REPORT

on the

DOC GOLD PROPERTY

South Unuk River Skeena Mining Division British Columbia

Latitude: 56 °20' North Longitude: 130 °27' West NTS Map-Area 104B/08W

PART A - GEOLOGICAL REPORT

PART B - EVALUATION REPORT

Prepared for

GLENCAIRN EXPLORATIONS LTD.

Ву

N.C. CARTER, Ph.D. P.Eng. July 23, 2001

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SUMMARY

Glencairn Explorations Ltd. has entered into an agreement to purchase a 100% interest in the Doc gold property which is situated northwest of Stewart in northwestern British Columbia. The property, which consists of 2 contiguous mineral claims covering an area of 400 hectares, is within the well-documented Unuk River mineral district. The currently producing Eskay Creek gold-silver mine is 55 km north of the Doc preperty and the past producing Granduc copper mine is 15 km south. Access to the property is by helicopter from Stewart.

This report, prepared at the request of Glencairn Explorations Ltd. is based in part on a personal examination of the subject property undertaken July 15, 2001 and on records of previous exploratory work completed between 1986 and 1989.

Gold mineralization within the boundaries of the present Doc property was discovered in 1946. Initial work consisted of the excavation of a number of surface trenches and some diamond drilling. Exploratory work completed between 1986 and 1989 included geological mapping, geochemical sampling, detailed sampling of existing trenches, 4680 metres of surface and underground diamond drilling in 50 holes and 680 metres of underground crosscutting and drifting.

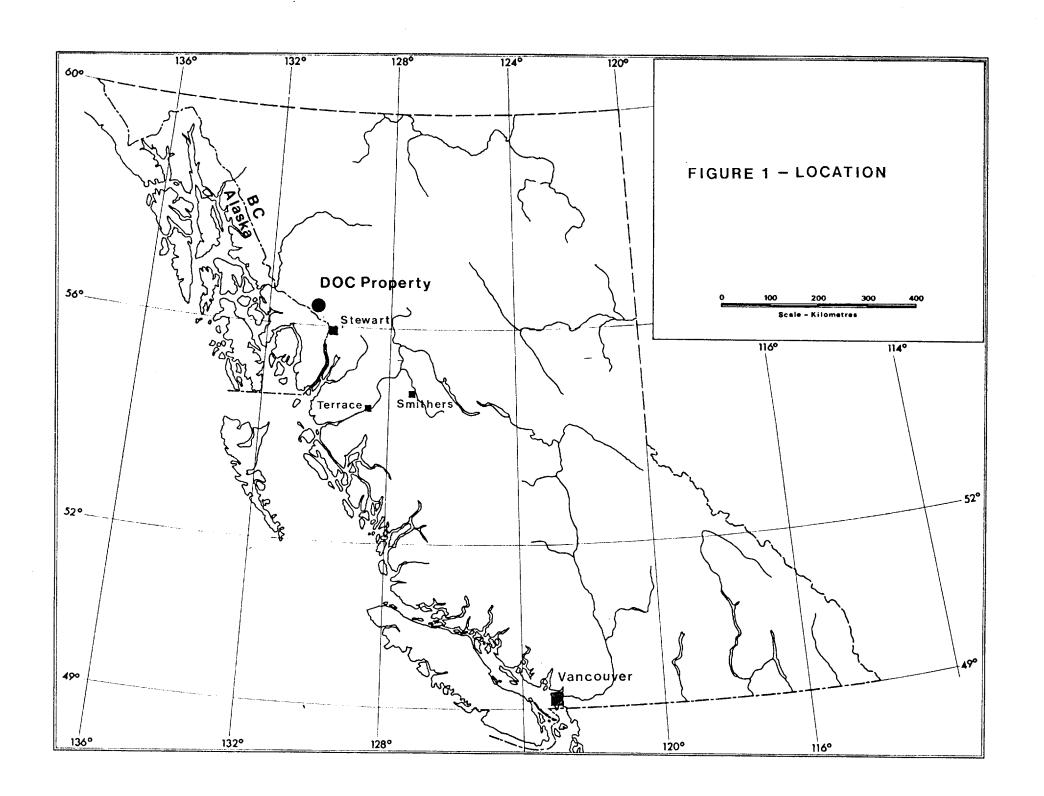
The property is underlain by a Late Triassic metavolcanic - metasedimentary sequence which has been intruded by granitic rocks. Work to date has identified nine west-northwest-striking, steeply-dipping, mesothermal quartz-sulptiide vein structures containing significant gold and silver values. Two pontiguous veins, Q17 and Q22, host uncut and undiluted Inferred Mineral Resources totaling 119100 tonnes grading 12.0 g/t gold. Both structures are open to depth and possibly along strike. Limited sampling of the other known vein structures has indicated locally significant gold and silver values. The Doc property may also have potential for skarn-hosted precious and base metals mineralization and possibly volcanogenic base metal mineralization.

The Doc preperty is of sufficient merit to warrant further exploratory werk. All of the known gold (and silver)-bearing quartz veins found to date are in relatively open, subalpine and alpine terrain in the southern two-thirds of the current property area where bedrock exposures are plentiful. An apparently unexplored part of the property includes the northeastern one-third which is a densely forested, relatively steep area with fewer bedrock exposures than the higher areas. This area may be as equally prospective as the better explored portions of of the property.

It is recommended that a first phase exploratory program be directed to this part of the property. Work should consist initially of basic prospecting and detailed soil sampling along topographic contours 100 metres apart in elevation. It is also recommended that this area be further tested by way of a detailed Induced Polarization (IP) survey to provide resistivity measurements which may be useful in detecting additional quartz vein structures. First phase work should also include re-examination of known, but lesser explored vein structures on the property. Estimated costs of the recommended first phase work program total \$208,900.00

A second phase program of diamond drilling, estimated to cost \$507,450.00, would be contingent on the results of first phase work.

A fair and reasonable estimate of the current value for the Doc gold property, as determined by two valuation methods, ranges between \$933,900 and \$992,250.



INTRODUCTION and TERMS OF REFERENCE

Glencairn Explorations Ltd. has entered into an agreement to purchase the Doc Gold Property from two arm's-length individuals. The property, which consists of 16 mineral claim units, is situated north of Stewart in northwestern British Columbia. Quartz vein-hosted gold and silver mineralization on the present property was discovered in 1946 and extensive underground and surface work, including diamond drilling, was undertaken between 1986 and 1989.

The author of this report has been retained by Glencairn Explorations Ltd. to review and comment on the results of exploratory work completed to date on the subject property, to prepare preliminary comments regarding the potential of the property and to provide recommendations regarding the nature and scope of further exploratory work programs. An estimate of the current value of the Doc property also forms part of this report.

This technical report has been prepared in compliance with the requirements of National Instrument 43-101 and Form 43-101F1 and is intended to be used as supporting documentation to be filed with the British Columbia Securities Commission, the Canadian Venture Exchange and other regulatory agencies as required.

The report is based in part on an evaluation report on the Doc property prepared by the writer June 15, 1998 on behalf of the then property owner Lawrence Barry. Information used in the preparation of the current and previous reports includes published and unpublished documents pertaining to previous exploratory work and the geological setting of the property. Appropriate citations to these and other sources of information are contained in the References section.

Cemments regarding proporty location, access, physical and geological setting and character of mineralization are based in part on a brief personal examination of parts of the subject property undertaken July 15, 2001. This examination was limited by inclement weather conditions and extensive romaining winter snow cover above 1100 metres elevation.

The writer has a good working knowledge of the geological settings and styles of mineralization in this part of British Columbia, based on numerous property examinations and geological mapping programs conducted over the past 35 years on behalf of both the Provincial Government and private sector companies.

Units of measure in this report are metric; monetary amounts referred to are in Canadian dollars. Illustrations accompanying this report were initially prepared for the writer's 1998 report.

PART A - GEOLOGICAL REPORT

PROPERTY DESCRIPTION and LOCATION

The Doc gold property of two contiguous 4-post mineral claims situated in the Skeena Mining Division 55 kilometres northwest of Stewart in northwestern British Columbia (Figure 1). The mineral claims, which comprise 16 mineral claim units, cover an area of 400 hectares centred on latitude $56^{\circ}20^{\circ}$ North and longitude $130^{\circ}27^{\circ}$ West in NTS map-area 103B/08W.

The configuration of the various mineral claims is illustrated on Figure 2. Note that the Doc 9 2-post mineral claim, in existence in 1998, has been subsequently included in the Eldorado 4 mineral claim pursuant to provisions of the British Columbia Mineral Tenure Act.

Details of the two mineral claims are contained in the following table.

