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	/ Contoured Magnetics (Gammas)		

# APPENDICES

* APPENDIX I	1999 Ground Magnetic Field Data
* APPENDIX II	Bill's Grinding Summary.



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## A.) PROPERTY DESCRIPTION

## 1) Location

The Redgold property is located in the Cariboo Mining Division, British Columbia, 60 kilometres northeast of the city of Williams Lake and 10 kilometres northeast of the community of Horsefly (Figure 1). More precisely, it is located at 52 degrees 28 minutes north latitude and 121 degrees 46 minutes west longitude. (National Topographic System Map 93A/6)

2) Access and Physiography

The Redgold property is readily accessible from Williams Lake B.C. via 70 kilometres of paved highway to the community of Horsefly, then 13 kilometres on the Mitchell Bay all-weather gravel road, from where seasonal logging roads provide excellent access to all of the property.

The Redgold property lies in the Quesnel Highland physiographic region of the central B.C. interior. This region is characterized by broad valleys and gently rolling hills with elevations on the Redgold property ranging from 2400 feet (730 metres) to 3200 feet (980 metres) above sea level. The north flowing Horsefly River valley bounds the Redgold property on the east.

The property occurs in a moist vegetative zone dominated by combinations of coniferous (pine-spruce-fir) and deciduous (birch-poplar) forests with variable undergrowth of alder and devil's club. Much of the Redgold property and adjacent lands have been clear-cut logged and all slash has subsequently been burnt. This recent logging has greatly improved the access and uncovered additional outcrops and rubble for geological evaluation.

3) Claims

The Redgold property consists of 7 contiguous modified grid and 1 two-post mineral claims for a total of 55 units, covering some 1375 hectares that were located according to the British Columbia Mineral Act (Figure 2). The status of the claims is summarized as:

CLAIM NAME	Number of Units	Record Number	Date of Expiry
SHIK 1	16	204603	31/05/2006
SHIK 2	12	204604	01/06/2006
SHIK 3	2	206667	01/12/2000
SHIK 4	1	206668	01/12/2000
SHIK 5	3	206669	01/12/2000

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CLAIM NAME	Number of Units	Record Number	Date of Expiry
SHIK 6	20	206670	01/12/2000
RG 1	1	325558	22/05/2006
	55		

The date of expiry reflects Statement of Work No. 3141999 filed in Vancouver on November 12, 1999.

4) Regional History (Horsefly-Quesnel River Area)

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In 1859 placer gold was discovered, at Quesnel Forks on the Quesnel River, about 35 kilometres northwest of the Redgold property. This discovery sparked the Cariboo gold rush which lasted for five years. Placer gold discoveries made during that rush resulted in an estimated 3 million ounces of placer gold being recovered from the Cariboo (Boyle 1979). During this period the Horsefly River system was subjected to extensive placer mining and contributed to this value. There is no record of lode gold production from the Redgold property, but past and recent placer mining activity is evidenced by workings along the Horsefly River that cuts the eastern edge of the property.

The Cariboo Bell porphyry copper-gold deposit, subsequently renamed Mount Polley, is located 16 kilometres to the northwest of the Redgold property, was discovered in 1964 during exploration of a prominent aeromagnetic anomaly. Exploration at Mount Polley has been ongoing since that time. In July of 1997 Imperial Metals commenced production from the Mount Polley deposit, containing 82 million tons grading 0.42 grams/tonne gold and 0.30% copper.

The discovery of the Cariboo-Bell deposit spurred exploration interest for additional porphyry copper deposits in this area of the Quesnel Trough. Exploration targets were defined by aeromagnetic anomalies associated with alkalic intrusive complexes. In 1973 Dome Mines' Ltd and Newconex Holdings Ltd located the SL mineral claim group to cover the porphyry copper-gold potential of the alkalic Shiko stock. This holding was subsequently reduced and transferred to Terramar Mines Ltd., a public company that traded on the Vancouver Stock Exchange. In May 1982, Messrs. Durfeld and Morton, while conducting reconnaissance exploration in the Shiko Lake area located the SHIK 1 and 2 mineral claims to cover the **Redgold** showing. The **Redgold** showing is an area underlain by propylitically altered alkalic volcanics with disseminated pyrite and chalcopyrite with significant gold values. Since that time the property has been expanded to cover the whole Shiko intrusive complex.

In 1975, during the investigation of a similar aeromagnetic anomaly, Dome Mines Ltd and Newconex Holdings Ltd discovered the "QR" (Quesnel River) deposit 32 kilometres northwest of the Redgold property. The QR deposit, containing 1,333,000 tons grading 4.6 grams/tonne gold has been in production since 1995. Since 1982, Messrs. Morton and Durfeld and subsequently Sedona Resources, Phelps Dodge, and Imperial Metals have conducted programs of geological mapping, rock sampling, geophysical surveys (electromagnetic, magnetic and induced polarization) bulldozer trenching and diamond drilling. To date this work has covered much of the Shiko alkalic intrusive and volcanic complex. This report compiles these surveys and identifies targets for ongoing exploration.

