinc, silver, and copper "replacement bodies" in the central portion of the camp along with gold mineralization at the Molly Gibson and Motherlode claims south and northwest of the central base metal showings.

Base metal production in the camp has been sporadic and no production records are readily apparent until 1948 when the Minister of Mines Report states that 14 tons of base metal



ores were shipped from the Halifax claim to the smelter at Trail.

Direct shipments to off-site mills of mine run ore, mainly from the Eva Bell and Halifax claims, were made from 1972-1977. Lack of concentration facilities on site to up-grade the mine run ore resulted in marginal economics and production ceased. The following table summarizes the recent base metal data, exploration efforts, and production history at Burnt Basin.

#### TABLE I

- 1927 Minister of Mines Report; per ton Silver 10.8 oz; Lead 17.8%; Zinc 20.5%.
- 1948 Minister of Mines Report: 14 tons shipped; Silver 10.5 oz; Lead 18.1%; Zinc 18.3%, per ton.
- 1965 Christina Lake Mines geological, geochemical and magnetometer surveys were completed. Some diamond drilling data not available.
- Dalex Mines an induced polarization survey, considerable stripping and trenching on Burnt Basin and Ajax claims. Geochemical survey, trenching and stripping and seven drill holes totalling 2,142 feet.
- 1972-75 Donna Mines, reports by E.O. Chisholm and H.H.Shear, line cutting and magnetometer surveys on the Eva Bell and Halifax, and five short diamond drill holes on the Eva Bell, cat trenching and percussion drilling. Shipped a total of 1,488 tons to Trail, H.B. Mines, Re-Mac Mines and Kam-Kotia.

- 1975-76 Alviija Mines Ltd produced 1,750 tons from the Eva Bell claim and shipped 535 tons yielding 3.1 oz. Ag/ton, 4.45% Pb, 6.75% Zn with 21.5% magnetite to the H.B. Mine at Salmo.
- 1977 Paulson Mines Ltd. completed 1,500 feet of diamond drilling on the Halifax claim and published intercepts of up to 6" grading 12.4 oz. Ag/ton, 19.7% Lead and 14.9% Zinc. (note: Details not available)
- Oliver Resources completed a vector Pulse E.M.
  Survey, I.P. Survey with about 10 km completed.
  Granges Exploration Ltd. completed 291 m of diamond drilling on the Eva Bell and BP No. 2 (adjoins Eva Bell to the east).
- 1986-87 West Rim Resources carried out extensive soil geochemical surveys in the Halifax-Eva Bell area.
- 1989-93 Crownex Resources Ltd. conducted gold exploration surveys over the Paulson area covering the old mining camps of Burnt Basin and Inland Empire, and one of the surveys was successful in outlining anomalous gold values on the Spruce Claims.
- 1994 Gold City Resources continued surface gold exploration of the spruce claims in the Inland Empire Camp. Expanding the surface data base and locating two caved adits within the gold in soil anomaly.

The following Table II summarizes gold exploration and production history associated with the Molly Gibson and Mother Lode claims at Burnt Basin.

#### TABLE II

1909 - 1933	Shafts, tunnels and trenches on the Molly Gibson Group produced 260 tons containing 285 oz. gold and 119 oz. silver.
1909 - 1936	Molly Gibson Group an un-dated

production total of 316 tons yielding 332 oz. gold.

1986 - 1987 West Rim Resources completed 420 meters of diamond drilling at the Motherlode prospect.

John Worthing - Salt Lake City, Utah drilled at least 4 core holes on the Molly Gibson. (data unavailable)

1991 Orvana completed small geochemical grid on Molly Gibson.

1992 Crownex drilled four Reverse Circulation drill holes on the Molly Gibson claim.

Other gold claims in the Burnt Basin camp include the Kittie, Aldeen, Contact, Tammany and Tunnel group.

Historically, production in the Inland Empire camp, east of Paulson near Granville Mountain has been from small scale shafts, tunnels and open cuts which have produced limited tonnages of gold and silver ore. The following table lists some of the more pertinent data by claim.

#### TABLE III

INLAND EMPIRE GROUP: Albion Claim

shipped 25 tons containing 8 oz. gold and 38 oz. silver.