Table 1

Claim Name	Record No.	<u>Units</u>	Area(ha)	Record Date	Expiry Date
Eldorado 2	343905	4	100	March 5,1996	March 5,2002
Eldorado 4	343907	12	300	March 5,1996	March 5,2002

Glencaim Explorations Ltd. has agreed to pay \$66,500 and to issue 2,500,000 shares (at a deemed price of \$0.20 per share) in order to earn a 100% interest in the subject mineral claims from two arm's-length parties. The purchase agreement also specifies that the first \$2 million of property expenditures will be managed under contract to a company affiliated with the property vendor who will collect a 10% management fee for that work. Other components of the agreement include a 2.5% net smelter return, payable to the property vendor(s) on any future mineral production from the property and an additional cash payment of \$10,000 due within one year of finalizing the agreement.

The two mineral claims comprising the Doc gold property are thought to have been located pursuant to procedures specified by regulations of the Mineral Tenure Act of the Province of British Columbia. No claim posts or lines were inspected during the writer's examination of the property July 15, 2001. The mineral claims have not been surveyed.

The mineral claims cover the principal known gold-silver-bearing zones identified by work to date on the property.

Mineral claims in British Columbia may be kept in good standing by incurring assessment work or by paying cash-in-lieu of assessment work in the amount of \$100 per mineral claim unit per year during the first three years following location of the mineral claim. This amount increases to \$200 per mineral claim unit in the fourth and succeeding years. Inasmuch as the Eldorado 2 and 4 mineral claims were located in 1996, the annual assessment work requirements for these would be \$200 per mineral claim unit per year.

The writer is not aware of any specific environmental liabilities to which the two mineral claims are subject. Reclamation work on the property was undertaken two years ago on behalf of the previous property owner, Magna Ventures Ltd. The 40-man camp, fuel drums, etc., which had been on the property since the late 1980s, were removed and a small tractor, initially airlifted to the property a number of years ago, was used to recontour the camp and adit areas.

Past and current mining operations in the general area include the past-producing Granduc base metal mine, 15 km southeast of the Doc property, and the currently producing Eskay Creek precious-base metals mine some 35 km north (Figure 3).

Exploration work on mineral properties in British Columbia requires the filing of A Notice of Work and Reclamation with the Ministry of Energy and Mines. The issuance of a permit facilitating such work may involve the posting of a reclamation bond.

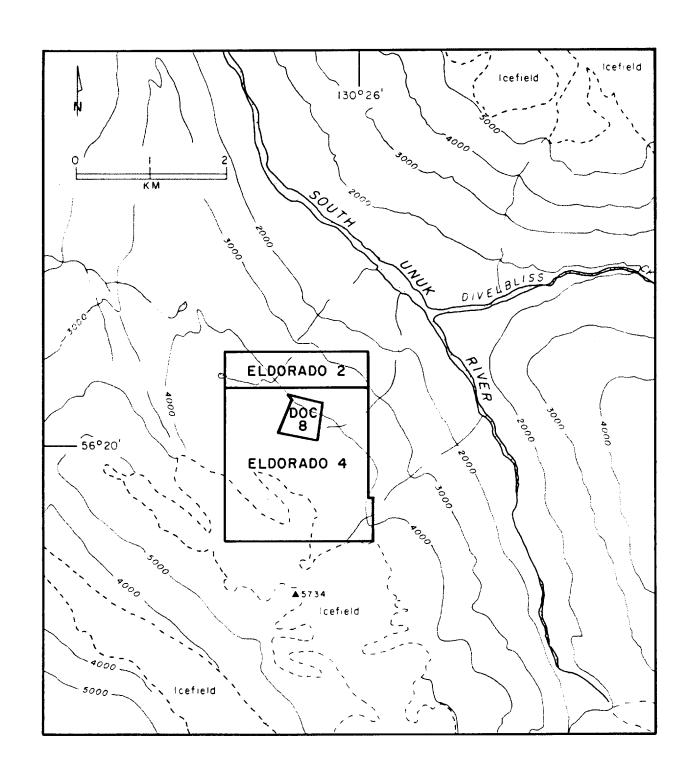


FIGURE 2 - DOC PROPERTY - MINERAL CLAIMS

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

Access to the Doc property is by helicopter from Stewart. When weather conditions permit, this distance is about 60 km or slightly less than one-half hour flying time. This direct route involves flying over the southern portion of the Frank Mackie Glacier (Figure 3) where elevations exceed 2100 metres above sea level. Inclement weather conditions (low cloud, fog), characteristic of this part of British Columbia, predicate a more circuitous route through the Alaska panhandle involving distances of up to 100 km and slightly under an hour flying time.

Equipment and supplies can be transported by road to an airstrip 3 km ndrth of the former Granduc mine access tunnel portal immediately north of Summit Lake (Figure 3). Terminus of this road is 50 km north of Stewart and 25 km southeast of the Doc property.

Facilities on site include two 12×14 wooden buildings with steeply pitcehd aluminum roofs immediately below the adit portal. A small bulldozer, stored inside the adit portal, was used in the past to construct roads to the various trench areas above the adit.

Unuk River and its tributaries empty irito Burroughs Bay, an ocean ihlet in neighbouring southeast Alaska. This was the original access route into the Unuk River region in the early part of the last century. A tote road down the South Unuk River valley from Granduc mine was constructed in the 1960s to facilitate logging operations for mining purposes. This road is essentially overgrown as is an airstrip constructed at about the same time in the valley bolow the Doc property.

Stewart, with a permanent population of slightly tess than 1,000, offers limited supplies and services. Daily bus service links the community with Terrace and a helicopter charter firm maintains a base at the local airport during the summer months.

Most suppiles and services are available in the communities of Smithers and Terrace (Figure 1). These resource-based communities, both on Provincial highway 16 and the northern CN Rail line, have daily scheduled airline service and are central to a district population base of more than 25,000. Access to Stewart from both Terrace and Smithers is by paved highway; distances from both are approximately 320 km.

The climate of the Stewart area is typical of the north coast of British Columbia. Summers feature a moist, mild, marine climate while winters are characterized by abundant snowfall ranging from 12 to 25 metres dependent on elevation. Mineral exploration work in higher areas, such as the Doc property, is restricted to a 3.5 month poriod between the middle of June to the end of September.

The Doc gold property is situated in the Boundary Ranges of the northern Coast Mountains of British Columbia, a mountainous region dissected by streams and modified by glaciation. Steep slopes are common adjacent to major drainages and tree line extends to about 1000 metres elevation. Vegetation includes thick stands of western hemlock and spruce and thick undergrowth.

As indicated on Figure 3, much of the area south and east of the property is covered by permanent icefields, notably the Frank Mackie Glacier. The frontal areas of these icefields are

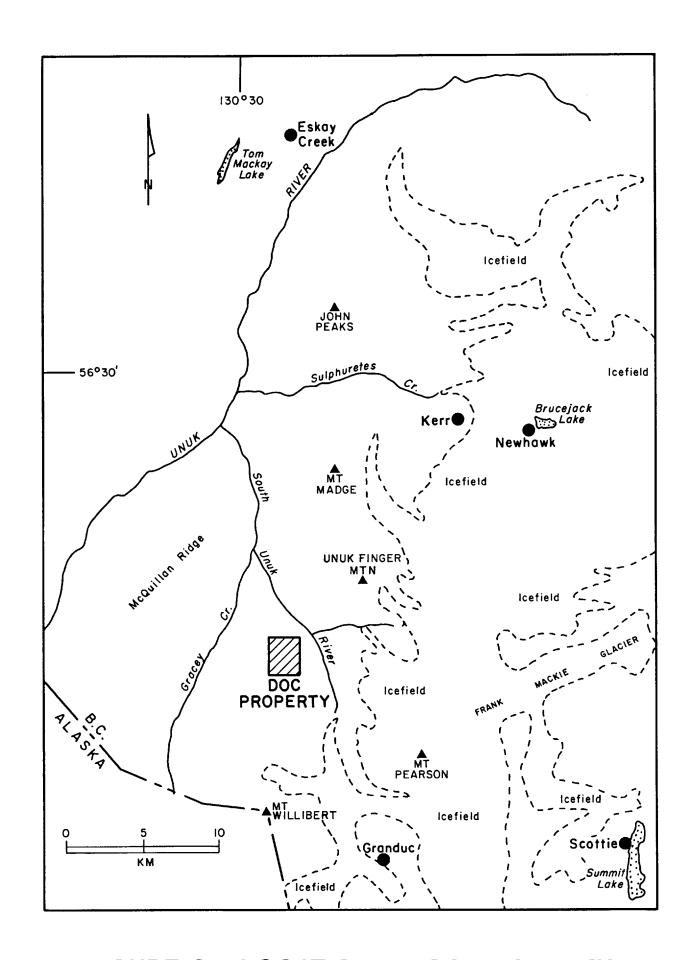


FIGURE 3 - LOCATION - DOC PROPERTY

receding; an example of this is the South Leduc glacier in the vicinity of Granduc Mine (Figure 3) where the surface of the glacier dropped from an elevation of 1160 metres above sea level in 1948 to about 800 metres in 1971 (Grove,1986).