## 5) Economic Considerations

The Redgold property is linked to the city of Williams Lake by eighty-five kilometres of paved and all-weather gravel road. The infrastructure at Williams Lake would easily support any development in the Redgold area. Hydroelectric lines pass within five kilometres of the Redgold property and a reliable supply of water is readily available from the Horsefly River. There is adequate area on the Redgold property for mine-mill development and waste or tailings disposal. The permitting and recent commissioning of the Mount Polley Mine 16 kilometres to the northwest reaffirm the area as favourable to mining activities.

# C.) GEOPHYSICS

Much of the Redgold property has been subjected to induced polarization and ground magnetic surveys. The property is also central to an Airborne Geophysical Survey (HEM-MAG-VLF) conducted by Scintrex in 1996. A compilation of the geophysical surveys will define targets for ongoing exploration.

1) Aeromagnetic and Ground Magnetic Surveys

The property is centred on a strong positive magnetic high which is somewhat coincident with the magnetite rich alkalic Shiko intrusive complex and forms an oblong 1.5 kilometre by 1 kilometre northeasterly trending feature. From the northeast corner of the main magnetic body, a one kilometre southeasterly trending magnetic high may correspond to a narrower or buried magnetic intrusion.

The airborne and ground magnetic surveys correlated well in outlining the magnetic-high features.

1a) Ground Magnetic Survey

Work in the Quarry area showed a strong correlation of magnetic rich intrusive rocks with copper / gold mineralization. The 1999 ground magnetic survey was conducted over the previously unsurveyed Induced Polarization grid in the Quary Zone and was expanded to the east to include the northern portion of the Redgold Zone.



#### 1b) Survey Procedure

The Induced Polarization grid was re-established and referenced to NAD 83. Lines were extended and laid out using Real Time Differential GPS and referenced to NAD 83. A line spacing of 100 metres with 25 metre stations was used throughout.

For the survey an ENVI-MAG Magnetometer System was rented from T. Hasek and Associates. The unit was set to read total field with a tune field of 60,000 gammas. In the field readings were taken at 25 metre intervals on lines 100 metres apart. Data was recorded in the unit and downloaded to a portable computer at the end of each day. Diurnal variation was checked by running loops and correcting to a local base station.

The corrected magnetic data was output as an x-y-z data base in ASCII format. This data was then contoured using company software and presented as figure 3 (Contoured Magnetics).

#### C.) GEOLOGY

1.) Regional Geology (Figure 1)

Geologically, the Redgold property is located in a structural feature known as the Quesnel Trough, a 30 kilometre wide, northwest-trending, Early Mesozoic age volcanic-sedimentary belt. The Quesnel Trough in the Horsefly area is a fault-bounded region that is flanked to the east by Precambrian to Paleozoic rocks of the Barkerville and Slide Mountain terranes and to the west by Paleozoic rocks of the Cache Creek terrane. In 1988 Dr. A. Panteleyev of the British Columbia Department of Mines completed regional mapping in the property and broader Horsefly areas.

2.) Property Geology

The Redgold property covers the Shiko stock of alkalic composition that has intruded a series of Mesozoic volcanic and sedimentary rocks (Figure 2). The oldest rocks belonging to the Triassic to Jurassic Age Takla Group consist of (1) a submarine sequence of augite basalt flows and wackes that are overlain by (2) massive felsic tuff breccias which in turn are overlain by (3) a dark grey siltstone. The youngest unit (7) is maroon analcite-bearing basalt flows and breccias.

The Shiko stock is a zoned north to northeasterly trending alkalic intrusive complex consisting of (4a) gabbro, grading inward to (4b) augite diorite to (4c) monzonite and (4d) syenite. It may in part be coeval with the younger volcanic lithologies.

Hydrothermal alteration related to the Shiko stock grades outward from a potassic core of K-spar and/or secondary biotite, to a propylitic assemblage of chlorite, epidote and/or calcite. Areas of intense propylitic alteration are mapped as propylite and highlighted on the detailed geology maps. Minor secondary brown biotite was noted in association with a dioritic intrusion.



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## Structural Geology

The stratigraphy of the Takla group in the Redgold area develops a regional north to northwesterly trend.

Air photo and aeromagnetic structural interpretation in the Redgold area shows a strong northeasterly Air photo linear that is also coincident with offsets in the magnetic data. The other main structural direction is as a westerly to northwesterly air photo and aeromagnetic linear.

### Mineralization

Mineralization, in order of abundance, occurs as magnetite, pyrite, chalcopyrite, bornite and gold. Of interest is the pyrite-magnetite zoning that shows a decrease of pyrite and increasing magnetite toward the intrusive core. In the Quarry area the syenite to monzonite contains up to 10% magnetite with very little pyrite. The copper mineralization is as chalcopyrite and bornite with up to 10% magnetite and less than 1% pyrite. Free gold was identified in diamond drill hole 96-02 in the Quarry area.