- shipped 152 tons containing 16 oz. gold, 147 oz. silver, 309 lbs. lead, and 309 lbs. zinc.
- shipped 25 tons containing 70 oz. gold, 23 oz. silver, 50 lbs. lead, and 50 lbs. zinc.

#### Alice L./Berlin Claims

- 1917 59 tons valued @ \$90-100 in gold and silver.
- 1918 142 tons assaying 3.0 oz/ton gold, 15.0 oz/ton silver, and 0.6% copper.
- 1919 65 tons containing 26 oz. gold, 83 oz. of silver and 117 lbs. copper.
- 1938 541 tons shipped containing 121 oz. gold, 1,142 oz. silver.
- 1939 467 tons yielding 80 oz. of gold and 145 oz. silver.

#### Inland (Inland Empire) Claim

1912 2.200 tons milled. 43 tons shipped.

Minor production has been reported form the Cascade Bonanza and Nugget claims on the south east side of the
camp; and in addition, the Enterprise group to the north
east of Inland Empire also has recorded shipments, probably
totalling less than 50 tons.

Recent efforts in the Spruce Claim area had centered around gold bearing quartz veins until Prominent Resources Corp's more comprehensive exploration in 1985 which focused

on the viability of bulk gold targets adjacent to the traditional camp, as well as trying to evaluate the quartz vein targets within the intrusive.

#### 2.0 GEOLOGY

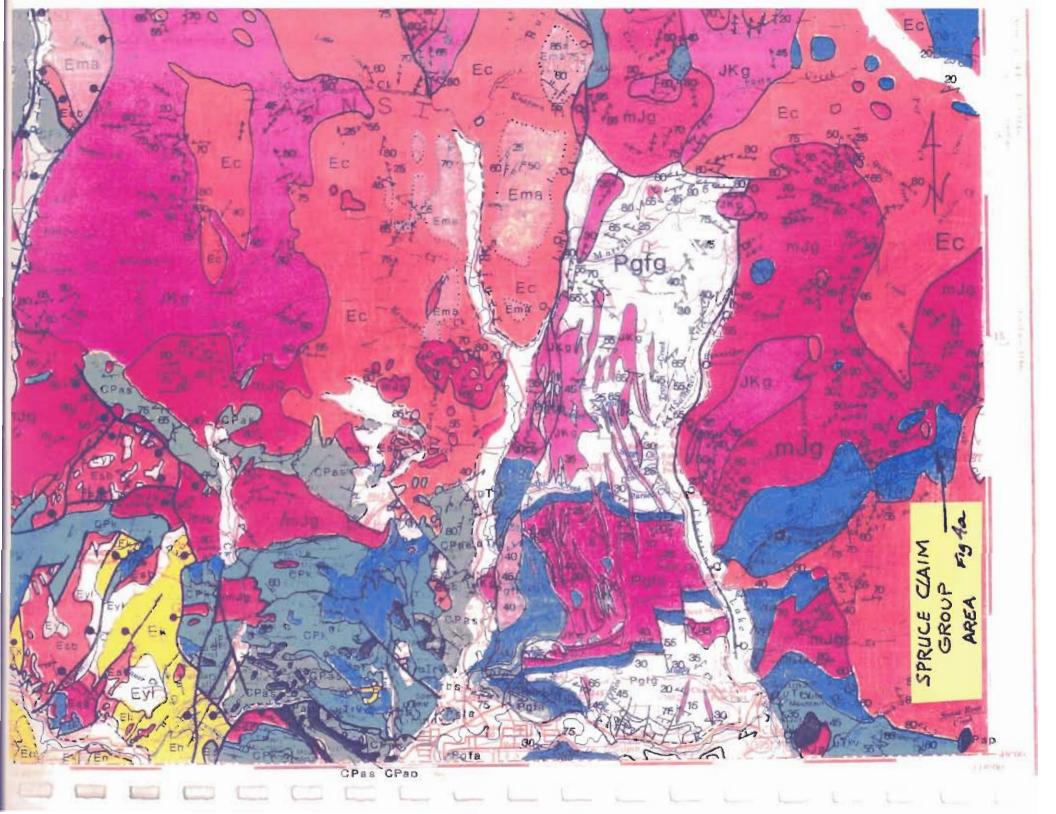
#### 2.1 REGIONAL GEOLOGY

Carboniferous or older rocks, possibly equivalent in part to the Pennsylvanian-Permian Mt. Roberts Formation and Lower Jurassic Elise Formation of the Rossland Group, have been intruded by Late Jurassic Early Cretaceous Nelson and Middle Eocene Coryell plutonic rocks (Figure #4a & 4b).