The Doc property is situated on the northeast flank of a ridge between Gracey Creek and South Unuk River (Figures 2 and 3). Elevations range from 760 metres above sea level at the northeast corner of the property to about 1500 metres in the southwestern property area. (Note that elevations are expressed in Imperial units of measurement on Figure 3).

Much of the property area is in open, alpine terrain in which bedrock is well exposed except where covered by a small icefield in the southern and southwestern parts of the property (Figure 3). The central property area, which includes the principal areas of interest, features moderate relief with elevations ranging from 1200 to 1500 metres. Tree cover extends to about 1160 metres elevation and covers the steeper slopes in the northeastern part of the property.

HISTORY

Placer gold eccurrences in the Unuk River region were initially investigated in the 1880s and small operations were underway in the lower regions of Sulphurets Creek (Figure 3) in 1896. Vein-hosted gold-silver mineralization was discovered on the Globe property adjacent to South Unuk River (immediately adjacent to the Doc property - Figure 4) at the turn of the century and initial work consisted of the driving of short adits and the erection of a 3 tons per day stamp mill. The Globe mineral claims were Crown granted in 1902.

Prospecting activities in the 1930s resulted in the discovery of the Morris Summit (Scottie) gold property at Summit Lake (Figure 3) and gold-silver mineralization in the vicinity of the currently producing Eskay Creek mine east of Tom Mackay Lake. The Granduc copper deposits were discovered in 1951 and exploration work throughout the region over the following 20 years identified several mineralized zones near the headwaters of Sulphurets Creek.

Work between the early 1980s and mid-1990s was successful in defining reserves and resources at the Newhawk and Kerr properties (Figure 3) and the identification of high grades of gold-silver mineralization at Eskay Creek in 1989 refocused attention on the general area.

Gold and silver-bearing quartz veins were discovered on the present Doc property in 1946. Known originally as the Gracey property, work over the next 3 years by Halport Mines Ltd. included surface trenching (75 trenches) and 1900 metres of diamond drilling in 29 holes. All supplies, including the diamond drill, were reportedly air-dropped onto the property (B.C. Minister of Mines Annual Reports for 1948 and 1949).

The property lay idle until 1974 when new Minex Resources re-sampled existing trenches. Some investigative work carried out by DuPont of Canada Exploration Ltd. in 1980 preceded the acquisition of the property by Silver Princess Resources Inc. in 1985. Magna ventures Ltd. entered into a joint venture agreement in 1986 and undertook trenching, mapping and sampling, 33.5 metres gf underground crosscutting (3.0 x 2.5 metres trackless headings) and 913.2 metres of diamond drilling in 10 holes (Gewargis,1986).

Work the following year included prospecting of an expanded property area which included the adjacent Globe Crown granted mineral claims, additional detailed surface mapping

and sampling 376 metres of underground development and 694 metres of underground diamond drilling in 8 holes (Aelicks et al, 1988).

Echo Bay Mines Ltd. joint ventured the Doc property in 1988 and constructed a 40-person camp. Continued exploration work included an additional 230 metres of underground drifting and 32 surface diamond drill holes totaling 3074 metres (Freeze et al,1989).

By the end of the 1988 program, werk completed over a three year span included a total of 6052 metres of surface diamond drilling, 695 metres of underground drilling, 630 metres of underground development and extensive surface trenching. A one-month geological mapping and geochemical sampling program was undertaken over the then property area of 7900 hectares plus the six adjacent Crown granted Globe mineral claims in 1989 (Glover et al,1989).

Property expenditures between 1986 and 1989, as documented in various assessment reports on public file, amounted to \$3,897,807.00

The original Doc mineral claims subsequently lapsed and the current claims were located to cover the principal areas of Interest in March of 1996. Work since that time has consisted of limited prospecting to satisfy assessment work requirements.

GEOLOGICAL SETTING

Regional Setting

The Unuk River area is within the western part of the Intermontane tectonic belt which is bounded on the west by the Coast Plutonic Complex. The Intermontane belt in northern and central British Columbia is underlain by Stikine terrane which is decribed (MacIntyre et al,1989) as "a collage of Jurassic, Cretaceous and Tertiary magmatic arcs and related successor basins" including Late Triassic submarine island-arc volcanic rocks, volcaniclastic and sedimentary rocks of the Early to Middle Jurassic Hazelton Group, Late Jurassic and Early Cretaceous successor basin sedimentary rocks of the Bowser Lake, Skeena and Sustut Groups and Late Cretaceous and Tertiary continental volcanic rocks of the Kasalka, Ootsa Lake and Goosly Lake Groups.

Stikine terrane in the Unuk River area is comprised of late Triassic (Stuhini Group) and early to mid-Jurassic (Hazelton Group) arc-related volcanic-sedimentary sequences which are capped in part by late Jurassic clastic sediments of the Bowser lake Assemblage. The layered rocks are intruded by coeval and younger granitid rocks, in part related to the Coast Plutonic Complex, and are variably deformed and metamorphosed marginal to these intrusions.

The Unuk River area is well known for its number and diversity of mineral deposits, These include polymetallic quartz velns containing significant gold and silver values, porphyry copper-gold (+molybdenum) deposits, and stratiform, volcanogenic massive sulphide deposits, some of which, most notably Eskay creek, are enriched in precious metals.

Some of the more significant deposits in the goneral erea of the Doc property are shown on Figure 3. Examples of shear-hosted, gold and silver-bearing quartz vein deposits include Newhawk at Brucejack lake. Mesothermal, quartz-carbonate, polymetallic veins here contain

proven and probable reserves of 750000 tonnes grading 15.4 g/t gold and 650 g/t silver. The Scottie Gold (Morris Summit) mine at Summit Lake, which was in production in the early 1980s, consists of auriferous pyrrhotite-chalcopyrite veins containing reserves of 240000 tonnes grading 18.5 g/t gold.

The Kerr property, at the headwaters of Sulphurets Creek (Figure 3), includes a highly deformed and strongly altered porphyry copper-gold deposit developed within and marginal to an early Jurassic monzonite intrusion. A 135 million tonnes resource grading 0.76% copper and 0.34 g/t gold was identified by drilling between 1985 and 1992. Kerr is one of several porphyry copper-gold (+molybdenum) systems present in the Sulphurets Creek area; others include the nearby Sulphurets and Mitchell zones and the Snowfield disseminated gold doposit.

The Granduc mine, 15 km south of the Doc property (Figure 3), includes a series of concordant massive sulphide lenses hosted by Early Jurassic, deformed volcanic and lesser sedimentary recks. These sulphide lenses are considered (Grove,1986) to be syngenetic, volcanogenic deposits which were deformed by subsequent metamorphic processes. Granduc reserves prior to mining were 39 million tonnes grading 1.73% copper with some gold and silver credits. About half of the reserve was mined between 1971 and 1984.

The Eskay Creek mine, north of Unuk River (Figure 3), is a precious metals enriched, volcanogenic massive sulphide deposit. Several stratiform, polymetallic deposits are hosted by clastic sediments and felsic volcanic rocks of the uppermost (Middle Jurassic) Hazelton Group (Barrett and Sbedock,1996). This mine in 2000 processed 192200 tonnes grading 58.39 g/t gold and 2400 g/t silver (Homestake Mining Company 2000 Annual Report). Production amounted to 333,200 ounces gold and 14.7 million ounces silver; remaining proven and probable reserves are 1.47 million tonnes grading 44.91 g/t gold, approximately equal to reserves at inception of mining in early 1995.

Local and Property Geology

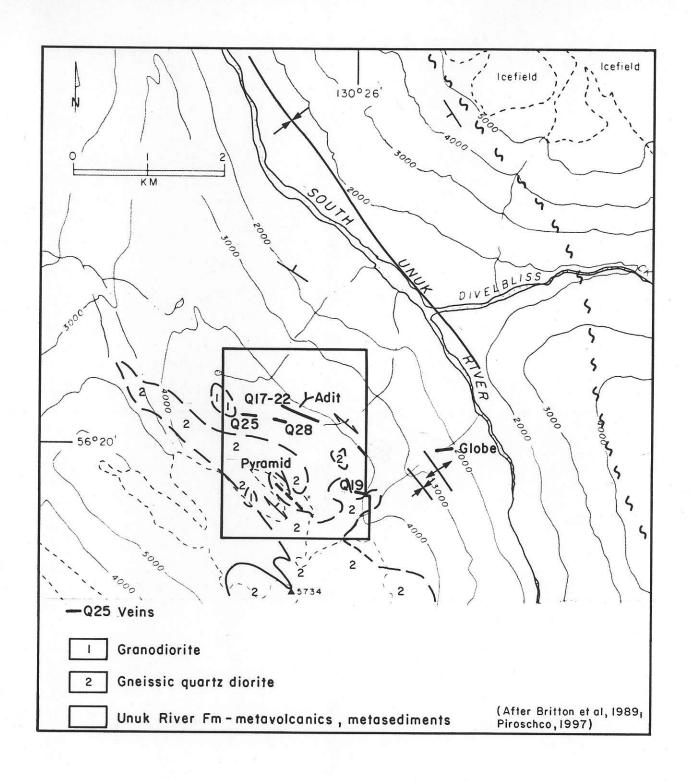
Principal geological features in the area of the current Doc property, shown in general fashion on Figure 4, are as summarized by Piroshco (1997) and are based on mapping by Freeze et al (1989) and Alldrick (1989).