## Quarry

In 1993 Durfeld and Morton entered into a contract with Pacific Granistone to supply syenite which was used as the pink aggregate for the Vancouver Public Library. Visual examination of the quarry by Morton and Durfeld during this production identified copper staining and fine disseminated bornite in the syenite. Initial analyses of grab samples in the quarry contained up to 1.9% copper and 1.5 gm/T gold.

The Quarry area attracted the attention of Imperial Metals and was the focus of their work from 1995 to 97. Work by Imperial consisted of detailed diamond saw channel sampling of the Quarry exposure, four diamond drill holes and an induced polarization survey. This channel sampling showed values of up to 3260 ppb gold and 8285 ppm copper over 1 metre. Diamond drill hole 96-02, collared immediately north of the channel sampling in the quarry, over 11.9 metres (7.5 to 18.4 metres) averaged 4331 ppm copper and 1885 ppb gold with an included section 0.3 metres section (18.6 to 18.9 metres) of 41104 ppm copper and 12068 ppb gold. A distinct grain of gold was observed in this high grade section. The results of this work are summarized as:

Intersection	From (metres)	To (metres)	Width (metres)	Gold (ppb)	Copper (ppm)
Trenches					
T-2	0	10	10	1376	2465
incl.	4	8	4	2082	4323

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Intersection	From (metres)	To (metres)	Width (metres)	Gold (ppb)	Copper (ppm)
T-3	3	25	22	472	2444
incl.	17	21	4	1107	5326
96-01	36.6	39.1	2.5	341	1078
96-02	7.5	19.4	11.9	1885	4331
incl	10.5	12	1.5	6435	11632
incl	18.6	18.9	.3	12068	41104
96-03	20.1	23.1	3	1009	1690
	29.1	32.1	3	338	1049
	36.3	39.3	3	403	1316
96-04	10	17.5	7.5	704	3666
	29.5	32.3	2.8	1810	2768

The channel and core sampling suggest a series of northeasterly trending zones with strong to very strong copper and gold mineralization. These extremely positive trench and drill results cover an area of 250 by 250 metres that is open in all directions.

The Quarry is on the southern edge of the large magnetic high coincident with a resistivity high sourced by the magnetic monzonite that show north-south and northeasterly fabric. It is on the lower chargeability section of a strong chargeability anomaly that continues a minimum of 500 metres to the southeast. The potential at the Quarry is open in all directions.

The Quarry zone should be subjected to ongoing exploration consisting of expanded geophysical (induced polarization, magnetic) and geochemical sampling (soil, channel and rock), concurrent with ongoing diamond drilling.

## Redgold

The Redgold target is an area of calcareous, propylitically altered basalt and felsic tuff with disseminated to blotchy pyrite and chalcopyrite that are locally intruded by monzonite dykes. Sections with up to 40% pyrite are noted in the felsic lapilli tuff. Surface sampling of float and outcrop has returned up to 8250 ppb gold and 18730 ppm copper. A single diamond drill hole, 90-20, gave the following results:

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Intersection	From (metres)	To (metres)	Width (metres)	Gold (ppb)	Copper (ppm)
90-20	42	45	3	1540	412
	84	96	12	985	1873
	111	114		125	1078
	147	158.5	11.5	234	789
incl	156	158.5	2.5	189	2408

The magnetic surveys suggest that the Redgold target is immediately southeast of a buried northwesterly trending intrusive. The Induced Polarization surveys show strong chargeability anomalies.

# Northeast

One kilometre northwest of the Redgold target, diamond drill holes 90-05 and 08 tested chargeability anomalies on the northern end of the same northwesterly trending magnetic anomaly with the following results:

Intersection	From (metres)	To (metres)	Width (metres)	Gold (ppb)	Copper (ppm)
90-05	28	30	2	120	1151
	34	36	2	100	1030
	112	123.7	11.7	362	2240
90-08	20	22	2	130	1266
	34	40	6	174	1005
	48	50	2	820	1950
	54	66	12	343	973
incl	54	58	4	2020	700

Both these holes in the Northeast target and 91-20 in the Redgold target (1.3 kilometres north) cored propylitically altered sediments and volcanics. Ongoing exploration should consider the relationship of both these zones to a possible intrusive body underlying the northwesterly trending magnetic anomaly between them. Geophysical (magnetic and induced polarization) and geochemical (soil, rock and trench) surveys should be expanded to test the full potential of the

Redgold and Northeast targets and possible extensions between them.

## 3.) Economic Geology (Regional)

Mineral exploration programs conducted in the Quesnel Trough area of B.C. in the mid-1960's to the late-1970's led to the discovery of several alkalic porphyry copper, copper-gold and gold deposits. Most notable in this area are:

DEPOSIT	RESERVES
Afton Mine	31 million tons 1.1% copper and .58 grams/tonne gold
Mount Polley Mine	82 million tons .3% copper and .42 grams/tonne gold
"QR" Mine	1.33 million tons 4.6 grams/tonne gold

The copper and gold mineralization in all the deposits of this type is largely controlled by structure and hydrothermal alteration.