Mt. Roberts Formation rocks form an elongate east west roof pendant in the central part of the project area. The pendant consists mainly of limestone, argillaceous limestone, chert, slate, pebble conglomerate and andesitic volcanics. Rocks within the pendant strike roughly north east 320° to 340° dipping 40° to 85° east and are cross cut by north trending shear zones.

Limestone and argillites are generally light gray to black in color and relatively unaltered except where locally skarned. Volcanic rocks are typically dark green and "intrusive dykes and sills" are typically light colored.

Rocks equivalent? to the Rossland Group, consisting of flow



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breccias, volcanic breccias, andesites, basalts, agglomerates, tuffs, black laminated siltstones, and augite porphyry, outcrop throughout the property.

Biotite hornblende/granodiorite of the Late Jurassic Early Cretaceous Nelson intrusives, cut both the Rossland
Group and the Mt. Roberts Formation.

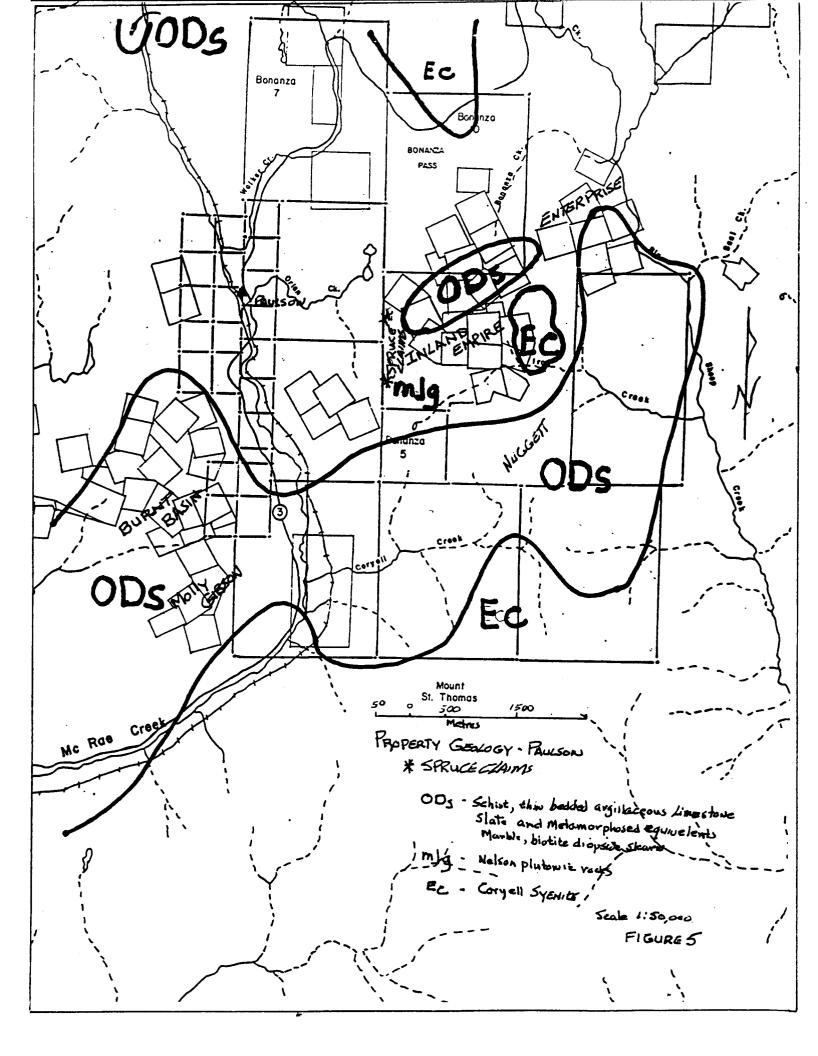
Nelson intrusive rocks have been subsequently intruded by Middle Eocene Coryell, coarse grained syenite, and quartz monzonite. Granites and monzonites of Coryell age are also common along with numerous hypabyssal prophyritic phases.