The property is mainly underlain by a northwest-trending metavolcanic and metasedimentary sequence initially interpreted (Alldrick et al,1989) as being part of the lowest Hazelton Group (Unuk River Formation) of Early Jurassic age. Subsequent radiometric dating of crosscutting diorite intrusions (Britton,1990) indicates that these layered rocks are in fact part of the Late Triassic Stuhini Group.

Principal lithologies include porphyritic andesites and intercalated siltstones and limestones (marbles) which are intruded by foliated to gneissic quartz diorites, coeval with, or slightly younger than, the layered rocks, and by distinctly younger (Eocene) granodiorites related to the Coast Plutonic Complex. The volcanic and sedimentary rocks are strongly deformed and converted to schists and gneisses, particularly marginal to intrusive rocks. At least two stages of isoclinal and chevron folding are evident (Piroshco, 1997).

Mineralization

While there is some reference to skarn mineralization in marble units, (Piroshco,1997), quartz veins constitute the most significant style of mineralization. At least ten fissure-filling vein structures have been identified by work to date; these occupy shears and dilatant zones which



parallel the northwest structural trend of the folded metavolcanic and metasedimentary host rocks and are best developed marginal to granitic intrusions.

Vein mineralogy consists of massive, crystalline white quartz with some calcite and between 5% and 10% metallic minerals including pyrite, galena, chalcopyrite, sphalerite. specularite and magnetite. Wallrock alteration marginal to the quartz veins is restricted, indicative of a mesothermal environment.

Individual quartz veins are vertical to steeply north-dipping lepses that pinch and swell both horizontally and vertically. Vein widths average 2 metres and individual structures have been traced by surface exposures, trenches and diamond drilling over strike lengths of up to 250 metres. Gold mineralization occurs mainly in brecciated limonitic quartz with higher values noted where pyrite is fresh and unoxidized. The incidence of specularite and galena is locally coincident with higher gold values (Freeze et al,1989).

The more significant gold (+silver)-bearing veins are shown on Figure 4. Of these, the Q17 and Q22 vein structures have been most thoroughly investigated by way of surface trenching, underground drifting and surface and underground diamond drilling (Figure 5).

Q17 Vein

The Q17 vein is a west-northwest striking, subvertical structure which was initially explored in the late 1940s by a number of surface trenches and by diamond drilling. More recent sampling results (Gewargis,1986) for 12 of the trenches indicate a weighted average grade, as calculated by the writer, of 16.03 g/t gold and 86.1 g/t silver over an average width of 2.33 metres and a strike length of 139,5 metres. This structure has also been sampled in detail in the crosscut and drifts of the 1160 metres elevation adit (Figure 5). Sample spacing across the exposed structure was at 2 metres intervals from the face of the west drift to a point midway along the east drift. Incorporating a 3.43 g/t gold cutoff grade, a weighted average grade for this section of the Q17 vein is 11.90 g/t gold over an average width of 1.81 metres and a strike length of 163 metres.

Q17 vein has alse been tested by a number of inclined, surface diamond drill holes which intersected the structure between surface and the 1160 level and to vertical depths of about 50 metres below the level. The numbered holes on Figure 5 are those with intervals containing +3.43 g/t gold; details of these are included in the following table. While many of the 1948 drill holes (numbered 48A,B etc. - Figure 5) reportedly had good values (Piroshco,1997), complete details of these holes are unavailable and consequently are not included.

Table 2

Hole No. 86-3 86-6 86-7	Dip.Azimuth -75 @ 202 -60 @ 215 -75 @ 215	Elevation(m) 1225 1234 1234	TD(m) 108.2 74.1 138.7	Interval(m) 91.4-93.0 65.6-68.1 130.2-133.6	Length(m) 1.6 2.5 3.4	Au(g/t) 5.35 50.50 12.45
86-8	-45 @ 194	1237	72.8	137.2-137.8 59.0-61.0	0.6 2.0	22.49 10.73
88-2	-60 @ 205	1237	106.4	95.2-97.2	2.0	12.86
88-4	-60 @ 205	1216	57.6	42.1-43.0	0.9	14.71
88-6 88-9	-60 @ 205 -55 @ 205	1219 1234	48.5 36.9	28.2-31.3 21.0-22.0	3.1 1.0	5.31 4.46
88-18	-45 @ 205	1237	117.7	71.0-73.0	2.0	18.34
88-24	-60 @ 205	1234	104.2	27.7-28.8	1.1	22.90
88-25 88-26	-50 @ 205 -55 @ 205	1230 1219	119.2 85.0	33.6-35.1 7.9-8.8	1.5 0.9	14.09 6.51

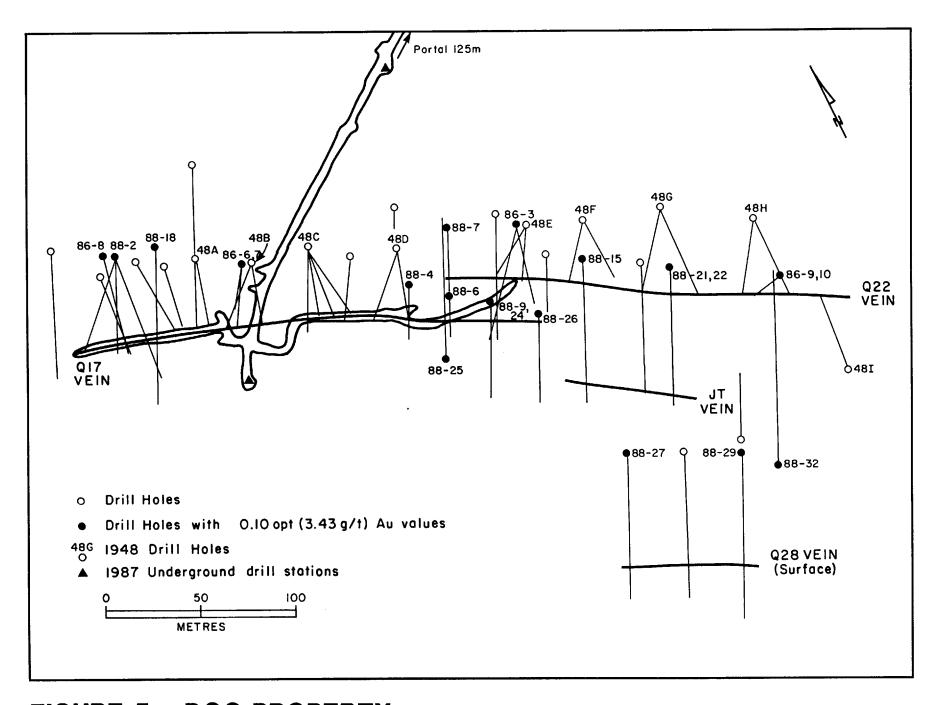


FIGURE 5 - DOC PROPERTY SURFACE DRILL PLAN & UNDERGROUND WORKINGS

Q22 Vein

As indicated on Figure 5, this vein is immediately north of, and parallel to Q17 vein and may be a faulted offset of same. Q22 is exposed on surface in six trenches from which sampling results (Gewargis,1986) indicate a weighted average grade of 6.34 g/t gold over an average width of 2.54 metres and a strike length of 140 metres.

The vein was not explored by underground drifting but was tested by surface drilling over a 200 metres strike length and to vertical depths of between 50 and 100 metres below the surface exposures. Drill holes with intercepts of +3.43 g/t gold include the following:

Table 3

<u>Hole No.</u> 86-9	<u>Dip,Azimuth</u> -60 @ 265	Elevation(m) 1228	TD(m) 49.4	Interval(m) 35.8-36.4 43.5-43.8 45.7-47.2	Length(m) 0.6 0.3 1.5	Au(g/t) 19.68 9.26 20.50
86-10	-45 @ 265	1228	34.4	25.6-30.9	5.3	15.74
88-7	-55 @ 205	1203	106.4	51.4-52.2	8.0	3.81
88-15	-45 @ 205	1214	112.5	22.2-23.9	1.7	3.77
88-21	-45 @ 205	1217	109.4	23.6-24.6	1.0	4.25
88-22	-75 @ 205	1217	53.0	40.6-41.2	0.6	27.19

Other Veins

The *JT* quartz-pyrite vein, parallel to, and 50 metres south of Q22 (Figure 5), was intersected by four 1988 surface drill holes over an apparent strike length of 100 metres. Low gold vatues were obtained ranging from 0.48 g/t gold over 0.14 metre to 3.39 g/t over 2.55 metres (Piroshco,1997).