The potential for the Redgold property is to host an alkalic copper-gold and/or alkalic gold porphyry. This model is supported by the similar geology and alteration at the Mount Polley Mine 16 kilometres northwest and the QR Mine 32 kilometres northwest.

4.) Potential for Aggregate and / or Building Stone

In 1993 and 1996 rock was mined from the Redgold Quarry as decorative building aggregate for the Vancouver Public Library and a building in Seattle. Subsequent prospecting and exploration in the Quarry pit has identified significant copper and gold mineralization in the Redgold Quarry. During the 1999 program several rock samples representing typical product from the Redgold quarry were crushed and evaluated as decorative aggregate products. Appendix II describes the history of the Redgold aggregate and describes the crushing, and classifying and identifies potential uses. Ongoing development of the Redgold property should assess the potential of producing a decorative aggregate from low-grade areas.

### F.) DISCUSSION

The Redgold property covers the Shiko intrusive and volcanic complex. The property was acquired for its potential of hosting an 'Alkalic Porphyry Copper and/or Gold Deposit'.

Targets for further exploration have been defined by geology (intrusive lithologies - alteration - mineralization) in conjunction with geochemical (rock - soil - core) and geophysics (magnetic and

induced polarization) surveys. The work to date has tested many of these anomalies with mixed results and left some very prospective areas.

Recent work has identified the **Quarry zone** that is open in all directions. Of particular interest is the mineral zoning of high grade mineralization is seen as bornite and chalcopyrite with 5% magnetite and very little pyrite observed in diamond drill hole 96-02. Yet the zone is on the edge of a strong chargeability high. Ongoing work should study and refine these zoning patterns.

The initial **Redgold** showing was acquired for its potential as a 'QR' type deposit hosted in propylitically altered calcareous basalts.

The previous compilation showed both the Quarry and Redgold zones to be proximal to strong magnetic highs identified by Airborne magnetic surveys.

#### **1999 Ground Magnetic Survey**

The 1999 magnetic survey covered an area including the Quarry and Redgold zones. The ground magnetic survey identifies the southern extent of a strong magnetic high feature coincident with the 'Main Shiko Stock' around the Quarry zone. Although the aerial extent of this magnetic high feature is very similar to the airborne anomaly it suggests more local variation and structure. The broad magnetic high anomaly in the eastern grid area confirms the airborne magnetic feature seen here. This anomaly occurs just northwest of the Redgold zone. The strong north-south fabric seen in the magnetic data throughout the grid may in part be due to the asymmetric nature of the grid. A more detailed magnetic survey would give better resolution to these magnetic features.

Ground magnetic surveys should be expanded to cover all of the property. More detailed surveys in areas of known mineralization will assist in defining mineralized structures. A compilation of geology, magnetics (ground and airborne) and induced polarization will continue to defined targets for ongoing exploration.

## 1999 Redgold Quarry Aggregate

The 1999 crushing and screening of rock from the Redgold Quarry developed an apricot colored product. Ongoing demand for aggregate products of this color should be assessed. Trenching and ongoing work in the Redgold Quarry area should continue to evaluate the low grade / waste for its potential as a decorative aggregate for concrete and / or landscaping material.

# E.) COST STATEMENT

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Geologist	R.M. Durfeld, B.Sc., P.Geo. - manager and mag survey grid	4 days @ \$400 /day	\$ 1,600.00
	J.W. Morton, M.Sc., P.Geo. - mapping and aggregate evaluation	3 days @ \$400/day	1,200.00
Assistant	G. Hansen - grid layout and magnetometer operator	5 days @ \$186/day	930.00
Magnetometer Rental	T. Hasek	1 week @ \$379.44	379.44
Room and Board		10 man days @ \$50	500.00
Truck Rental including fuel		5 days @ \$100	500.00
Crushing Costs	Acme Analytical		23.00
Report Preparation			850.00

and Drafting

# Total Project Cost\$ 5,982.44

Dated at Williams Lake, British Columbia this 22<sup>nd</sup> day of February 2000.



R.M. Durfeld, B.Sc., P.Geo



# F.) STATEMENT OF QUALIFICATIONS

I, Rudolf M. Durfeld, do hereby certify that:

1.) I am a geologist with offices at 1725 Signal Point Road, Williams Lake, BC.

2.) I am a graduate of the University of British Columbia, B.Sc. Geology 1972, and have practised my profession with various mining and/or exploration companies and as an independent geological consultant since graduation.

3.) I am a member of The British Columbia and Yukon Chamber of Mines and the Canadian Institute of Mining and Metallurgy.

4.) That I am registered as a Professional Geoscientist by the Association of Engineers and Geoscientists of B.C. (No. 18241).

5.) That this report is based on:

a.) my observations as geologist and/or GPS operator during the 1999 field season on the Redgold property during the period June  $15^{th}$  to  $30^{th}$ , 1999.

b.) my personal review of all available company and government maps / reports and assessment reports.

c.) my personal knowledge of the property and surrounding areas.