#### 2.2 ECONOMIC GEOLOGY

Gold bearing fissure quartz veins have been found on the Burnt Basin side at the Motherlode, Kittie, Aldeen, Tammany and Tunnel group claims. Reported gold values have ranged from a trace to 22 grams per ton.

Most of the Burnt Basin (Figure #5) gold production has come from sulfide rich calc-silicate skarn bodies in a siliceous limestone unit at the Molly Gibson group claims. Sulfides include pyrrhotite, pyrite and chalcopyrite.

Magnetite is also present in the skarn aureole, but is



usually a minor constituent except in the base metal "replacement" ore bodies where it forms bands of massive magnetite up to 2.0 meters thick.

East of Paulson (Figure #3), the gold mineralization at the Inland Empire camp is related to north trending quartz veins cutting quartz monzonite and related intrusive bodies. These veins are usually: polymetallic, striking within 10 degrees of north, dipping steeply, faulted, and discontinuous along strike.

Alteration halos associated with the veins tend to be narrow and either propylitic or argillic. Some quartz veins exhibit epithermal banding and mineralogy while others appear to have mesothermal characteristics. Sulfide pods, disseminations, and disseminations within the quartz veins or at the vein wall rock contact, consist of all or one of the following: pyrite, arsenopyrite, chalcopyrite galena, pyrrhotite, and sphalerite. Magnetite bearing quartz veins have been found within the Rossland? volcanics on the Spruce claims.

Skarn hosted mineralization that occurs along the south end of the limestone belt and within the Enterprise claim group to the north east, is predominantly base metal enriched.

However, selective sampling of the skarn can produce economic gold assays. Skarnification evidenced in the limestone of the Mt. Roberts Formation and Rossland volcanic units, appears to be intensely telescoped. It is common to go from coarse marble to garnetite within a few meters along strike of the limey beds and from calcite epidote skarn to garnet magnetite skarn in less than one meter within the highly fractured volcanics.

#### 3.0 EXPLORATION 1994

Following the 1994 recommendations found in the Gold City assessment report of that year, two old, caved adits, (maybe the Burgin? and/or the John Bull adits of early historical significance in the camp) were opened and chip samples were collected across both ribs every 3.0 meters along the drift.

#### 3.1 GEOCHEMISTRY

Fourteen chip samples were collected from the 94 Spruce adit #1 and three chip samples were collected from the 94 Spruce adit #2. starting at the face in both adits, samples were chipped from the ribs every three (3) meters until the portal was reached (Figure #6).

No detectable gold was reported for the three samples from

ULSON PROTECT - SPRICE CLAIMS - TRAIL CREEK MAING DUISION B.C.
LUCATUM OF TWO ACUTS, CAPUTO & SAMINGED 1999
1992 REMINE CARCULATION DOLL HOLS AND -80 WBH GOLD
11 SOIL ADMALY SAMON. ALL LUCATO RELATIVE TO CALD

94 Spruce adit #2. Samples from 94 Spruce #1 showed detectable gold in thirteen of the fourteen samples collected. The mean gold value for the samples with detectable gold from adit #1 is 987 ppb with a high value of 5130 ppb and a low of 20 ppb. The anomalous gold values are related to polymetallic quartz veining, propylitically altered diorite, quartz diorite, greenstone, (andesite?), brecciation, and shear zones.

Data collected from the adits suggest that the gold bearing structural zone that, on the surface, has a trace of approximately 1100 meters in length and 50 to 150 meters in width, dips 40° to 50° easterly.

Following is a description of the rock fragments collected at each sample point. Although each sample was collected as a channel sample they are better classified as chip samples, due to the poor condition of the drift and the hard and soft variability of the rock units all of which contributed to a somewhat selective sampling result.

94 SP 1-01R Most of the rock fragments are propylitically altered very fine crystalline diorite and/or greenstone with minor disseminated pyrite. A few banded quartz vein fragments with euhedral pyrite, chalcopyrite and

arsenopyrite? are also present. gold assay 910 ppb.

94 SP 1-02R Rock chips consist of actinolite and calcite
with minor magnetite and pyrite. Propylitically altered
greenstone? Gold assay 1230 ppb.

94 SP 1-03R Mainly fragments of quartz diorite (Tonolite) with traces of magnetite. Other fragments are altered diorite or greenstone with minor disseminated pyrite, calcite and arsenopyrite? Calcite veinlets are present in the altered diorite? or greenstone and epidote was also present along fractures. Gold assay 230 ppb.

94 SP1-04R Very fine silicified diorite?, quartz diorite? with trace of disseminated pyrite and magnetite. Very weakly propylitic. Gold assay <5 ppb.

94 SP1-05R Propylitically altered diorite with 1.0% disseminated pyrite and fragments of a polymetallic quartz vein with euhedral pyrite, chalcopyrite, and a thin band of tarnished pyrite make up 30% of the fragments. The majority of the fragments are a silicified diorite with 3-4% disseminated pyrite. Gold assay 285 ppb.

94 SP1-06R Mainly chips of a layered polymetallic brecciated quartz vein with pyrite, chalcopyrite, galena,

and sphalerite. The breccia matrix is milky quartz.

Associated fragments suggest the wall rock is a very fine crystalline diorite or altered greenstone with up to 2% pyrite. Gold assay 2390 ppb.

94 SR1-07R Greenstone with traces of magnetite and pyrite, weakly propylitic with hematite stain along fractures.

Gold assay 80 ppb.

94 SP1-08R Mainly quartz patches in greenstone, both rock types contain pyrite and galena, with up to 6% disseminated pyrite in greenstone and sheared greenstone. Gold assay 1340 ppb.

94 SP1-09R Slickensided altered pyritic greenstone, with weak dioritic texture. Trace of quartz veinlets with pyrite and galena. Gold assay 110 ppb.

94 SP1-10R Very fine crystalline quartz diorite with trace of disseminated sulfide and magnetite. Additional fragments of sheared greenstone with quartz veinlets, disseminated pyrite, and traces of galena and chalcopyrite. Gold assay 345 ppb.

94 SP1-11R Quartz diorite? with disseminated magnetite and

pyrite, traces of unidentified steel gray soft mineral.

Rocks are propylitic. One piece of glassy quartz with

pyrite, galena and chalcopyrite along contact with quartz

diorite. Gold assay 720 ppb.

94 SP1-12R Traces of pyrite and magnetite in a propylitically altered sheared quartz diorite. Gold assay 40 ppb.

94 SP1-13R Quartz vein with massive pyrite, chalcopyrite, galena and 3-5% finely divided pyrite with rock chips of magnetite bearing quartz diorite and pyritic greenstone, both of which are propylitic. Gold assay 5130 ppb.

94 SP1-14R Propylitically altered quartz diorite with trace of pyrite. Gold assay 20 ppb.

94 SP2-01R to 03R Altered greenstone (andesite?) with pyrite and minor calcite veining. Very weakly propylitic. Gold assays <5 ppb.

Abundant propylitic alteration with a high percentage of calcium carbonate in a structural setting, would result in a recessive surface expression of the gold bearing zone hindering earlier surface exploration efforts, including

the utilization of any other model but quartz vein gold.

The work to-date allows for another observation in that the textural complexity of the rock samples suggest a hypabyssal implacement of dioritic and/or quartz a diorite magma resulting in andesitic and dacitic flows. In turn this could give rise to an additional gold exploration model, specifically in the dacitic flows.

#### 3.2 GEOPHYSICS

Ground magnetometry data from the grid lines that are spatially related to the two adits sampled, show similar profile curves suggesting the possibility of north-south geologic continuity over the 200 meters between them (Figure #7 and #8). From this observation perhaps the profiles of the magnetometry would be an aid in defining the gold bearing zone of interest north and south of the adits.

#### 4.0 CONCLUSION

Surface and subsurface data gathered to-date indicates a gold enriched potential target on the Spruce Claims that encompasses an area approximately 1100 meters in length and 50 to 200 meters in width, with a down dip extension estimated to be at least 200 meters. The length of the down dip extension is based on the geochemical soil

SPRUCE CLAIMS GRID LINE 48300 N Lastony north SOIL GENTHEM - SOMESH, GOLD IN PP.b. NS 5800Y-625ppb, 100 metres North of Section GADUND MAG. RESPUNSE 35ppb 100meter South of Section 57000 Y EAST 56008 WEST APPROXIMATE TOPO SUIZEACE W/ SUBSULFACE DATA. 94SPACEADIT # 1 1100 233 geochem gow b PVb. Ave from (1) 1992 Drill hade 92PA7 bend to face (2) Geology - divinta pladiorila & - steeristante all intrudas by symile and mousantes. Mineralizary of Uning in Shears FIG X7 METAK REM 1994

SPRUCE CLAIMS GRID LINE Looking North SOIL GEOCHEM, - 80 MESH, GOLD IN PPb, **45** Soc Y-GROUND MAG RESPONSE 570008 Stack WEST APPROXIMATE TOPO SURFACE W/ SUBSULTIMA DATA 94 SPRUCE ADIT \* Z endrymend sampler showed no detectable gold 1992 Prill hole Gaday - divite, ofs diante + 92 PA #8 greenstone all intruded by Syand's and Monzonete. 213 VNING IN Shear F16 \*8 METRES Ren 1994

48,00 N

dispersion pattern that occurs along the steep east-west topography on the south end of the grid. Based on the physical dimensions and 0.01 oz/ton gold, there appears to be an estimated geologic resource drill target of between 250,000 and 1,000,000 ounces of gold.

#### 5.0 RECOMMENDATIONS

- 1. Add a 2 x 2 claim south and adjacent to the south line of Bonanza #5.
- 2. Obtain the mineral right to the Nugget (31897) claim to the east of the Bonanza #5 and Spruce claims.
- 3. Drill three NQ Core holes (600 meters), separated along strike of the zone of interest, in an westerly direction at an angle from the east side of the gold in soil anomaly to cut the projected favorable structure.
- 4. Re-examine the geology with the objective of locating a gold enriched, pyrite and carbonate bearing dacite flow or flows, that might host bulk tonnage high grade gold ore bodies.

Respectfully submitted

R.E. Miller

# APPENDIX A STATEMENT OF QUALIFICATIONS

#### STATEMENT OF QUALIFICATIONS

I ROBERT E. MILLER, of Spokane, Washington U.S.A., DO HEREBY CERTIFY:

- THAT I am a consulting geologist with a business address of 367 Gold Street, Greenwood, British Columbia. VOH 1JO.
- 2. THAT I am a graduate from Brigham Young University with a Bachelor of Science degree in Geological Engineering (1969).
- THAT I have practised my profession continuously since graduation.
- 4. THAT I personally conducted the 1994 exploration program discussed in this report.
- 5. THAT I am a Director and Shareholder of Gold City Resources.

DATED this\_

day of

1995

Robert E. Miller Corp. Black Ge Geological Engineer

## STATEMENT OF QUALIFICATIONS

Kim Anschetz P.O. Box 152 Rock Creek, British Columbia VOH 1YO

Miner

Blasters Certificate #1976 Mine Rescue #6227

## STATEMENT OF QUALIFICATIONS

John Kemp Rainbow and Sunshine Prospecting and Exploration Services Box 866 Grand Forks, British Columbia VOH 1HO Phone (604) 442-2917

Prospector - Attends British Coumbiia Prospecting courses.

# APPENDIX B STATEMENT OF EXPENDITURES

## SPRUCE CLAIMS

**************************************	
STATEMENT OF COST	
Manpower	
Bob Miller - geologist 9 days \$250.00 x 9	\$2250.00
John Kemp - prospector	1235.00
John Thomas - backhoe D-6 Cat	957.30
Kim Anschetz - helper 4 days \$125.00 x 6	750.00
Vehicles	
1 truck x 5 x \$65.00	325.00
Assays	
17 rock chip samples @\$14.00	238.00
Report, office, reclamation etc	600.00
Total	\$ 6355.30

APPENDIX C
REFERENCES

#### REFERENCES

- British Columbia Minister of Mines Annual Report, 1901; pg. 106, 1904; pg, 299.
- Crowe, Gregory G., M.Sc. P.Geol. and Forbes, Jonna R. B.Sc., 1985 Geological, Geochemical and Geophysical Report on the Granville Mountain Property of Prominent Resources Corporation B.C. Assessment Report 14733.
- Fox, M., B.Sc., F.G.A.C. Geological and Geochemical Report on the Molly Gibson Property owned by Herman Hoehn B.C. Assessment Report 11,989.
- Miller, R.E., 1994 Summary Report on the Spruce Claims, Assessment Report for Gold City Resources.
- Miller, R.E., 1993 Summary Report on the Spruce Group, Assessment Report for Crown Resources Corp.
- Miller, R.E., 1992, Airborne Geophysical Survey on the Paulson Project, British columbia, Assessment Report on the Orion Group.
- Ruzicka, Stan, Personal communication, Maps, and Records 1991.
- Shear, H.H., 1973 Progress Report on Donna Mines, November 1973.
- Templeman-Kluit, D.J., 1989: Geology, Penticton, British Columbia, Geological survey of Canada, Map 1736A. Scale 1:250,000.
- Von Einsiedel, C.A., 1989, Prospecting Report Josh Claim Group, Assessment Report 18560.

### APPENDIX D

CERTIFICATE OF ANALYSIS and ANALYTICAL PROCEDURES



# Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1

Phone: (604) 984-0221 Telex: 04-352597 Fax: (604) 984-0218

Au (oz/T): Code 398

Gold analysis is carried out by standard fire assay techniques. In the sample preparation stage the screens are checked for metallics which, if present, are assayed separately and calculated into the results obtained from the pulp assay.

A 0.5 assay ton sample is fused with a neutral flux inquarted with 2 mg of Au-free silver and then cupelled.

Silver beads for AA finish are digested for 1/2 hour in 1 ml HNO3, then 3 ml HCl is added and digested for 1 hour. The samples are cooled and made to a volume of 10 ml, homogenized and run on the AAS with background correction.

Detection Limit 0.002 oz/T

Code 981 is the same as 398, but performed on a rush basis.

Gold FA-AA ppb - Chemex Code 100

A 10 gram sample is fused with a neutral flux inquarted with 6 mg of Au-free silver and then cupelled.

Silver beads for AA finish are digested for 1/2 hour in 0.5 ml HNO3, then 1.5 ml HCl is added and digested for 1 hour. The samples are cooled and made to a volume of 5 ml, homogenized and run on the AAS with background correction.

Detection limit: 5 ppb



## **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 To: MILLER, ROBERT

P.O. BOX 2941 GRAND FORKS, BC V0H 1H0

A9431265

Comments:

**CERTIFICATE** 

A9431265

(LJP) - MILLER, ROBERT

Project: P.O. # : SPRUCE PROP

Samples submitted to our lab in Vancouver, BC. This report was printed on 28-NOV-94.

	SAMPLE PREPARATION						
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION					
205 294	17 17	Geochem ring to approx 150 mesh Crush and split (6-10 pounds)					

ANALYTICAL PROCEDURES								
CHEMEX CODE	NUMBER SAMPLES		DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT		
100	17	Au ppb:	Fuse 10 g sample	FA-AAS	5	10000		
				· · · · · · · · · · · · · · · · · · ·				



# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers

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

To: MILLER, ROBERT

P.O. BOX 2941 GRAND FORKS, BC V0H 1H0

Project : Comments:

SPRUCE PROP

Account

Page Number :1 Total Pages :1 Certificate Date: 28-NOV-94 Invoice No. P.O. Number :19431265

:LJP

			CERTIFIC	ATE OF ANALYSIS	A9431265	
SAMPLE	PREP CODE	Au ppb FA+AA				
94sP1 01R 94sP1 02R 94sP1 03R 94sP1 04R 94sP1 05R	205 294 205 294 205 294 205 294 205 294	230 < 5				
94sp1 06R 94sp1 07R 94sp1 08R 94sp1 09R 94sp1 10R	205 294 205 294 205 294 205 294 205 294	80 1340 110				
94sP1 11R 94sP1 12R 94sP1 13R 94sP1 14R 94sP2 01R	205 294 205 294 205 294 205 294 205 294	40 5130 20 < 5				
94SP2 02R 94SP2 03R	205 294 205 294	< 5 < 5				

CERTIFICATION:

N C H O R T

ESSMENT

JLSON PROJECT -- SPRUE CLAIMS - TRAIL CREEK MINING DIVISION B.C.
LOCATION OF TWO ADITS, OPENED & SAMIYLED 1994
1992 KEVETSE CIRCULATION DRILL HOLES AND -80 MBH GOLD
IN SOIL ANOMALY SHOWN. ALL LOCATED RELATIVE TO GRUD

Ren 194