The surface trace of **Q28** vein is 150 metres south of Q22 (Figure 5). This quartz-pyrite-galena-specularite-magnetite structure was explored by six thenches over a 95 metres strike length and contains a weighted average grade of 7.20 g/t gold over an average width of 1.95 metres. Three 1988 drill holes returned no significant results although a "new vein" was reportedly (Piroshco,1997) intersected at shallow depths. results included 15.06 g/t gold over 0.60 metre in hole 88-27 and 24.55 g/t over 0.30 metre in hole 88-29. It is possible that these results could be from the gently north-dipping Q28 vein.

Q25 vein, exposed on surface and in several trenches east and west of a 60 x 70 metres icefield, is 500 metres west of Q17 (Figure 4). Weighted average grade of the western segment is 18.48 g/t gold over a 2.42 metres width and a 28 metres strike length; the eastern segment grades 4.28 g/t over a 3.00 metres width and an 8 metres strike. This structure was tested by three 1949 drill holes (Piroshco,1997) which returned an average grade of 8.83 g/t gold over a 0.74 metre width. No details are available regarding intercept depths.

Q32 vein, 1000 metres on strike to the northwest of Q17 and near the western property boundary, returned 1.78 g/t gold over 2.44 metres in one trench.

The **Q19** quartz-pyrite vein, which is in the southeastern property area (Figure 4), strikes west-northwest and dips gently north. The vein has been explored by ten trenches over a 25 metres strike length; weighted average gold grade (Pireshco,1997) is 7.65 g/t over a 1.59 metres width.

The *Pyramid Zone* is a 10 to 15 metres wide, northwest-striking shear zone which has been traced in outcrop and by fourteen trenches over a 1200 metres strike length. As described by Piroshco (1997), this is a locally silicified and quartz-veined, clay-altered zone containing pyrite. A weighted average grade of vein samples from seven trenches over 200 metres of strike length at the known northwestern limits of the zone is 2.80 g/t gold over a 0.65 metre width. Samples from six trenches over 110 metres of strike length in the southeastern part of the zone returned a weighted average grade of 0.56 g/t gold over an average width of 0.86 metres. Selected samples from elsewhere along the zone had grades of between 6.62 and 13.23 g/t gold (Piroshco,1997).

Silver Values

Silver grades have not been routinely reported for all drill holes and results for underground sampling do not include silver values. Based on data available, the silver gold ratio for the various vein structures averages about 5:1.

SAMPLING METHODS, SAMPLE PREPARATION and ANALYSES

The following comments pertain to sampling procedures employed during the various work programs completed on the Doc property between 1986 and 1989.

Surface and underground diamond drilling recovered BQ-size core. Recoveries reportedly averaged in excess of 90% (Gewargis,1986) and mineralized core intervals were split with one-half of the sample retained on site. (Note: core boxes believed to contain all drill core recovered between 1986 and 1988 are stacked in several locations near the 1160 adit portal and adjacent camp area.) As indicated on Figure 5, surface drill holes which tested the Q17 and Q22 were drilled on sections 25-30 metres apart.

Underground sampling (Freeze et al,1989) involved the following procedures: (1) three individual muck samples were collected from each round of advance for a total of 198 sample sets. Gold and silver values for each set of three samples were averaged arithmetically. In addition, 300 lbs. of material were collected from each drift round and placed in 45 gallon drums for possible metallurgical testing. It is not known if this testing was carried out and the disposition of these drums is unknown. (2) following each round of advance, two parallel, horizontal sample lines, 1 metre apart were marked for chip sampling on each fresh heading face. In total, 615 face samples were collected for analyses. (3) Back samples were collected at 2 metres intervals perpendicular to the strike of the vein; in each case, 3 or more chip samples were collected between the vein footwall and hangingwall. 312 such samples were collected.

Many of the surface trenches on the Doc property, initially sampled in the late 1940s, were re-sampled during the 1986 - 1988 programs. As reported in the previous section, many of these trenches on the various vein structures were closely spaced; for example, the majority of the trenches on the Q17/Q22 vein structures were excavated normal to the strike at 5 to 10 metres intervals.

All 1986-1989 samples collected for analyses were submitted to either Chemex Labs Ltd., Acme Analytical Laboratories Ltd. or Min-En Laboratories for fire assay determination of gold and silver values, and in most cases, for multi-element ICP analyses. All of the foregoing

facilities are headquartered in Vancouver, B.C. and are well recognized, certified laboratories.

DATA VERIFICATION

The writer has no reason to doubt the quality of trench, drill core or underground samples collected by previous operators from the Doc property nor the veracity of the analytical results results obtained from these samples.

During the course of the writer's brief examination of two areas of the Doc property July 15, 2001, two rock samples were collected for analyses. As noted previously, the property examination and sample collection were hampered by extensive snow cover above 1000 metres elevation.

One sample (M751051) of white, crystalline, fractured quartz displaying minor iron oxide staining and containing occasional 1-2 mm pyrite blebs was collected from the 1160 adit dump (Figure 4). A second sample (M751052) of milky white quartz containing minor sulphide minerals was collected adjacent to one of the few trenches free of snow in the eastern part of the Q22 vein structure 100 metres above and a few hundred metres south of the 1160 adit (Figure 5).

The two rock samples, which may be referred to as character samples, were submitted to ALS Chemex in North Vancouver for determination of 32 major and trace elements by standard ICP techniques plus gold by fire assay with atomic absorption finish. Complete results are included as Appendix I; surnmary results are as follows:

Table 4

Sample Number	<u>Location</u>	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)	Sb(ppm)
M751051	1160 Adit	150	8.0	9	6	2	<2	<2
M751052	Q22 trench	3120	18.4	13	46	<2	<2	<2

As noted, a low gold value was obtained from the adit dump sample. As previously noted, better grade material encountered during underground drifting was placed in drums with lower grade material left on the adit dump. The second sample, which returned 3.12 g/t gold, is interpreted as being representative of lower grade material within the Q22 vein structure.

MINERAL RESOURCE ESTIMATES

The available database permits the estimation of a mineral resource for both the Q17 and Q22 veins. These estimates have been prepared pursuant to CIM Standards on Mineral Resources and Reserves, prepared by the CIM Standing Committee on Reserve Definitions, adopted by CIM Council August 20, 2000 and published in the CIM Bulletin of October, 2000.

For both the Q17 and Q22 structures, the available surface (trenches), underground and surface diamond drilling sampling information is sufficient to categorize the resource estimate as Inferred Mineral Resources which are defined by the CIM Standing Committee as "that part of a Mineral Resource fer which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes."

Q17 Vein

The writer's calculation of an Inferred Mineral Resource incorporates sampling results of surface trenches which are at an elevation of about 1250 metres above sea level plus detailed underground sampling on the 1160 metres level. A number of surface drill holes, which demonstrate continuity of the structure between surface and the 1160 level, also contain values in excess of 3.43 g/t gold (see Table 2) but have not been included in the calculation of the resource.

Results of surface and underground sampling are summarized as follows:

Trenches 1160 Level	Width(m) 2.33 1.81	Length(m) 139.5 163.0	Gold (g/t) 16.03 11.90
Average	2.07	151.0	14.06

The following parameters were used for the resource calculation:

Cutoff Grade - 3.43 g/t gold
No cutting of values in excess of 34.3 g/t gold
No internal or external dilution incorporated
Assumed specific gravity - 2.65
Average Width - 2.07 metres
Strike Length - 151.0 metres
Vertical Range - 90.0 metres (between surface at 1250 metres elevation and adit at 1160 metres elevation)

Q17 Inferred Mineral Resource - 74548 tonnes @ 14.06 g/t gold or 75500 tonnes @ 14.1 g/t gold

Q22 Vein

An Inferred Mineral resource for the Q22 vein has been calculated by section (seven sections between drill holes 88-7 and 86-9,-10 - Figure 5) and incorporates results of surface trenching and drill intercepts of +3.43 g/t gold. Parameters used are the same as listed for the Q22 vein calculation with the exception of the following:

Average Width - 2.15 metres
Strike length - 150.0 metres
Vertical Range - 55.0 metres (average of drill intercepts below surface trenches at 1250 metres elevation)

Q22 Inferred Mineral Resource - 44647 tonnes @ 8.16 g/t gold or 44600 tonnes @ 8.2 g/t gold

Total Inferred Mineral Resource - Q17 and Q22 Veins -119100 tonnes @ 12.0 g/t gold

Previous estimates of "reserves/resources" for the Q17 and Q22 veins include those of Aelicks et al (1988) and Freeze et al (1989) which obviously were not prepared using the current CIM Guidelines.