Dated at Williams Lake, British Columbia this 22<sup>nd</sup> day of February 2000.

Μ. DURFELD CIEN

R.M. Durfeld, B.Sc., P.Geo

P.O. Box 4438 Station Main, Williams Lake, B.C. V2G 2V5

# **APPENDIX 1**

1999 Ground Magnetic Field Data

EAST	NORTH	GAMMA		EAST	NORTH	GAMMA
605000	5813000	57167		603249	5812867	59829
605000	5813000	57171		603274	5812867	60095
604975	5813000	56574		603299	5812867	59744
604950	5813000	57336		603324	5812867	60074
604925	5813000	55529		603349	5812867	60482
604900	5813000	57887		603374	5812867	59317
604875	5813000	57847		603399	5812867	57412
604850	5813000	57870		603399	5812867	57370
604825	5813000	58051		603399	5812867	57132
604800	5813000	58153		603399	5812867	57412
604775	5813000	58197		603399	5812867	57370
604750	5813000	58101		603399	5812867	57132
604735	5813000	58205	· · · · · · · · ·	603424	5812867	57945
604723	5813000	58325		603424	5812867	57945
604675	5813000	58661		603449	5812867	58077
604650	5813000	57846	· · · · · · · · · · · · · · · · · · ·	603474	5812867	57617
604635	5913000	5740		602400	5912007	57127
604620	5813000	55510		602524	5012007	57157
604600	5813000	55519		603524	5012007	57104
604575	5813000	54006		603549	5812807	57267
604550	5813000	58063		603574	5812867	57263
604525	5813000	57851		603599	5812867	57372
604500	5813000	5/384		603624	5812867	5/464
604500	5813000	57610		603649	5812867	57539
604475	5813000	57627		603674	5812867	57768
604450	5813000	57205		603699	5812867	57841
604425	5813000	58154		603699	5812867	57840
604400	5813000	57859		603724	5812867	58015
604375	5813000	58075		603674	5812767	57665
604350	5813000	58559		603649	5812767	57588
604325	5813000	58245		603624	5812767	57506
604300	5813000	57801		603599	5812767	56868
604275	5813000	57502		603599	5812767	57324
604250	5813000	56983		603574	5812767	57116
604225	5813000	57554		603549	5812767	57024
604200	5813000	57726		603524	5812767	58782
604200	5813000	57765		603499	5812767	59760
604200	5813100	57876		603474	5812767	59990
604200	5813100	57874		603449	5812767	60285
604225	5813100	58546		603424	5812767	59750
604250	5813100	58262		603399	5812767	59028
604275	5813100	58065		603374	5812767	57532
604300	5813100	57751	[ ·	603349	5812767	57746
604325	5813100	58062		603324	5812767	58305
604350	5813100	57963		603299	5812767	58890
604375	5813100	58001		603274	5812767	58378
604400	5813100	57980		603249	5812767	58109
604425	5813100	58561	<u> </u>	603249	5812767	58128
604450	5813100	58551		603224	5812767	58183
604475	5813100	58031	+	603199	5812767	58388

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EAST	NORTH	GAMMA		EAST	NORTH	GAMMA
604500	5813100	57456		603174	5812767	58169
604525	5813100	57810		603149	5812767	58127
604550	5813100	57101		603124	5812767	58746
604575	5813100	55851		603124	5812767	58745
604600	5813100	58223		603099	5812767	58107
604625	5813100	58759		603074	5812767	57457
604650	5813100	58700		603049	5812767	57526
604675	5813100	58376		603024	5812767	57593
604700	5813100	58189		602999	5812767	57508
604725	5813100	58247		602974	5812767	57662
604750	5813100	58263		602974	5812767	57678
604775	5813100	58518		602924	5812767	58130
604775	5813100	58521		602899	5812767	58458
604800	5813100	58698		602874	5812767	59173
604825	5813100	58575		602849	5812767	58862
604850	5813100	57992		602824	5812767	58358
604875	5813100	58577		602799	5812767	58506
604070	5813100	58193		602774	5812767	58938
604925	5813100	55681		602749	5812767	59893
604950	5813100	54267		602724	5812767	59686
604950	5813100	54695		602699	5812767	60175
604930	5813100	55325		602674	5812767	59509
605000	5813100	55967		602649	5812767	58725
605000	5813000	56924		602624	5812767	58349
605000	5813000	56473		602524	5812767	58656
605000	5813000	57299	· · · · · ·	602533	5012707	58040
605000	5813100	57300		602574	5912707	50940
604075	5813200	59078		602524	5812767	58740
604975	5813200	58250		602400	5912707	58752
604930	5813200	59569		602499	5812767	59641
604923	5813200	59701		602474	5912707	59524
604900	5813200	59707		602449	5812707	59/12
604850	5813200	59/07		602449	5812667	59940
604835	5913200	50401		602449	5912007	50040
604025	5013200	59730		602449	5012007	50422
604775	5013200	59103		602474	5012007	59422
604775	5013200	50007		602499	5012007	59605
604750	5813200	50731		602524	5012007	59102
604725	5013200	50720		602549	5012007	59122
604700	5813200	50793		602574	5012007	59702
604650	5013200	50/31		602624	5012007	50034
604000	5013200	50922	· · · · ·	602640	5012007	50030
604600	5013200	50/39		602649	5012007	50191
604675	5013200	50/04	<b> </b>	600674	5012007	5/8/8
604575	5013200	50921	<u> </u>	602600	5012007	5/342
604530	5013200	50132		602099	5012007	501/1
604525	5013200	501/1	<b> </b>	602740	5012007	50510
604475	5013200	57494		600774	5012007	50/14
0044/5	5013200	5/520		002774	5012007	594/9
604450	5813200	56122		602799	5812667	59683

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EAST	NORTH	GAMMA	-	EAST	NORTH	GAMMA
604425	5813200	57039		602824	5812667	59218
604400	5813200	58489		602849	5812667	58158
604375	5813200	58640		602874	5812667	58858
604350	5813200	58153		602899	5812667	58425
604325	5813200	58042		602924	5812667	58352
604300	5813200	58137		602949	5812667	57816
604275	5813200	57971		602974	5812667	57601
604250	5813200	57764		602999	5812667	57689
604225	5813200	56468		603024	5812667	58348
604200	5813200	58021		603049	5812667	57970
604200	5813200	58031		603074	5812667	58254
604200	5813100	57898		603099	5812667	58091
603424	5813167	59412		603124	5812667	57814
603399	5813167	58612		603149	5812667	57328
603374	5813167	58348		603174	5812667	57198
603349	5813167	57719		603199	5812667	57057
603324	5813167	57857		603224	5812667	56882
603299	5813167	58609		603249	5812667	57123
603274	5813167	58415		603274	5812667	57123
603249	5813167	58289		603299	5812667	57419
603224	5813167	60108		603324	5812667	57437
603100	5813167	60138	·	603349	5812667	57602
603174	5813167	60511		603374	5812667	56775
603149	5813167	60158		603399	5812667	57383
603124	5813167	60464		603424	5812667	57/02
603000	5813167	50011		603440	5812667	57674
603074	5813167	50624		603474	5912007	57014
603049	5813167	50024		603474	5812667	57740
603024	5813167	58754		603409	5812667	57582
602000	5813167	58500		603524	5812667	50527
602933	5813167	50339		603549	5812667	508/3
6029/4	5813167	50122		603549	5812667	58012
602024	5912167	50286		602500	5912007	58600
602924	5912167	59200		603634	5912007	58090
602099	5013107	59503		603624	5012007	57022
602840	5013107	50759		602674	5012007	57933
602849	5812167	60200	<u> </u>	602600	5912007	5/328
602049	591310/	E0140		002033	501200/	57439
602700	5913107	50119		602704	5012007	J/04/
602799	5013107	57259		603724	5012007	50010
602740	591310/	5/205		003/24	501200/	58029
602724	5013107	57560		603549	5012942	504/9
602620	501310/	5/300		003524	5012942	58002
600074	5013107	5/495		003499	5012942	20900
602674	501310/	5/012		0034/4	5012942	59416
602649	501310/	5/801		003449	5012942	59225
002624	591310/	50247		003424	5012942	59531
002599	501310/	5905/		003399	5012942	59022
0025/4	501310/	58354		603374	5812942	59890
602549	5813167	58424		603349	5812942	60542

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EAST	NORTH	GAMMA		EAST	NORTH	GAMMA
602524	5813167	58103		603349	5812942	60547
602499	5813167	58118		603349	5812967	59171
602474	5813167	58308		603349	5812967	59098
602449	5813167	57926		603349	5812992	58780
602449	5813167	57911		603349	5812992	58825
602574	5813067	58019		603324	5812992	59189
602574	5813067	58031		603299	5812992	58938
602599	5813067	58027		603274	5812992	58689
602624	5813067	58221		603249	5812992	58103
602624	5813067	58232		603224	5812992	57638
602649	5813067	58288		603199	5812992	56639
602674	5813067	58140	· · · · · · · · · · · · · · · · · · ·	603174	5812992	59183
602699	5813067	58024		603149	5812992	61244
602724	5813067	58168		603149	5812992	60957
602724	5813067	58170		603149	5813017	59362
602749	5813067	58216		603149	5813017	59359
602749	5813067	58217		603174	5813017	57089
602774	5813067	58085		603199	5813017	57407
602799	5813067	57732		603224	5813017	58360
602799	5813067	57038	· · · · · · · · · · · · · · · · · · ·	603249	5813017	58623
602824	5813067	57805		603274	5813017	58742
602849	5813067	57505		603209	5813017	58805
602874	5813067	58027		603324	5813017	50095
602800	5813067	58640		603340	5813017	58725
602034	5913007	50049		602274	5912017	57090
602924	5813067	59409		603374	5013017	57069
602949	5913067	59004		603434	5013017	59007
602974	5013007	59379		603424	5013017	50750
602999	5013007	59520		003449	5013017	50910
603024	5013007	50423		603474	5013017	59679
603049	5813067	50500		603499	5813017	59243
603074	5813067	58681		603524	5813017	59928
603099	5813067	58039		603524	5813017	59871
603124	5813067	57925		603524	5812992	60078
603149	5813067	57983		603524	5012992	60098
0031/4	5013067	59003		603499	5812992	59235
603199	5813067	58660		6034/4	5812992	59650
603224	5813067	58746		603449	5812992	59079
003249	5013067	583/4		003424	5812992	59081
603274	5813067	58434		603399	5812992	58136
603299	5813067	58539		603374	5812992	58078
603324	5813067	58673		603349	5812992	58843
603349	5813067	58287		603349	5812992	58841
603349	5813067	58426		603374	5813017	58112
603349	5813067	58325		603374	5813017	58112
603374	5813067	57328		603699	5812968	57916
603399	5813067	58591	l	603699	5812968	57915
603424	5813067	58893		603724	5812969	58694
603449	5813067	58896	L	603749	5812970	59450
603474	5813067	58865	l	603774	5812971	58561

EAST	NORTH	GAMMA		EAST	NORTH	GAMMA
603499	5813067	58847		603799	5812972	59053
603524	5813067	59257		603824	5812973	58650
603549	5813067	59939		603849	5812974	58770
603574	5813067	59768		603874	5812975	58395
603599	5813067	59547		603899	5812976	58684
603624	5813067	58012		603924	5812977	58299
603649	5813067	57811		603949	5812978	58472
603674	5813067	57617		603974	5812979	57576
603699	5813067	58120		603999	5812980	57399
603724	5813067	59090		603999	5812981	57402
603699	5812967	58128		604024	5812982	57484
603674	5812967	57811		604049	5812983	57451
603649	5812967	57806		604074	5812984	57710
603624	5812967	57309		604099	5812985	57801
603599	5812967	57149		604124	5812986	58428
603574	5812967	57838		604149	5812987	58295
603549	5812967	58759		604174	5812988	57797
603499	5812967	59744		604199	5812989	57625
603474	5812967	59909		604224	5812990	57607
603449	5812967	59866		604224	5812991	57605
603434	5812967	50000		604200	5813000	57687
603300	5812067	58568		604200	5813000	57688
603374	5812907	50/01		604200	5813100	57846
603349	5812967	59095		604200	5813100	57843
603334	5812067	50630		604200	5813200	57925
603324	5812067	58326		604200	5813200	57070
603233	5812067	57603		604200	5813300	58014
6032/4	5812907	57/00		604200	5813300	58070
6022249	5812067	56784		604200	5813300	58065
602100	5912907	59702		604220	5813300	57810
602174	5012907	58002		604230	5813300	58487
603174	5012907	50092		604273	5813300	59924
603149	5012907	50315		604300	5913300	50034
603024	5012907	59179		604325	5013300	58200
603099	5012907	60134		604330	5013300	50200
603074	5012907	55300		604400	5013300	57511
603049	501290/	0U243		604400	5013300	50001
600000	501290/	50000		604425	5013300	50009
002999	5012907	59262		604430	5013300	5000/
602040	5012907	50300		604500	5013300	50010
0U2949	5012907	5/435		604500	5013300	50394
002924	5012907	57452		604525	5013300	29090
602899	5012907	57405		604530	5013300	59063
002074	5012907	5/089		0043/5	5013300	59010
002849	501290/	5/930		604600	5013300	29009
602824	581296/	5/94/		004625	5013300	56535
602/99	5812967	5/939		004650	5013300	58570
602774	5812967	5/881		004675	5013300	50000
602/49	5812967	5/983		604/00	5813300	58383
602724	5812967	58116		604725	5813300	58348