Aelicks et al (1988) reported "proven, probable and possible" reserves of 187600 tonnes grading 11.0 g/t gold for the Q17 vein and 35700 tonnes grading 12.3 g/t gold for the Q22 structure or a cornbined total of 223300 tonnes grading 11.2 g/t gold. These were reported as uncut and undiluted and were calculated in Imperial units using a tonnage factor of 12 which is approximately equal to a specific gravity of 2.65.

Estimates by Freeze et al (1989) involved a more rigorous approach and incorporated a minimum true width of 1.2 metres, a diluted true width of 1.8 metres, a cutoff grade of 3.43 g/t gold and the cutting of grades exceeding 34.3 g/t to 34.3 g/t gold. The estimates were reported as a "mineral inventory" and included 67800 tonnes @ 9.4 g/t gold for the Q22 vein and 23700 tonnes @ 7.2 g/t for the Q17 vein for a total of 91500 tonnes grading 8.8 g/t gold. The inventory for both veins, using a 10.3 g/t gold cutoff grade, was reported as 24700 tonnes grading 14.7 g/t gold.

INTERPRETATION AND CONCLUSIONS

The Doc property is situated in a well-documented, highly mineralized area of northwestern British Columbia. Past work on the property has identified a number of west-northwest striking, steeply-dipping quartz veins containing appreciable gold and silver values.

Two of the vein structures, the Q17 and Q22 veins, have been explored in some detail by surface trenching, 4680 metres of diamond drilling in 50 holes and by 680 metres of underground workings. The writer's estimate of Inferred Mineral Resources contained within these two vein structures amounts to 119100 tonnes grading 12.0 g/t gold. Both structures are open to depth and possibly along strike. Limited sampling of seven other known vein systems has returned locally significant gold and silver values and some of these structures are considered to have good potential for the definition of additional resources

The various vein structures have been described as occupying dilatant zones best developed in more competent metavolcanic rocks as opposed to interlayered metasedimentary sequences. While the veins reportedly pinch and swell both along strike and down-dip; the mesothermal character of the veins is indicative of good potential for continuity of structure and grade to depth.

Other styles of mineralization may be present on the property. Metamorphosed calcareous sedimentary rocks, recognized in the central and southern property areas may have potential for skarn-type gold and base metals mineralization. An example of endoskarn mineralization, developed in a deformed metadiorite stock, has been reported (Glover, 1989) as extending over a 700 x 200 metres area and locally containing magnetite-pyrite-pyrrhotite. Although no significant precious or base metal values were reported, this style of mineralization warrants further investigation.

The nature and age of the host rocks are similar to those hosting the nearby Granduc copper deposit. It is not known if any investigation of this style of mineralization has been carried out in the past.

RECOMMENDATIONS

The writer is of the opinion that the Doc property is of sufficient merit to warrant further exploratory work. It is recommended that this additional work be conducted in phases in order to gain a better knowledge of lesser explored parts of the property prior to undertaking additional drilling.

All of the known gold (and silver)-bearing quartz veins are situated in relatively open subalpine and alpine terrain in the southern two-thirds of the current property area. This area features abundant bedrock exposure. An apparently unexplored part of the property includes the northeastern portion below, and northeast of the adit portal at 1160 metres elevation.

This is a well forested, relatively steep area with fewer bedrock exposures than the higher areas of the property. Elevations range from 1160 metres at the adit portal to about 700 metres at the northeast corner of the property. Although a considerably more difficult area to explore, there is no reason to believe that it is not equally as prospective as the area of the property explored to date. In this regard, it is worthy of note that the principal gold-bearing structures on the adjacent Globe property occur in densely forested and steep terrain between elevations of between 600 and 750 metres.

It is recommended that a first phase exploratory program be directed to this area of the property. This work should initially include basic prospecting and detailed soil sampling along flagged topographic contours 100 metres apart in elevation, beginning at the adit portal level. It is anticipated that five contour lines, parallel to the prevailing slope (ie - northwest direction), and of varying lengths, will be sampled at 50 metres intervals. This should result in the collection of about 100 samples.

it is also recommended that this area be tested by way of a high resolution, gradient Induced Polarization (IP) survey employing 10 metres dipole spacings. This method, which provides resistivity measurements in addition to IP readings, may be successful in detecting new quartz veins and an orientation survey across known structures (ie - Q17 vein) would be in order prior to undertaking the survey in the northeastern property area. The IP survey of his area will necessitate the establishment of a 6.5 km cut grid consisting of several northeast crosslines at 200 metres spacings off a northwest baseline. This orientation will ensure that the survey is carried out normal to the prevailing west-northwest structural trend.

Prior to the inception of the field program all available records of previous work on the Doc property should be compiled. An orthophoto base map, showing topography, is a necessary requirement for ongoing field investigations.

The two existing buildings near the adit portal can be readily rehabilitated for camp purposes. It is anticipated that the phase one program will take about one month to complete.

A second phase program of diamond drilling will be contingent on the results of first phase work which may result in the identification of targets for drill-testing. First phase work may also identify additional drill targets in the better explored parts of the property.

COST ESTIMATE

Phase I

Data compilation, base map preparation Personnel	\$13,500.00
Geologist - \$400/day x 40 days	\$16,000.00
Geological assistants - (3) - \$750/day x 30 days	\$22,500.00
Camp cook, first aid attendant \$350/day x 30 days	\$9,000.00
	\$47,500.00
Camp costs - \$750/day x 30 days	\$22,500.00
Soil sample analyses- 100 samples x \$22/sample	\$2,200.00
Rock sample analyses - 50 x \$25/sample	\$1,250.00
Grid construction - 6.5 km @ \$800/km	\$5,200.00 \$34.500.00
High Resolution Gradient IP Survey - \$1,750/day x 14 days Helicopter support - 30 hours @ \$1,100/hour	\$24,500.00 \$33,000.00
Mobilization, demobilization expenses	\$12,000.00
Miscellaneous -	Ψ12,000.00
field supplies, rentals, freight, communications	\$10,000.00
Supervision, reporting	\$10,000.00
Contingencies @ 15%	\$27,250.00
Total, Phase I	\$27,250.00 \$208,900.00
Total, Phase I	
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days	\$208,900.00 \$300,000.00 \$14,000.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days Camp cook, first aid attendant - \$350/day x 35 days	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00 \$12,250.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days Camp cook, first aid attendant - \$350/day x 35 days Camp costs - \$750/day x 35 days	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00 \$12,250.00 \$26,250.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days Camp cook, first aid attendant - \$350/day x 35 days Camp costs - \$750/day x 35 days Sample analyses - 200 x \$25/sample	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00 \$12,250.00 \$26,250.00 \$5,000.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days Camp cook, first aid attendant - \$350/day x 35 days Camp costs - \$750/day x 35 days Sample analyses - 200 x \$25/sample Helicopter support - 50 hours @ \$1,100/hour	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00 \$12,250.00 \$26,250.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days Camp cook, first aid attendant - \$350/day x 35 days Camp costs - \$750/day x 35 days Sample analyses - 200 x \$25/sample Helicopter support - 50 hours @ \$1,100/hour Miscellaneous -	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00 \$12,250.00 \$26,250.00 \$5,000.00 \$55,000.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days Camp cook, first aid attendant - \$350/day x 35 days Camp costs - \$750/day x 35 days Sample analyses - 200 x \$25/sample Helicopter support - 50 hours @ \$1,100/hour Miscellaneous - field supplies, rentals, freight, communications	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00 \$12,250.00 \$26,250.00 \$5,000.00 \$10,000.00
Total, Phase I Phase II (contingent on results of Phase I) Diamond drilling - 2000 metres @ \$150/metre (all-inclusive) Geologist - \$400/day x 35 days Geological assistant - \$250/day x 35 days Camp cook, first aid attendant - \$350/day x 35 days Camp costs - \$750/day x 35 days Sample analyses - 200 x \$25/sample Helicopter support - 50 hours @ \$1,100/hour Miscellaneous -	\$208,900.00 \$300,000.00 \$14,000.00 \$8,750.00 \$12,250.00 \$26,250.00 \$5,000.00 \$55,000.00

Total, Phase II

\$507,450.00

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PART B - EVALUATION REPORT

Introduction

The purpose of this section is to provide an independent estimate of the current value of the Doc gold property.

As described in the previous section of this report, results of past sampling programs allow for the estimation of Inferred Mineral Resources for two of the gold-bearing vein structures on the Doc property. As these estimates pertain only to inferred resources, they cannot be assigned a dollar value; nevertheless, the identification of these resources does attest to the merit of the subject mineral property.

Evaluation Methodologies

Evaluation or valuation of mineral properties, particularly those in the exploration stage, is an exercise which is currently undergoing further review (Draft Discussion Paper - CIM Special Committee on Valuation of Mineral Properties (CIMVal), April 2001). Neverthaless, several approaches have been used in the recent past to address the issue of assigning value to mineral properties. In summary, these include:

- (1) Comparable Transaction Analysis is a market approach to the valuation of exploration stage mineral properties (Lawrence,1986,2000). This method involves a review of documented option and farm-in agreements entered into by willing buyers and willing sellers in an open and unrestricted market. This method works best where it is possible to compare a subject property with nearby, similar properties for which recent option/participation agreements have been negotiated.
- (2) Discounted Cash Flow estimates to determine the present value of a mineral property ere appropriate for properties for which an economically viable deposit has been identified and a feasibility study has been completed.
- (3) Geotechnical Rating Method, a cost approach to valuation, measures the conceptual probability of the discovery of a mineral deposit on a subject property by way of a geoscience factor rating method to generate a cash value for each mineral claim comprising the property (Kilburn,1990). A systematic assessment of each mineral claim is undertaken to determine its location relative to significant mineralization, producing mines and on- and off-property geological, geochemical and geophysical targets. Each of these categories includes a number of sub-categories ranging from high to low potential and which have been assigned numerical values. These values are combined and used as a multiplier of a deemed base acquisition cost to determine the value of each mineral claim comprising the subject graperty. This method is appropriate for mineral properties situated in well known, established or emerging mining districts.

(4) Appraised Value Method involves a cost approach to assigning value to a mineral property for which a viable deposit has not been defined (Roscoe,1986,2000). The value of such properties is based on its exploration potential and this method provides a means by which a value of this potential can be measured. A combination of past exploration expenditures plus warranted future expenditures to test the exploration potential are used to arrive at a property value. Only those past expenditures which are meaningful and have effectively advanced the property potential are considered to be retained expenditures; these are combined with the estlmated costs of a recommended and warranted program of additional investigative work to arrive at an estimate of property value.

Value of the Doc Gold Property

Comparable transaction analysis, usually a good measure of mineral property value, is not considered applicable in providing an estimate of value for the Doc property inasmuch as there are records of only a few mineral property transactions in this particular part of British Columbia over the past 10 years. Discounted cash flow estimates apply only to those mineral properties for which a feasibility study has been completed; consequently this also is not a viable approach for the subject property.

The best methods for determining a value for the Doc property are the two cost approaches, namely the Appraised Value Method and the Geotechnical or Geoscience Factor Method.

Appraised Value Method

As noted, this approach involves a determination of the value of the potential of a mineral property based on previous exploration expenditures. Past exploration expenditures on a subject mineral property are assessed to determine if a property's value is either enhanced or diminished by previous exploration work. Assuming the value has been enhanced, there must also be a reasonable expectation that if additional funds are spont, the property's value will be further enhanced. A combination of retained past expenditures plus warranted future expenditures can provide an estimate of property value (Roscoe, 1986,2000).

The writer is of the opinion that the value of the Doc property has been enhanced by past exploration work and that good potential exists for increasing the current inferred mineral resources within the known vein and for the discovery of additional vein structures.

Past exploration expenditures, as documented in assessment reports on public file, are as follows:

Year	Company	Expenditures
1986	Magna Ventures/Silver Princess	\$191,757
1987	Magna Ventures/Silver Princess	\$1.500,000
1988	Echo Bay Mines Ltd.	\$2,194,000
1989	Echo Bay Mines Ltd.	\$12,050
	Total	\$3,897,807

It is necessary to determine what percentage of the foregoing amount can reasonably be

deemed to be retained expenditures in order to arrive at a value for the property. By Roscoe's (1986,2000) methods, if the exploration expenditures had been incurred in the recent past, the property retained by the previous owner and additional exploration work planned, 100% would be deemed as retained expenditures.

In the case of the Doc property, little substantive work has been done since 1989 and the original mineral claims were allowed to lapse. The property in 1989 consisted of 316 mineral claim units or an area of 7900 hectares. The present mineral claims, which cover an area of 400 hectares, include all of the known, significant vein structures and it is estimated that 75% of the 1986-1989 exploration expenditures or \$2.9 million, were incurred within this area. 25% of this amount, or \$725,000 is considered to be a reasonable estimate of retained past expenditures.

Warranted future expenditures would include the writer's recommended first phase program, estimated to cost \$208,900, and designed to assess the potential of a lesser explored part of the Doc property. For purposes of this evaluation, 100% of these costs are considered to be retained future expenditures

A value for the Doc property, using the Appraised Value Method, is the sum of retained past expenditures and retained future expenditures as follows:

Retained past expenditures \$725,000 Retained Future Expenditures \$208,900

Total \$933,900

Geotechnical / Geoscience Rating or Factor Method

This method, as proposed by Kilburn (1990,1998), involves a geoscience factor rating method which generates a cash value of individual mineral claims. A systematic assessment of several technical characteristics of individual mineral claims is made to determine a series of multipliers which are applied to a deemed base acquisition cost per claim. Kilburn proposed a base acquisition cost of \$400 per 16 hectare claim (Ontario) in 1990; this was subsequently revised to \$450 (Kilburn, 1998).

Mineral claim units in British Columbia are 500×500 metres or 25 hectares in size; consequently, using Kilburn's model, deemed base acquisition cost per claim unit would be 56% greater or \$700 per unit.

Kilburn's 1990 proposal involved the assessment of the importance of five main geotechnical characteristics for individual mineral claims or units in order to assign a dollar value. These include location of the subject property relative to significant, off-property (off claim) mineralization and/or producing mines, location relative to known off-property geological, geocherhical and geophysical targets, grades of mineralization on the claim being evatuated, plus the incidence of geophysical; and/or geochemical targets and geological patterns favourable for mineralization. Each of the five principal characteristics include a number of subcategories ranging from high to low potential which have been assigned numerical values. As previously noted, these are combined and used as a multiplier of the base cost of claim acquisition.

The Doc property consists of two British Columbia 4-post mineral claims comprising 16 mineral claim units of 25 hectares each for a total property area of 400 hectares. Based on parameters proposed by Kilburn (1990) all of the 16 mineral claim units would have a value in excess of the base cost of acquisition or \$700 per unit.

The mineral claim unit with the greatest potential would be that in the northern part of the Eldorado 4 mineral claim which includes the Q17 and Q22 vein structures, both of which contain inferred mineral resources. Using Kilburn's 1990 methodology, the dollar value for this claim unit is derived as follows:

(a) Location of claim unit relative to off-property (outside the claim unit being assessed), significant mineral occurrences. These would include the nearby Q25and Q28 veins, both of which contain "sub-ore grade mineralization" which has been measured in three dimensions by surface trenching and sampling and by limited diamond drilling. These are within 1.6 km of the subject claim unit, consequently the value factor or multiplier would be 2.5.

In addition, the adjacent claim units also contain "interesting but sub-ore grade mineralization" which has been measured in two directions, and including the JT and "new vein". The applicable multiplier would 1.5.

- (b) Location of the claim unit containing the Q17 and Q22 veins relative to known off-claim geological, geochemical, geophysical targets. Three or more such targets would be applicable in this case and would include indicated extensions to other known vein structure. The value or multiplier factor would be 1.5.
- (c) Grades of mineralization on the claim unit under evaluation both the Q17 and Q22 veins contain what would be categorized as an "ore grade mineralized zone, which has been measured in three dimensions, at a size which is economically interesting (not yet shown to be economically exploitable)." A multiplier of 8.0 would be applicable.
- (d) Geophysical and/or geochemical targets on the claim unit under evaluation in other words targets similar to those indicative of known mineralization these would include potential parallel veins structures and the applicable multiplier would be 3.0.
- (e) Geological patterns on the claim unit two such patterns are evident, including the fact that Q17 and Q22 veins are open to depth and possibly along strike. The multiplier for this category would be 3.0.

The total multiplier for this, the highest priority mineral claim unit,, would be $2.5 \times 1.5 \times 1.5 \times 8.0 \times 3.0 \times 3.0 = 405.0$.

The mineral claim unit would have an estimated value of Base Cost of Acquisition $($700) \times \text{Multiplier} (405.0) = $283,500.$

A similar exercise, undertaken for lower order priority mineral claim units includes the following:

- Claim unit including Q28 vein plus potential northwest strike extension of Q17 vein - Multiplier -202.5. Value = Base Acquisition Cost (\$700) x 202.5 = \$141,750.

- Claim unit containing Q25 vein same rating as previous. Value = \$700 x 202.5 = \$141,750.
- Claim units (2) containing the Pyramid zone and Q19 vein multiplier for each would be 81.0 and combined value of these two claim units would be $$700 \times 81.0 \times 2 = $113,400$.
- Balance of the 11 remaining claim units comprising the property are deemed to have a similar value. These include claim units between Pyramid zone and Q19 vein, northwest and southeast strike extensions of Q17 and Q22 veins. Applicable multiplier would be 40.5 and combined value for these 11 claim units would be $$700 \times 40.5 \times 11 = $311,850$.