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EAST	NORTH	GAMMA		EAST	NORTH	GAMMA
602699	5812967	58093		604750	5813300	58552
602674	5812967	57978		604775	5813300	58164
602649	5812967	58039		604800	5813300	58405
602624	5812967	58043		604825	5813300	58389
602599	5812967	57951		604850	5813300	58807
602574	5812967	57881		604875	5813300	58169
602549	5812967	57953		604900	5813300	57226
602524	5812967	58039		604925	5813300	57375
602499	5812967	58022		604950	5813300	57838
602474	5812967	56547		604975	5813300	57832
602449	5812967	57865		605000	5813300	57596
602449	5812967	57871		605000	5813300	57597
602449	5812867	58263		605000	5813400	57150
602449	5812867	58271		605000	5813400	57146
602474	5812867	58245		604978	5813400	57392
602499	5812867	58249		604956	5813400	57533
602524	5812867	58115		604934	5813400	57666
602549	5812867	58015		604912	5813400	57466
602524	5812867	57900		604890	5813400	56428
602599	5812867	58120		604868	5813400	57024
602624	5812867	58139		604846	5813400	57931
602649	5812867	58270		604824	5813400	58947
602674	5812867	58334		604802	5813400	58998
602699	5812867	58374		604780	5813400	58865
602699	5812867	58375		604758	5813400	59060
602724	5812867	58145		604736	5813400	58288
602749	5812867	58008		604714	5813400	58086
602774	5812867	57944		604692	5813400	5792 <del>9</del>
602774	5812867	57930		604670	5813400	57895
602799	5812867	57871		604648	5813400	57995
602824	5812867	57912		604626	5813400	58200
602849	5812867	58272		604604	5813400	58182
602874	5812867	58075		604582	5813400	58285
602899	5812867	57994		604560	5813400	58156
602924	5812867	57921		604538	5813400	58433
602949	5812867	57826		604516	5813400	60094
602974	5812867	57826		604494	5813400	58896
602999	5812867	57836		604472	5813400	58972
603024	5812867	57860		604450	5813400	59486
603049	5812867	58214		604428	5813400	59129
603074	5812867	58447		604406	5813400	58326
603099	5812867	58377	1	604384	5813400	57969
603124	5812867	58442		604362	5813400	57678
603149	5812867	58738	6	604340	5813400	57721
603174	5812867	59798		604318	5813400	57343
603199	5812867	60000		604296	5813400	57585
603224	5812867	60094		604200	5813000	57677
603249	5812867	60334		604200	5813000	57676

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### **APPENDIX 11**

#### Architectural and / or Landscaping Assessment

During 1993 and 1996 7800 tons of salmon colored syenite were excavated from a small area on the Shik 6 mineral claim. The excavation was completed by quarry Pacific Industries Ltd. who, during this period, had a lease on this claim. The material was trucked to the facilities of APS Architectural Precast Structures Ltd. in Langley BC, where it was crushed using a mobile crusher to make aggregate for cement panels. Two sizes of aggregate were produced; a coarse fraction tightly constrained around a +3/8 inch screen size and a fine fraction less than 3/8 inch screen size which was ground into sand. 6000 tons of syenite was used to produce precast cement panels for the Vancouver Library while another 1800 tons of material was used to make panels for the a Microsoft office building in Seattle.

The Quarry Pacific excavation resulted in the identification of significant mineralization in the syenite. Subsequent diamond drilling in 1996 from the flour of the quarry returned and intercept of 1.92 gms/T gold and 0.44 % copper over 11.4 metres. The subtle copper mineralization is caused by less than 1% fine-grained disseminated bornite localized in mafic minerals. The rock is essentially devoid of pyrite and mineralization is not easily noticed. In 1999 it was decided to investigate the crushed properties of the syenite as a precursor to finding a broader application for it; possibly as a byproduct in conjunction with mining the better mineralized material for processing as a gold-copper ore at the nearby facilities of the Mount Polley Mine.

A sample weighing 19 kilograms was crushed at the facilities of Acme Analytical Laboratories using a "Rhino" jaw type crusher. The opening of the crusher was set to its widest setting at 1.3 cm. The Rhino crusher uses stationary and vibrating chrome steel plates attached to a cam to give the plates horizontal and vertical movement, which crushes the sample. The material was subsequently sieved through a minus 1/2 inch screen with the undersize being further screened through a minus 1/4 inch screen. The screened material was then examined for color and angular characteristics:

Acme Analytical Laboratories Crushed Sample:Total weight of sample 19 kilograms.Weight of material not passing a ½ inch screen(+½ inch) 4.5 kilograms24%Weight of material passing a ½ inch screen but not a 1/4 inch screen(-½, +1/4 inch) 9.1 kilograms48%

The colour of the +1/2 inch and -1/2, +1/4 inch fractions was defined as **apricot** by Paulette Morton an Interior Designer who examined the product.

This method of crushing resulted in an extreme angular characteristic for the +1/2 size fraction. Many of the clasts in this fraction are narrow in one dimension resulting in a knife like habit, which would present problems in a landscape application. It has therefore been determined that more trials are necessary to select an optimum crushing methodology.

A second sample was obtained on site by shoveling previously broken material through a 1 inch screen. The - 1 inch material, weighing 18 kilograms, was screened to a -1,  $\pm 1/2$  inch and a  $\pm 1/2$ ,  $\pm 1/4$  inch screen size. The screened material was then placed in a residential garden setting where it was subjected to repeated cycles of wetting (irrigation) and drying for two months. At the end of this period the material was inspected for any signs of iron (or copper) staining. No staining was observed and it has been determined that this product will produce an attractive ornamental landscape material.

Previously Rough Broken –1 inch (Quarry Pacific material) at Redgold Quarry: Total weight of sample that passed a 1 inch screen 18 kilograms. Weight of material not passing a ½ inch screen (-1, +1/2 inch) 8.0 kilograms 44% Weight of material passing a ½ inch screen but not a 1/4 inch screen (-½, +1/4 inch) 4.1 kilograms 23%