The total estimated value of the Doc property using the Geotechnical/Geoscience Rating or factor method is the sum of values for the various mineral claim units which equals \$992,250.

Conclusions

A fair and reasonable estimate of the current value of the Doc gold property, based on the two different valuation methods, ranges between \$933,900 and \$992,250.

C. CARTER

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CERTIFICATE

- I, NICHOLAS C. CARTER, Consulting Geologist, with residence and business address at 1410 Wende Road, Victoria, British Columbia, do hereby certify that:
- 1. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S.(1962) and the University of British Columbia with Ph.D.(1974).
- 2. I have practiced my profession as a geologist, both within government and the private sector, in eastern and western Canada and in parts of the United States Mexico and Latin America for more than 35 years. Work has included detailed geological investigations of mineral districts, examinations of, and reporting on, a broad spectrum of mineral prospects and producing mines, supervision of mineral exploration projects and comprehensive mineral property evaluations.
- 3. I have been registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1966. I am a Fellow of both the Canadian Institute of Mining, Metallurgy and Petroleum and the Geological Association of Canada and am a past director of The Prospectors and Developers Association of Canada and a past president of the British Columbia and Yukon Chamber of Mines.
- 4. I am a "qualified person" for purposes of National Instrument 43-101. Relevant experience with regard to the foregoing report includes numerous personal examinations, geological studies, and related research projects directed to a number and variety of precious metals deposits throughout British Columbia, elsewhere in North America and in parts of South America.
- 5. I personally examined the Doc gold property on July 15, 2001.
- 6. I have prepared all sections of the foregoing report which is based in part on a previous report on the Doc property prepared by the undersigned and dated June 15, 1998, and on a number of published and unpublished reports pertaining to past exploration work and the geological setting of the property.
- 7. As of the gate of this certificate, I am not aware of any material fact or material change with respect to the subject matter of the foregoing technical report which is not reflected in the report, the omission to disclose which makes the technical report misleading.
- 8. I am not corrently, nor arn I under an agreement, arrangement or understanding or expect to become, an insider, associate, affiliated entity or employee of Glencairn Explorations Ltd. or of an insider or affiliated entity of the issuer. I am not under an agreement, arrangement or understanding or expect to become, a partner of the issuer or of an insider or affiliated entity of the issuer.
- 9. I do not own, directly or indirectly, nor am I under an agreement, arrangement or understanding or expect to acquire, any securities of Glencaim Explorations Ltd. or of an affiliated entity of the Company. I hold no interest, directly or indirectly, in the mineral property that is the subject of the foregoing technical report or in any adjacent mineral property.

8. I have read National Instrument 43-101 and Form 43-101F1 and the foregoing technical report has been prepared in conformity with this Instrument and Form 43-101F1 and generally accepted Canadian mining industry practice.

Dated at Victoria, British Columbia, this 23rd day of July, 2001:

N.C. Carter, Ph.D. P.Eng.

N. C. CARTER

N.C. CARTER, Ph.D. P.Eng. Consulting Geologist

APPENDIX I

Analytical Results



ALS Chemex

Aurora Laboratory Services 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: CARTER, N. C.

1410 WENDE RD. VICTORIA, BC V8P 3T5

A0120821

Comments: ATTN: N.C. CARTER

CERTIFICATE

A0120821

(OUO) - CARTER, N. C.

Project: P.O. #:

Samples submitted to our lab in Vancouver, BC. This report was printed on 25-JUL-2001.

SAMPLE PREPARATION					
METHOD CODE	NUMBER SAMPLES	DESCRIPTION			
PUL-31 STO-21 LOG-22 CRU-31 SPL-21 229	2 2 2 2	Pulv. <250g to >85%/-75 micron Reject Storage-First 90 Days Samples received without barcode Crush to 70% minus 2mm Splitting Charge ICP - AQ Digestion charge			
* NOTE 1:					

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

	NUMBER SAMPLES		METHOD	DETECTION LIMIT	UPPEI LIMIT
1433		Weight of received sample	BALANCE	0.01	1000.0
Au-AA23		Au-AA23 : Au ppb: Fuse 30 grams	Fa-aas	5	10000
Ag-ICP41		Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
Al-ICP41		Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
As-ICP41		As ppm: 32 element, soil & rock	ICP-AES	2	10000
B-ICP41 Ba-ICP41		B ppm: 32 element, rock & soil Ba ppm: 32 element, soil & rock	ICP-AES ICP-AES	10 10	10000
Be-ICP41		Be ppm: 32 element, soil & rock	ICP-AES	0.5	10000
Bi-ICP41		Bi ppm: 32 element, soil & rock	ICP-AES	2	100.0
Ca-ICP41		Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
Cd-ICP41	_	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
Co-ICP41		Co ppm: 32 element, soil & rock	ICP-AES	1	10000
Cr-ICP41		Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
Cu-ICP41		Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
Fe-ICP41	_	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
Ga-ICP41		Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
Hg-ICP41		Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
K-ICP41 La-ICP41		K %: 32 element, soil & rock	ICP-AES	0.01	10.00
Mg-ICP41	-	La ppm: 32 element, soil & rock Mg %: 32 element, soil & rock	ICP-AES ICP-AES	10 0.01	10000 15.00
Mn-ICP41		Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
Mo-ICP41		Mo ppm: 32 element, soil & rock	ICP-AES	í	1000
Na-ICP41	_	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
Ni-ICP41		Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
P-ICP41	2	P ppm: 32 element, soil & rock	ICP-AES	10	10000
Pb-ICP41		Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
S-ICP41		S %: 32 element, rock & soil	ICP-AES	0.01	10.00
Sb-ICP41		Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
Sc-ICP41		Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
Sr-ICP41		Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
Ti-ICP41 Tl-ICP41		Ti %: 32 element, soil & rock Tl ppm: 32 element, soil & rock	ICP-AES	0.01	10.00
U-ICP41		U ppm: 32 element, soil & rock	ICP-AES ICP-AES	10 10	10000
V-ICP41	_	V ppm: 32 element, soil & rock	ICP-AES	10	10000



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* NOTE 1:					

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

METHOD CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
W-ICP41 Zn-ICP41		W ppm: 32 element, soil & rock Zn ppm: 32 element, soil & rock	ICP-AES ICP-AES	10 2	10000 10000



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Project : Comments: ATTN: N.C. CARTER

Page Number :1-A Total Pages :1 Certificate Date: 25-JUL-2001 Invoice No. :10120821

P.O. Number Account :OUO

SAMPLE M751051 M751052				_					CE	RTIF	ICATE	OF A	NALY	'SIS		A0120	821		-
	PREP CODE	Weight Au Kg Fl			As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm
	94139402 94139402	1.44 2.50	150 0.8 3120 18.4	0.01	< 2 < 2	< 10 < 10	220 1240	< 0.5 < 0.5	< 2 < 2 <	0.02 0.01	< 0.5 < 0.5	< 1 < 1	119 122	9 13	0.23 0.51	< 10 < 10	< 1 < 1	0.01 < 0.01	< 10 < 10

CERTIFICATION:



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Page Number :1-B Total Pages :1 Certificate Date: 25-JUL-2001 Invoice No. :10120821

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SAMPLE				<u></u>						CE	RTIFI	CATE	OF A	NAL	/SIS		\0120	B21	
	PREP CODE	M g %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	ppm U	D Dan	ppm W	Zn ppm	
751051 751052	94139402	< 0.01 < 0.01	35 5	< 1 <	0.01	2 2	< 10	6 46	0.01	< 2 < 2	< 1 < 1	8 <	3 0.01 3 0.01	< 10	< 10 < 10		< 10 50	2 < 2	
																	63		

CERTIFICATION:_



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Account : OUO

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SAMPLE	PREP	Weight Au ppb Kg FA+AA	ppm yg	A 1 %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cq ppm	Co ppm	Cr ppm	Cu Dom	Fe %	Ga ppm	Hg ppm	K %	La ppm
M751051 M751052	94139402 94139402	1.44 150 2.50 3120	0.8 18.4	0.01 0.01	< 2 < 2	< 10 < 10	220 1240	< 0.5 < 0.5	< 2 < 2 <	0.02	< 0.5 < 0.5	< 1 < 1	119 122	9 13	0.23 0.51	< 10 < 10	< 1 < 1	0.01	< 10 < 10
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SAMPLE	PREP CODE	Mg %	Mn ppm	Mo Na		ppm p	Pb ppm	S %	Sb ppm	Sc ppm	Sr T	T1	mqq U	ppm V	DDur M	Zn ppm	
M751051 M751052	94139402 94139402	< 0.01 < 0.01	35 5	< 1 < 0.01 4 < 0.01	2 2	< 10 < 10	6 46	0.01	< 2 < 2	< 1 < 1	8 < 0.01 19 < 0.01	< 10 < 10	< 10 < 10	< 1 < 1	< 10 50	< 2	
																1	

CERTIFICATION: