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REPORT ON THE RED 1-6 MINERAL CLAIMS,

BITTER CREEK PROJECT:

2000 GEOCHEMICAL AND GEOLOGICAL

FOLLOW-UP SURVEYS

BITTER CREEK AND CLEMENTS LAKE AREAS:

LATITUDE 56° 02' NORTH

LONGITUDE 129° 54' WEST

NTS 104A/04W

SKEENA MINING DIVISION,

STEWART GOLD CAMP,

NORTHWESTERN BRITISH COLUMBIA

BY

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**GEOLOGICAL SURVEY BRANCH
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JANUARY 2001

26,581

SUMMARY: 2000 BITTER CREEK PROJECT CARRIED OUT ON THE RED 1-6 MINERAL CLAIMS:

The Red 1-6 Mineral Claims are located in the Bitter Creek and Clements Lake Areas of the Stewart Gold Camp of Northwestern British Columbia. The 6 contiguous claims comprise 61 Claim Units and cover about 15 square km. The Red 1-4 Claims were staked in September 1999, as part of a regional geochemical stream sediment and geological evaluation (i.e., a BC Prospectors Assistance Program) of various, currently unexplored environments in the camp (Molloy, 2000). In 2000, the Red 3 Claim was re-staked as New Red 3, to cover open ground; and, the Red 5 and Red 6 Claims were staked as part of the 2000 follow-up activities.

The 1999 geochemical program had almost immediately identified interesting, polymetallic targets in the Bitter Creek Valley (Molloy, 2000). Initial follow-up activities indicated that an historic mill complex was located in one of the target areas. Research in 1999 and 2000 first indicated that mill feed had apparently come from a source or sources in proximity to the mill. However, data provided by the BC government on August 14, 2000 indicated that the mill was owned by the Adam Milling Company and operated from April until September 1973. The mill was apparently built to treat copper-gold ore from the Red Cliff deposit on American Creek and from the Roosevelt deposit farther up Bitter Creek (Minfile 104A037).

The author's current interest in the Bitter Creek and Clements Lake Areas is based primarily on the favourable geological environment, which includes the Eocene Bitter Creek quartz monzonite pluton, a satellite of the Coastal Plutonic Complex; and, proximal, altered Hazelton Group Rocks, including Unuk River Formation andesite rhyolite flows, and pyroclastic rocks, including crystal tuff and crystal tuff breccia. The environment becomes particularly interesting when the various stream sediment anomalies are referenced with respect to specific geological settings on the property, and in terms of the relevance of such polymetallic anomalies obtained from similar environment elsewhere in the Stewart Camp. For example, the geology of the Poly Property (Molloy, 2000P) includes the Entrance Peak quartz monzonite pluton, in the vicinity of which polymetallic stream sediment and soil anomalies are indicative of rather prospective and only recently discovered gold-copper-silver-lead-zinc targets.

The 2000 Bitter Creek Project was also carried out under the BC Prospectors Assistance Program as part of a regional project. In addition to the aforementioned claim staking, the exploration activities included compass and chain surveying of access roads, mill site roads, trails, and hiking trails; the installation of various flagged grid and control lines; detailed and reconnaissance geological and geochemical surveys, including the collection of 113 stream sediment, rock, soil and check samples and their analysis for gold and 34 element ICP; and, some airborne investigation to ascertain possible local source areas of the Adam's mill feed.

A> Bitter Creek Area Geological and Geochemical Surveys:

All of the 10 stream sediment samples collected in the Bitter Creek Valley on the Red Property have anomalous copper and cadmium contents ranging between 64 and 2330 ppm and 1 and 5 ppm, respectively. Six samples have anomalous lead contents ranging between 20 and 268 ppm; 9 samples have anomalous zinc contents between 130 and 346 ppm; 5 samples have anomalous arsenic contents between 32 and 80 ppm; three samples have anomalous gold values between 30 and 120 ppb; and five samples have anomalous silver values between 0.8 and 4.4 ppm.

The stream sediment samples are indicative of at least two areas of interest: Area 1> an area located about 1.2 km south of the historic mill on the Bitter Creek Road (sample 759713SS: 346 ppm zinc, 100 ppm copper; 80 ppm arsenic; 5 ppm cadmium; and sample 759714SS: 120 ppb gold; 150 ppm zinc, 79 ppm copper, 40 ppm arsenic); and, Area 2> the Mill Area (e.g. sample 759788SS, a retake of the original discovery sample 160207SS, located on the Bitter Creek Road about 70 m north of the mill: 35 ppb gold; 4.4 ppm silver; 256 ppm lead; 268 ppm zinc; 2330 ppm copper). The original sample contained 50 ppb gold; 5 ppm silver; 372 ppm lead; 346 ppm zinc; and, 1325 ppm copper.

Four of the 54 soil samples collected on the property in the Bitter Creek Valley were taken from the historic tailings pond, which is now dry and located about 250 m north of the mill. The four samples have gold contents ranging between 300 and 510 ppb; silver contents between 4.4 and 5.5 ppm; lead contents between 18 and 68 ppm; zinc contents between 8 and 22 ppm; copper contents between 188 and 840 ppm; arsenic contents between 42 and 74 ppm; and bismuth contents between 34 and 52 ppm. The analytical results are somewhat suggestive of the metals recovered in the mill i.e., gold, copper, and silver from rock with a distinctive arsenic-bismuth signature.

The remaining 50 B-horizon soil samples were mainly taken on grid lines in the vicinity of the mill. Twenty-five have anomalous gold values ranging between 10 and 360 ppb; 34 have anomalous silver values between 0.8 and 25 ppm; 35 have anomalous copper values between 40 and 1550 ppm; 19 have anomalous arsenic contents between 30 and 48 ppm; 2 have anomalous zinc contents of 172 and 1270 ppm; 4 have anomalous bismuth contents between 6 and 144 ppm; and two have anomalous W contents of 20 and 70 ppm. The results are considered reflective of the favourable rhyolite and rhyolite breccia horizon exposed on the east edge of the Bitter Creek Road. The felsic rocks appear to have been intruded by the quartz monzonite pluton, with which they have both sharp and gradational contacts. A large majority of the soil samples taken within 100 m of the east side of the road have anomalous silver, lead, copper, and arsenic values. The higher zinc values are also located in this area, along with the majority of anomalous gold values.

The gold anomalies are not limited to the area of the historic mill site e.g. the second and third highest gold values (120 and 95 ppb) and the second highest copper value (524 ppm) were obtained on higher ground, to the east of the site. The most interesting soil sample (759769SO)

was dug from the bank above the culvert where the aforementioned stream sediment samples 759788SS and 160207SS were taken. The soil sample returned 125 ppb gold; 25 ppm silver; 1510 ppm lead; 2270 ppm zinc; 34 ppm arsenic, 8 ppm cadmium and 26 ppm bismuth. The significance of this apparently important sample has yet to be fully ascertained: while its metal contents could be possibly due to run off from the muck pile to the east or from the mill site to the south, there is little evidence of any such historic metal dispersion or contamination elsewhere on the property, except in the tailings pond.

The second most interesting soil sample (759753SO) was taken about 200 m south of the mill, just east of the Bitter Creek Road. It returned 360 ppb gold; 0.8 ppm silver; 28 ppm lead; 124 ppm zinc; 249 ppm copper; 32 ppm arsenic; 1.5 ppm cadmium; 144 ppm bismuth; and, 70 ppm tungsten. The third most interesting soil sample (759758SO) was taken east of all historic infrastructure on the property – about 8 m east of, and above the main muck pile. It contained 95 ppb gold; 6 ppm silver; 44 ppm lead; 28 ppm zinc; 524 ppm copper; 42 ppm arsenic; and, 24 ppm bismuth.

Of the 22 rock samples collected on the property in the Bitter Creek Area, 4 are composite samples of the two main mineralization types on the 2 muck piles located about 100 m above the mill. The smaller dump pile contains quartz-carbonate breccia vein material mineralized with disseminations and fracture fillings of galena, sphalerite and chalcopyrite. Two samples (759729RM and 759730RM) returned 870 and 60 ppb gold; 451.0 and 44.4 ppm silver; 4240 and 7660 ppm lead; 8810 and 44700 ppm zinc; 16 and 6 ppm arsenic; 136.5 and 486.0 ppm cadmium; and 2 and 24 ppm bismuth, respectively.

The two composite samples (759731RM, 759732RM) of semi massive sulfides (coarse pyrite and massive chalcopyrite in silicified, brecciated volcanic rock) from the main pile contained 870 and 2340 ppb gold; 10 and 35 ppm silver; <2 and 50 ppm lead; 124 and 206 ppm zinc; 4670 and 35600 ppm copper; 204 and 692 ppm arsenic; 3 and 6 ppm cadmium; and 80 and 220 ppm bismuth.

Of the remaining 18 rock samples collected in the Bitter Creek area of the property, 17 have strongly anomalous copper contents, ranging between 67 and 66200 ppm; 10 have anomalous gold contents ranging between 25 and 3420 ppb; 5 have anomalous silver contents ranging between 0.8 and 45.2 ppm; 2 have anomalous lead contents of 50 and 84 ppm, one has an anomalous zinc content of 156 ppm; three have anomalous arsenic contents ranging between 80 and 692 ppm; 7 have anomalous cadmium contents ranging between 1 and 6.5 ppm; 7 have anomalous bismuth contents ranging between 6 and 2160 ppm; and, six have anomalous tungsten values ranging between 10 and 670 ppm.

Of the 18 aforementioned rock samples, 9 are from outcrop and 9 are interpreted as subcrop. All of the outcrop samples have anomalous copper contents ranging between 188 to 2920 ppm; and, seven of the samples have anomalous gold contents ranging between 30 and 3150 ppb. The latter gold value came from rock sample 759752R, collected from a 10 cm wide quartz sulfide vein, and located above the aforementioned soil sample 759753SO. The rock sample

returned 3150 ppb gold, 5.6 ppm Ag, 64 ppm lead; 124 ppb zinc; 2920 ppm copper; 6 ppm arsenic; 3 ppm cadmium; 2160 bismuth; and, 670 ppm tungsten. A composite sample (759753R) of hanging wall and footwall rocks composed of rhyolite breccia contained 210 ppb gold; 413 ppm copper; 48 ppm bismuth and 150 ppm tungsten.

The most interesting subcrop sample (759744RS) was dug out of the overburden about 50 m southeast of the mill. The brecciated and silicified, angular semi massive sulfide (pyrite and chalcopyrite) boulder returned 3420 ppb gold; 45.2 ppm silver; 84 ppm lead; 156 ppm zinc; 66200 ppm copper; 648 ppm arsenic; and, 464 ppm bismuth. Gold, silver, copper and zinc soil anomalies are located in the area of the sample. A sample (759745R) of similarly altered rhyolite from a nearby outcrop contained 90 ppb gold, 593 ppm copper, 6 ppm bismuth and 10 ppm tungsten.

Geological surveys indicate that the favourable felsic stratigraphy and its irregular contact with the quartz monzonite extends at least 600 m south of the mill, and is probably in excess of 200 m wide in the vicinity of the mill. The rhyolite and rhyolite breccia remain open for delineation in every direction.

It is concluded from work in the Bitter Creek Valley, that the Adam Mill was built on prospective geology, which continues to offer interesting exploration targets. The copper-gold-bismuth signature of the rhyolite and rhyolite breccia, along with the numerous historic mining claims staked in the area, many of which have recently come open, support, this interpretation.

Although it is firmly documented that the mill feed came from other properties, it is somewhat intriguing that in situ and subcrop mineralization on the property can have a geochemical signature, including bismuth, and alteration that is rather similar to that of the muck on the largest stock pile (e.g., sample 759752R vs. 759731RM). In addition to bismuth, one of the muck samples and a number of the rock samples from the property have anomalous tungsten contents. Based on the author's experience, tungsten is often associated with specular hematite, which is one of the most reliable and important indicators of gold potential in the Stewart Camp.

It is recommended that the Bitter Creek area of the property be followed-up along with the Clements Lake area, which is summarized below. The follow-up work in both areas should first include a detailed compilation to ascertain the precise location of all historic mineral occurrences, their reported geology, access routes and historic work carried out on and in the vicinity of the property. For example, air photos suggest there are a number of historic bush roads and trails leading to the area of the Adam Mill from well above the Bitter Creek Road. Fieldwork indicates many of these are now overgrown by dense vegetation. Do these roads lead to mineral showings and occurrences, which supplied some muck to stockpiles? The currently apparent follow-up targets, which include a number of geochemical anomalies and geological environments outlined by the 2000 work, should be prioritized for follow-up work based on the results of the compilation.

B> Clements Lake Area Geological and Geochemical Surveys:

The Red 5 and 6 Mineral Claims were staked based on the positive results from the 1999 program (Molloy, 1999); and, on the favourable indications from the 2000 work in the Bitter Creek Area. The Bitter Creek quartz monzonite pluton dominates the geology south of Clements Lake. The 1999 work delineated stream sediment anomalies, which were confirmed via the 2000 results. Of the 9 stream sediment samples taken, 8 have anomalous copper contents ranging between 47 and 173 ppm; seven samples have weakly anomalous silver contents between 0.8 and 1.8 ppm; six samples have anomalous lead contents between 22 and 48 ppm; seven samples have weakly anomalous zinc contents between 138 and 176 ppm; six samples have anomalous arsenic between 36 and 146 ppm; and three samples have weakly anomalous gold contents between 10 and 20 ppb. All three streams draining north into Clements Lake have polymetallic sediment anomalies, with the Middle and East Creeks having the strongest gold, copper and arsenic values.

As in the case of the Bitter Creek area, the anomalies are postulated to have sources in altered rocks near or at the contact with the quartz monzonite pluton. The initial follow-up of the East Creek anomaly located a large outcrop of pyritized crystal tuff, a composite sample (759847RF) of which returned 25 ppb gold and 94 ppm copper. Further follow-up of the East and Middle Creek anomalies lead to the discovery of some historic pits and adits at about the 1300 m elevation, about 1.5 km south of Clements Lake. The area is accessible by the Ore Mountain Hiking Trail.

Four contiguous panel samples (686801RP-686804RP) of sulfidized tuff (pyrite veins, stringers) were taken in a small open cut into the hillside. The samples have gold contents ranging between 195 and 1810 ppb and averaging 618 ppb; silver contents between 3.6 to 21.2 ppm and averaging 8.5 ppm; lead contents between 80 and 1010 and averaging 488 ppm; zinc contents between 148 and 216 ppm, and averaging 170 ppm; and, arsenic contents between 348 and 2150 ppb and averaging 917 ppm. A fifth, composite sample (686805RC) was taken from a pit located about 70 m north of the open cut and returned 20 ppb gold, 1.2 ppm silver, 88 ppm lead, 594 ppm zinc and 88 ppm arsenic. Weather conditions did not allow the examination of an adit located about 50 m below the pit.

It is concluded that the geological environment of the Clements Lake area of the Bitter Creek Pluton also offers interesting polymetallic exploration targets. The area, and the Bitter Creek Valley Area apparently have not been subject to recent detailed exploration scrutiny via discovery criteria that have been used successfully, elsewhere in the Stewart Camp. The Red Property is deemed to have sufficient favourable attributes for the initiation of such detailed follow-up work.

The compilation contemplated above in Section A is an important prerequisite. It should also reference the regional structural fabric, including a major east-west trending fault that extends through the property and with which historic mineralization is associated to the west. Based on the integration of the results of the compilation and those from this program, exploration

targets would be prioritized for detailed follow-up. Current priorities include the sulfidized tuffs in the Clements Lake area; the felsic horizon on and in the vicinity of the Adam Mill site and the Bitter Creek Road; the rationale for the upper road network above the mill site; and, a number of rock and stream sediment anomalies in the southern area of the Bitter Creek Road.

A proposed 2001, Phase 1, \$50,000 budget would include some helicopter time for air photo acquisition and interpretation to facilitate the delineation of structural fabric, bush road infrastructure and Ore Mountain historic mineral occurrences and access. The budget would utilize two geologists to carry out detailed follow-up geological and geochemical surveys for 30 days. The objective of the program would be the identification and initial prioritization of drill targets.

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**REPORT ON THE RED 1-6 MINERAL CLAIMS,
2000 BITTER PEAK PROJECT,
SKEENA MINING DIVISION,
NORTHWESTERN BRITISH COLUMBIA**

1. INTRODUCTION:

The following report reviews the work carried out as part of a BC 2000 Prospectors Assistance Program on the Red 1-6 Claims (Map 1). The property is located in the Bitter Creek and Clements Lake Area of the Stewart Gold Camp (Figures 1, 2), Northwestern British Columbia. It was originally staked (Red 1-4 Claims) to cover the postulated source area of a number of significant, polymetallic stream sediment anomalies located as part of the 1999 BC Prospectors Assistance Program (Molloy, 2000). The follow-up targets were discovered close proximity to the Bitter Creek Road and an historic mill site, a few km south of the Stewart-Cassiar Hwy 37A.

The targets comprise both syngenetic and epigenetic gold and polymetallic mineralization, associated with rhyolite breccia and fracture zones in the Bitter Creek quartz monzonite intrusion and in Unuk River Formation crystal tuff and crystal tuff breccia, respectively. The relevant Stewart Camp syngenetic models include the Eskay Creek VMS deposit (Figure 2) with 2000 total reserves of about 2.1 million tonnes containing 2.63 M oz of gold and 116.06 oz of silver; and total deposit size of 7.10 M oz gold equivalent. The deposit is hosted within Contact Unit carbonaceous mudstone and breccia, as well as the underlying rhyolite breccia.

The relevant epigenetic models include the Marc Zone, Red Mountain (Figure 2) type mineralization (auriferous pyrite and chalcopyrite in fracture controlled, often brecciated zones associated with Jurassic diorite intrusions), which totals about 1 M oz grading about 10 g Au/t. The historic Silbak-Premier deposit (Figure 2), which produced 56,000 kg of Au and 1,281,400 kg of Ag from 1918 to 1976, is also a relevant model. The ore is hosted by Unuk River Formation andesites and comagmatic Texas Creek porphyritic dacite sills and dykes. The ore bodies comprise a series of en echelon lenses, which are developed over a strike length of 180 m and through a vertical range of 600 m (Grove, 1986; McDonald, 1988). The mineralization is controlled by northwesterly and northeasterly trending structures and their intersections, but also occurs locally concordant with andesitic flows and breccias.

2. RED PROPERTY:

The Red 1-6 Claims are registered in the author's name, David E. Molloy. The claims comprise 61 units on BC Mineral Titles Map 104A04W (Map 1, Table 1) and cover about 15 square km.

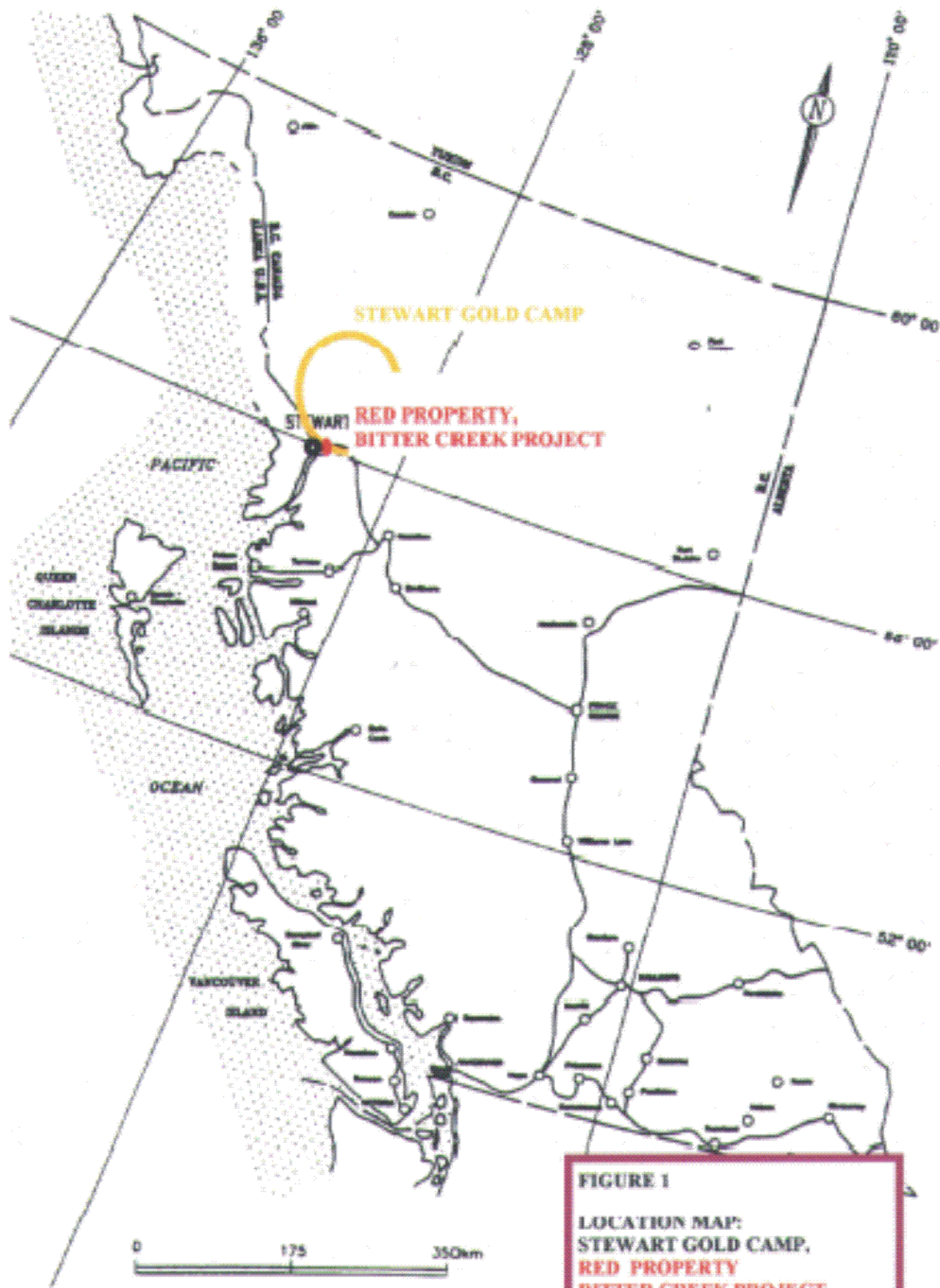


FIGURE 1
LOCATION MAP:
STEWART GOLD CAMP,
RED PROPERTY
BITTER CREEK PROJECT

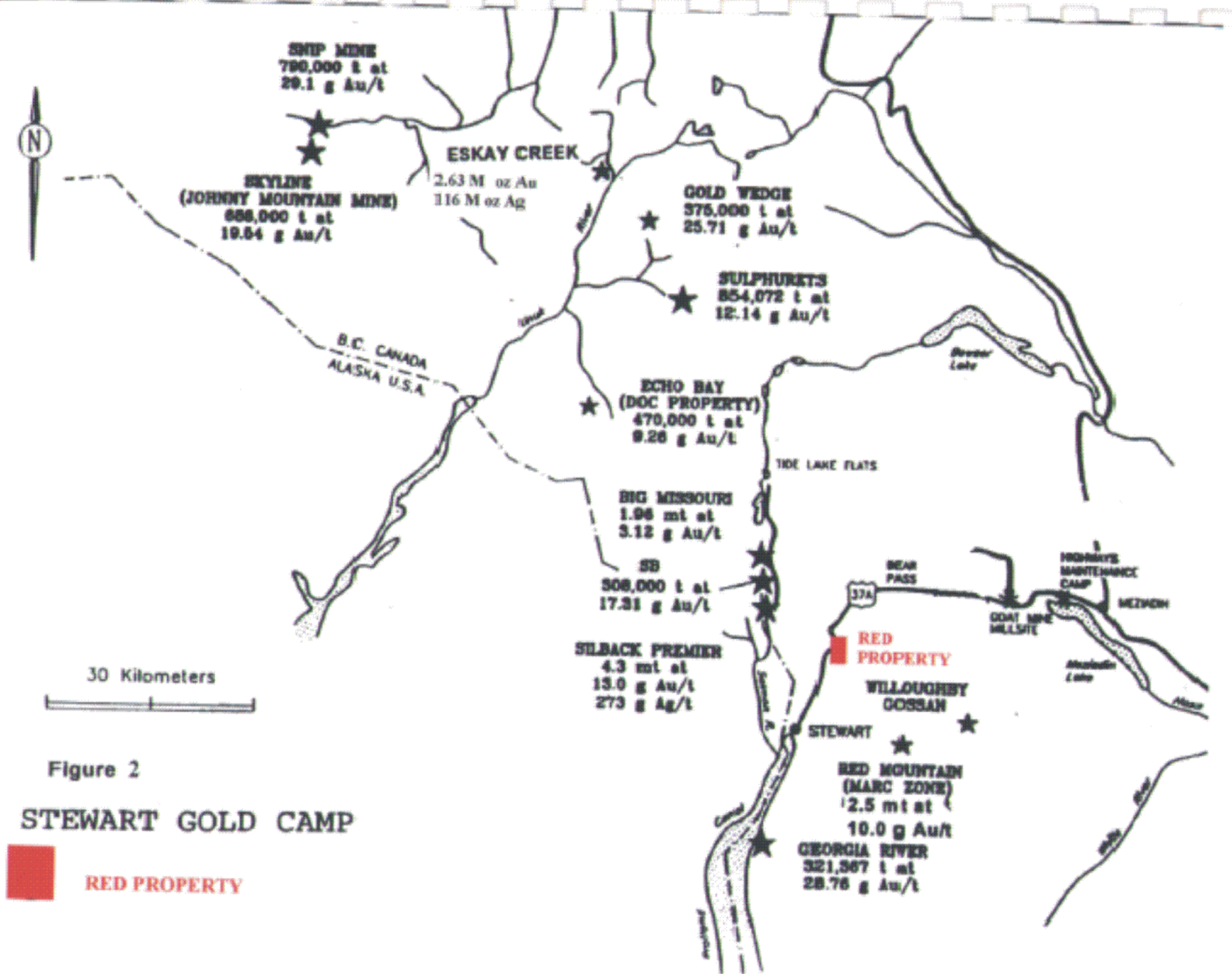


Figure 2

STEWART GOLD CAMP

RED PROPERTY

TABLE 1

RED CLAIMS, BITTER CREEK PROJECT:

CLAIM	UNITS	TENURE NO.	ANNIVERSARY DATE
RED 1	3	371779	SEPTEMBER 7, 1999
RED 2	4	371780	SEPTEMBER 7, 1999
NEW RED 3	15	379231	JULY 29, 2000
RED 4	9	371782	SEPTEMBER 7, 1999
RED 5	18	379658	JULY 31, 2000
RED 6	12	379659	JULY 31, 2000

TOTALS: 6 CLAIMS; 61 UNITS

3. LOCATION AND ACCESS:

The Red Claims (Figures 1-3; Maps 1, 2) are located in the Bitter Creek and Clements Lake Area of the Skeena Mining Division of Northwestern British Columbia, about 12 km east of Stewart. The claims are centred at about Latitude 56° 02'N, Longitude 129° 53'W on NTS Map 104A/04W (Map 2). Access to the Bitter Creek Valley is afforded from Hwy 37A, on the east side of Bitter Creek Bridge, via the Bitter Creek Road. The road is an old lumber/mining trail, which is frequently blocked by fallen trees and washouts. The LCP for the Red 1-4 claims is located about 2 km south of Hwy 37A, on the east side of the Bitter Creek Road, about 200 southeast of the avalanche gates.

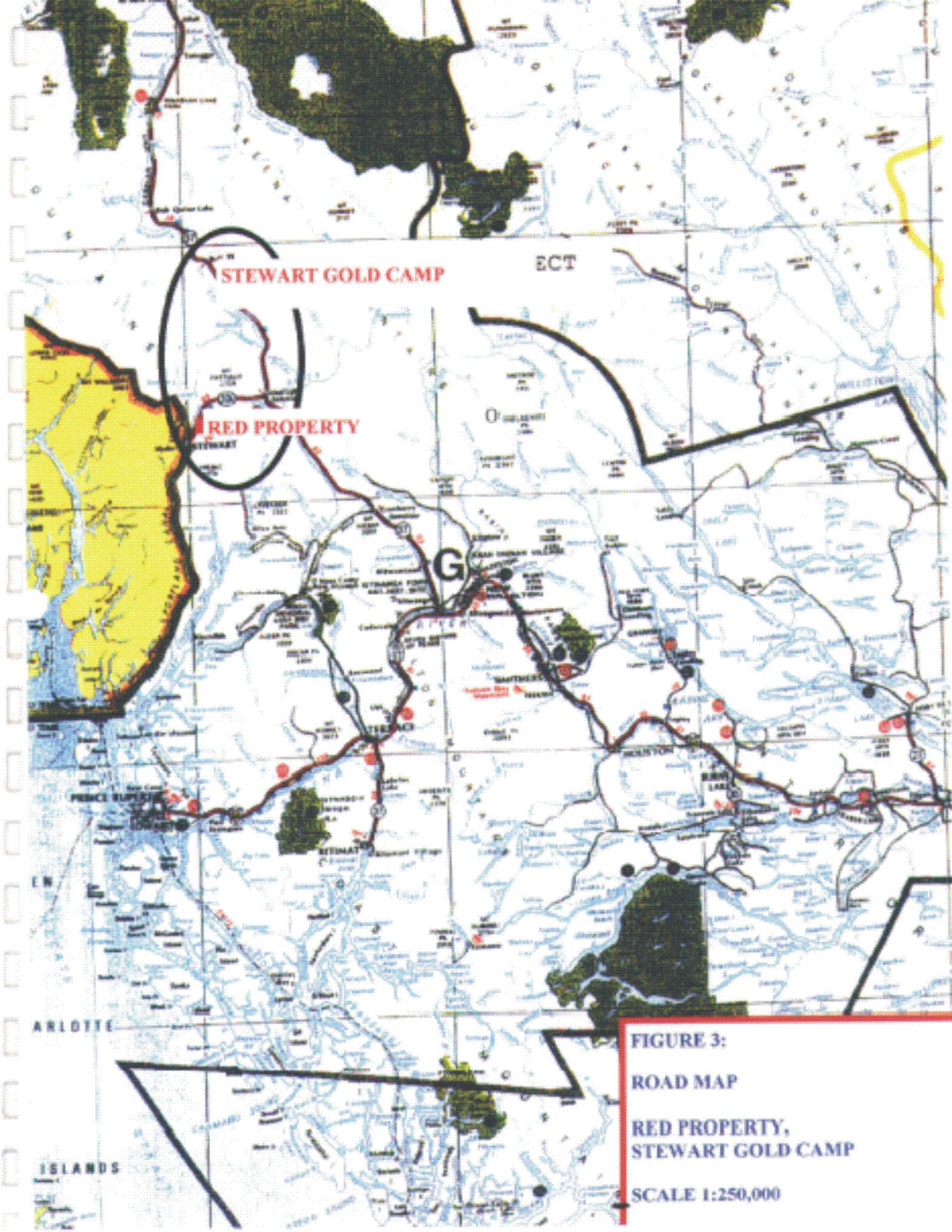
Access to the Clements Lake Area is gained from Hwy 37A, on the east side of Bitter Creek Bridge, via the same exit to the Bitter Creek Road. A left turn at the junction of the Bitter Creek Road (as opposed to a right turn to Bitter Creek Valley) leads to Clements Lake (Maps 1, 2). The LCP for the Red 5 and 6 claims is located on the north tip of the peninsula in the centre of the lake. The Ore Mountain Hiking Trail is located east of Clements Lake and leads south off the old Clements Lake Road (old Hwy 37A). The trail provides foot access to the alpine meadows on Ore Mountain.

4. TOPOGRAPHY, DRAINAGE, CLIMATE, WILDLIFE & VEGETATION:

The western area of the Red Property straddles the Bitter Creek Valley, which trends generally northeast on the property (Maps 1, 2). The eastern part of the property covers the southern area of Clements Lake and extends south, up the north flank of Ore Mountain. Elevations range from less than 100 m above sea level in the valley, to over 1400 m on Ore Mountain (Figure 4; Map 2). Bitter Creek is located in a young mountain valley, which mainly comprises tree covered, steep sides that generally extend southwest and northeast from the creek. Tributary creeks flow southwest and northeast into Bitter Creek, which flows northeast into Bear Creek (Map 2). Bitter Creek can quickly become and often remains a raging torrent because of the extreme topography in the drainage basin.

The exploration field season in the Stewart Camp generally extends from late June to October. However, with the good access, low elevation and close proximity to Stewart, the target areas in the Bitter Creek Valley could be pursued for much of the year. In the summer of 2000, the Stewart area experienced weather worse than that of 1999, which long time residents had characterized as the "worst in memory". Below normal temperatures, with rather constant and often heavy rainfall and thick fog, entailed generally negative exploration conditions for most of the field season. Snow accumulations at higher elevations did not melt in 1999, a conditions never previously experienced by the author in the Stewart Camp.

Although winters have been getting milder and glaciers are receding, snow can cover higher elevations in early September and accumulations can total several meters in a 24-hour period. The narrow mountain valleys in the Bitter Creek Area, southeast of the main target area, are conducive to the development of avalanche conditions in the winter months. Recorded mean



STEWART GOLD CAMP

ECT

RED PROPERTY



G













**FIGURE 3:
ROAD MAP
RED PROPERTY,
STEWART GOLD CAMP
SCALE 1:250,000**

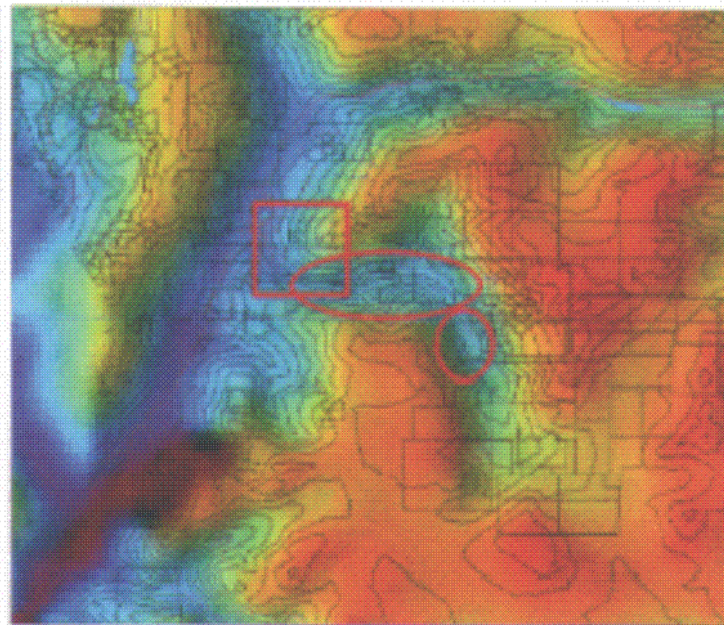
B.C. Ministry of Energy and Mines

FIGURE 4:

**BC RELIEF MAP WITH
MINERAL TITLES**

-  **RED PROPERTY**
-  **BITTER CREEK VALLEY**

-  **ROADS (4M)**
 -  Trunk Road
 -  Major Roads
 -  All Others
-  **Contours (250)**
-  **ROADS (250)**
-  **MINERAL TITLES transparent**
 -  All Others
-  **RIVERS (250)**
-  **LAKES (250)**
-  **BC Colour Relief Map**
-  **BC Border (1:2m)**



SCALE 1 : 431,617



annual snowfalls in the area range from 520 cm at Stewart (sea level) to 1,500 cm at Tide Lake Flats (915 m elevation). Summers are usually characterized by long hours of daylight and pleasant temperatures. However, the proximity to the ocean and relatively high mountains can make for highly changeable weather, including dense morning fog along the coast. Stewart is located on the Portland Canal (Figures 1, 2) and has the distinction of being Canada's most northerly, ice-free seaport.

Wildlife on and in the area of the Red Property can include skunks, mountain goats, moose, foxes, black bears, grizzly bears, wolves, coyotes, lynx, marmots, martins, ptarmigan, eagles, hawks, jays, gulls, and crows. Vegetation in the valleys and on their edges ranges from dense tag alders to areas of spruce, pine and poplar forest. Sub-alpine spruce thickets, with heather and alpine meadows, occur at higher elevations. Bare rock, talus slopes and glaciers with occasional islands of alpine meadow prevail above treeline, at approximately 1,200 m.

5. STEWART CAMP GEOLOGY:

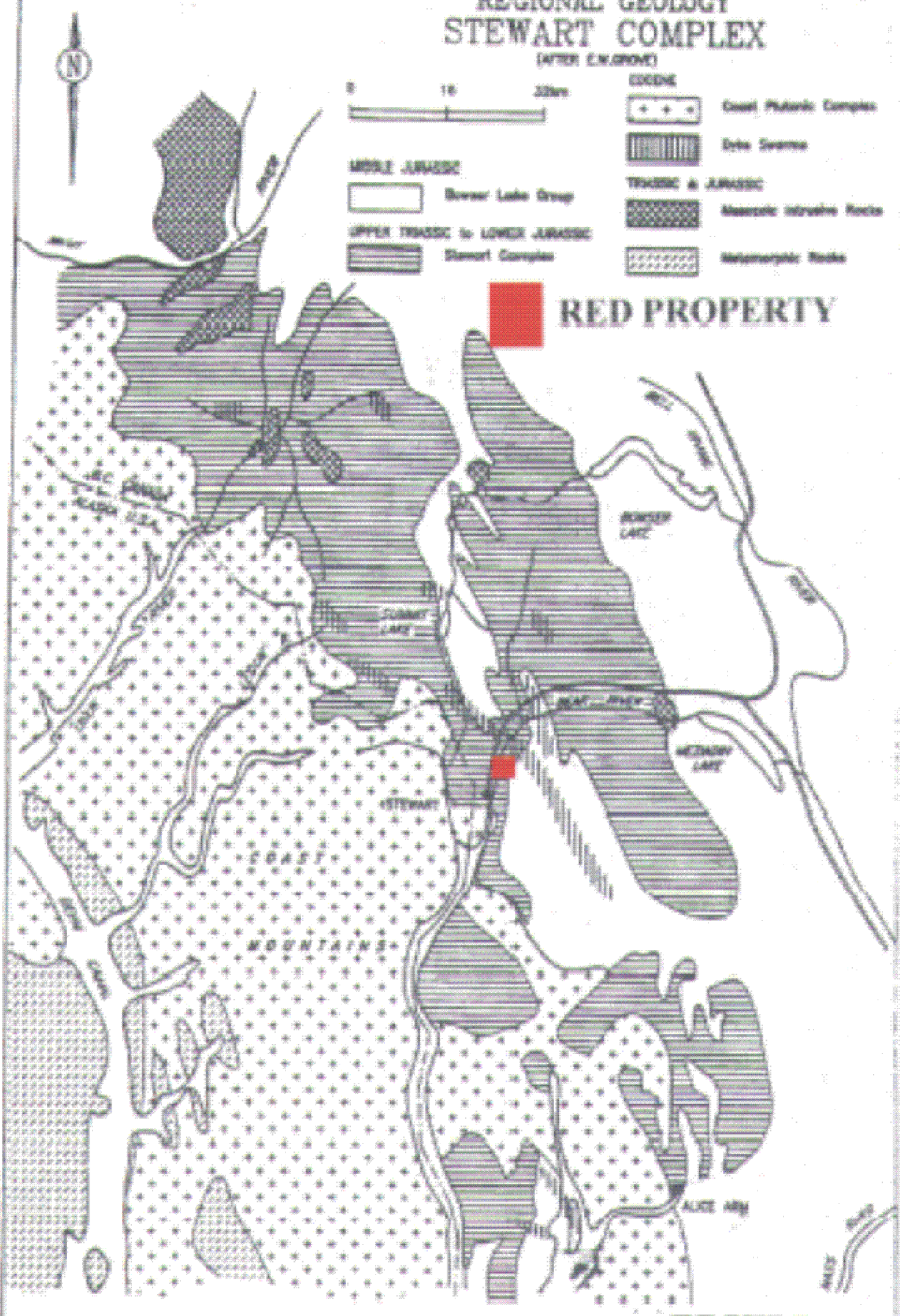
The Red Property is located in the Stewart Gold Camp, which is characterized by a broad, north-northwest trending volcanogenic-plutonic belt consisting of the Upper Triassic Stuhini Group and the Upper Triassic to Lower Middle Jurassic Hazelton Group. This belt has been termed the "Stewart Complex" (Figures 5, 6) by Grove (1986) and forms part of the Stikinia Terrane. The Stikinia Terrane, together with the Cache Creek and Quesnel Terranes, constitute the Intermontaine Superterrane, which was accreted to North America in Middle Jurassic time (Monger et al, 1982). To the west, the Stewart Complex is bordered by the Coast Plutonic Complex. Sedimentary rocks of the Middle to Upper Jurassic Bowser Lake Group overlay the Stewart Complex in the east.

The Jurassic stratigraphy was established by Grove (1986, Figure 5) during regional mapping conducted from 1964 to 1968. Formational subdivisions have been made and are currently being modified and refined as regional work continues, most notably by the Geological Survey Branch of the British Columbia Ministry of Energy, Mines and Petroleum Resources (Alldrick, 1984, 1985, 1989); and, by the Geological Survey of Canada (Anderson, 1989; Anderson and Thorkelson, 1990; Lewis, et al, 1993; Creig, et al, 1995). The sedimentological, structural, and stratigraphic framework of the area is being established with some degree of precision.

The Hazelton Group represents an evolving (alkalic/calc-alkalic) island arc complex, capped by a thick turbidite succession (Bowser Lake Group). Grove (1986) divided the Hazelton into four litho-stratigraphic units (time intervals defined by Alldrick, 1987):

- 1. The Upper Triassic to Lower Jurassic Unuk River Formation (Norian to Pliensbachian).**
- 2. The Middle Jurassic Betty Creek Formation (Pliensbachian to Toarcian).**

FIGURE 5:
REGIONAL GEOLOGY
STEWART COMPLEX
 (AFTER EMERSON)



3. **The Middle Jurassic Salmon River Formation (Toarcian to Bajocian).**
4. **The Middle to Upper Jurassic Nass Formation (Toarcian to Oxfordian - Kimmeridgian).**

Alldrick assigned formational status (Mt. Dilworth Formation, Figure 6A) to a Toarcian rhyolite unit (Monitor Rhyolite) overlying the Betty Creek Formation. Rocks of the Salmon River Formation are transitional between the mostly volcanic Hazelton Group and the wholly sedimentary Bowser Lake Group and are presently regarded as the uppermost formation of the Hazelton or the basal formation of the Bowser Lake Group.

The Unuk River Formation (Figure 6A), a thick sequence of andesite flows and pyroclastic rocks with minor interbedded sedimentary rocks, hosts a number of major gold deposits in the Stewart Camp (Figure 2). The unit is unconformably overlain by heterogeneous, maroon to green, epiclastic volcanic conglomerates, breccias, greywackes and finer grained clastic rocks of the Betty Creek Formation. Felsic flows, tuffs and tuff breccias characterize the Mt. Dilworth Formation (Figure 6A). This formation represents the climatic and penultimate volcanic event of the Hazelton Group volcanism and forms an important regional marker horizon. The overlying Salmon River Formation has been subdivided in the Iskut area into an Upper Lower Jurassic and a Lower Middle Jurassic member (Anderson and Thorkelson, 1990). The upper member has been further subdivided into three north trending facies belts: the eastern Troy Ridge facies (starved basin), the medial Eskay Creek facies (back-arc basin) and the western Snippaker Mountain facies (volcanic arc).

Sediments of the Bowser Lake Group rest unconformably on the Hazelton Group rocks and they include shales, argillites, silt and mudstones, greywackes and conglomerates. The contact between the Bowser Group and Hazelton Group passes between Strohn Creek in the north and White River in the south. The contact appears to be a thrust zone with the Bowser Group sediment "slices" occurring within and overlying the Hazelton Group pyroclastics to the west.

Two main intrusive episodes occurred in the Stewart area: a Lower Jurassic suite of diorite to granodiorite porphyries (Texas Creek Suite) that are comagmatic with extrusive rocks of the Hazelton Group; and, an Upper Cretaceous to Early Tertiary intrusive complex (Coast Plutonic Complex and satellite intrusions). The early Jurassic suite is characterized by the occurrence of coarse hornblende, orthoclase and plagioclase and phenocrysts and locally potassium feldspar megacrysts. The Eocene Hyder quartz-monzonite, comprising a main batholith, several smaller plugs, including the Bitter Creek quartz monzonite, and a widespread dyke phase, represents the Coast Plutonic Complex.

Middle Cretaceous regional metamorphism (Alldrick et al., 1987) is predominantly of the lower greenschist facies. This metamorphic event seems to be related to compression and concomitant crustal thickening at the Intermontaine - Insular superterrane boundary (Rubin et al. 1990). Biotite hornfels zones are associated with a majority of the quartz monzonite and granodiorite stocks.

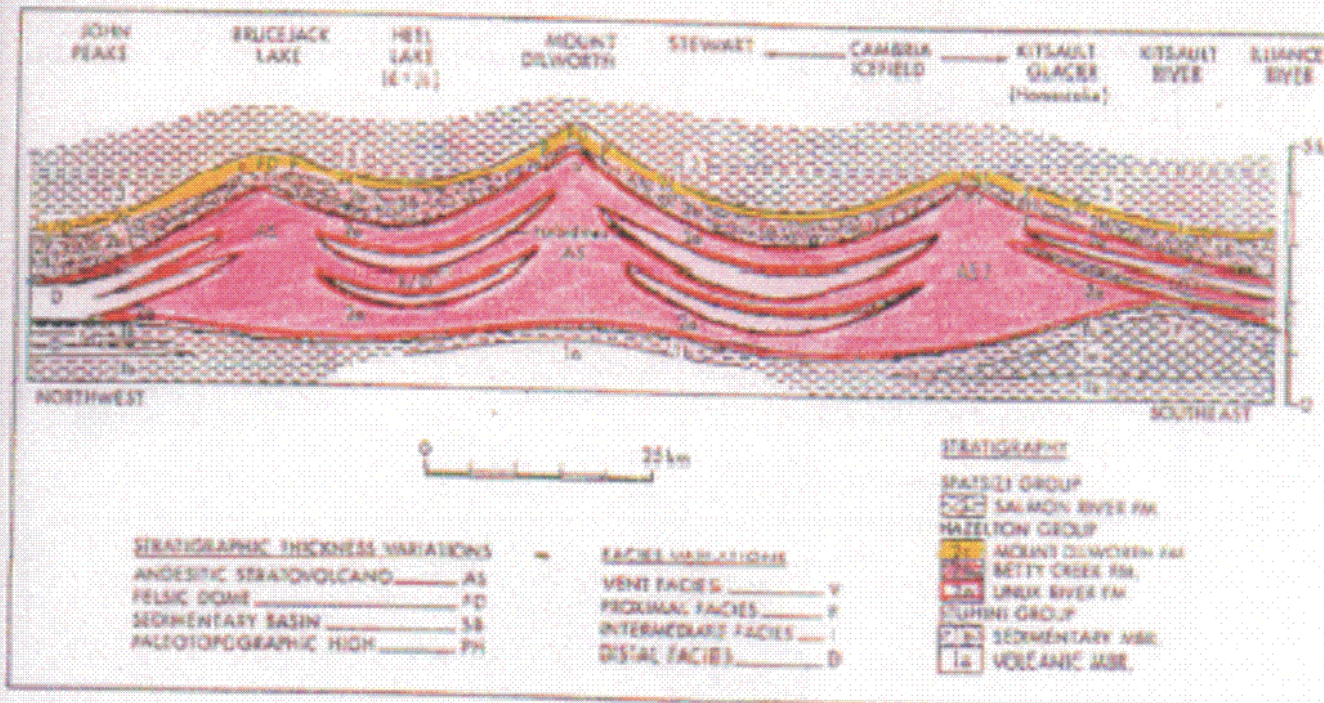


Figure 1-27-4. North-south schematic reconstruction through the Stewart complex.

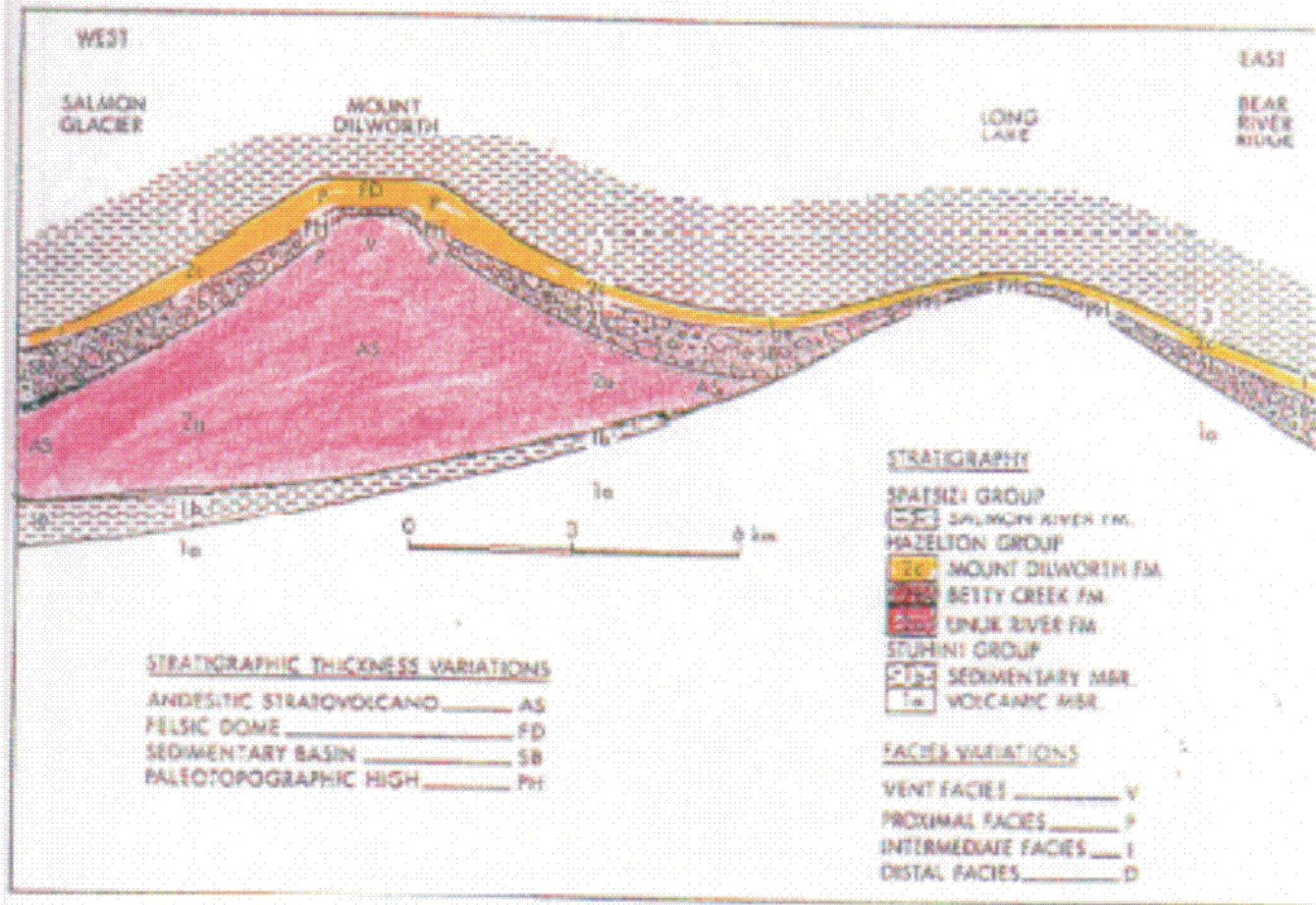


Figure 1-27-5. West-east schematic reconstruction through the Stewart complex.

FIGURE 6A
DILWORTH FORMATION IN STEWART
COMPLEX STRATIGRAPHY

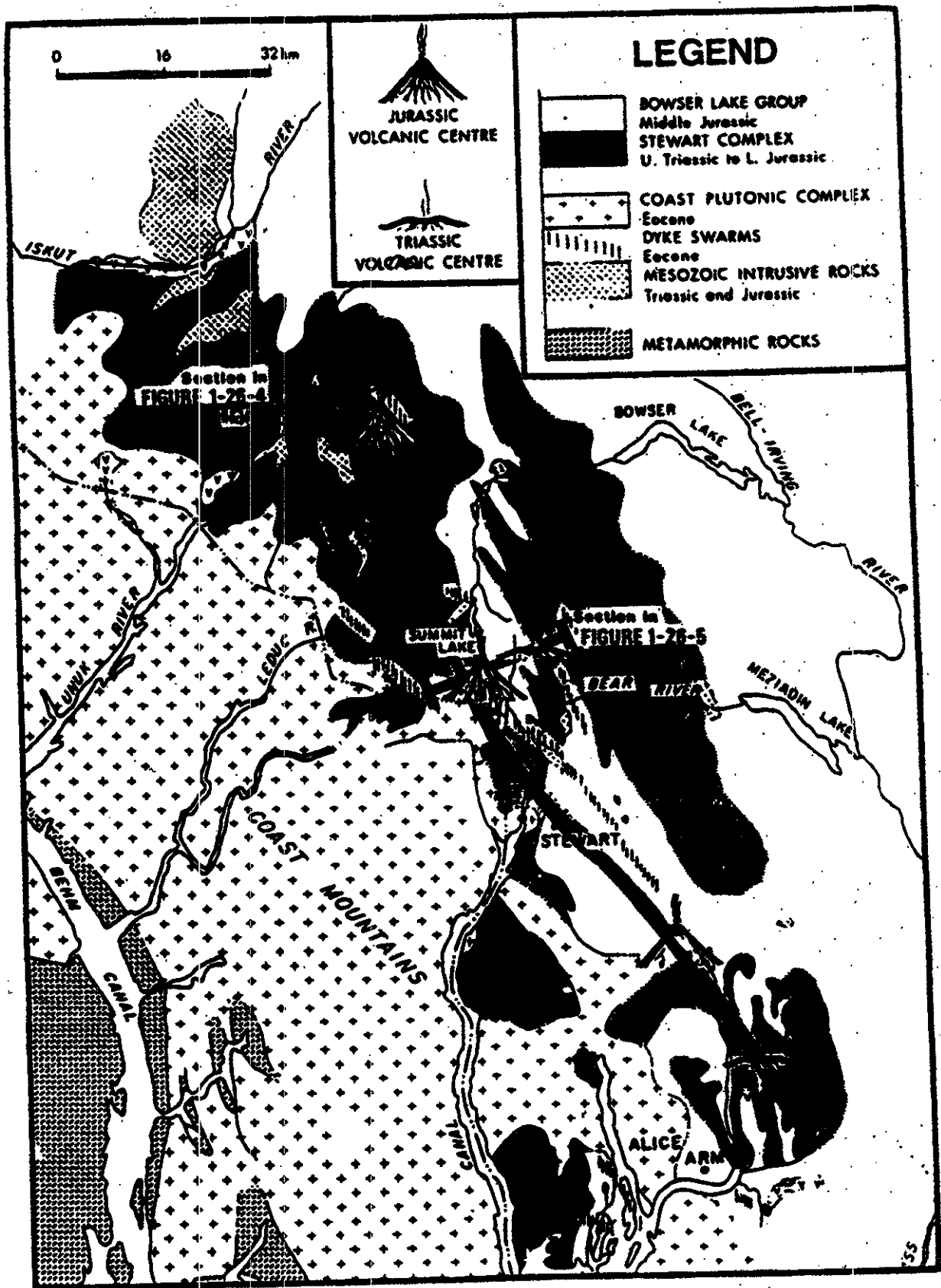
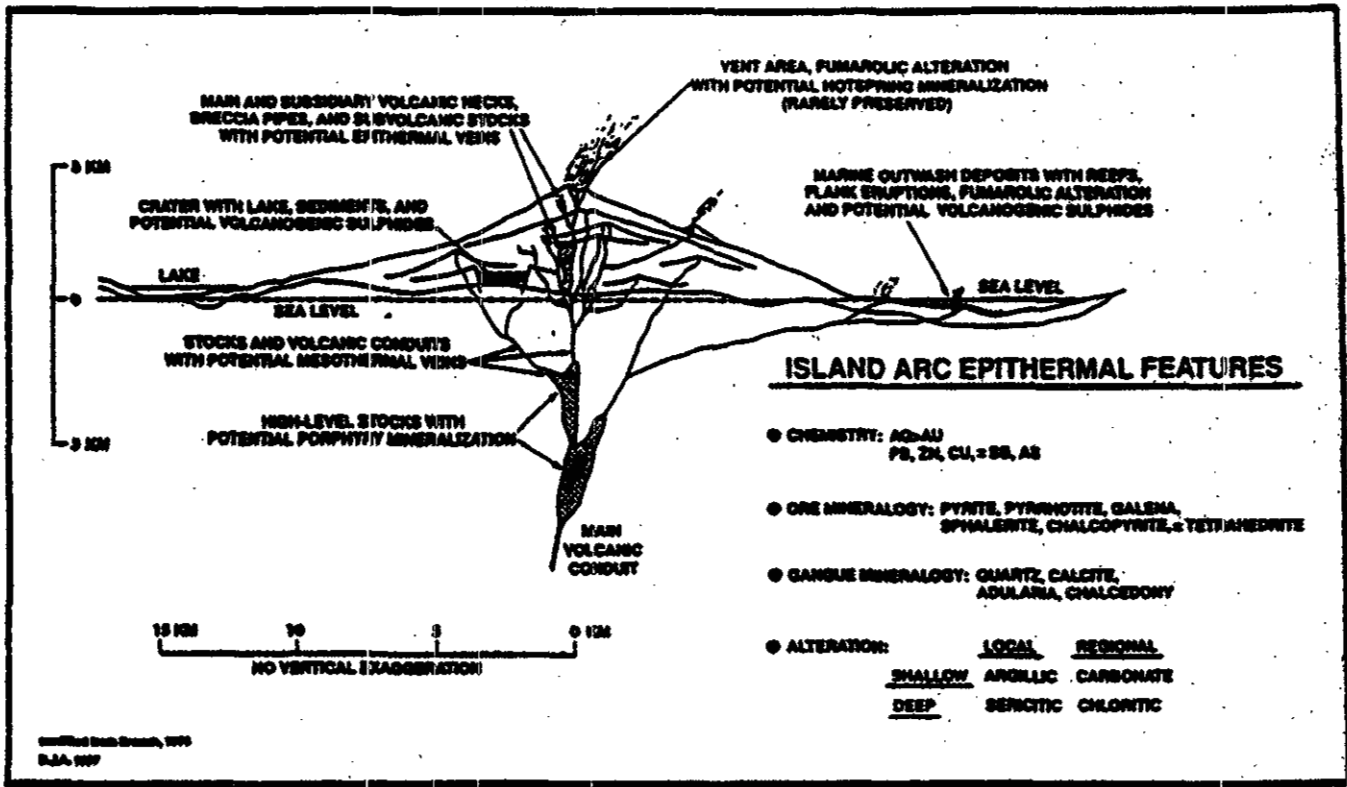


Figure 1-27-3. Distribution of the Stewart complex showing the locations of section lines for Figures 1-27-4 and 1-27-5.

FIGURE 6B
STEWART VOLCANIC BELT



Distribution of ore deposits within a stratovolcano (modified from Branch, 1976).

FIGURE 6C

MINERALIZATION TYPES
STEWART CAMP

6. STEWART CAMP MINERALIZATION:

The Stewart Complex is the setting for the Stewart (Silbak-Premier, Silver Butte, Big Missouri, Red Mountain, Snip, Johnny Mountain, Eskay Creek), Sulphurets, and Kitsalt (Alice Arm) gold/silver mining camps (Figure 2). Mesothermal to epithermal, depth persistent gold-silver veins form one of the most significant types of economic deposit. There appears to be a spatial as well as a temporal association of gold deposits to Eocene quartz monzonite plutons (e.g., as described in this report and Molloy, 2000P) and to Lower Jurassic Calc-alkaline intrusions and volcanic centres (Figures 6B, C). The latter intrusions are often characterized by 1-2 cm sized, potassium feldspar megacrysts and correspond to the top of the Unuk River Formation.

The most prominent example of this type of mineralization is the historic Silbak-Premier gold-silver mine, which has produced 56,000 kg of gold and 1,281,400 kg of silver in its original lifetime from 1918 to 1976. The mine was re-opened by Westmin in 1988 with reserves quoted at 5.9 million tonnes grading 2.16 g gold/t and 80.23 g silver/t (Randall, 1988). The mine was closed in the summer of 1997 and the mill is currently up for sale.

The ore is hosted by Unuk River Formation andesites and comagmatic Texas Creek porphyritic dacite sills and dykes. The ore bodies comprise a series of en echelon lenses, which are developed over a strike length of 180 m and through a vertical range of 600 m (Grove, 1986; McDonald, 1988). The mineralization is controlled by northwesterly and northeasterly trending structures and their intersections, but also occurs locally concordant with andesitic flows and breccias.

Two main vein types occur: silica-rich, low-sulfide precious metal veins and sulfide-rich base metal veins. The precious metal veins are more prominent in the upper levels of the deposit and contain polybasite, pyrargyrite, argentiferous tetrahedrite, native silver, electrum and argentite. Combined sulfides of pyrite, sphalerite, chalcopyrite and galena are generally less than 5%. The base metal veins crosscut the precious metal veins and increase in abundance with depth. They contain 25 to 45% combined pyrite, sphalerite, chalcopyrite and galena, with minor pyrrhotite, argentiferous tetrahedrite, native silver, electrum and arsenopyrite.

Quartz is the main gangue mineral, with lesser amounts of calcite, barite, and some adularia being present. The mineralization is associated with strong silicification, feldspathization, and pyritization. A temperature range of 250 to 260 degrees C has been determined for the deposition of the base and precious metals (McDonald, 1990).

Middle Eocene silver-lead-zinc veins are characterized by high silver to gold ratios and by spatial association with molybdenum and/or tungsten occurrences. They are structurally controlled and lie within north, northwest, and east trending faults. This mineralization has been less significant in economic terms.

Porphyry molybdenum deposits are associated with Tertiary Alice Arm Intrusions, a belt of quartz-monzonite intrusions parallel to the eastern margin of the Coast Plutonic Complex. An

example of this type of deposit is the BC Molybdenum Mine at Lime Creek.

The Eskay Creek Mine (total current reserves of 2.1 million tonnes containing 2.63 M oz gold and 116.06 M oz silver) was planning to increase current production from 150 t/d to 250 t/d in October 2000. The deposit is hosted within Contact Unit carbonaceous mudstone and breccia, as well as the underlying rhyolite breccia. Two styles of mineralization are present. The first is a visually striking assemblage of disseminated to near massive stibnite and realgar within the Contact Unit. The second style occurs in the adjacent footwall rhyolite, and features a stock work style quartz-muscovite-chlorite breccia mineralized with sphalerite, tetrahedrite and pyrite. Highest gold and silver values are obtained where the Contact Unit is thickest and the immediately underlying rhyolite breccia is highly fractured and altered. Drilling continues to expand the original, approximately 280 m by 100 m zone that has an average thickness of 10 m.

The Eskay Creek 21B deposit is approximately 900 m long, from 60 to 200 m wide and locally in excess of 40 m thick. Contact Unit mineralization comprises a continuous stratiform sheet of banded high-grade gold and silver bearing base metal sulfide layers, from 2 to 12 m thick. Mineralization appears to be bedding parallel. Sulfide minerals present include sphalerite, tetrahedrite, boulangerite, bornite plus minor galena and pyrite. Gold and silver are associated with electrum, which occurs as abundant grains associated with sphalerite. Peripheral and footwall to the banded sulfide mineralization, are areas of microfracture, veinlet hosted, disseminated tetrahedrite, pyrite and minor boulangerite mineralization.

No exploration was carried out on the Red Mountain project in 1999. However, Wheaton River optioned the property early in 2000 and commenced due diligence activities. Royal Oak had curtailed work in 1997 as a result of a dispute with the BC government. The Marc Zone and its northerly extension, the AV Zone, occur as sulfide lenses or cylinders associated with a structural junction and the brecciated contact of the Goldslide Intrusion. The mineralization consists of densely disseminated to massive pyrite and/or pyrite stringers and veinlets and variable amounts of arsenopyrite, tetrahedrite and various tellurides. Several phases of mineralization and deformation are indicated by the presence of different generations of pyrite and breccia fragments consisting of pyrite. High grade gold values are usually associated with the semi massive, coarse-grained pyrite aggregates, but also with stock works of pyrite stringers and veinlets. Gold occurs as native gold, electrum and as tellurides. Approximately 1 M ounces have been outlined to date, with an average grade of about 10 g gold/t.

7. EXPLORATION HISTORY, GEOLOGY, MINERALIZATION: RED PROPERTY AND BITTER CREEK TARGET AREA:

7.A.: EXPLORATION HISTORY:

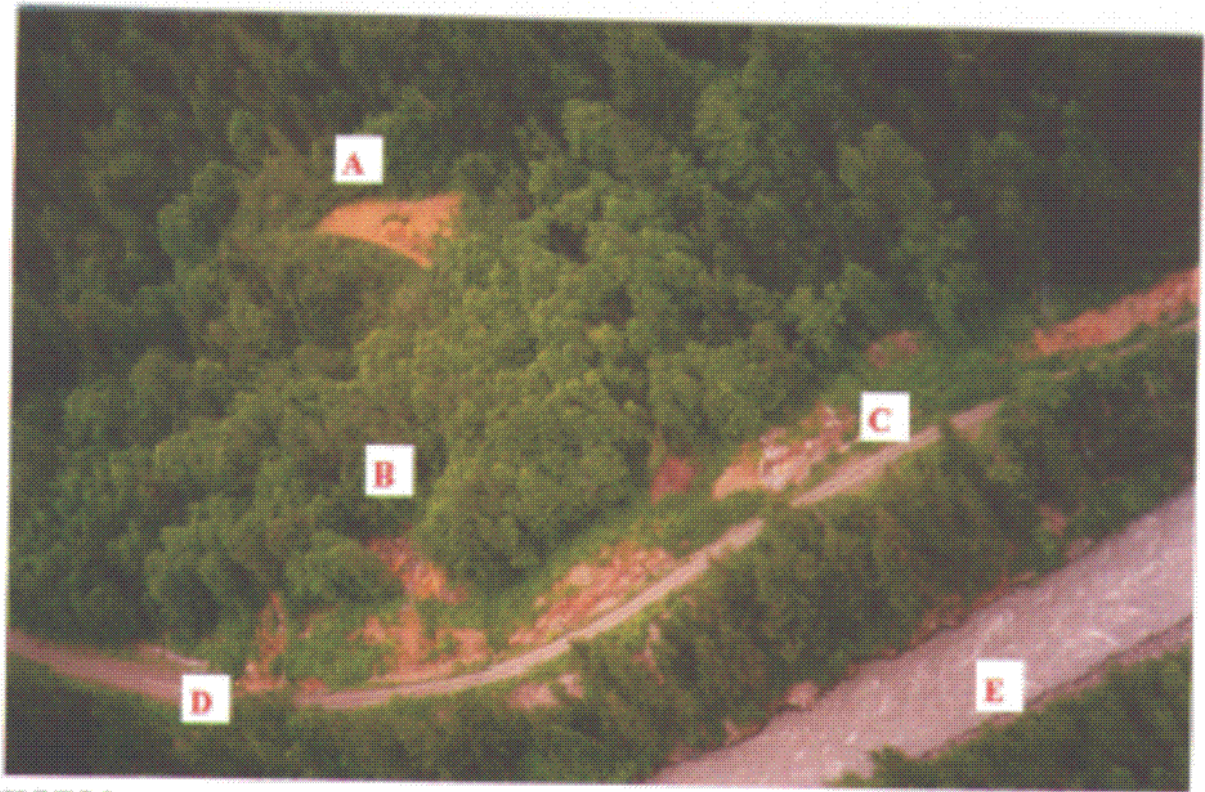
The general area hosts the Red Mountain Au-Cu deposit (about 6 km to the southeast, discovered by the author and Dave Kennedy in 1989) and the Silbak Premier Mine, about 3 km to the west. Subsequent to the discovery of Red Mountain, the surrounding area and a large part of the Stewart Camp were staked or re-staked. Bond Gold flew a helicopterborne, conventional EM and magnetic survey over the area in 1990.

Various historic activities were conducted on and in the vicinity of the Red Claims, including the erection of an old mill and tailings pond (Photos 1-4), just east of the Bitter Creek Road i.e., apparently on the old Mill 1 Claim 313872, which now is mainly the Red 4 Claim. The mill was owned by the Adam Milling Company and operated from April until September 1973 (Minfile 104A 037). The mill was apparently built to treat copper-gold ore from the Red Cliff deposit on American Creek and from the Roosevelt deposit farther up Bitter Creek

The numerous mineral occurrences in the area are shown on Figure 7. Most relate to narrow quartz-sulfide veins with Cu-Au-Ag-Pb-Zn values, and hosted by quartz monzonite or coarse cherty sediments. Some cross cutting and tunneling was done e.g., on the Ore Mountain Property (MINFILE 104A 143) and the Morgan 6 Property (104A 051), on quartz fracture zones with mineralization similar to that mentioned above.

As documented in the author's report on the 1999 Prospectors Assistance Program (Map 2; Molloy, 2000), very interesting polymetallic, stream sediment geochemical anomalies and in situ mineralization was discovered in proximity to the mill on the Bitter Creek Road. Similar targets were also found south of Clements Lake, where intrusive quartz monzonite has apparently strongly altered the host Hazelton Group volcanic rocks (Figure 7).

The MINFILE occurrences in the Bitter Creek Project Area are classified in Figure 7 and the individual MINFILE descriptions are provided in the following pages.



PHOTOS 1, 2:

ADAM MILL SITE, BITTER CREEK VALLEY;

A: MUCK PILES; **B:** MILL SITE; **C:** BITTER CREEK ROAD;

D: ALTERED RHYOLITE BRECCIA; **F:** TAILINGS POND

— SOME ROAD/TRAIL INFRASTRUCTURE



**PHOTO 3:
ADAM MILL LOOLING NORTH**



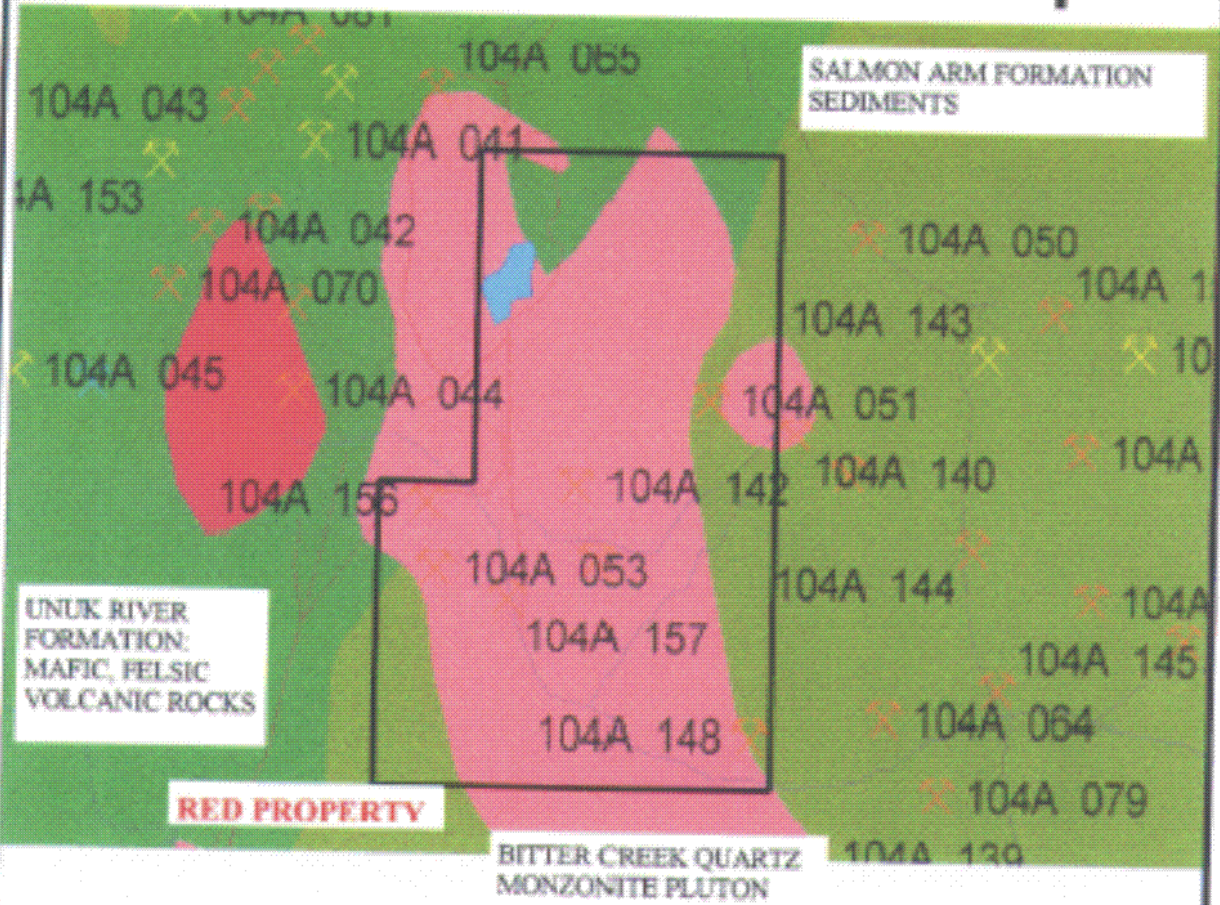
**PHOTO 4:
ADAM CRUSHER AND MUCK BIN: LOOKING EAST FROM SOUTH END OF
MILL**



FIGURE 7:

**RED PROPERTY:
MINFILE NUMBER FILE, GEOLOGY**

SCALE: 1:56250



MINFILE 104A 037:

MINFILE NUMBER: 104A 037

NATIONAL MINERAL INVENTORY: 104A4 C:10

NAME(S): RED CLIFF (L. 75), REDCLIFF, MOUNT LYELL,
MAC FR., DOT FR.

STATUS: Past Producer
NTS MAP: 104A04W
LATITUDE: 56 05 55
LONGITUDE: 129 33 47
ELEVATION: 1260 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: North portal (1000 level?) (Assessment Report 17465).

Underground

MINING DIVISION: Skeena
UTM ZONE: 09
NORTHING: 6217200
EASTING: 444240

COMMODITIES: Copper Gold Silver Zinc

MINERALS
SIGNIFICANT: Pyrite Chalcopyrite Sphalerite
ASSOCIATED: Quartz
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform
CLASSIFICATION: Epigenetic Hydrothermal
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 76 x 6 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: The vertical dimensions of the discrete ore lenses are not known and their attitude is highly variable. Dimensions of the largest lens on the 700 level.

HOST ROCK

DOMINANT HOST ROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic Hazelton Unuk River

LITHOLOGY: Andesitic Tuff
Andesitic Agglomerate
Andesitic Flow
Andesite
Amygdaloidal Feldspar Porphyry
Quartz Monzonite Dike
Diorite Dike
Hornblende Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES

ORE ZONE: RED CLIFF

CATEGORY: Unclassified YEAR: 1912
QUANTITY: 18856 Tonnes
COMMODITY GRADE
Gold 2.8000 Grams per tonne
Copper 3.1900 Per cent

COMMENTS: Estimate by J.L. Parker in 1912.
REFERENCE: Cited in Assessment Report 17465, p. 35.

CAPSULE GEOLOGY

The Red Cliff mine is on the west bank of Lydden Creek, immediately west of the confluence of American Creek and the Bear River. The portal to a lower, 425-metre long access tunnel (700 level) is at an elevation of 146 metres and is located on the east bank of Lydden Creek, about 700 metres west of the Stewart highway. Two portals (North and South) access the 1000 level and are located on the west bank of Lydden Creek, about 500 metres north-northwest of the portal of the lower tunnel. A fourth portal (Upper portal) lies about 30 metres above the North and South portals.

The Red Cliff group (Red Cliff, Montrose (104A 033), Mount Lyell, Little Pat (104A 062), Waterloo (104A 033) and Mac and Dot Fractions) were originally held by Lydden, Pederson, McDonald and Pearson who did some open cutting and drove tunnels in 1908. Apparently, other zones were discovered at the same time (Montrose,

MINFILE NUMBER: 104A 037

CAPSULE GEOLOGY

Waterloo). That year the property was sold to A.E. Smith, who formed the Red Cliff Mining Company. Between 1908-12, about 2,383 metres of underground development was carried out on 5(?) levels on the Red Cliff mineralization, including 4 portals, a long access tunnel and raises. The Red Cliff mine was the first significant mine in the Stewart area; it was linked to Stewart by road and rail. About 200 tonnes of ore grading 5 per cent copper was stockpiled in 1910; an additional 1.4 tonnes was shipped to the Tye smelter and yielded 0.25 per cent copper, 83.7 grams per tonne silver and \$5 per ton gold (1910 prices). In 1912, upon completion of the railway, a further 1,133 tonnes of ore was shipped to the Tacoma smelter and another 2,030 tonnes was placed on ore dumps. A total of 2,411 grams of gold and 40,100 kilograms of copper was recovered. The mine closed in 1912.

The property remained idle until 1921, when Trites, Woods and Wilson purchased the property and carried out minor work on the Montrose and Waterloo zones. Little further work was reported until 1939, when H.D. Haywood purchased the claims from the estate of Wilson. That year a camp and trail were built and during 1939-40 Haywood worked on the Montrose zone; about 40 tonnes of ore were shipped from the Montrose zone during this period. In 1941, 10 tonnes (averaging 9.23 per cent copper, 1.09 per cent zinc, 8.9 grams per tonne gold and 73.4 grams per tonne silver) was high graded from the 700 level(?) of the Red Cliff deposit and a 19.3 tonnes of ore was high graded from the Montrose zone. In 1946, the Yale Mining Company, Limited optioned the property and sampled the Montrose and Waterloo zones. In 1950, Yale Lead and Zinc Mines Limited completed about 600 metres of drilling on the Montrose(?) zone. In 1959, Oro Fino Mines Ltd. optioned the property; no work was reported.

In 1968, International Mogul Mines Limited acquired the property through amalgamation of several companies, including Yale Lead and Zinc. In 1972, Citex Mines Ltd. acquired a three year lease on the property from International Mogul and subsequently entered into an agreement with Adam Milling Ltd. The latter company built a 110 tonnes per day mill at the mouth of Bitter Creek and reopened the Red Cliff mine in April, 1973. The 700 level was rehabilitated and open stoping commenced. However, due to unsafe conditions, the Ministry closed the mine in September, 1973. Apparently, 3,768 tonnes of ore were shipped to the mill from the mine and old dumps. (This tonnage may include some ore from the Roosevelt deposit (104A 069)). Some drilling was also reported in area of the Red Cliff deposit that year. Little further work has been reported since 1973. In the late 1970s, limited work was done underground and, in 1979, Page and Skimming carried out sampling on the Red Cliff, Montrose and Waterloo zones.

In 1987, Joutel Resources Ltd. entered into a joint venture agreement with B.L. Carlson and V.M. Harbinson on the Red Cliff claim group and staked two grid claim blocks. That year Joutel conducted a comprehensive program, focusing mainly on the Montrose and Waterloo zones, comprising trenching, geological mapping, soil, silt and rock sampling and diamond drilling (6 holes, totalling 1,007 metres) on the Montrose and Ridley Road zones.

The area is underlain predominantly by north-striking, west-dipping andesitic tuffs, agglomerates and minor flows, of the Upper Triassic to Lower Jurassic Unuk River Formation (Hazleton Group) (Bulletin 58, 63). Immediately east of Lydden Creek a conformable body of amygdaloidal feldspar porphyry, containing phenocrysts of feldspar and augite, may represent a sill or a flow. Tertiary(?) quartz monzonite, diorite and hornblende porphyry dikes are common. These trend northwest and northeast and are part of the Portland Canal dike swarm (Bulletin 58). The area is intensely fractured and faulted. North-trending, west-dipping dip-slip faults are most conspicuous and appear to be younger than east-trending faults.

Mineralization comprises irregular veins and pods of quartz, pyrite, chalcopyrite and minor sphalerite. The ore bodies, irregular and lenticular, are commonly enclosed in weakly developed sericitic alteration. The largest ore body, 76 metres long and averaging 6 metres in width, occurs on the 700 level.

Most of the mineralized pods appear to lie along locally east-trending, steeply dipping shears that transect all rock types except the diorite dikes. The mineralization is most conspicuous adjacent to, and on the hangingwall of, a prominent north-trending, west-dipping fault along Lydden Creek.

Estimated reserves for the Red Cliff deposit are reported to be 18,856 tonnes of sorted ore containing 3.19 per cent copper and 2.8 grams per tonne gold (J.L. Parker, 1912; cited in Assessment Report 17465, p. 33).

RUN DATE: 03/29/93
RUN TIME: 10:19:25

MINFILE / pc
MASTER REPORT
GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

P. 05/06
PAGE: 74
REPORT: RGEN0100

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EMPR AR 1908-56; 1909-67; 1910-62; 1911-72, 74; 1912-104,107;
1921-66; 1939-66; 1940-52; 1946-79; 1950-78; 1959-8
EMPR GEN *1973-494
EMPR EXPL 1987-A15; 1988-A15,A32
EMPR BULL 58, p. 151; 63
EMPR ASS RPT *17465, 20379
EMPR MAP 8
EMPR PF (In 104A General - Knobel, N.E. (1909): Report upon the
mineral district of Bear River)
EMR NP CORPFILE (Red Cliff Mining Company, Limited; Citex Mines Ltd.;
Adam Milling Ltd.)
GSC MEN 32, p. 47; 175, p. 141
GSC MAP *28A; *216A; *217A; 307A; *315A; 9-1957; 1418A
GSC OF 2582

DATE CODED: 850724
DATE REVISED: 911004

CODED BY: GSB
REVISED BY: MC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: 104A_037

MINFILE NUMBER: 104A 057		NAME: RED CLIFF (L. 75)			STATUS: Past Producer	
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilogram Recovered	
1973		3,768	Silver Gold Copper	1 1		
1941	10		SILVER Gold Copper Zinc	754 89	92 10	
1940	31		Silver Gold Copper	1,182 2,550	24	
1912	1,133		Gold Copper	2,426	60,09	
1910	1		Silver Gold Copper	117 12	11	

SUMMARY TOTALS: 104A 057

NAME: RED CLIFF (L. 75)

	Metric	Imperial
Mined:	1,179 tonnes	1,295 tons
Milled:	3,768 tonnes	4,154 tons
Recovery:		
Silver:	2,054 grams	66 ounces
Gold:	5,078 grams	163 ounces
Copper:	41,386 kilograms	91,240 pounds
Zinc:	109 kilograms	240 pounds

Comments:

1973: From mine and old dumps, unknown quantity recovered EMPR GEM 1973.
 1941: Assessment Report 17465.
 1912: 2030 tonnes placed on ore dumps.
 1910: Also 200 tonnes stockpiled (Assessment Report 17465).

MINFILE 104A 051:

MINFILE NUMBER: 104A 051

NATIONAL MINERAL INVENTORY: 104/4 Ag19

NAME(S): LAKE SHORE (L. 4808), ORE MOUNTAIN

STATUS: Showing
 NTS MAP: 104A04W
 LATITUDE: 56 02 41
 LONGITUDE: 129 52 24
 ELEVATION: 1021 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Portal of adit (Assessment Report 13352).

Underground

MINING DIVISION: Skeena
 UTM ZONE: 09
 NORTHING: 6211200
 EASTING: 445590

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Arsenopyrite Sphalerite Galena
 Chalcopyrite
 ASSOCIATED: Pyrite Pyrrhotite Arsenopyrite
 ALTERATION: Silica
 ALTERATION TYPE: Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform
 CLASSIFICATION: Hydrothermal Epigenetic
 SHAPE: Irregular
 MODIFIER: Fractured

HOST ROCK

DOMINANT HOST ROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Salmon River

LITHOLOGY: Argillite
 Slate
 felsic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES

ORE ZONE: ADIT

CATEGORY: Assay	YEAR: 1984
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	139.5000 Grams per tonne
Gold	3.4000 Grams per tonne
Copper	0.1900 Per cent
Lead	1.0000 Per cent
Zinc	0.6200 Per cent

COMMENTS: Chip(?) sample across 27 centimetres in the adit; 4.95 metres from the portal.

REFERENCE: Assessment Report 13352.

CAPSULE GEOLOGY

The Lake Shore showing is located about 13 kilometres northeast of Stewart, about 3.5 kilometres east-northeast of the confluence of Bitter Creek and the Bear River, on the west side of Ore Mountain. In 1925, the Ore Mountain Mining Co. Ltd. acquired the Lake Shore claim (L. 4808). During 1925-28, 2 crosscut tunnels, 18 metres and 116 metres long, respectively, and several opencuts were emplaced on the mineralization. Only minor surface work was reported during 1929-32. In 1955, the claim was acquired by Rufus-Argenta Mines Limited. In 1966, the company name was changed to Crest Ventures Limited. During 1966-67, Crest Silver Company Limited, a subsidiary of Crest Ventures, acquired the claim and carried out some geological mapping. During 1970-73, Ardo Mines Ltd. optioned the property and carried out prospecting, magnetometer and electro-magnetic surveys. During 1979-80, Beaver Gold Resources Inc. acquired the property in and carried out mapping, prospecting and sampling. In 1984, the property was owned by Grey Silver Mines Ltd. That year Maralgo Mines Limited optioned the property and flew an airborne VLF-EM and magnetometer survey over the area and conducted geological mapping, prospecting and sampling on the occurrence. No further work was

MINFILE NUMBER: 104A 051

CAPSULE GEOLOGY

reported until 1989 when Grey Silver Mines performed geological mapping, sampling and soil surveys in the area. The following year Varitech Resources Ltd. conducted a program of geological mapping, prospecting, sampling and soil, VLF-EM and magnetometer surveys in the area. The showing was resampled that year.

The area is underlain by north to north-northeast striking, steeply dipping argillites and slates of the Middle Jurassic Salmon River Formation (Hazelton Group) (Bulletin 63). The showing lies close to the unconformable contact of these rocks with the underlying volcanics of the Upper Triassic to Lower Jurassic Unuk River Formation. The rocks are cut by several north to northwest-trending narrow felsic dikes that belong to the Portland Canal dike swarm. A prominent north to northeast trending fault lies immediately east of the showing. The dikes and mineralization appear to terminate against this fault (Assessment Report 13352).

Most of the mineralization occurs in the sediments, close to the contacts with a series of felsic dikes. Some mineralization occurs in the dikes themselves as fracture fillings and along joints. Mineralization comprises predominantly pyrite and pyrrhotite with lesser arsenopyrite, sphalerite, galena and chalcopyrite in a siliceous gangue. The sulphides form discontinuous, north-trending and west-dipping gash veins and pods up to 3 metres across; widths are typically less than 0.5 metre. The discrete mineral accumulations extend over a north to northeast length of about 150 metres, approximately parallel to the fault. The individual gash veins and pods, especially those hosted in dikes, tend to trend slightly oblique to the fault.

A chip(?) sample was collected in 1984 from the adit, 4.95 metres from the portal, near the south end of the exposed mineralization. The sample assayed 3.4 grams per tonne gold, 139.5 grams per tonne silver, 0.19 per cent copper, 1.0 per cent lead and 0.62 per cent zinc across a width of 27 centimetres (Assessment Report 13352).

A grab sample collected from a new discovery, approximately 210 metres south-southeast of the adit, in 1979 assayed 26.4 grams per tonne gold, 1,033.7 grams per tonne silver, 0.21 per cent copper, 11.75 per cent lead and 6.93 per cent zinc (Assessment Report 8095).

BIBLIOGRAPHY

EMPR AR 1925-93; 1926-93; *1928-104; 1929-433; 1931-43; 1932-43;
1966-41; 1967-34
EMPR GEN 1970-74; 1971-32; 1972-512; 1973-494
EMPR EXPL 1979-273
EMPR BULL 63
EMPR ASS RPT *8095, 10489, *13352, 19242, 20379, *20622
EMPR MAP 8
EMR MP CORPFILE (Ardo Mines Ltd.; Crest Ventures Limited; Ore
Mountain Mining Company, Limited; Van-Sea Resources Limited)
GSC MEM 159, p. 40; 175, p. 134
GSC MAP 28A; *216A; *217A; 307A; *315A; 9-1957; 1418A
GSC OF 2582

DATE CODED: 850724
DATE REVISED: 920117

CODED BY: GSB
REVISED BY: WC

FIELD CHECK: N
FIELD CHECK: N

MINFILE 104 053:

MINFILE NUMBER: 104A 053

NATIONAL MINERAL INVENTORY: 10414 Cu13

NAME(S): GOLD BAR NO. 1, AMERICA'S GIRL, AMERICUS GIRL,
GOOD ENOUGH, GOLDBAR, BLUE BELL,
BIG BOULDER

STATUS: Showing
NTS MAP: 104A04W
LATITUDE: 56 01 55
LONGITUDE: 129 54 35
ELEVATION: 0305 Metres
LOCATION ACCURACY: Within 1 KM

MINING DIVISION: Skeena
UTM ZONE: 09
NORTHING: 6209794
EASTING: 443308

COMMENTS: Location of showing #59 (Geological Survey of Canada Memoir 175).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOST ROCK: Plutonic

STRATIGRAPHIC AGE

GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Hazelton	Unuk River
Tertiary		Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
Greenstone

HOST ROCK COMMENTS: The hostrocks are not clear; GSC Map 28A indicates that the showing occurs in the Tertiary Bitter Creek quartz monzonite pluton.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES

ORE ZONE: SAMPLE

CATEGORY: Assay
SAMPLE TYPE: Grab

YEAR: 1925

COMMODITY: Gold 5.8000 Grams per tonne

COMMENTS: Vein on the Americus Girl claims reported to contain \$3.50 per tonne gold.

REFERENCE: Minister of Mines Annual Report 1925, p. 92.

CAPSULE GEOLOGY

The exact location of the Gold Bar No. 1 occurrence is not known. The Gold Bar claim was reported to lie on the south side of Bitter Creek, about 1.6 kilometres above its mouth (Geological Survey of Canada Map 28A and Memoir 175).

The Good Enough claim group, which included the Gold Bar No. 1 claim, was owned by Crosset and associates in 1910. That year 12 metres (40 feet) of tunnelling was reported. The America's (Americus) Girl claim group, staked in about 1925, covered approximately the same area. This claim group was owned by Duke, Campbell and Cullen who completed some open cutting and stripping and emplaced 2(?) short tunnels during 1925-27. The recent Tenajon Goldbar property is located just to the east of these showings.

The area is underlain by greenstones of the Upper Triassic to Lower Jurassic Unuk River Formation (Hazelton Group), close to the contact with the Tertiary(?) Bitter Creek quartz monzonite pluton (Geological Survey of Canada Memoir 175; Bulletin 58, 63).

Since the exact location is uncertain, the nature of the host rocks is not clear. According to Geological Survey of Canada Map 28A, the mineralization is hosted in the Bitter Creek pluton. The showing comprises a quartz vein, up to 3 metres wide, that is reported to carry gold (Geological Survey of Canada Memoir 32, 175).

On the Americus Girl claims, at an elevation of 500 metres, a 0.8 to 1.2-metre wide quartz vein contains minor chalcopyrite and pyrite. It is reported to contain gold values of about 5.8 grams per

MINFILE NUMBER: 104A 053

MINFILE 104 062:

MINFILE NUMBER: 104A 062

NATIONAL MINERAL INVENTORY: 104A4 W1

NAME(S): LITTLE PAT, BADLAND, HOGBACK,
GOLDBAR, ART

MINING DIVISION: Skeena
UTM ZONE: 09
NORTHING: 6209925
EASTING: 444690

STATUS: Showing
NTS MAP: 104A04W
LATITUDE: 56 02 00
LONGITUDE: 129 53 15
ELEVATION: 0366 Metres
LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized vein showings located southeast of the Bitter Creek bridge on the north side of Bitter Creek, in the northeast corner of the present day Goldbar claim (Property File - Mathews, 1942).

COMMODITIES: Tungsten Gold Silver Copper Molybdenum
 Lead Zinc

MINERALS
SIGNIFICANT: Chalcopyrite Scheelite Pyrite Molybdenite Sphalerite
 Galena Tetrahedrite Cosalite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT
CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Porphyry

HOST ROCK
DOMINANT HOST ROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Tertiary Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite

HOST ROCK COMMENTS: The hostrock is a Tertiary(?) Bitter Creek quartz monzonite pluton, a satellite intrusive of the Coastal Plutonic Complex.

GEOLOGICAL SETTING
TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine

RESERVES

ORE ZONE: SAMPLE

CATEGORY: Assay YEAR: 1943
SAMPLE TYPE: Chip
COMMODITY GRADE

Tungsten 0.1100 Per cent
COMMENTS: Tungsten as W03. Sample across a width of 7.5 centimetres from the main (Hogback) showing.

REFERENCE: Bulletin 10, p. 52.

CAPSULE GEOLOGY

The Little Pat showing is about 500 metres north of Bitter Creek and approximately 2.9 kilometres east-southeast of the confluence of Bitter Creek with the Bear River.

The property has been intermittently explored since 1908, when a number of narrow fissure veins containing quartz, pyrite, chalcopyrite and scheelite were located on the north side of Bitter Creek. During the 1940s the showings, comprising the Little Pat, Badland and Hogback claims, were known as the Little Pat. Open cutting was done during this time. Beaver Gold Resources Inc. conducted prospecting and rock sampling near the showing in 1979. The showing was then covered by the Art group of claims. The showings are presently located on the Goldbar claim held by Tenajon Resources.

The area is underlain by the Tertiary(?) Bitter Creek pluton, a quartz monzonite intrusive that is a satellite to the Coast Plutonic Complex (Bulletin 58, 63).

Several narrow quartz veins occur in the pluton. They typically contain pyrite, chalcopyrite and scheelite; molybdenite, sphalerite, galena, tetrahedrite and cosalite occur locally. The veins trend from 290 to 330 degrees and dip vertically to steeply northeast.

At the main showing (Hogback) the vein is about 15 centimetres wide but decreases to less than 2 centimetres wide in a distance of 30 metres. A sample across 7.5 centimetres assayed 0.11 per cent W03

MINFILE NUMBER: 104A 062

CAPSULE GEOLOGY

(Bulletin 10 p. 52).

About 300 metres to the north, a 7.5 to 15 centimetre wide quartz vein is mineralized with pyrite, sphalerite, scheelite and some galena and tetrahedrite. Samples of this vein are reported to have assayed 8.6 grams per tonne gold and 377.1 grams per tonne silver (Bulletin 10, p. 53). A composite sample of the vein assayed 0.01 per cent W03 (Bulletin 10, p. 53)

At least 3 other similar vein showings occur in the area to the north of the main showing.

BIBLIOGRAPHY

EMPR BULL *10, p. 52; 58; 63

EMPR ASS RP1 8095, 20379, 20682, 21909

EMPR MAP 8

EMPR PF (In 104A General - Mathews, W.H. (1943): *Tungsten in the Portland Canal Area; Mathews, W.H. (1942): *Geology and Scheelite Deposits of the Portland Canal Area, Map)

GSC MAP 28A; 216A; 217A; 307A; 315A; 9-1957; 1418A

GSC OF 2582

DATE CODED: 850724
DATE REVISED: 920116

CODED BY: GSB
REVISED BY: WC

FIELD CHECK: N
FIELD CHECK: N

MINFILE 104 140:

MINFILE NUMBER: 104A 140

NATIONAL MINERAL INVENTORY: 104A4 Ag19

NAME(S): LEAD COIL A (L. 4811), SILVER BAND (L. 4810), ORE MOUNTAIN

STATUS: Showing
NTS MAP: 104A04W
LATITUDE: 56 02 34
LONGITUDE: 129 51 40
ELEVATION: 1341 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Portal of adit (Assessment Report 13352).

MINING DIVISION: Skeena
UTM ZONE: 09
NORTHING: 6210970
EASTING: 446345

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS
SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT
CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Tabular
MODIFIER: Faulted

HOST ROCK
DOMINANT HOST ROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
Granodiorite Dike

GEOLOGICAL SETTING
TECTONIC BELT: Intermontane
TERRANE: Stikine
PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES

ORE ZONE: TRENCH

COMMODITY	GRADE	YEAR: 1984
Silver	231.7000	Grams per tonne
Gold	4.4600	Grams per tonne
Copper	0.0800	Per cent
Lead	0.4400	Per cent
Zinc	0.1200	Per cent

COMMENTS: Channel sample across a width of 30 centimetres from trench 46N.
REFERENCE: Assessment Report 13352.

CAPSULE GEOLOGY

The Lead Coil A showing is located about 13 kilometres northeast of Stewart and 4.2 kilometres east of the confluence of Bitter Creek and the Bear River, on the west flank of Ore Mountain.
In 1925, the Ore Mountain Mining Co. acquired the Lead Coil (L. 4811) and Silver Band (L. 4810) claims. During 1925-28, an adit, 21 metres long, was driven on the Silver Band claim and several opencuts were emplaced on the exposed mineralization in the western part of the adjacent Lead Coil claim. Only minor surface work was reported during 1929-32. The claims were subsequently acquired by Rufus-Argenta Mines. In 1966, the company name was changed to Crest Ventures Limited. That year Crest Silver Company Limited, a subsidiary of Crest Ventures, acquired the claims and during 1966-67 carried out some geological mapping. During 1970-73, Ardo Mines Ltd. optioned the property carried out prospecting, magnetometer and electromagnetic surveys. During 1979-80, Beaver Gold Resources Inc. acquired the property and carried out mapping, prospecting and sampling. In 1984, the property was owned by Grey Silver Mines Ltd. That year Meralgo Mines Limited optioned the property and flew an airborne VLF-EM and magnetometer survey over the area and conducted geological mapping, prospecting and sampling on the occurrence. No further work was reported until 1989 when Grey Silver Mines performed geological mapping, sampling and soil surveys in the area. The following year Varitech Resources Ltd. conducted a program of geological mapping, prospecting, sampling and soil, VLF-EM and

CAPSULE GEOLOGY

magnetometer surveys in the area. The showing was resampled that year.

The area is underlain by north to northeast-striking, folded argillites of the Middle Jurassic Salmon River Formation (Hazelton Group) (Bulletin 63). The rocks are cut by several northwest-trending granodiorite dikes that belong to the Portland Canal dike swarm.

Discontinuous mineralization occurs along both the faulted, vertical contacts of a 20-metre wide, northwest-trending granodiorite dike. This dike can be traced for about 400 metres and appears to split into two 5 to 15-metre wide dikes to the southeast. The mineralization comprises quartz veins and lenses, containing pyrite, galena, sphalerite and chalcopyrite, hosted in crushed and sheared argillite. The lenses, or swelling of the veins, appear to coincide with flexures in the dike walls.

The longest continuous vein is exposed over a length of about 45 metres in the adit; channel sampling in 1980 indicated negligible values for this vein (Assessment Report 10489). In 1984, channel samples were taken from a trench on the mineralization between the east and west branches of the dike (trench 46N), about 350 metres south-southeast of the adit. One sample, assayed 4.46 grams per tonne gold, 231.7 grams per tonne silver, 0.08 per cent copper, 0.44 per cent lead and 0.12 per cent zinc across a width of 30 centimetres (Assessment Report 13352).

BIBLIOGRAPHY

EMPR AR 1925-93; 1926-93; *1928-104; 1929-433; 1931-43; 1932-43;
1966-41; 1967-34
EMPR GEM 1970-74; 1971-32; 1972-512; 1973-494
EMPR EXPL 1979-273
EMPR BULL 63
EMPR ASS RPT 8095, *10489, *13352, 19242, 20379, *20622
EMPR MAP B
EMR MP COMFILE (Ardo Mines Ltd.; Crest Ventures Limited; Ore
Mountain Mining Company, Limited; Van-Sea Resources Limited)
GSC MEM 159, p. 40; 175, p. 134
GSC MAP 211A; *216A; *217A; 307A; *315A; 9-1957; 1418A
GSC OF 25112

DATE CODED: 920120
DATE REVISED: 920120

CODED BY: WC
REVISED BY: WC

FIELD CHECK: N
FIELD CHECK: N

MINFILE 104 141:

MINFILE NUMBER: 104A 141

NATIONAL MINERAL INVENTORY: 104A4 Ag19

NAME(S): LEAD COIL B (L. 4811), ORE MOUNTAIN

STATUS: Showing
NTS MAP: 104A04W
LATITUDE: 56 02 25
LONGITUDE: 129 51 12
ELEVATION: 1493 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized outcrop (Assessment Report 19242).

MINING DIVISION: Skeena
UTM ZONE: 09
NORTHING: 6210680
EASTING: 446840

COMMODITIES: Copper Silver Tungsten

MINERALS
SIGNIFICANT: Chalcopyrite Scheelite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT
CHARACTER: Stockwork Breccia
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK
DOMINANT HOST ROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Salmon River	

LITHOLOGY: Argillite

GEOLOGICAL SETTING
TECTONIC BELT: Intermontane
TERRANE: Stikine
PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES

ORE ZONE: SAMPLE

CATEGORY: Assay	YEAR: 1989
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	14.4000 Grams per tonne
Copper	0.4900 Per cent
Tungsten	0.0100 Per cent

COMMENTS: Grab sample from the 3-metre wide breccia zone.
REFERENCE: Assessment Report 19242.

CAPSULE GEOLOGY

The Lead Coil B showing is located about 13 kilometres northeast of Stewart and 4.7 kilometres east of the confluence of Bitter Creek and the Bear River, on the south flank of Ore Mountain. The showing is near the northeast corner of the Lead Coil claim (L. 4811).

The showing may have been known previously, but it was first reported in 1989 when Grey Silver Mines performed geological mapping, sampling and soil surveys in the area. The following year Varitech Resources Ltd. conducted a program of geological mapping, prospecting, sampling and soil, VLF-EM and magnetometer surveys in the area.

The area is underlain by north to northeast-striking, folded argillites of the Middle Jurassic Salmon River Formation (Hazelton Group) (Bulletin 63).

Mineralization comprises a breccia zone, 3 metres wide, hosted in black argillite. The zone trends north and dips 46 degrees west. It contains quartz stockworks carrying chalcopyrite, malachite and minor scheelite(?).

A grab sample collected in 1989 assayed 0.49 per cent copper, 14.4 grams per tonne silver and 0.01 per cent tungsten; lead, zinc and gold values were negligible (Assessment Report 19242).

BIBLIOGRAPHY

EMPR BULL 63
EMPR ASS RPT *19242, 20379, 20622
EMPR MAP 8
GSC MAP 28A; 216A; 217A; 307A; 315A; 9-1957; 1418A

MINFILE 104 142:

MINFILE NUMBER: 104A 142

NATIONAL MINERAL INVENTORY: 104A4 Ag19

NAME(S): ORE HILL 6 (L. 4821), ORE MOUNTAIN

MINING DIVISION: Skeena
UTM ZONE: 09
NORTHING: 6210470
EASTING: 444500

STATUS: Showing
NTS MAP: 104A04W
LATITUDE: 56 02 17
LONGITUDE: 129 53 27
ELEVATION: 0260 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized vein (Assessment Report 13352).

COMMODITIES: Gold Silver Copper Zinc

MINERALS
SIGNIFICANT: Pyrite Chalcopyrite Sphalerite
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT
CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Tabular

HOST ROCK
DOMINANT HOST ROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Tertiary Coast Plutonic Complex

LITHOLOGY: Quartz Porphyry
Diabase Dike

HOST ROCK COMMENTS: The host quartz porphyry, is a grey-pink phase of the Tertiary(?) Bitter Creek pluton (a satellite of the Coast Plutonic Complex).

GEOLOGICAL SETTING
TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine

RESERVES

ORE ZONE: VEIN

CATEGORY: Assay YEAR: 1984
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 165.2000 Grams per tonne
Gold 11.4000 Grams per tonne

COMMENTS: Channel sample across the maximum vein width of 12 centimetres.
REFERENCE: Assessment Report 13352.

CAPSULE GEOLOGY

The Ore Hill 6 showing is located about 11 kilometres north-northeast of Stewart, just east of the Stewart highway (37A), and approximately 4.2 kilometres east of the confluence of Bitter Creek with the Bear River. The showing is in the southeastern part of the Ore Hill 6 claim (L. 4821).

The showing may have been known in the 1920s when the Ore Hill claim group was explored by the Ore Mountain Mining Company Limited. In 1984, the property was owned by Grey Silver Mines Ltd. That year Maralgo Mines Limited optioned the property and flew an airborne VLF-EM and magnetometer survey over the area and conducted geological mapping, prospecting and sampling on the Ore Hill claims. The showing was reported at that time. In 1989, Grey Silver Mines performed geological mapping, sampling and soil surveys in the general area; no work was reported on the showing. The following year Varitech Resources Ltd. conducted a program of geological mapping, prospecting, sampling and soil, VLF-EM and magnetometer surveys in the area.

The area is underlain by the Tertiary(?) Bitter Creek pluton, a satellite intrusion of the Coastal Plutonic Complex (Bulletin 58, 63). The immediate hostrocks to the mineralization comprise 'quartz porphyry', a greyish-pink phase of the pluton (Assessment Report 13352).

A narrow, 5 to 12-centimetre wide, quartz vein follows a fault zone that lies along the south wall of an east-northeast trending, narrow diabase dike. The vein can be traced for about 10 metres. It contains pyrite, chalcopyrite and minor sphalerite. A channel sample

MINFILE NUMBER: 104A 142

MINFILE 104 148:

MINFILE NUMBER: 104A 148

NATIONAL MINERAL INVENTORY:

NAME(S): ART

STATUS: Showing
NTS MAP: 104A04W
LATITUDE: 56 01 20
LONGITUDE: 129 51 53
ELEVATION: 0305 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized outcrop (Assessment Report 8095).

MINING DIVISION: Skeena
UTM ZONE: 09
NORTHING: 6208675
EASTING: 446105

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOST ROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Salmon River	
Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
Sediment/Sedimentary

HOST ROCK COMMENTS: The hostrock is unclear; they may be Tertiary(?) Bitter Creek plutonic rocks or Jurassic Salmon River Formation sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES

ORE ZONE: SAMPLE

CATEGORY:	YEAR:
Assay	1979
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	4.8000 Grams per tonne
Gold	3.4000 Grams per tonne

COMMENTS: Grab sample from mineralized outcrop(?).
REFERENCE: Assessment Report 8095.

CAPSULE GEOLOGY

The Art showing is located about 10.5 kilometres north-northeast of Stewart, on the north side of Bitter Creek, and approximately 4.5 kilometres east-southeast of the confluence of Bitter Creek and the Bear River.

In 1979, the showing was covered by the Art claims, owned by Beaver Gold Resources Inc. That year, the company carried out a program of geological mapping, prospecting, sampling and geochemical surveys in the area. The showing was sampled at that time. No further work has been reported on the showing.

The area is underlain by the Tertiary(?) quartz monzonite Bitter Creek pluton, a satellite intrusion of the Coast Plutonic Complex. The pluton intrudes Middle Jurassic sediments of the Salmon River Formation (Hazelton Group) (Bulletin 58, 63). The nature of the hostrock is not clear; it may be granitoid or sedimentary.

No details on the mineralization are available. A grab sample, from mineralized outcrop?, collected in 1979 assayed 3.4 grams per tonne gold and 4.8 grams per tonne silver (Assessment Report 8095).

BIBLIOGRAPHY

EMPR EXPL 1979-273
EMPR BULL 58; 63
EMPR ASS REP #8095, 20379
EMPR MAP 8
GSC MAP 28A; 216A; 217A; 307A; 315A; 9-1957; 1418A

MINFILE NUMBER: 104A 148

MINFILE 104 156:

MINFILE NUMBER: 104A 156

NATIONAL MINERAL INVENTORY: 104A4 Cu13

NAME(S): GOLDBAR NW, GOLDBAR

STATUS: Showing
 NTS MAP: 104A04W
 LATITUDE: 56 02 10
 LONGITUDE: 129 54 41
 ELEVATION: 0122 Metres
 LOCATION ACCURACY: Within 50M
 COMMENTS: Mineralized outcrop west of the Goldbar property (104A 157), near the historical Gold Bar No. 1 showings (104A 053) (Assessment Report 20682).

MINING DIVISION: Siceena
 UTM ZONE: 09
 NORTHING: 6210250
 EASTING: 443210

COMMODITIES: Silver Bismuth Copper Zinc Lead Molybdenum

MINERALS
 SIGNIFICANT: Chalcopyrite Molybdenite
 ASSOCIATED: Quartz Pyrite Chlorite
 MINERALIZATION AGE: Unknown

DEPOSIT
 CHARACTER: Vein Shear
 CLASSIFICATION: Hydrothermal Epigenetic Porphyry

HOST ROCK
 DOMINANT HOST ROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite

HOST ROCK COMMENTS: The showing occurs within the Tertiary(?) Bitter Creek quartz monzonite pluton.

GEOLOGICAL SETTING
 TECTONIC BELT: Intermontane
 TERRANE: Stikine
 PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES

ORE ZONE: VEIN

COMMODITY	GRADE	YEAR: 1990
Silver	1779.4000	Grams per tonne
Bismuth	0.9100	Per cent
Copper	1.0000	Per cent
Molybdenum	0.0400	Per cent
Lead	0.2100	Per cent
Zinc	0.2200	Per cent

COMMENTS: Grab sample (88657) from a quartz-chlorite vein.
 REFERENCE: Assessment Report 20682.

CAPSULE GEOLOGY

The Goldbar NW showing is located approximately 11 kilometres north-northeast of Stewart, on the south side of the Stewart highway (37A) about 600 metres west of the Bitter Creek bridge. This showing is just west of Tenajon's Goldbar property and is located in the same area as the historical Gold Bar No. 1 showings (104A 053).

The history of the showing is unclear. The area was explored during 1910 and, again, in 1925 when the area was covered by the Good Enough (including the Gold Bar claim) and America's (or Americus) Girl claim groups. In 1990, Tenajon Resources Corp. carried out a limited rock, soil and silt sampling program on the Goldbar group owned by Javorsky. The showing was reported at that time.

The area is underlain by the Tertiary(?) Bitter Creek quartz monzonite pluton, a satellite body of the Coast Plutonic Complex. The pluton intrudes Upper Triassic to Lower Jurassic Unuk River Formation volcanics of the Hazelton Group (Bulletin 58, 63). The volcanics comprise crystal and lithic tuffs and cherty sediments that form large inclusions in the pluton (Assessment Report 20682).

Narrow, 1 to 20-centimetre wide, quartz veins occupy narrow shears in the pluton and contain semi-massive pyrite and chalcopyrite and up to 3 per cent molybdenite. A grab sample (88657) taken in 1990 assayed about 1.0 per cent copper, 1,779.4 grams per tonne

RUN DATE: 03/29/93
RUN TIME: 10:19:25

MINFILE / pc
MASTER REPORT
GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

PAGE: 313
REPORT: RGEN0100

CAPSULE GEOLOGY

silver, 0.91 per cent bismuth, 0.22 per cent zinc, 0.21 per cent lead and 0.04 per cent molybdenum; gold, antimony and tungsten values were also anomalous (Assessment Report 20682).

The reported assays are confusing as to which results belong with which sample/showing. Subsequent sampling (Assessment Report 21909) of the Goldbar showing (104A 157) to the southeast, fails to duplicate the results reported for that showing in Assessment Report 20682, but the values are very similar to the results quoted for this showing.

BIBLIOGRAPHY

EMPR AR 1910-64; 1925-92; 1927-92
EMPR BULL 53; 63
EMPR ASS RPT 20379, *20682, 21909
EMPR MAP 8
GSC MEM 32, p. 58; 175, pp. 105, 119
GSC MAP *28A; 216A; 217A; 307A; *315A; 9-1957; 1418A
GSC OF 2582

DATE CODED: 920214
DATE REVISED: 930301

CODED BY: WC
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: 104A 156

MINFILE 104 157:

MINFILE NUMBER: 104A 157

NATIONAL MINERAL INVENTORY: 104A4 Cu13

NAME(S): GOLDBAR

STATUS: Showing
 NTS MAP: 104A04W
 LATITUDE: 56 01 49
 LONGITUDE: 129 53 58
 ELEVATION: 0130 Metres
 LOCATION ACCURACY: Within 500M

MINING DIVISION: Skeena
 UTM ZONE: 09
 NORTHING: 6209600
 EASTING: 443950

COMMENTS: Mineralized quartz vein located in the northwest corner of the Goldbar claim (Assessment Report 20682).

COMMODITIES: Silver Gold Copper Lead Molybdenum
 Bismuth

MINERALS
 SIGNIFICANT: Pyrite Stibnite Chalcopyrite Molybdenite
 ASSOCIATED: Quartz
 MINERALIZATION AGE: Unknown

DEPOSIT
 CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic Porphyry

HOST ROCK
 DOMINANT HOST ROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Hazelton	Unuk River	
Tertiary			Coast Plutonic Complex

LITHOLOGY: Augite Diorite Porphyry
 Tuff
 Volcanic
 Cherty Sediment/Sedimentary

HOST ROCK COMMENTS: The showing occurs within augite diorite porphyry (Tertiary?) near the contact with Hazelton Group rocks.

GEOLOGICAL SETTING
 TECTONIC BELT: Intermontane
 TERRANE: Stikine
 PHYSIOGRAPHIC AREA: Boundary Ranges

RESERVES
 ORE ZONE: VEIN

CATEGORY: Assay	YEAR: 1990
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	1779.7000 Grams per tonne
Gold	0.3428 Grams per tonne

COMMENTS: Sample across 0.3 metre of the mineralized quartz vein.
 REFERENCE: Assessment Report 21909.

CAPSULE GEOLOGY

The Goldbar showing is located approximately 11 kilometres north-northeast of Stewart, on the west side of Bitter Creek about 700 metres south-southeast of the Bitter Creek bridge. The Goldbar NW (104A 156) showing occurs to the northwest and the historical Gold Bar No. 1 showings (104A 053) also occur in the area.

The history of the showing is unclear. The area was explored during 1910 and, again, in 1925 when the area to the west was covered by the Good Enough (including the Gold Bar claim) and America's (or America's) Girl claim groups (104A 053). No further work was reported in the area until 1990 when Tension Resources Corp. carried out a limited rock, soil and silt sampling program on the Goldbar group owned by Javorsky. The showing was reported at that time.

The area is underlain by the Tertiary(?) Bitter Creek quartz monzonite pluton, a satellite body of the Coast Plutonic Complex. The pluton intrudes Upper Triassic to Lower Jurassic Unuk River Formation volcanics of the Hazelton Group (Bulletin 58, 63). The volcanics comprise crystal and lithic tuffs and cherty sediments that form large inclusions in the pluton (Assessment Report 20682). The volcanic and sedimentary rocks are intruded by augite diorite porphyry.

Several narrow (less than 10 centimetres wide) quartz veins contain variable amounts of pyrite, chalcopyrite, stibnite and

CAPSULE GEOLOGY

molybdenite. One quartz vein, 30 centimetres wide, is well mineralized with stibnite, molybdenite and pyrite. A chip(?) sample collected in 1990 assayed 17.0 grams per tonne gold, 4.04 per cent bismuth, 21.7 grams per tonne silver and 0.16 per cent lead (Assessment Report 20682).

A sampling program was conducted to follow this vein; the highest value was 1779.7 grams per tonne silver and 0.3428 gram per tonne gold (Assessment Report 21909).

The reported assays are confusing as to which results belong with which sample/showing. Subsequent sampling (Assessment Report 21909) of this showing southeast, fails to duplicate the results reported in Assessment Report 20682, but the values are very similar to the results quoted for the Goldbar NW (104A 156) showing.

BIBLIOGRAPHY

EMPR AR 1910-64; 1925-92; 1927-92
EMPR BULL 58; 63
EMPR ASS RPT 20379, *20682, *21909
EMPR MAP 8
GSC MEM 32, p. 58; 175, pp. 105, 119
GSC MAP *28A; 216A; 217A; 307A; *315A; 9-1957; 1418A
GSC OF 2582

DATE CODED: 920214
DATE REVISED: 930301

CODED BY: MC
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

7.B. GEOLOGY:

The regional and Red Property geology, as compiled by the B.C. Ministry of Energy and Mines, is shown in Figures 7 and 7A. The property geology comprises a segment of the Bitter Creek quartz monzonite pluton, shown in pink. The Eocene pluton is a satellite intrusive of the Coastal Plutonic Complex, and is hosted by Hazelton Group Rocks: Unuk River Formation basalt, andesite and rhyolite flows shown in green; and, Salmon Arm Formation argillites, sandstone, siltstone and shale, shown in olive green.

Some MINFILE reports reference acid volcanics, breccias and cherty sediments as components of the mineral occurrences. Some of more interesting historic mineralization appears to be associated with these rocks. Northeast of the property in the Clements Lake area (Map 7.B.) the geology is somewhat similar, with the host rocks of the intrusion comprising altered breccias and tuffs. As mapped by Grove (1962) the regional structure shown in Figure 7A extends northeast from the Town of Stewart across the Bitter Creek Pluton to the area of the American Creek Anticline.

7.C. MINERALIZATION:

As noted in Section 7.A. and described in the MINFILE reports, historic mineralization on and in the vicinity of the Red Property generally comprises narrow quartz-sulfide veins, with copper-gold-silver-lead-zinc values, and some tungsten and molybdenum values, hosted by quartz monzonite or coarse cherty sediments. Some cross cutting and tunneling was done e.g., on the Ore Mountain Property (MINFILE 104A 143) and on the Morgan 6 Property (MINFILE 104A 051), on quartz fracture zones with mineralization similar to that mentioned above.

Mineralization is also hosted sediments of the Salmon Arm Formation and is associated with felsic dykes and the faulted contacts of such dykes e.g., the Lead Coil A Showing (MINFILE 104A 140); and, the Lead Coil B Showing (MINFILE 104A 141). The mineralization generally comprises pyrite, galena, sphalerite, and chalcopyrite in quartz veins and lenses, and quartz breccia zones, hosted by sheared argillite.

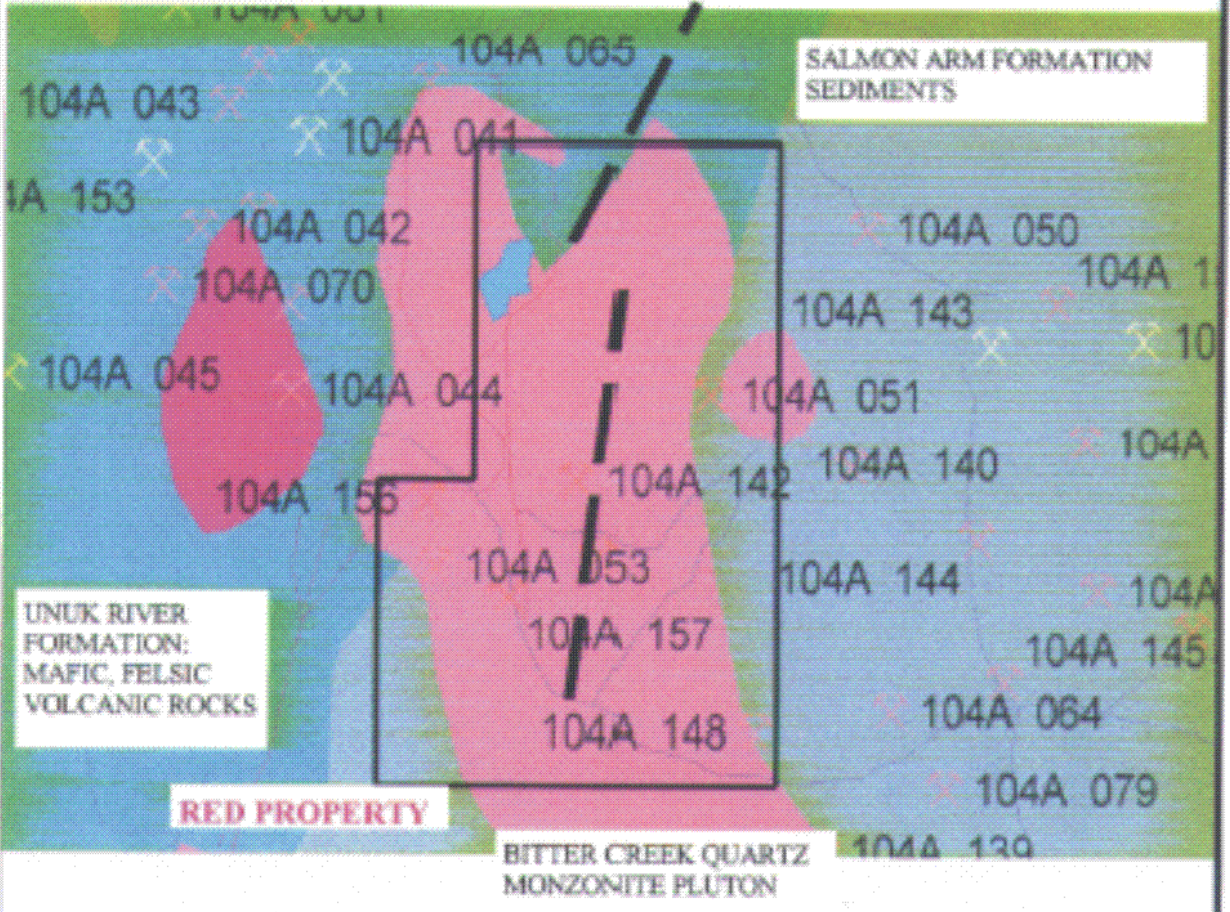
The regional structure referenced in Section 7.B. and shown on Figure 7A above appears to be a favourable environment for mineralization. Two of the Minfile locations are located in proximity to it and southwest of Bitter Creek it is associated with the historic Dunwell Mine on Dunwell Creek.

Most of the aforementioned mineral occurrences were discovered historically and, in themselves, do not appear to constitute substantial targets. Moreover, many of the relatively recent exploration activities have been focused on the re-evaluation of the showings, without the broader perspective of evaluating the potential of favourable geological environments to host world-class ore bodies.

FIGURE 7A:

RED PROPERTY:
MINFILE NUMBER FILE, GEOLOGY
REGIONAL STRUCTURE

SCALE: 1:56250



Section 8

8. 2000 EXPLORATION ACTIVITIES ON THE RED 1-6 CLAIMS:

The Red 1-4 Mineral Claims were staked in September 1999 to cover polymetallic stream sediment anomalies generated by a regional geochemical and geological program carried out under the BC Prospectors Assistance Program. Follow-up activities in 1999 almost immediately identified interesting, polymetallic targets associated with rhyolite and rhyolite breccia stratigraphy in the Bitter Creek Valley (Molloy, 2000). The activities also indicated that an historic mill complex was located in one of the target areas. Research in 1999 and 2000 first indicated that mill feed had apparently come from a source or sources in proximity to the mill. However, data provided by the government on August 14, 2000 indicated that the mill was owned by the Adam Milling Company and operated from April until September 1973. The mill was apparently built to treat copper-gold ore from the Red Cliff deposit on American Creek and from the Roosevelt deposit located farther up Bitter Creek (Minfile 104A 037).

The 2000 Bitter Creek Project was also initiated as part of a regional Prospectors Assistance Program in the Stewart Gold Camp. Exploration activities including additional research and compilations, claim staking, geological and geochemical surveys, analytical work, data entry and reporting, were initiated in July and completed in December, 2000. The fieldwork was carried out intermittently as allowed by the generally adverse weather conditions, which often entailed heavy, incessant rainfall and fog. The Town of Stewart was used as a base for the work.

The approximately \$20,000 project expenditure is summarized Table 2. Expenses have been apportioned from the Assistance Program, but include industry salary rates and the full cost of report writing and map preparation.

8.A. CLAIM STAKING:

The Red 3 Mineral Claim was re-staked as New Red 3, to cover additional ground that had come open in the Bitter Creek Area. The Red 5 and Red 6 Claims were staked in the Clements Lake Area as the part of the initial 2000 follow-up activities, which continued to confirm the favourable geological environment covered by the Red Property.

8.B. 2000 GEOLOGICAL AND GEOCHEMICAL SURVEYS:

In addition to the aforementioned claim staking, the 2000 exploration activities included research in the Smithers, BC Ministry of Energy and Mines' Office and the Stewart Museum; compass, chain and flag surveying of access roads, mill site roads, trails, and hiking trails; the installation of various flagged grid and control lines; detailed and reconnaissance geological and geochemical surveys, including the collection of 113 stream sediment, rock, soil and check samples and their analysis at ALS Chemex in Vancouver for gold (FA/AA) and 34 elements (ICP); and, some air photo investigation to ascertain the existence of possible local source areas of the Adam Mill feed. The ALS Chemex Certificates of Analysis are included in Appendix A.

**TABLE 2: EXPLORATION EXPENDITURES (\$ CDN)
(INCL MOB TORONTO>STEWART CAMP; DEMOB >TORONTO)**

TYPE:	CLAIM NO. (WK ALLOCATION):	AMOUNT:
	RED 5	9%
	RED 6	8%
	RED 4	40%
	RED 3	35%
	RED 2	6%
	RED 1	2%
a. truck: gas, rental, repairs, km.....		\$3163.88
b. subsistence, accommodation.....		1365.08
c. Chemex analytical charges.....		2265.96
d. salaries 20 days @ \$300/day.....		9000.00
e. supplies.....		793.08
f. shipping, courier, communication.....		181.33
g. claim registration.....		450.00
g. project research, data acquisition.....		300.00
b. report writing/data interp.....		1500.00
c. reproduction.....		175.00
TOTALS.....		19194.33

8.C.1. BITTER CREEK AREA 2000 GEOLOGICAL AND GEOCHEMICAL SURVEYS:

Reconnaissance 2000 geological and geochemical surveys were initially carried out in the Bitter Creek Valley to confirm 1999 targets; and, to ascertain the extent of the felsic volcanic stratigraphy and its potential, to south of the Adam Mill on the Bitter Creek Road (Map 3). The work was hindered by the constant heavy rainfall, which tended to cleanse streams of sediment and precipitate landslides, which closed the road about 1.5 km south of the mill.

8.C.1.a. RECONNAISSANCE STREAM SEDIMENT GEOCHEMISTRY:

All of the 10 stream sediment samples (Table REDSS00; Map 3; Appendix A) collected in the Bitter Creek Valley on the Red Property have anomalous copper and cadmium contents ranging between 64 and 2330 ppm and 1 and 5 ppm, respectively. Six samples have anomalous lead contents ranging between 20 and 268 ppm; 9 samples have anomalous zinc contents between 130 and 346 ppm; 5 samples have anomalous arsenic contents between 32 and 80 ppm; three samples have anomalous gold values between 30 and 120 ppb; and five samples have anomalous silver values between 0.8 and 4.4 ppm.

The stream sediment samples are indicative of at least two main areas of interest: Area 1 > an area located about 1.2 km south of the historic mill on the Bitter Creek Road (sample 759713SS: 346 ppm zinc, 100 ppm copper; 80 ppm arsenic; 5 ppm cadmium; and sample 759714SS: 120 ppb gold; 150 ppm zinc, 79 ppm copper, 40 ppm arsenic); and, Area 2 > the Mill Area (e.g. sample 759788SS, a retake of the original 1999 discovery sample, located on the Bitter Creek Road about 70 m north of the mill: 35 ppb gold; 4.4 ppm silver; 256 ppm lead; 268 ppm zinc; 2330 ppm copper). The original, 1999 sample (160207SS) contained 50 ppb gold; 5 ppm silver; 372 ppm lead; 346 ppm zinc; and, 1325 ppm copper. The geological survey (Map 3) indicated that the favourable rhyolitic unit that has apparently been intruded by the Bitter Creek quartz monzonite pluton continues to the south of the mill area (Map 1) and remains open to further delineation.

8.C.1.b. DETAILED FOLLOW-UP SOIL GEOCHEMISTRY:

Soil geochemical surveys were used to evaluate and delineate the extent of the rhyolite and rhyolite breccia in the vicinity of the historic mill (Photo 5). The felsic rocks appear to have been intruded by the Bitter Creek quartz monzonite pluton. As exposed along the east side of the road, the two main rock types have both sharp and gradational contacts. The rocks are covered by clay and silt-sand and clay overburden within a few meters of the road, and the cover thickens and becomes rather pervasive, even on the much steeper topography on the eastern area of the grid lines (Map 3). However, many of the soil holes that were dug with a large boniknocker, contained angular, felsic rock fragments and boulders, suggesting the target stratigraphy is fairly extensive.

TABLE REDSS00
RED STREAM SEDIMENT SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME, COLOUR:	DESCRIPTION:	STREAM PERAMATERS:	GEOLOGY: HAZ. VOL & QTZ MON INTRUSIVE	SAMPLE NO	SOME ANAYTICAL RESULTS								
						AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	W ppm
1.0 759701CK TOP MAP 104/A HWY 37 & BITTER CRK; NW BANK, CHECK MATERIAL FOR SURV	SD, BLK	FI GR, MAINLY RD MAFIC VOL (70%); QTZ (15%); OX MAT (6%); FELD (5%); MINOR BIOTITE, SERICITE; NO MAGNETITE	FAST FLOW NW, MAJOR STREAM DRAINING MINERALIZED AREA THAT INCLUDES RED MOUNTAIN FLOWS NE	ALTERED (SIL, CARB, K FELSPAR, LIM)	759701CK	360.0	2.8	106.0	252.0	139.0	162.0	5.0	50.0	<10
2.0 759713SS 2.525 KM S OF RD CULVERT @ 0+00 ON RED GRID SAMP AT END OF DRIVEABLE SECT OF BITTER CRK RD	HETRO SILT, SD, GRAV BRN	SILT-CO 30% SILT, 60% SD, 10% GRAV CW HETRO FRAGS, MOST WELL OXID (LIM), 2-3% ARE WH, SIL	HIGH ENERGY REGIME CRK FLOWS 345° FEW SEDS	HETRO BO - QM, FELD PORPH; FEW OXID SEDS	759713SS	<30	0.8	14.0	346.0	100.0	80.0	5.0	130.0	<10
3.0 759714SS 2.225 KM S OF RD CULVERT @ 0+00	HETRO SD, GRV; BRN	SILT-PEBS 10% SILT, 60% SD, 30% HETRO FRAGS - 60% ANG SED FRAGS, SOME OXID; 30% WH, GREY QTZ, MIN EPID, 2-3% ORGS, 7% SILT	CRK FLOWS 353° SLUGGISH DRAINAGE	HETRO BO, MAINLY QTZ MON & PORPH, ONLY FEW OX BO	759714SS	120.0	0.4	22.0	150.0	79.0	40.0	2.0	110.0	<10
4.0 759725CK BITTER CREEK CHECK SAMP					759725CK	300.0	0.6	34.0	188.0	127.0	128.0	3.0	50.0	<10
5.0 759727SS 0+35S, 1+50E RED GRID	SILT/SD/GRAV RED BRN	SILT-PEBS 60% SILT, 30 SD, 10 PEB, ORGS MAINLY PEB FRAGS, FEW OX FRAGS	CRK FLOWS 325°	FORESTED, OV, DEVILS CLUB NEGATES PROGRESS	759727SS	<30	0.6	12.0	138.0	115.0	26.0	3.0	170.0	<10
6.0 759735SS 0+65N, 0+40E RED GRID	HETRO SD BRN	FI - CO 20% FI, 80% C, INCL BLK VOL, GRY - WH - PK CHERTY MAT, SOM QTZ MON, SOM OX FRAGS, SOM WH QTZ 60% MAFICS, 30% FELSICS	CRK FLOWS 96° MOD FLOW	FORESTED, OV, DEVILS CLUB NEGATES PROGRESS	759735SS	30.0	0.4	20.0	130.0	78.0	50.0	1.5	130.0	<10
7.0 759736SS 0+82N RED GRID	CL/SILT/SD BRN	CL TO CO 20% ORG MUCK, 70% SD, 10% CL. SOM LIM FRAGS, SOM QTZ MON	CRK FLOWS 240° LOW FLOW	ON E SIDE OF RD DENSE VEG	759736SS	<30	0.8	24.0	136.0	95.0	46.0	2.0	140.0	<10
8.0 759737SS 1+07S RED GRID	SILT/SD/PEBS ORG BRN	SILT - PEBS 70% SILT, 20% SD, 10% ORGS, MUCK, FRAGS > 50% OXID QTZ MON 50% FR QTZ MON	DRY DITCH SAMP NO FLOW	ON E SIDE OF RD DENSE VEG	759737SS	<30	0.4	46.0	138.0	128.0	22.0	1.0	160.0	80.0
9.0 759748SS 1+57S, 1+25E RED GRID	ORG MUCK BLK	SILT 50% SILT, 50% ORGS	MIN FLOW @ 220° WELL HEM RHY	ON E SIDE OF RD DENSE VEG FLT BO	759748SS	<30	1.2	6.0	24.0	111.0	<2	1.5	170.0	<10
10.0 759749SS 2+25 S ALONG BITTER CRK RD RED GRID	SILT/CL PK RD BRN	CL-SILT 80% SILT, 20% CL	FLOW S IN DITCH	ON E SIDE OF RD OXID RHY	759749SS	<30	0.6	22.0	114.0	64.0	28.0	2.0	170.0	<10
11.0 759750CK BITTER CRK CHECK SAMP					759750CK	270.0	2.6	104.0	258.0	138.0	194.0	5.0	50.0	10.0
12.0 759755SS 3+06 BITTER CRK RD, RED GRID	SILT/SD BRN - ORG BRN	SILT-CO 60% SILT, 40 SD, MIN ORGS	HI ENERGY STR, FLOWS 240°	RHY BREC	759755SS	<30	0.8	14.0	154.0	121.0	18.0	2.5	220.0	<10
13.0 759788SS 0+03 BITTER CRK RD, RED GRID	SILT/SD BRN - ORG BRN	SILT-CO 20% SILT, 80 SD, HETRO SD - OX FRAGS, LIM, HEM, RHY, QTZ MON	DITCH CREEK	RHY BREC	759788SS	35.0	4.4	256.0	268.0	2330.0	32.0	1.5	150.0	<10



PHOTO 5:

**RHYOLITE BRECCIA, EDGE OF BITTER CREEK ROAD,
WEST OF ADAM MILL SITE**

Four of the 54 soil samples (759702SO-759705SO, Table REDSO00; Map 3; Appendix A) collected on the property in the Bitter Creek Valley Area were taken from the historic tailings pond (Photo2), which is now dry and located about 250 m north of the mill. The analytical results are somewhat suggestive of the original contents of the muck milled: the four samples have gold contents ranging between 300 and 510 ppb; silver contents between 4.4 and 5.5 ppm; lead contents between 18 and 68 ppm; zinc contents between 8 and 22 ppm; copper contents between 188 and 840 ppm; arsenic contents between 42 and 74 ppm; and bismuth contents between 34 and 52 ppm. The mill thus appears to have thus been constructed to process mainly gold-silver-copper feed that has a distinctive arsenic + bismuth signature.

Detailed soil geochemical surveys in the mill area and to the south of it entailed the collection of 50 additional samples taken from the generally well-developed B-horizon. The sample material is usually composed of silt and sand that is often well oxidized (limonite, hematite, jarosite-alunite), with distinctive hues of yellow, red brown and pink. Most of the 50 samples were collected at a spacing of 10 to 25 m on grid lines and mill roads (Table REDSO00; Map 3; Appendix A). Twenty-five samples have anomalous gold values ranging between 10 and 360 ppb; 34 have anomalous silver values between 0.8 and 25 ppm; 35 have anomalous copper values between 40 and 1550 ppm; 19 have anomalous arsenic contents between 30 and 48 ppm; 2 have anomalous zinc contents of 172 and 1270 ppm; 4 have anomalous bismuth contents between 6 and 144 ppm; and, two have anomalous tungsten contents of 20 and 70 ppm.

The results of the soil samples taken in the vicinity of the mill are considered reflective of the favourable rhyolite and rhyolite breccia horizon exposed on the east edge of the Bitter Creek Road. A large majority of the soil samples taken within 100 m of the east side of the road (Map 3; Figures 8A-8F) have anomalous silver, lead, copper, and arsenic values. The higher zinc values are also located in this area, along with the majority of anomalous gold values. Since the overburden is interpreted to have a masking affect and the initial FA/AA gold analyses had a lower detection limit of 30 ppb, 13 soil samples with values <30 ppb were re-run. Eleven returned anomalous gold values ranging between 10 and 80 ppb (Figure 8A).

The gold anomalies are not limited to the area of the historic mill site e.g. the second and third highest gold values (120 and 95 ppb; Figure 8A; Map 3) and the second highest copper value (524 ppm; Figure 8C; Map 3) were obtained on higher ground, to the east of the site. The eastern area of the grid has the steepest terrain and the thickest overburden cover that often comprises a 10-15 cm A-horizon, with a 3-6 cm thick clay horizon at its base; and, an underlying, apparently thick and well-oxidized B-horizon. The B-horizon often contains angular fragments of felsic volcanic rock and crystal tuff, as well as some quartz monzonite and black sediment. In spite of the deep overburden cover, the gold, copper and silver soil values on the eastern area of the grid are intriguing: a number of weak gold values just above the detection limit, along with one very anomalous value of 120 ppb, and a number of silver and copper anomalies. However, the results have to be interpreted carefully: e.g., in the original sample 759728SO, B-horizon material was taken below the aforementioned clay horizon and it

TABLE REDS000
RED SOIL SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME HORIZ DEVEL DEPTH	GR SIZE COLOUR	COMPOSITION	DRAINAGE, GEOLOGY	COMMENTS	SAMPLE NO	RELEVANT ANALYTICAL RESULTS									
							AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
1.0 759702SO 2+43N, 0+25E W OF BITTER CRK RD IN TAILINGS AREA? RED GRID	SILT TAILINGS? WATER LAID, WATER SORT? 15 CM	SILT ORG BRN	SILT, SOM WELL LIM	TAILINGS PAD NO GEOL AVAIL	TAILINGS EITHER TRUCKED OR PIPED FROM MILL	759702SO	510.0	5.4	18.0	20.0	842.0	42.0	1.5	1.0	52.0	<10
2.0 759703SO 2+08N, 0+40E W OF BITTER CRK RD IN TAILINGS AREA? RED GRID	SILT/SD TAILINGS? WATER LAID, WATER SORTED? 15 CM	SILT/FI-CO ORG BRN - GREY BRN	60% SILT, 30% SD, 10% FRAGS SOM JARVAL	TAILINGS PAD NO GEOL AVAIL	TAILINGS EITHER TRUCKED OR PIPED FROM MILL	759703SO	450.0	5.4	68.0	22.0	514.0	74.0	0.5	130.0	42.0	<10
3.0 759704SO 1+83N, 0+40E W OF BITTER CRK RD IN TAILINGS AREA? RED GRID	SILT TAILINGS? WATER LAID, WATER SORTED? 20 CM	SILT ORG BRN - GREY BRN	SILT IN OXID (LIM) BANDS	TAILINGS PAD NO GEOL AVAIL	TAILINGS EITHER TRUCKED OR PIPED FROM MILL	759704SO	300.0	4.4	26.0	26.0	188.0	66.0	<0.5	30.0	34.0	10.0
4.0 759705SO 1+58N, 0+40E W OF BITTER CRK RD IN TAILINGS AREA? RED GRID	SILT TAILINGS? WATER LAID, WATER SORTED? 24 CM	SILT ORG BRN - YEL GREY	75% SILT, 25% SD LIM	TAILINGS PAD NO GEOL AVAIL	TAILINGS EITHER TRUCKED OR PIPED FROM MILL	759705SO	480.0	4.4	30.0	8.0	348.0	50.0	<0.5	70.0	34.0	<10
5.0 759707SO 0+25S, 0+25E E SIDE BITTER CRK RD RED GRID	SILT/SD/GRAV B-C POOR 15 CM	SILT - PEBS BRN GREY - ORG BRN	30% SILT, 20% SD, 50% CHERTY, OXID FRAGS-> RHY BRECC, QTZ MON	OXID RHY BREC BOLDERS & SOM FRESH ANG QTZ MON		759707SO	<30, 25	0.6	30.0	94.0	384.0	30.0	2.0	140.0	8.0	20.0
6.0 759710SO 0+25S, 0+31E E SIDE BITTER CRK RD RED GRID	SILT/SD/GRAV B-C POOR 15 CM	SILT - PEBS BRN - ORG BRN	30% SD, 50% SILT, 20% FRAGS, MAINLY LIM, SIL MAT	OXID RHY BREC BOLDERS & SOM FRESH ANG QTZ MON		759710SO	<30, 20	0.6	22.0	88.0	108.0	34.0	1.5	80.0	<2	<10
7.0 759711SO 0+25S, 0+50E E SIDE BITTER CRK RD RED GRID	SILT/SD/GRAV B-C POOR 18 CM	SILT - PEBS BRN - ORG BRN	60% SD, 30% SILT, 5% FRAGS, 5% ORGSVEG FRAGS WELL OXID, MAINLY MN	NO GEOL - DENSE		759711SO	<30, 10	1.4	16.0	78.0	69.0	30.0	1.0	90.0	<2	<10
8.0 759712SO 0+25S, 0+75E E SIDE BITTER CRK RD RED GRID	AS 759711SO					759712SO	<30, 5	1.0	16.0	102.0	88.0	34.0	2.0	130.0	2.0	<10
9.0 759716SO BITTER CRK RD @ 0.525 KM S OF CULVERT (0+00) RED GRID	SILT/SD BC POOR 22 CM	SILT - FI ORG BRN	30% SILT, 20% SD WELL LIM, LOC DERIVED	OXID FELSIIC VOL OUTCROP SEE RK SAMPLES 759716, 17		759716SO	<30, 45	<2	22.0	88.0	89.0	36.0	0.5	40.0	<2	<10

TABLE REDS000 (CONT):
RED SOIL SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME HORIZ DEVEL DEPTH	GR SIZE COLOUR	COMPOSITION	DRAINAGE, GEOLOGY	COMMENTS	SAMPLE NO	SOME ANALYTICAL RESULTS									
							AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
10.0 759720SO BITTER CRK RD @ 0+50 S, 0+25 E RED GRID	SILT/SD B BANK 25 CM	SILT - CO ORG BRN TO RD BRN	60% SILT, 40% SD LIM, HEM SOM CO FRAGS RHY BREC	OXID RHY BO, SOM QTZ MON; DRAINAGE GOOD TO WEST		759720SO	30.0	0.4	22.0	52.0	260.0	24.0	0.5	110.0	<2	<10
11.0 759721SO BITTER CRK RD @ 0+50 S, 0+46 E RED GRID	SILT/SD B WELL 30 CM	SILT - CO PK BRN	70% SILT, 30% SD LIM, HEM SOM CO FRAGS RHY BREC	OXID RHY BO, SOM GRANITE; DRAINAGE GOOD TO WEST		759721SO	30.0	0.8	22.0	98.0	100.0	34.0	1.5	110.0	<2	<10
12.0 759722SO BITTER CRK RD @ 0+50 S, 0+67 E RED GRID	SILT/SD B WELL 30 CM	SILT - CO ORG BRN, PK TINGE	70% SILT, 30% SD LIM, HEM SOM CO FRAGS RHY BREC	NO GEOL DRAINAGE GOOD TO WEST		759722SO	<30, 20	0.8	26.0	106.0	126.0	48.0	1.5	100.0	2.0	<10
13.0 759723SO BITTER CRK RD @ 0+50 S, 0+85 E RED GRID	SILT/SD B WELL 24 CM	SILT - CO ORG BRN, PK TINGE	70% SILT, 30% SD LIM, HEM	OXID PORPH QTZ MON? DRAINAGE GOOD TO WEST		759723SO	<30, 80	2.6	18.0	72.0	76.0	32.0	1.0	110.0	<2	<10
14.0 759724SO BITTER CRK RD @ 0+50 S, 0+97 E RED GRID	SILT/SD B BANK 24 CM	SILT - CO ORG BRN	70% SILT, 30% SD MIN ORGS SOM OXID FRAGS - RHY?	NO GEOL DRAINAGE GOOD TO WEST		759724SO	<30, 5	1.4	16.0	38.0	29.0	18.0	0.5	70.0	<2	<10
15.0 759726SO BITTER CRK RD @ 0+50 S, 1+55 E RED GRID	SILT/SD B WELL 30 CM	SILT - CO ORG, BRN BLK, YEL	80% SILT, 10% SD, 10% FRAGS, ORGS SIL OXID FRAGS INCL TO BLK ANG VOL	NO GEOL DRAINAGE GOOD TO WEST		759726SO	<30	1.4	20.0	30.0	25.0	18.0	2.0	50.0	<2	<10
16.0 759728SO @ 0+50 S, 1+75 E RED GRID	SILT/SD B WELL 30 CM	SILT - CO YEL ORG, BRN	80% SILT, 20% SD, MINOR FRAGS - BLK FIR FOREST VOL & ALT FEL VOL	NO GEOL DRAINAGE GOOD TO WEST		759728SO	120.0	0.2	16.0	94.0	67.0	26.0	1.5	120.0	<2	<10
17.0 759733SO @ 0+50 S ON RD BK SAMP RED GRID	SILT/PEBS B WELL 30 CM	SILT - PEBS YEL BRN	90% SILT, 10% PEBS OXID PEBS - BKL VOLDRAINAGE & RHY	RHY DRAINAGE GOOD TO WEST		759733SO	30.0	1.8	14.0	64.0	52.0	24.0	1.5	100.0	<2	<10
18.0 759734SO ~ 0+00, 0+25E ON UPPER RD BK SAMP RED GRID	SILT/SD B WELL 25 CM	SILT - CO ORG BRN	90% SD, 10% SILT MIN FRAGS - BLK VOL, SIL PEBS	FOREST DRAINAGE GOOD TO WEST		759734SO	30.0	0.4	26.0	98.0	113.0	40.0	1.5	110.0	2.0	<10
19.0 759738SO 1+25S, 0+17E BK SAMP RED GRID	SILT/SD/PEBS B WELL 25 CM	SILT - PEBS ORG BRN	20% SD, 70% SILT 10 ORGS & OXID FRAGS - MAINLY RHY	BK DRAINAGE GOOD TO WEST		759738SO	<30, 10	1.2	14.0	60.0	70.0	20.0	0.5	100.0	<2	<10
20.0 759739SO 1+25S, 0+25E RED GRID	SILT/SD/PEBS ROCKY B WELL 15 CM	AS 759738SO				759739SO	<30, 30	0.8	32.0	172.0	98.0	28.0	1.5	220.0	<2	<10

TABLE REDSO00 (CONT):
RED SOIL SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME HORIZ DEVEL DEPTH	GR SIZE COLOUR	COMPOSITION	DRAINAGE, GEOLOGY	SAMPLE NO	SOME ANAYTICAL RESULTS									
						AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
21.0 759740SO 1+25S, 0+40E BK SAMP RED GRID	SILT/SD/PEBS ROCKY B WELL 20 CM	AS 759738SO			759740SO	<30, 15	0.6	24.0	108.0	111.0	30.0	2.0	160.0	<2	<10
22.0 759743SO 1+25S, 0+56E BK SAMP RED GRID	SILT/SD/PEBS STONEY B WELL 25 CM	SILT - PEBS ORG BRN	20% SD, 70% SILT 10 ORGS & OXID FRAGS - MAINLY RHY, BLK VOL	BK DRAINAGE GOOD TO WEST	759743SO	<30, 25	<2	24.0	108.0	116.0	40.0	1.5	120.0	<2	<10
23.0 759746SO 1+25S, 0+79E TREE SAMP RED GRID	SILT/SD/PEBS B WELL 30 CM	SILT - PEBS PK BRN	10% SD, 80% SILT 10 ORGS & BLK FRAGS	NO GEOL DRAINAGE GOOD TO WEST	759746SO	<30, 10	2.0	12.0	50.0	48.0	22.0	0.5	90.0	<2	<10
24.0 759747SO 1+25S, 1+19E RED GRID	SILT/SD/PEBS ROOTY B WELL 20 CM	SILT - PEBS GREY PK	10% SD, 80% SILT 10 ORGS & HEM FRAGS	NO GEOL DRAINAGE GOOD TO WEST	759747SO	<30	1.2	10.0	20.0	16.0	20.0	<0.5	70.0	<2	<10
25.0 759754SO BITTER CRK RD 2+91S AT BASE OF OUTCROP IN SAMP 759753RX	SILT/SD BASE OC RK DERIVED	SILT - CO ORG BRN	50% SD, 50% SILT SD FR HAS OX BR FRAGS	IN SAMP 759753RX OUTCROP	759754SO	360.0	0.8	28.0	124.0	249.0	32.0	1.5	170.0	144.0	70.0
26.0 759757SO 3+65 M S ON BITTER CRK RD BK SAMP	SILT/SD B WELL 10 CM	SILT - FI ORG BRN	80% SILT, 20% SD MIN GRAN FRAGS	QZ MON OC NEAR SAMP	759757SO NA										
27.0 759848SO L0+50S 37.5E RED GRID	SILT/SD/PEBS B WELL 25 CM	SILT - PEBS ORG BRN	60% SILT, 30% SD 5% ORG, 5% HETRO FRAGS - OXID MAT, RHY, MIN BLK SED	SULF RHY NEAR SAMP	759848SO	5.0	1.6	18.0	74.0	64.0	24.0	<0.5	120.0	<2	<10
28.0 759849SO L0+50S 75E RED GRID	SILT/SD/PEBS B WELL 30 CM	SILT - PEBS ORG BRN	60% SILT, 30% SD 5% ORG, 5% HETRO FRAGS - OXID MAT, RHY, MIN BLK SED	NO OC	759849SO	10.0	1.2	16.0	84.0	82.0	30.0	<0.5	110.0	<2	<10
29.0 759850 CHECK WGMI					759850CHK	105.0	3.4	<2	78.0	5780.0	2.0	0.5	<10	<2	<10
30.0 759758SO L0+50S 1+28E RED GRID	SILT/SD/PEBS B WELL 20 CM	SILT - PEBS ORG BRN	55% SILT, 30% SD 5% ORG, 10% HETRO FRAGS - OXID MAT, RHY, MIN BLK SED	NO OC	759758SO	95.0	6.0	44.0	28.0	524.0	42.0	<0.5	150.0	24.0	<10
31.0 759759SO L0+50S 1+37.5E RED GRID	CL/SILT//PEBS B - BELOW CL HORIZ WELL 32 CM	CL - PEBS ORG BRN YELL BRN	50% CL, 40% SILT 10% HETRO FRAGS - OX, SIL BLK DACITE	NO OC	759759SO	<5	0.8	8.0	20.0	19.0	18.0	<0.5	60.0	<2	<10

TABLE REDS000 (CONT):
 RED SOIL SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME HORIZ DEVEL DEPTH	GR SIZE COLOUR	COMPOSITION	DRAINAGE, GEOLOGY	COMMENTS	SAMPLE NO	SOME ANALYTICAL RESULTS									
							AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
32.0 759760SO L0+50S 1+65E IN MATURE FOREST RED GRID	CL/SILT/PEBS B - BELOW CL HORIZ WELL 32 CM	CL - PEBS RED BRN	60% CL, 30% SILT 10% HETRO FRAGS - OX RHY	NO OC		759760SO	<5	0.4	4.0	16.0	14.0	12.0	<0.5	50.0	<2	<10
33.0 759761SO L0+50S 1+75E IN MATURE FOREST RETAKE OF 759728SO RED GRID	CL/SILT/PEBS B - BELOW CL HORIZ WELL 32 CM	CL - PEBS ORG BRN	10% CL, 45% SILT 45% SD, MIN OX FRAGS	NO OC		759761SO	<5	0.6	14.0	96.0	67.0	24.0	<0.5	140.0	<2	<10
34.0 759763SO L0+50S 1+85E IN MATURE FOREST RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 35 CM	SILT - PEBS ORG BRN YELLOW BRN WOW	70% SILT, 26% SD MIN OX CRYST TUFF FRAGS	NO OC		759763SO	10.0	1.2	12.0	94.0	47.0	24.0	<0.5	140.0	<2	<10
35.0 759764SO L0+50S 1+95E IN MATURE FOREST RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 35 CM	SILT - PEBS ORG BRN	60% SILT, 30% SD, 3% ORGS, 7% OXID FRAGS - DACITE	NO OC		759764SO	10.0	1.6	20.0	56.0	54.0	32.0	<0.5	100.0	<2	<10
36.0 759765SO L0+50S 2+05E IN MATURE FOREST RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 35 CM	SILT - PEBS ORG BRN	60% SILT, 30% SD, 3% ORGS, 7% OXID FRAGS - DACITE	NO OC		759765SO	<5	1.4	18.0	42.0	49.0	26.0	<0.5	70.0	<2	<10
37.0 759767SO L0+50S 2+15E IN MATURE FOREST RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 35 CM	SILT - PEBS YELL BRN	70% SILT, 25% SD, 5% OXID FRAGS - DACITE	NO OC		759767SO	10.0	1.0	10.0	56.0	42.0	22.0	<0.5	100.0	<2	<10
38.0 759768SO L0+50S 2+25E IN MATURE FOREST RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 35 CM	SILT - PEBS YELL BRN ORG BRN	70% SILT, 25% SD, 5% OXID FRAGS - DACITE	NO OC		759768SO	<5	1.4	16.0	56.0	36.0	24.0	<0.5	100.0	<2	<10
39.0 759770SO L0+50S 2+35E IN MATURE FOREST RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 25 CM	SILT - PEBS YELL BRN ORG BRN	70% SILT, 25% SD, 5% OXID FRAGS - DACITE	NO OC		759770SO	<5	1.4	14.0	64.0	47.0	26.0	<0.5	70.0	<2	<10

TABLE REDS000 (CONT):
RED SOIL SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME HORIZ DEVEL DEPTH	GR SIZE COLOUR	COMPOSITION	DRAINAGE, GEOLOGY	COMMENTS	SAMPLE NO	SOME ANALYTICAL RESULTS									
							AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
40.0 759771SO L0+60S 1+75E IN MATURE FOREST RED GRID	CL/SILT/SD/PEBS/CL - PEBS B - BELOW CL HORIZ WELL 35 CM	YELL BRN ORG BRN	40% CL, 40% SILT 10% SND 5% OXID FRAGS- DACITE 5% ORGS	NO OC		759771SO	<5	1.0	12.0	34.0	25.0	24.0	<0.5	100.0	<2	<10
41.0 759772SO L0+60S 1+85E IN MATURE FOREST RED GRID	CL/SILT/SD/PEBS/CL - PEBS B - BELOW CL HORIZ WELL 24 CM	YELL BRN ORG BRN	40% CL, 40% SILT 10% SND 5% OXID FRAGS- DACITE 5% ORGS	NO OC		759772SO	<5	1.0	16.0	50.0	35.0	28.0	<0.5	100.0	<2	<10
42.0 759773SO L0+60S 1+60E IN MATURE FOREST RED GRID	CL/SILT/SD/PEBS SILT- PEBS B - BELOW CL HORIZ WELL 35 CM	ORG BRN YELLOW BRN	80% SILT, 10% SD 5% OXID FRAGS- RHYOLITE 5% ORGS	NO OC		759773SO	<5	0.8	10.0	54.0	33.0	14.0	<0.5	100.0	<2	<10
43.0 759774SO L0+40S 1+65E IN MATURE FOREST RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 50 CM	SILT- PEBS ORG BRN YELLOW BRN	60% SILT, 35% SD 5% OXID FRAGS- DACITE	NO OC		759774SO	<5	1.6	12.0	62.0	40.0	20.0	<0.5	90.0	<2	<10
44.0 759775 CHECK CH3						759775 CK	1240.0	3.2	<2	132.0	7650.0	138.0	0.5	<10	2.0	<10
45.0 759776SO L1+25S, 1+19E RETAKE OF 759747SO RED GRID	CL/SILT/SD/PEBS CL- PEBS B - BELOW CL HORIZ WELL 30 CM	ORG BRN YELLOW BRN	10% CL, 60% SILT, 20% SD, 10% OXID - LIM, JAR/ALUN, SIL TUFF	NO OC		759776SO	5.0	1.8	14.0	48.0	30.0	26.0	<0.5	90.0	<2	<10
46.0 759777SO L1+25S, 1+08E RED GRID	SILT/SD/PEBS B - BELOW CL HORIZ WELL 25 CM	SILT- PEBS RED BRN	80% SILT, 10% SD, 10% OX - LIM, JAR/ALUN, SIL TUFF	NO OC		759777SO	<5	1.6	14.0	36.0	37.0	32.0	<0.5	80.0	<2	<10
47.0 759778SO L1+25S, 1+35E RED GRID	CL/SILT/SD/PEBS CL- PEBS B - BELOW CL HORIZ WELL 25 CM	RED BRN YELLOW BRN	10% CL, 60% SILT, 20% SD, 10% OXID - LIM, JAR/ALUN, SIL TUFF	NO OC		759778SO	5.0	3.0	10.0	38.0	29.0	20.0	<0.5	140.0	<2	<10
48.0 759779SO L1+25S, 1+45E RED GRID	CL/SILT/SD/PEBS CL- PEBS B - BELOW CL HORIZ WELL, 25 CM	RED BRN	5% CL, 60% SILT, 10% SD, 5% OXID - LIM, JAR/ALUN, SIL TUFF	NO OC		759779SO	<5	1.4	16.0	40.0	49.0	18.0	<0.5	80.0	<2	<10

TABLE REDSO00 (CONT):
RED SOIL SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME HORIZ DEVEL DEPTH	GR SIZE COLOUR	COMPOSITION	DRAINAGE, GEOLOGY	COMMENTS	SAMPLE NO	SOME ANALYTICAL RESULTS									
							AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
49.0 759780SO L1+25S, 1+55E RED GRID	SILT/SD/PEBS B WELL, 25 CM	SILT- PEBS ORG BRN YEL BRN	60% SILT, 30% SD, NO OC 10% OXID TUFF FRAGS - LIM, JAR/ALUN, SIL TUFF			759780SO	<5	0.8	8.0	48.0	26.0	14.0	<0.5	80.0	<2	<10
50.0 759781SO L1+25S, 1+65E RED GRID	SILT/SD/PEBS B WELL, 25 CM	SILT- PEBS ORG BRN YEL BRN	60% SILT, 35% SD, NO OC 5% OXID TUFF FRAGS - LIM, JAR/ALUN, SIL TUFF			759781SO	5.0	0.6	12.0	98.0	56.0	22.0	<0.5	100.0	<2	<10
51.0 759782SO L1+25S, 1+75E RED GRID	SILT/SD/PEBS B WELL, 25 CM	SILT- PEBS ORG BRN YEL BRN	60% SILT, 35% SD, NO OC 5% OXID TUFF FRAGS - LIM, JAR/ALUN, SIL TUFF			759782SO	<5	0.6	12.0	50.0	32.0	18.0	<0.5	70.0	<2	<10
52.0 759783SO L1+25S, 1+85E RED GRID	SILT/SD/PEBS B WELL, 35 CM	SILT- PEBS YEL BRN	40% SILT, 50% SD, NO OC 10% OXID TUFF FRAGS - LIM, JAR/ALUN, SIL TUFF			759783SO	5.0	1.8	20.0	94.0	121.0	32.0	<0.5	130.0	2.0	<10
53.0 759784SO L1+25S, 1+95E RED GRID	SILT/SD/PEBS B WELL, 80 CM BK	SILT- PEBS YEL BRN	40% SILT, 50% SD, NO OC 10% OXID TUFF FRAGS - LIM, JAR/ALUN, SIL TUFF			759784SO	<5	0.6	18.0	74.0	87.0	22.0	<0.5	80.0	<2	<10
54.0 2+85 S ON BIT CRK RD, 15 M TO EAST OF RD - E OF AU, CU SHOWING	CL/SILT/SD/PEBS B WELL, 25 CM	CL- PEBS ORG BRN	30% CL, 50% SILT, AT RHY OC 10% SD, 10% OXID PEBS OF OX RHY			759785SO	10.0	0.8	10.0	40.0	35.0	24.0	<0.5	150.0	2.0	<10
55.0 759786SO 2+85 S ON BIT CRK RD, 40 M TO EAST OF RD - E OF AU, CU SHOWING	SILT/SD/PEBS B WELL, 25 CM	SILT- PEBS ORG BRN RED BRN	50% SILT, AT RHY OC 40% SD, 10% OXID PEBS OF OX TUFF			759786SO	<5	1.4	14.0	56.0	48.0	24.0	<0.5	90.0	<2	<10
56.0 759787SO 2+85 S ON BIT CRK RD, 10 M S OF AU, CU SHOWING	SD TALUS SAMP	FI - CO BRN	50% CO FR HETRO SD - LIM, RHY, TUFF FRAGS	AT RHY OC		759787SO	10.0	0.4	18.0	74.0	85.0	30.0	0.5	90.0	6.0	<10
57.0 759789SO 0+03 S ON BIT CRK RD, AT ORIG STR SED SAMP AT CULVERT	CL - SILT B7 BK 15 CM	CL - SILT YELLOW BRN TO GREY	50% CL, 50% SILT	AT RHY TALUS		759789SO	125.0	25.0	1510.0	1270.0	1550.0	34.0	8.5	110.0	26.0	<10

FIGURE 8A:

**GOLDSOIL
GEOCHEMISTRY ON
RED GRID IN AREA OF
MILL SITE, RED PROP-
ERTY**

● 38 SOIL SAMPLE
LOCATION WITH
GOLD VALUE
IN PPB

SCALE 1:1000

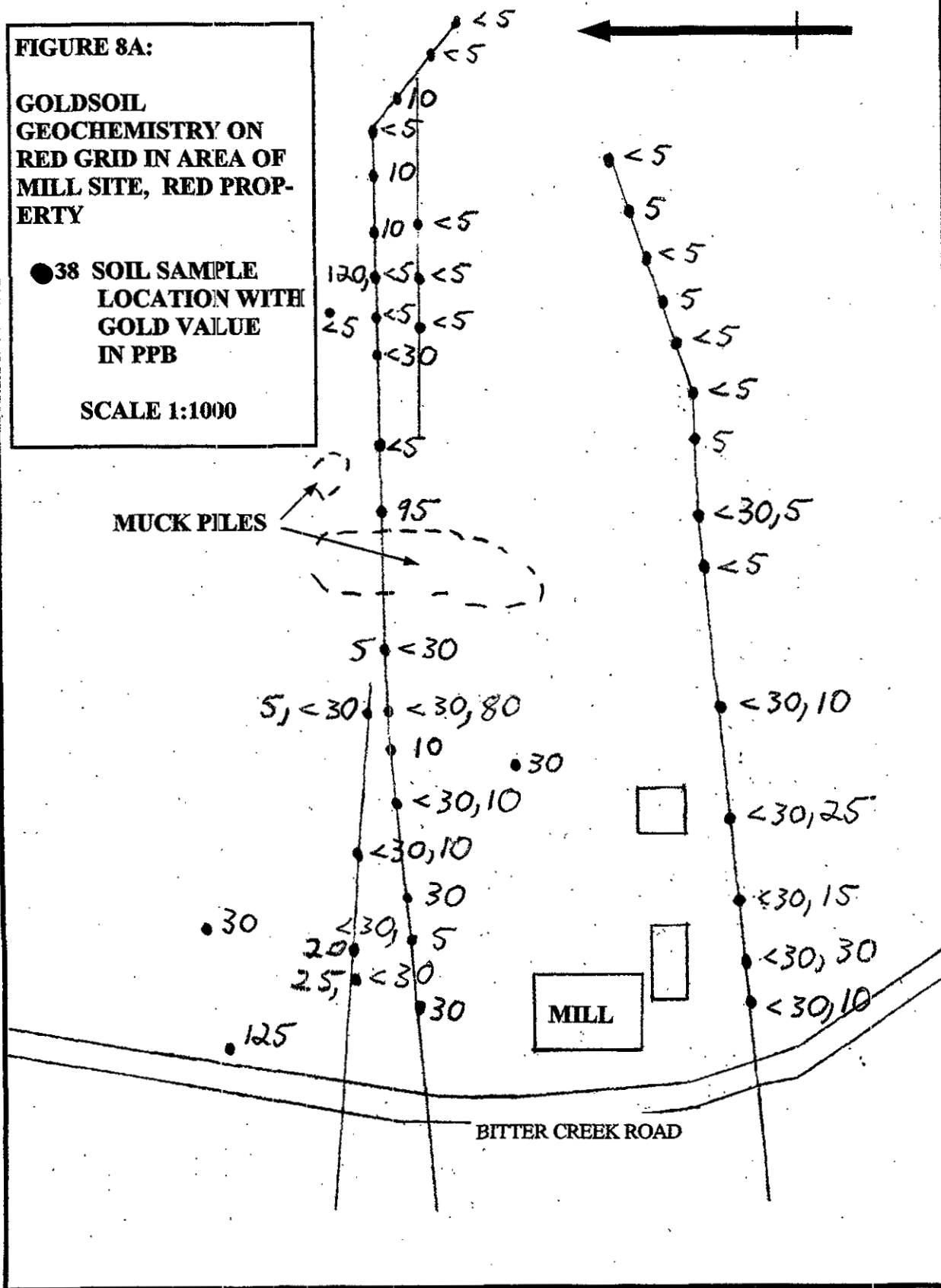


FIGURE 8B:

SILVER SOIL
GEOCHEMISTRY ON
RED GRID IN AREA OF
MILL SITE, RED PROP-
ERTY

● 38 SOIL SAMPLE
LOCATION WITH
SILVER VALUE
IN PPM

SCALE 1:1000

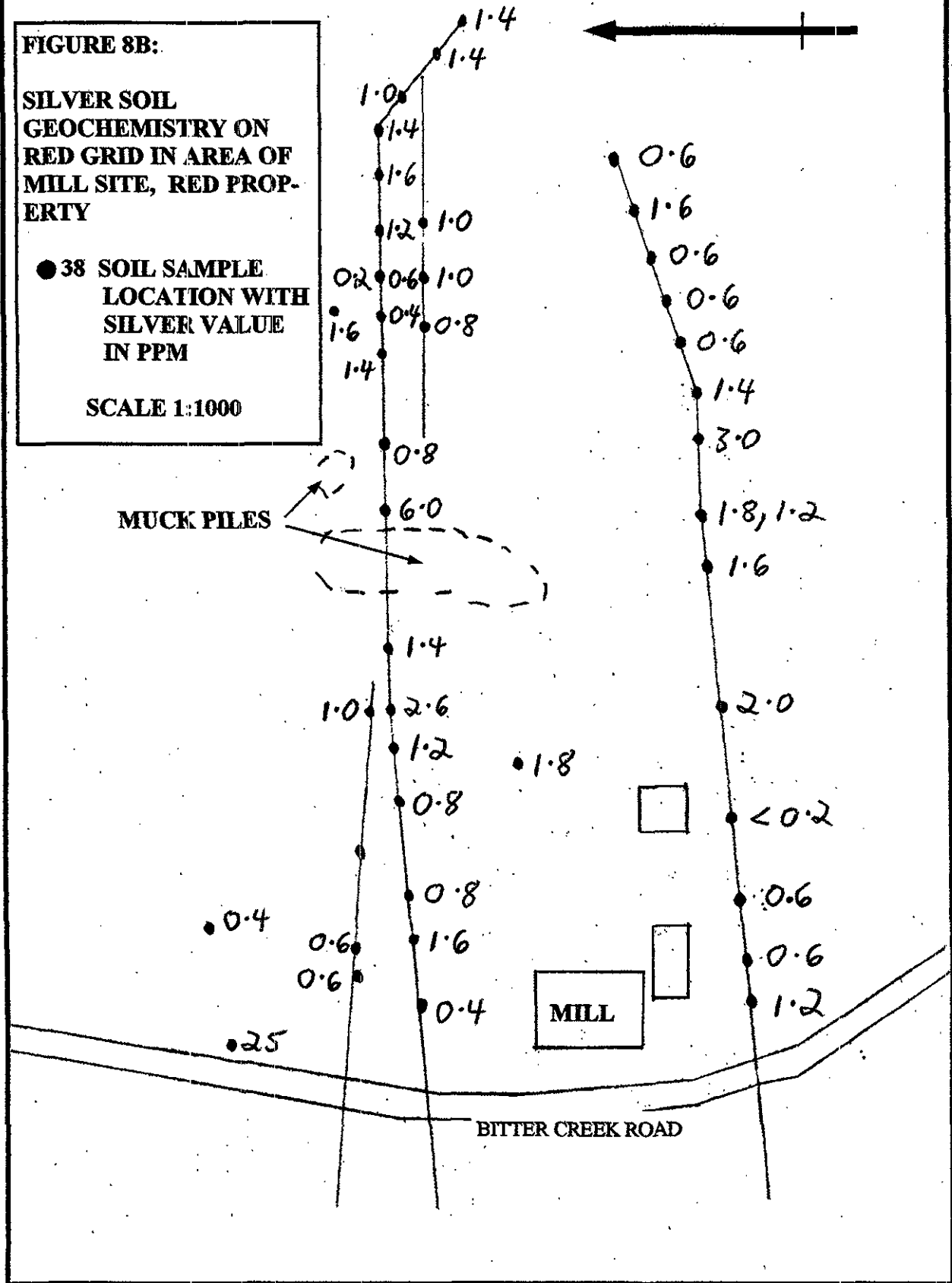


FIGURE C:

**COPPER SOIL
GEOCHEMISTRY ON
RED GRID IN AREA OF
MILL SITE, RED PROP-
ERTY**

● 38 SOIL SAMPLE
LOCATION WITH
COPPER VALUE
IN PPM

SCALE 1:1000

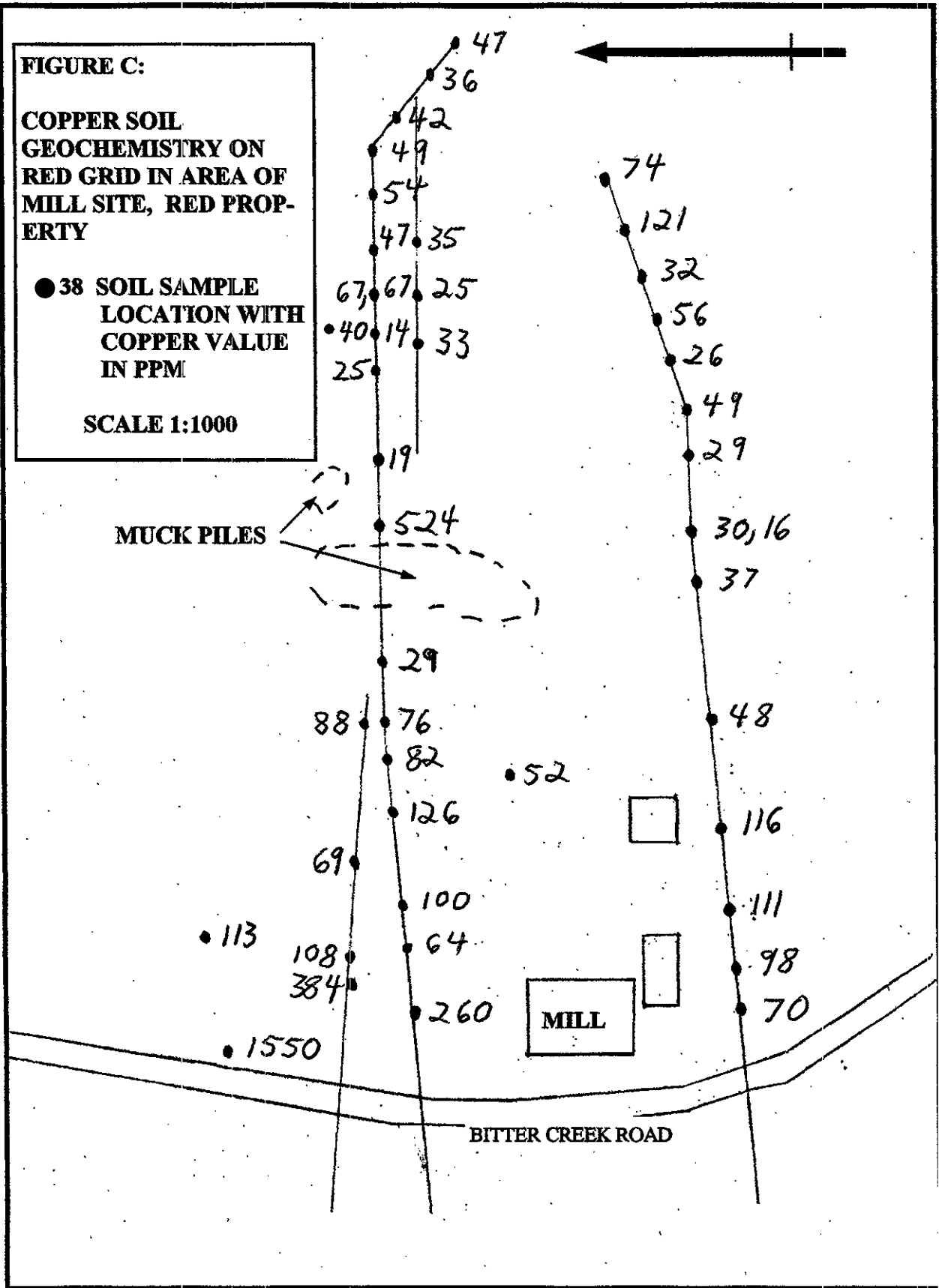


FIGURE D:

**LEADSOIL
GEOCHEMISTRY ON
RED GRID IN AREA OF
MILL SITE, RED PROP-
ERTY**

● 38 SOIL SAMPLE
LOCATION WITH
LEAD VALUE
IN PPM

SCALE 1:1000

MUCK PILES

MILL

BITTER CREEK ROAD

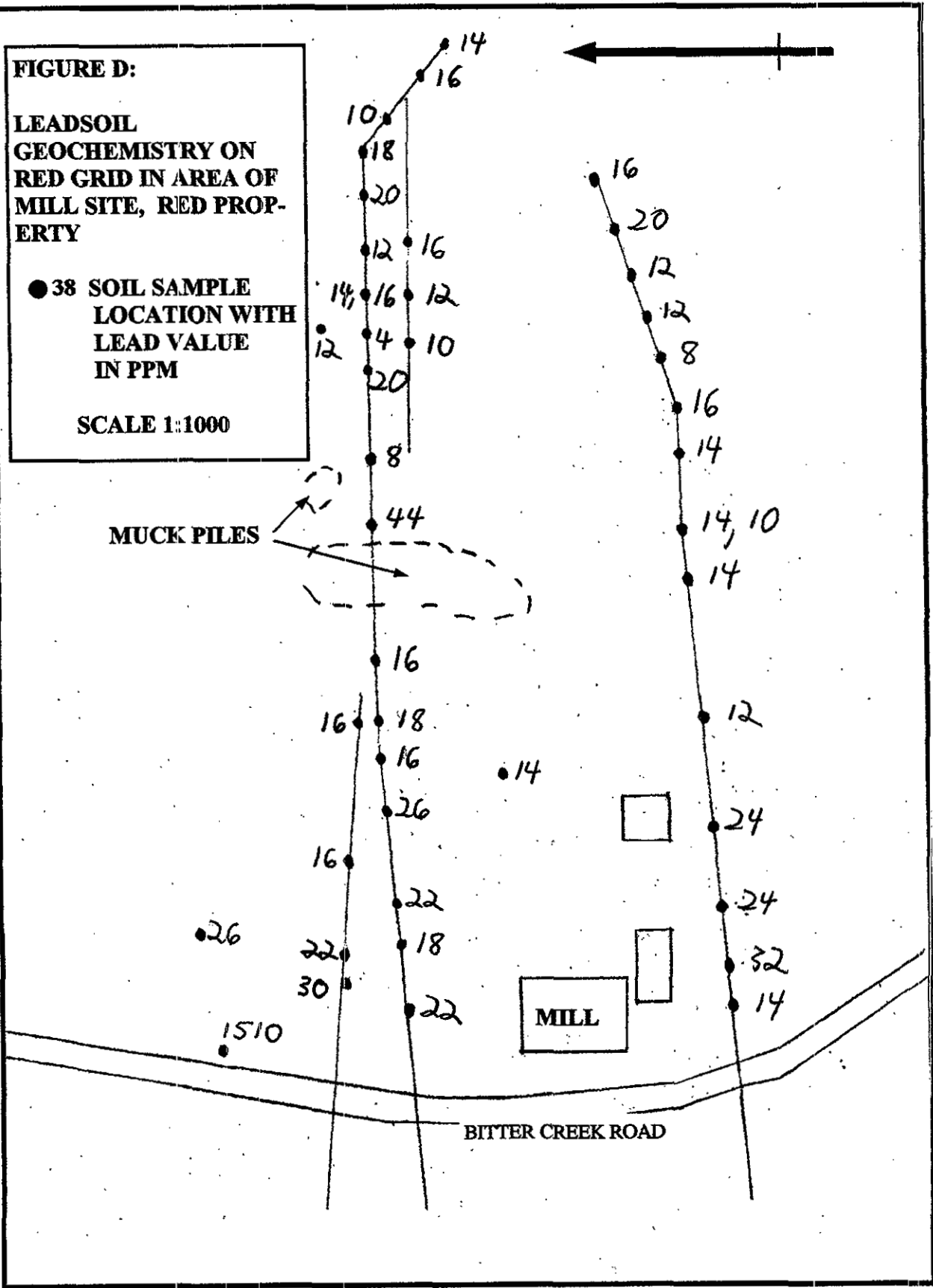


FIGURE 8E:

ZINC SOIL
GEOCHEMISTRY ON
RED GRID IN AREA OF
MILL SITE, RED PROP-
ERTY

● 38 SOIL SAMPLE
LOCATION WITH
ZINC VALUE
IN PPM

SCALE 1:1000

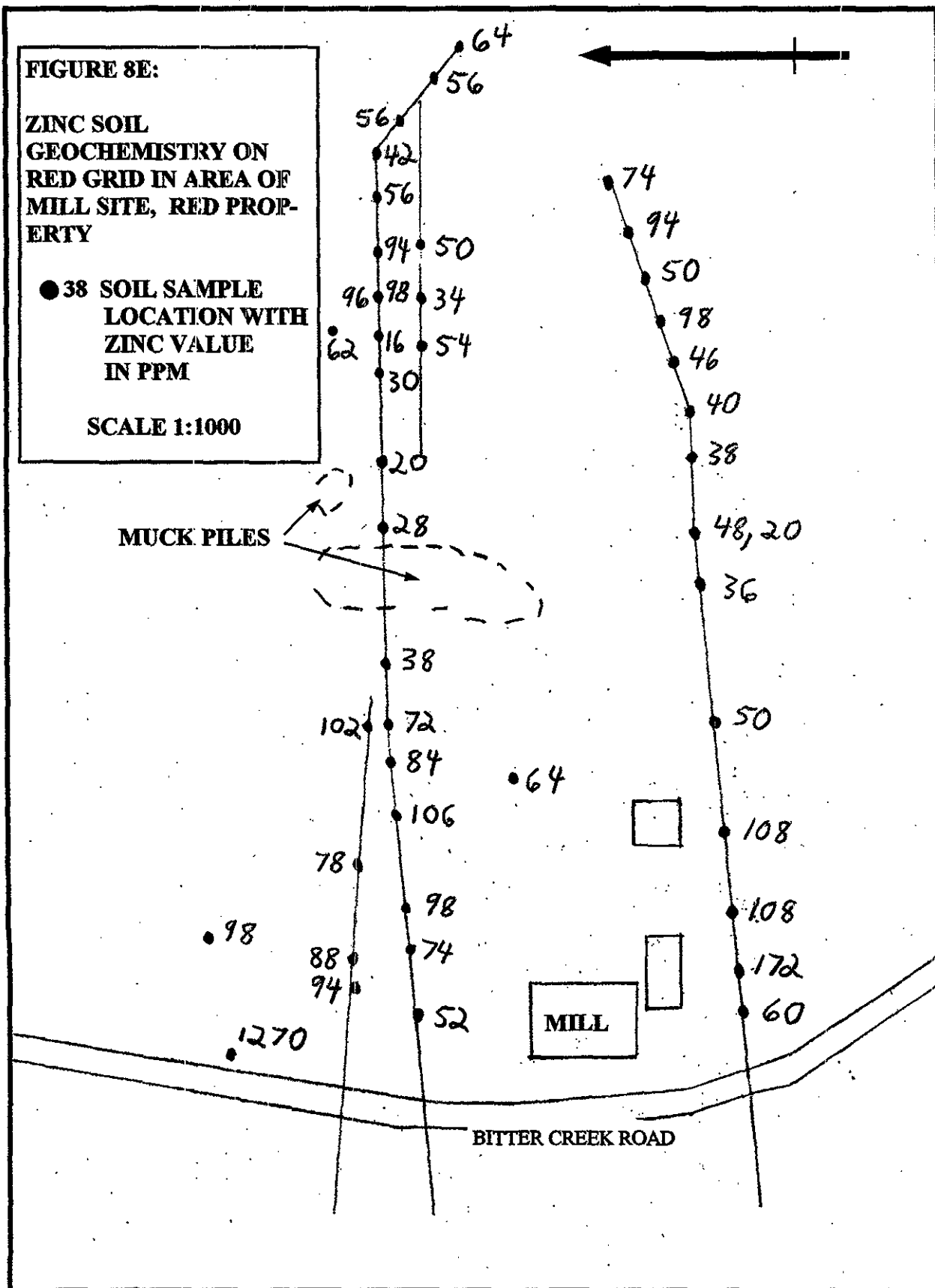
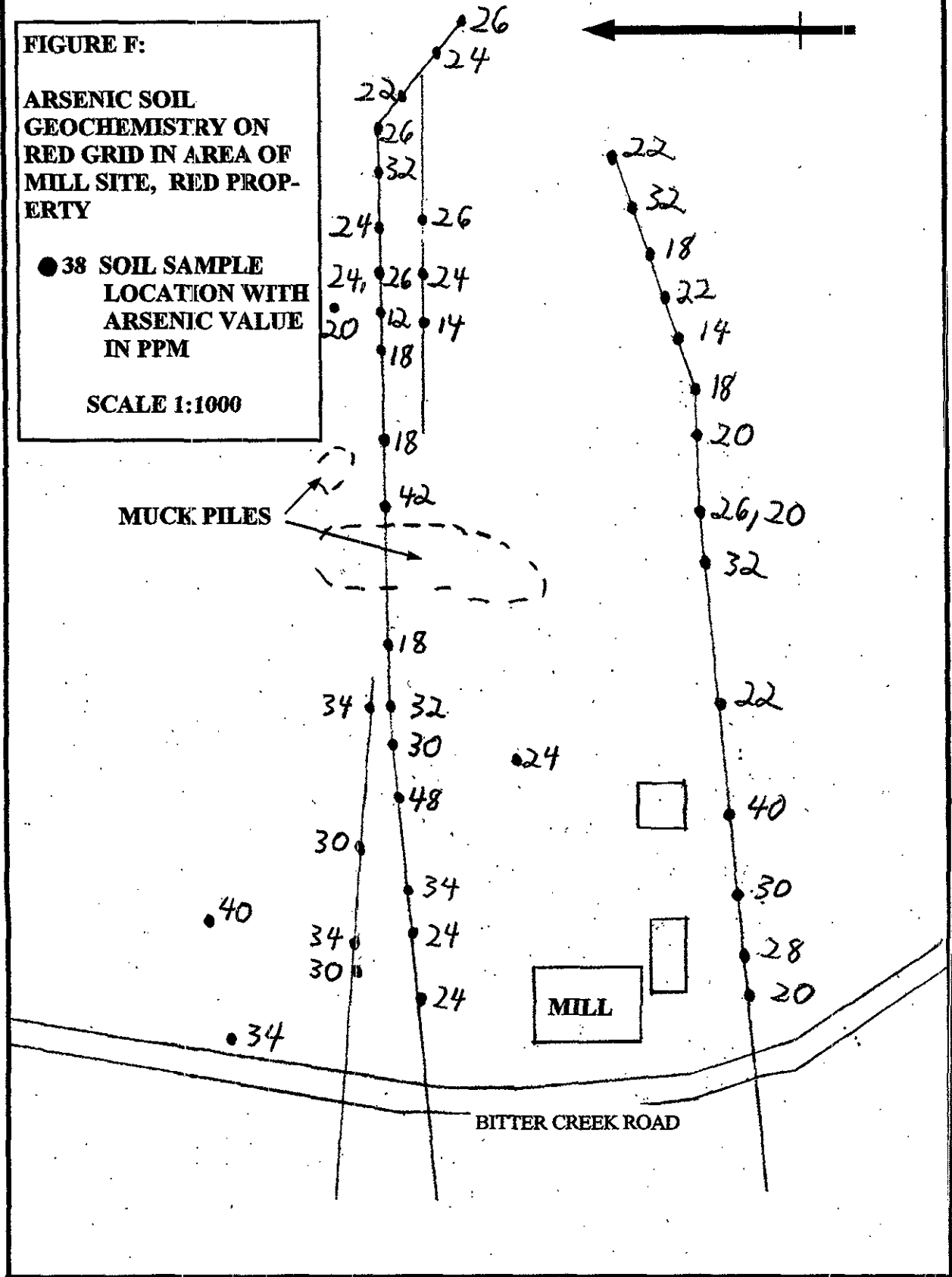


FIGURE F:

**ARSENIC SOIL
GEOCHEMISTRY ON
RED GRID IN AREA OF
MILL SITE, RED PROP-
ERTY**

● 38 SOIL SAMPLE
LOCATION WITH
ARSENIC VALUE
IN PPM

SCALE 1:1000



returned 120 ppb gold. A repeat sample (759761SO) of similar material returned <5 ppb gold, possibly indicative of a nugget effect.

The most interesting soil sample (759769SO; Table REDSO00; Map 3; Figures 8A-8F; Appendix A) was dug from the bank above the stream near the culvert, where the aforementioned stream sediment samples 759788SS and 160207SS were taken. The soil sample returned 125 ppb gold; 25 ppm silver; 1510 ppm lead; 2270 ppm zinc; 34 ppm arsenic, 8 ppm cadmium and 26 ppm bismuth. The significance of this apparently important sample has yet to be fully ascertained: while its metal contents could be possibly due to run off from the muck pile to the east or from the mill site to the south, there is little evidence of any such historic metal dispersion or contamination elsewhere on the property, except in the tailings pond. Moreover, the muck pile with the mineralization that contains high lead-zinc values is very small and could not itself be the source of the aforementioned anomalies.

The second most interesting soil sample (759753SO; Table REDSO00; Map 3) was taken about 200 m south of the mill, just east of the Bitter Creek Road. It returned 360 ppb gold; 0.8 ppm silver; 28 ppm lead; 124 ppm zinc; 249 ppm copper; 32 ppm arsenic; 1.5 ppm cadmium; 144 ppm bismuth; and, 70 ppm tungsten. The third most interesting soil sample (759758SO; Table REDSO00; Map 3; Figures 8A-8F) was taken east of all historic infrastructure on the property – about 8 m east of, and above the main muck pile. It contained 95 ppb gold; 6 ppm silver; 44 ppm lead; 28 ppm zinc; 524 ppm copper; 42 ppm arsenic; and, 24 ppm bismuth.

8.C.1.c. **ROCK GEOCHEMISTRY AND GEOLOGICAL SURVEYS:**

The geological survey indicated that the prospective felsic stratigraphy is more extensive than originally anticipated: it has been located in outcrop for at least 600 m south of the mill site and fragments in stream sediment samples indicate it could extend beyond 1.4 km south of the mill. Fragments in soil sample holes indicate it could also extend for over 200 m to east of the Bitter Creek Road. Its extent to the west of the road remains to be determined. The felsic unit comprises massive to flow banded rhyolite, to coarse rhyolite breccia, with angular to sub rounded fragments up to over 30 cm in their longest dimension (Photo 5). Outcrops are often well oxidized (limonite, jarosite-alunite) and altered (hematite, silica, carbonate) and are mineralized with disseminations of pyrite, pyrrhotite and chalcopyrite. The breccia fragments are mainly composed of felsic material, with apple green (fuchsite) and pink (potassium altered?) varieties in a siliceous, aphanitic matrix.

The contacts of the quartz monzonite with the felsic rocks range from sharp to gradational. However, at such contacts, the intrusive rock is often altered (pyrite, limonite, carbonate) and strongly oxidized, and it is difficult to readily determine the exact relationship between them. The Bitter Creek Pluton appears to have intruded the pyroclastic rocks (crystal tuff and crystal tuff breccia) and mafic (andesite) and felsic (dacite to rhyolite) units of the Unuk River Formation. The contact of the pluton with such rocks and the cross cutting structures in such rocks and the pluton appear to offer prospective exploration targets for gold-silver-base metal mineralization.

Of the 22 rock samples collected on the property in the Bitter Creek Area (Table REDR00; MAP 3; Appendix A), 4 are composite samples of the two main mineralization types on the 2 muck piles located about 100 m above and east of the mill. The smaller dump, over grown pile contains quartz-carbonate breccia vein material mineralized with disseminations and fracture fillings of galena, sphalerite and chalcopyrite. Two samples (759729RM and 759730RM; Table REDR00; Map 3; Appendix A) returned 870 and 60 ppb gold; 451.0 and 44.4 ppm silver; 4240 and 7660 ppm lead; 8810 and 44700 ppm zinc; 16 and 6 ppm arsenic; 136.5 and 486.0 ppm cadmium; and 2 and 24 ppm bismuth, respectively.

Two composite samples (759731RM, 759732RM; Table REDR00; Map 3; Appendix A) of semi massive sulfides (coarse pyrite and massive chalcopyrite in silicified, brecciated volcanic rock) from the main 40 X 25 m pile contained 870 and 2340 ppb gold; 10 and 35 ppm silver; <2 and 50 ppm lead; 124 and 206 ppm zinc; 4670 and 35600 ppm copper; 204 and 692 ppm arsenic; 3 and 6 ppm cadmium; and 80 and 220 ppm bismuth. This material was obviously the main material milled and it has rather distinct bismuth and arsenic signature that is found in the soil samples from the tailings pond (Section 8.C.1.b.).

Of the remaining 18 rock samples collected in the Bitter Creek area of the property (Table REDR00; Map 3; Appendix A), 17 have strongly anomalous copper contents, ranging between 67 and 66200 ppm; 10 have anomalous gold contents ranging between 25 and 3420 ppb; 5 have anomalous silver contents ranging between 0.8 and 45.2 ppm; 2 have anomalous lead contents of 50 and 84 ppm; one has an anomalous zinc content of 156 ppm; three have anomalous arsenic contents ranging between 80 and 692 ppm; 7 have anomalous cadmium contents ranging between 1 and 6.5 ppm; 7 have anomalous bismuth contents ranging between 6 and 2160 ppm; and, six have anomalous tungsten values ranging between 10 and 670 ppm.

Of the 18 aforementioned rock samples, 9 were taken from outcrop; and, 9 are interpreted as subcrop. All of the outcrop or "R" samples have anomalous copper contents ranging between 188 to 2920 ppm; and, seven of the samples have anomalous gold contents ranging between 30 and 3150 ppb. The latter gold value came from rock sample 759752R, collected from a 10 cm wide quartz-sulfide vein, and located above the aforementioned soil sample 759753SO. The rock sample returned 3150 ppb gold, 5.6 ppm Ag, 64 ppm lead; 124 ppb zinc; 2920 ppm copper; 6 ppm arsenic; 3 ppm cadmium; 2160 bismuth; and 670 ppm tungsten. A composite sample (759753R) of hanging wall and footwall rocks composed of rhyolite breccia contained 210 ppb gold; 413 ppm copper; 48 ppm bismuth and 150 ppm tungsten.

The most interesting subcrop sample (759744RS) was dug out of the overburden about 50 m southeast of the mill. The brecciated and silicified, angular semi massive sulfide (pyrite and chalcopyrite) boulder returned 3420 ppb gold; 45.2 ppm silver; 84 ppm lead; 156 ppm zinc; 66200 ppm copper; 648 ppm arsenic; and, 464 ppm bismuth. A rock sample (759745R) taken from a nearby outcrop of altered rhyolite contained 90 ppb gold, 593 ppm copper and 6 ppm bismuth. Gold, silver, copper and zinc soil anomalies are located in the area of the sample.

TABLE REDR00
ROCK SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME, COLOUR:	DESCRIPTION:	COMMENTS:	SAMPLE NO	AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
1.0 759706RS 0+25S, 0+16E RED GRID	RHY BREC; W: ORG BRN F: GRY, GR, PK, BLK	FI - APHAN, SUG, BREC TEXT, SIL MATRIX, WELL FRAC WITH VNS, STRING, OFTEN II TO SUB II CW FRAC FILL OF BLK MET MIN - HEM? CW DISEM PY, TR CPY TO 5 - 7% CPY; APPROX 80% SIL, UP TO 5% SULFS, 5% HEM, 5% CHL LOC. 5% OXID MAT CHERTY FRAGS TO 4 CM	SUBCROP IN VICINITY OF ORIG STR SED ANOMALY AT CULVERT	759706RS	<30	0.2	2.0	30.0	650.0	6.0	<0.5	30.0	<2	<10
2.0 759708RS 0+25S, 0+25E RED GRID	RHY BREC, W: ORG BRN, W F: PK, WH, BLK	FI - APHANITIC MATRIX C/W CHERTYTY FRAGS TO 2 CM, GEN ELONG & OFTEN FORMING BNDS TO 0.5 CM WIDE & 6 CM LONG; VNS, STRING AND LATTER VNS OF BLK HEM? LOC 10% FI DISSEM SULF, MAINLY PY; CHL STRINGS C/W PY; SOM BLEB PY, CPY, HEM		759708RS	<30	<0.2	<2	40.0	403.0	8.0	1.5	30.0	<2	<10
3.0 759709RS 0+25S, 0+31E RED GRID	RHY BREC, W: ORG BRN F: PK, WH, BLK, BRN	FI - APHANITIC MATRIC, BREC TEXT, FRAGS TO 20%, TO 6 CM X 2 CM; CHL IN FRACS C/W SOM DISSEM SULFS - PY TO 3%, TR CPY ~80% SILICA, 3% SULFS, 3% CHL, 15% PK HEM FRAGS, SOM POLY PHASE FLOW BND, BNDS TO 2 CM	CRK FLOWS @ 29 DEG NO SEDIMENT	759709RS	60.0	0.8	2.0	30.0	811.0	<2	<0.5	20.0	<2	<10
4.0 759715R BITTER CRK RD @1.125 KM S OF CULVERT (0+00) RED GRID	FLOW BND RHYOLITE? W: ORG BRN F: GRY PINK	FI - APHANITIC, CHERTY BNDS, IRREG TO 0.3 CM, PINK, GREY, C/W FI DISSEM PY, 2% LOC, CHL LENSES, FRAC FILLINGS, STRING, SOM STRING ASPY, SOM BLEBS, DISSEM PY TR JAR/ALUN ON FRACS	CRK FLOWS @ 29 DEG NO SEDIMENT	759715R	60.0	0.2	<2	38.0	296.0	8.0	0.5	20.0	6.0	20.0
5.0 759716R BITTER CRK RD @ 0.525 KM S OF CULVERT (0+00)	RHY BREC? W: ORG BRN BLK (LIM, MN) F: GRY GREEN SIL, FUCHSITE	FI - APHANITIC SIL MATRIX, CHL BANDS, PATCHES, PK K ALT, ASPY IN CHL; CPY & PY AS PATCHES, SOM EPIDOTE COATINGS PY, ASP TO 5% AS DISEM, STRING CPY ON II FRAC SURFS; SOM FUCHSITE LENSES WITH MIN SULFS; FRACS WITH MN, AL/JAR, CHL.	OXID (LIM, HEM) OUTCROF IN EAST DITCH	759716R	60.0	<0.2	4.0	54.0	188.0	<2	1.0	60.0	2.0	<10
6.0 759717R BITTER CRK RD @ 0.525 KM S OF CULVERT (0+00)	RHY BREC? W: ORG BRN BLK (LIM, MN) F: GRY GREEN SIL, FUCHSITE	FI - APHANITIC SIL MATRIX, C/W SIL BREC FRAGS TO 4 CM SOM FLOW BND, PY, ASP AS DISSEM, STRINGS, TO 3%; SOM BLK FIBROUS RADIATING MINERAL - TREM?	OUTCROP	759717R	<30	0.2	<2	32.0	395.0	128.0	<0.5	10.0	<2	<10
7.0 759719R BITTER CRK RD @ 0+50 M S OF CULVERT (0+00) RED GRID	RHY BREC? W: ORG BRN TO BUFF F: GREY YEL	FI - APHAN MATRIX, FELSIC FRAGS - PINK, GREY TO 20 CM; SOM FI TO BLEB PY, PYRR, ALSO DISSEM, COATINGS FINE PYRR - MAGNETIC	OUTCROP IN EAST DITCH, TREND N-S	759719R	90.0	0.2	<2	26.0	398.0	80.0	1.0	10.0	4.0	10.0

TABLE REDR00 (CONT)
ROCK SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME, COLOUR:	DESCRIPTION:	COMMENTS:	SAMPLE NO	AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
8.0 759729RM EAST OF STOCK PILE AREA ABOVE MILL	ALT MAF VOL W: ORG BRN TO BLK WH F: BLK WH	FI - APHAN MATRIX CW QTZ AND QTZ CARB VNS, STRING, STK WKS, WEAK TO WELL DEVEL, CONTAIN BLEBY CPY, GAL, SPHAL?, WITH SOME MAL STAIN, SOM ANKERITE, SID? UP TO 5% SULFS, INCL MIN POLYMETAL STRING	FROM RUBBLE PILE APPROX 15 M BEYOND STOCK PILE - LOOKS LIKE RUBBLE LOC DERIVE	759729RM	870.0	451.0	4240.0	8810.0	1305.0	16.0	136.5	30.0	2.0	10.0
9.0 759730RM EAST OF STOCK PILE AREA ABOVE MILL	QTZ CARB BREC W: ORG BRN TO BLK WH F: BLK WH	FI - APHAN MATRIX CW QTZ AND QTZ CARB VNS, STRING, STKWKS, AND BREC FRAGS., 50% FRAGS, 50% MATRIX, FRAGS TO 4 CM; MATRIX QTZ CARB, WITH BLEBY GAL, CPY, SPHAL; SOM MAL STAIN; SOM EVID MULTIPHASE ACTIV	FROM RUBBLE PILE APPROX 15 M BEYOND STOCK PILE - LOOKS LIKE RUBBLE LOC DERIVE	759730RM	60.0	44.4	7660.0	44700.0	782.0	6.0	486.0	10.0	24.0	<10
10.0 759731RM SOUTH END OF STOCK PILE AREA ABOVE MILL	SEMI MASS PY W: ORG BRN TO BRASS PY F: GREY WH TO BRASS PY	BLEBY TO PEA PY, COAR GRAN TEXT IN FI GR SIL MATRIX; SOM MASS TO 60% PY; TR MAL, TR ASPY	FROM RUBBLE PILE AT S END OF STOCK PILE AREA OVERLOOK ROAD	759731RM	870.0	10.0	<2	124.0	4670.0	204.0	3.0	10.0	80.0	<10
11.0 759732RM MID STOCK PILE ABOVE MILL	SEMI MASS PY CPY W: ORG BRN F: GREY WH TO BRASS PY, CPY	FI SIL MATRIX CPY WITH 60% SULFS - 30% GRAN TO MASS PY, 30% MASS TO BLEB CPY; SOM QTZ BX FRAGS; LOCAL CHL ALT	FROM RUBBLE IN MID STOCK PILE AREA	759732RM	2340.0	35.0	50.0	206.0	35600.0	692.0	6.0	10.0	222.0	<10
12.0 759741RS 1+25S, 0+42E RED GRID	RHY W: ORG BRN F: GREY BLK	FI - APHAN, SIL, SOM CHL, LIM, MN, HEM, FI DISSEM PY, TR ASPY	SUBCROP	759741RS	<30	<0.2	6.0	90.0	177.0	2.0	0.5	110.0	<2	<10
13.0 759742RS 1+25S, 0+56E RED GRID	RHY BREC W: ORG BRN F: GREY PK	FI - APHAN, SIL MATRIX CW FRAGS TO 6 CM X 2 CM, 30% OX PATCHES IN FRAGS, LENSES PY; 1-2% PY AS DISSEM, BLEBS, SEMI MASS; K ALT, FUCHSITE, EPIDOTE	SUBCROP	759742RS	<30	<0.2	2.0	50.0	154.0	<2	0.5	40.0	<2	<10
14.0 759744RS 1+25S, 0+60E RED GRID	SEMI MASS SULFS W: ORG BRN GREY BLK F: BRASSY YEL TO BLK	FI - CO, MASS PY, MASS CPY, 15% CPY, 35% PY, & SOM NET TEXT - PY GRS IN TOUR? GREY QTZ FRAGS TO 1.5 CM; WH QTZ VN, BX TO 2 CM; METAL BLK VEIN SPHAL? TO 1 CM	COMPOSITE OF 2 OXID SULF BO	759744RS	3420.0	45.2	84.0	156.0	66200.0	648.0	6.5	10.0	464.0	<10
15.0 759745R 1+25S, 0+69E RED GRID	RHY W: ORG BRN GREY BLK F: PK, WH, GREY	FI - APHAN, BND, SIL, BREC, GREY QTZ VNS TO 1 CM, STRING, DISSEM, BLEBS PY, TR CPY, TR GAL; 20% QTZ, UP TO 7-8% SULFS LOC IN QTZ; MAINLY SIL GREY VOL, TRANS FROM SMS 758744	OUTCROP	759745R	90.0	1.0	<2	14.0	593.0	20.0	0.5	10.0	6.0	10.0

TABLE REDR00 (CONT)
ROCK SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYTICAL RESULTS:

SAMPLE NO., LOC, TYPE:	NAME, COLOUR:	DESCRIPTION:	COMMENTS:	SAMPLE NO	AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
16.0 759751R 2+25S IN DITCH ON BITTER CRK RD	RHY W: ORG BRN GREY BLK F: PK, WH, GREY GR	FI - APHAN, SIL, K ALT, BREC - FRAGS TO 10 CM, CHL AROUND FRAGS, CPY IN GR FRAGS, LOC 10%; 2-3% FI DISSEM PY, LOOK LIKE PYRR, SOM MAG PYRR, VAR BREC TO MASS TO ANOMASTOSING VNS; SIL BNDS, GEN UP TO 7-8% SULFS - PY 3-4%, PYRR 1-2%, 1% CPY	OUTCROP	759751R	30.0	<0.2	<2	30.0	349.0	<2	0.5	10.0	12.0	80.0
17.0 759752R 2+91S IN DITCH ON BITTER CRK RD	QTZ VN W: ORG BRN GREY BLK F: BLK, WH, BRASSY	VN ON SLICK SURF, UP TO 10 CM WIDE; CO CRYST QTZ C/W 5 - 30 % SULFS - PYRR TO 20%, AS MASSES & CO DISSEM; CPY 2-3%; MIN GEN AS STRING II TO QTZ VN, BUT ALSO AS DISSEM; HIGHLY MAG PYRR; SOM RESINOUS SPHAL; SOM SOOTY GOETHITE? QTZ GREY TO BLUE GREY C/W RUSTY BNDS	OUTCROP	759752R	3150.0	5.6	64.0	124.0	2920.0	6.0	3.0	<10	2160.0	670.0
18.0 759753R 2+91S IN DITCH ON BITTER CRK RD	HW, FW QTZ VN @ 2+91S W: ORG BRN F: GRY PK GR	HW: FI - CO, SOM PORPH TEXT, ALT QTZ MON? C/W VN MAT TO 0.5 CM; DISSEM PYRR, OX PY, CPY, BKJACK, SOM IN FRACS & LAD VNS, 5-7% SULFS, HIGHLY FRAC FW: LESS SULF, FRAGS & ANOMOST VNS OF CHL, VNS TO 2 CM, SOM FLOW BND	OUTCROP	759753R	210.0	0.6	<2	66.0	413.0	<2	1.5	50.0	48.0	150.0
19.0 759756R 3+06 M S ON BITTER CRK RD	RHY BREC W: ORG BRN F: GRY PK GR	FI APHAN SIL MATRIX, FRAGS TO +10CM, CHL PATCHES, SULF TO 5% - DISSEM PY, MIN CPY IN BREC FRAGS; EARTH PATCHES - GOETHITE? FW: LESS SULF, FRAGS & ANOMOST VNS OF CHL, VNS TO 2 CM, SOM FLOW BND	OUTCROP	759756R	<30	<0.2	2.0	78.0	264.0	<2	1.5	100.0	2.0	<10
20.0 759762RS L0+50S 1+85E RED GRID	CRYST TUFF W: ORG BRN F: GRY GR	FI APHAN SIL MATRIX, CRYSTS GRY WH QTZ, MM SCALE; APPROX 20% CRYSTS; 1-2% DISSEM PY		759762RS	<5	<0.2	18.0	62.0	5.0	2.0	<0.5	120.0	<2	<10
21.0 759766RS L0+50S 2+15E RED GRID	DACITE W: ORG BRN F: GRY BLK	FI APHAN SIL MATRIX, 2-3% DISSEM PY		759766RS	25.0	1.4	12.0	46.0	90.0	20.0	<0.5	60.0	<2	<10
22.0 759769RS L0+50S 2+15E RED GRID	DACITE W: ORG BRN F: GRY BLK	FI APHAN SIL MATRIX, 2-3% DISSEM PY		759769RS	<5	0.2	2.0	84.0	67.0	<2	<0.5	120.0	<2	<10
23.0 759775CK CH3				759775CK CH3	1240.0	3.2	<2	132.0	7650.0	136.0	1.5	<10	2.0	<10
24.0 759888A CK CH3				759888A C	1875.0	2.2	16.0	126.0	7360.0	128.0	<0.5	<10	2.0	<10

The results of the rocks samples, integrated with those of the soil, stream sediment and geological surveys are deemed to provide conclusive evidence that the Adam Mill was built on a prospective geological environment that remains open in all directions.

8.C.2. CLEMENTS LAKE AREA 2000 GEOLOGICAL AND GEOCHEMICAL SURVEYS:

The Red 5 and 6 Mineral Claims were staked based on the positive results from the 1999 program (Molloy, 1999); and, on the favourable indications from the 2000 work in the Bitter Creek Area. The Bitter Creek quartz monzonite pluton dominates the geology south of Clements Lake. The 1999 work was delineative of stream sediment anomalies; and, indicative of prospective geological environments on the edge of the pluton.

8.C.2.a. STREAM SEDIMENT GEOCHEMISTRY:

Of the 9 stream sediment samples (Table CLEMENTS SS00; Map 4; Appendix 1) taken in 2000, 8 have anomalous copper contents ranging between 47 and 173 ppm; seven samples have weakly anomalous silver contents between 0.8 and 1.8 ppm; six samples have anomalous lead contents between 22 and 48 ppm; seven samples have weakly anomalous zinc contents between 138 and 176 ppm; six samples have anomalous arsenic between 36 and 146 ppm; and three samples have weakly anomalous gold contents between 10 and 20 ppb. All three streams draining north into Clements Lake (Maps 1, 2) have polymetallic sediment anomalies, with the Middle and East Creeks having the strongest gold, copper and arsenic values.

8.C.2.b. ROCK GEOCHEMISTRY AND GEOLOGICAL SURVEYS:

As in the case of the Bitter Creek area, the stream sediment anomalies are postulated to have sources in altered rocks near or at the contact with the Bitter Creek quartz monzonite pluton. The initial follow-up of the East Creek anomaly located a large outcrop of pyritized crystal tuff, a composite sample (759847RF; Table CLEMENTS R00; Map 4; Appendix A) of which returned 25 ppb gold and 94 ppm copper. Further follow-up of the East and Middle Creek anomalies led to the discovery of some historic pits and adits at about the 1300 m elevation, about 1.5 km south of Clements Lake (Map 4). The area is accessible by the Ore Mountain Hiking Trail and the workings may comprise the historic Lake Shore, Ore Mountain showing (Figure 7; Minfile 104A 051).

Four contiguous panel samples (686801RP-686804RP; Table CLEMENTS R00; Map 4; Appendix A) of sulfidized tuff (pyrite veins, stringers) were taken in a small, open cut into the hillside. The samples have gold contents ranging between 195 and 1810 ppb and averaging 618 ppb; silver contents ranging between 3.6 to 21.2 ppm and averaging 8.5 ppm; lead contents ranging between 80 and 1010 and averaging 488 ppm; zinc contents ranging between 148 and 216 ppm, and averaging 170 ppm; and, arsenic contents ranging between 348 and 2150 ppb and averaging 917 ppm. A fifth, composite sample (686805RC) was taken from a pit

TABLE CLEMENTS SS00A: CLEMENTS LAKE INITIAL FOLLOW-UP
SURVEYS RE 1998 SEDIMENT SAMPLES 160213SS, 160208SS, 160211SS

STREAM SEDIMENTS SAMPLES AND MOST RELEVANT ANALYSES:

SAMPLE NO., LOC, TYPE:	NAME, COLOUR:	DESCRIPTION:	STREAM PERAMATERS:	GEOLOGY: HAZELTON TUFF, BRECCIA & QUARTZ MONZONITE PLUTON	SAMPLE NO	MOST RELEVANT ANALYTICAL RESULTS:									
						AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
1.0 759836SS CONFIRM 160213SS	SD/PEBS ORG BRN	FI - PEBS 70% PEBS, 30% FI HETRO FRAGS - RD @ 208° QTZ MON & OX, TUFF BREC, GR VOL	HI ENERGY CRK FLOWS TO RD @ 285° TURNS TO FOLLOW	HETRO BO	759836SS	20.0	1.0	22.0	138.0	114.0	146.0	0.5	320.0	4.0	<10
2.0 759837SS 60 M WEST ON RD	SD/PEBS ORG BRN	FI - PEBS 70% PEBS, 30% FI HETRO FRAGS - RD @ 208° QTZ MON & OX, TUFF BREC, GR VOL	HI ENERGY CRK FLOWS TO RD @ 285° TURNS TO FOLLOW	HETRO BO	759837SS	<5	0.4	14.0	118.0	69.0	72.0	<0.5	420.0	<2	<10
3.0 759839SS DRY V STR S SIDE RD LOC S OF GRAV PIT JUST WEST OF CLEMENTS LAKE - 60 M E OF CLEMENTS L RD	SD RED BRN LIM, HEM	FI - MED DER FROM QTZ MON - WELL SORTED, QTZ, FELD, OX MATERIAL	DRY CRK 10 M W OF RD @ 220°	QTZ MON OC IN AREA	759839SS	<5	0.8	30.0	150.0	60.0	28.0	0.5	270.0	<2	<10
4.0 759840SS DRY CRK IN GRAV PIT @ END OF RD	SD BRN	FI - CO HETRO SD - GR GRY VOL, QTZ, FELD, OX, MIN ORG	DRY CRK 70 M FROM MAIN RD @ 080°	QTZ MON OC IN AREA	759840SS	5.0	0.8	30.0	150.0	99.0	36.0	0.5	280.0	<2	<10
5.0 759842SS UP DRY CRK 30 M FROM 759840SS	SD BRN	FI - CO HETRO SD - GR GRY VOL, QTZ, FELD, OX, MIN ORG	DRIP CRK @ 080°	QTZ MON OC IN AREA	759842SS	15.0	1.2	48.0	176.0	79.0	38.0	<0.5	150.0	<2	<10
6.0 759843SS UP DRY CRK 25 M FROM 759842SS	SD/ORG BRN	FI - CO MAINLY OX MAT - HEM, SOM WH QTZ, FELD MIN ORG	DRIP CRK @ 080°	QTZ MON OC IN AREA	759843SS	5.0	1.0	46.0	142.0	76.0	46.0	0.5	200.0	<2	<10
7.0 759844SS UP DRY CRK 30 M FROM 759843SS	CL/SILT/ORGS BRN	CL - SILT 70% ROOTS, 15% SILT, 15% CL, MIN ORG	DRIP CRK CREEK BECOMES DIFFUSE - MANY SMALL CHAN	QTZ MON OC IN AREA	759844SS	<5	0.8	6.0	28.0	21.0	2.0	<0.5	90.0	<2	<10
8.0 759845SS 100 M E ON RD FROM PARKING AREA	CL/SILT BRN	CL - SILT 50% CL - 50% SILT NO FRAGS	SMALL CREEK @ 108°	QTZ MON OC IN AREA	759845SS	<5	1.8	26.0	146.0	47.0	12.0	0.5	350.0	<2	<10
9.0 759846SS 155 M E ON RD FROM HIKING TRAIL - 15 M UP CREKK	SD/GRAV BRN	FI - CO 80% CO & PEBS CRK FEW FINES MAINLY ANG GR ANDESITE. SOM WH QTZ, MIN OX MAT	HIGH ENERG @ 118°	AND BO	759846SS	10.0	0.8	8.0	148.0	173.0	106.0	0.5	140.0	<2	<10

TABLE CLEMENTS RS00: CLEMENTS LAKE INITIAL FOLLOW-UP
SURVEYS RE 1999 SEDIMENT SAMPLES 160213SS, 160208SS, 160211SS

ROCK SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYSES:

SAMPLE NO, TYPE LOCATION	NAME, COLOUR:	DESCRIPTION:	COMMENTS:	SAMPLE NO	MOST RELEVANT ANALYTICAL RESULTS:										
					AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm	
1.0 759838R AT 759837SS SEE TABLE: CLEMENTS SS00	QTZ MON W: ORG BRN BLK (LIM, MN) F: YEL WH GREY BLK	FI - CO QM, SUG TEXT, QTZ, FELD, PORPH BIOTITE MICA TO 0.5 CM, 5-7% UNIFORMLY DISSEM, BLEB PY 60% QTZ, 30% FELD, 10 SULFS, MICA	NUMEROUS OX BO TO INVESTIG	759838R	<5	0.2	2.0	18.0	32.0	2.0	<0.5	290.0	2.0	<10	
2.0 759841RF	QTZ MON W: ORG BRN GREY WH F: GREY WH TO ORG BRN	CO QM, CW EUHED BLK BIOTITE WH QTZ, FELD; 2-3% SULFS, PY PYRR, INVESTIG <1% CPY	NUMEROUS OX BO TO INVESTIG	759841RF	<5	0.2	<2	40.0	637.0	<2	<0.5	310.0	<2	<10	
3.0 759847RF 75 M E OF AT 759847SS	CRYST TUFF W: ORG BRN F: GRN GREY	MM SCALE CRYSTS IN GR SIL MATRIX; 7-10% DISSEM PY, SOM WH ASPY; MIN CARB	NUMEROUS OX BO TO INVESTIG	759847RF	25.0	0.8	8.0	28.0	94.0	2.0	<0.5	60.0	2.0	<10	
4.0 759850CK WGM1				759850CK	105.0	3.4	<2	78.0	5780.0	2.0	0.5	<10	<2	<10	
5.0 686801RP S OF CLEMENTS L. ON HIKE TRAIL AT ORE MT. AT OPEN CUT OVER 1 M	PY VN IN CRYST TUFF W: ORG BRN F: GRY WH, BRASSY	PY VN TO 30 CM; SAMP OVER 0.5 CM; PY AS MASS LENS, STRING, VN TO 0.5 CM; COATINGS, VUG FILLINGS, SOOTY ON WH APHAN QTZ; OVERALL 20%;	VN & WALL ROCK SIM TO TODD CRK	686801RP	1810.0	21.2	644.0	154.0	121.0	2150.0	0.5	<10	<2	<10	
6.0 686802RP S OF CLEMENTS L. ON HIKE TRAIL AT ORE MT. AT OPEN CUT OVER 1 M AT 1290 M ELEV	SULF CRYST TUFF W: ORG BRN F: GREY WH, BRASSY	50% SIM TO 686803RP 50% WELL DEVEL QTZ CARB STRING, VN TO 3 CM; OFTEN VUG, EARTHY, LOC BREC, SEMI MASS PY TO 2 CM; GEN CO DISSEM; BND OF GREY QTZ, WH QTZ, 0.5 CM BLEBS PY RIM VNS; LOC 50% PY; OVERALL 5-7%	VN & WALL ROCK SIM TO TODD CRK	686802RP	110.0	2.2	80.0	216.0	37.0	348.0	2.0	90.0	<2	<10	
7.0 686803RP S OF CLEMENTS L. ON HIKE TRAIL AT ORE MT. AT OPEN CUT OVER 1 M AT 1290 M ELEV	SULF CRYST TUFF W: ORG BRN F: GREY WH, BRASSY	WK CARB, TUFF CRYST TO MM SCALE LIM FRAGS TO 0.5 CM, BLEB CO PY IN 2 CM LENS, SEMI MASS PY VN TO 0.5 CM; LOC 20% PY, OVERALL 5-7%; WELL FR, WELL MN, VUG, EARTHY	VN & WALL ROCK SIM TO TODD CRK	686803RP	355.0	3.6	216.0	160.0	36.0	604.0	2.5	70.0	<2	<10	
8.0 686804RP S OF CLEMENTS L. ON HIKE TRAIL AT ORE MT. AT OPEN CUT OVER 1 M AT 1290 M ELEV	AS 686803RP		VN & WALL ROCK SIM TO TODD CRK	686804RP	195.0	6.8	1010.0	148.0	33.0	564.0	1.0	400.0	<2	<10	
9.0 686805RC S OF CLEMENTS L. ON HIKE TRAIL AT ORE MT. AT N OPEN CUT ABOUT 75 M NORTH OF FIRST TRENCH COMP SAMP	AS 686802RP	WELL FR; DISSEM PY IN SIL MATRIX, SOM PY VN TO 2 CM; OVERALL 3-5% BLEB PY	VN & WALL ROCK SIM TO TODD CRK	686805RC	20.0	1.2	88.0	594.0	27.0	88.0	6.5	90.0	<2	<10	
10.0 686806CK				686806CK	95.0	3.0	2.0	76.0	5820.0	6.0	0.5	<10	<2	<10	

Appendix 9

located about 70 m north of the open cut and returned 20 ppb gold, 1.2 ppm silver, 88 ppm lead, 594 ppm zinc and 88 ppm arsenic. Weather conditions did not allow the examination of apparent adits located about 50 m below the pit.

The mineralization is rather interesting, given its similarity to that at other significant deposits and exploration targets in the Stewart Camp e.g., the mineralized tuff breccias at the Red Mountain Deposit to the south and at the Todd Creek Deposit to the north in the Todd Creek Valley.

9. CONCLUSIONS, RECOMMENDATIONS:

It is concluded that regional geochemical and geological surveys, in part sponsored by the BC Prospectors Assistance Program, have been successful in quickly identifying prospective geological environments in the Stewart Gold Camp. The Clements and Bitter Creek Areas of the Red Property are examples of such environments: favourable geology, alteration and mineralization is associated with contacts of the Bitter Lake Pluton. A major east trending structure as mapped by Grove bisects the property and the regional geology, and it and parallel structures, as well as the aforementioned contact rocks, are deemed prospective for copper-gold mineralization. The environment is analogous to that on the Poly Property (Molloy, 2000P). Such evidence is indicative that Eocene, as well as Jurassic intrusive rocks, can entail significant exploration potential for polymetallic mineralization in the Stewart Gold Camp.

9.A. BITTER CREEK VALLEY, RED PROPERTY:

It is concluded from work in the Bitter Creek Valley, that the Adam Mill was built on prospective geology, which continues to offer interesting exploration targets. The copper-gold signature of the rhyolite and rhyolite breccia, along with the numerous historic mining claims staked in the area, many of which have recently come open, support, this interpretation.

Although it is firmly documented that the mill feed came from other properties, it is somewhat intriguing that in situ and subcrop mineralization on the property can have a somewhat similar geochemical signature, including bismuth (e.g., sample 759752R vs. 759731RM), and alteration to that of the muck from the largest stock pile. In addition to bismuth, one of the muck samples and a number of the rock samples from the property have anomalous tungsten contents. Based on the author's experience, tungsten is often associated with specular hematite, which is one of the most reliable and important indicators of gold potential in the Stewart Camp.

Based on the apparent overgrown, upper bush roads and overgrown, smaller muck pile, it is postulated that there are historic mineral occurrences and showings located on or in closed proximity to the Red Property. One or more of these may have supplied some of the muck, particularly the quartz-carbonate vein material on the smaller pile.

It is recommended that the Bitter Creek area of the property be followed-up along with the Clements Lake area, which is referenced below. The follow-up work in both areas should first include a detailed data integration and compilation to ascertain the precise location of all historic mineral occurrences, their reported geology, access routes and historic work carried out on and in the vicinity of the property. For example, air photos and fieldwork suggest there are a number of historic bush roads and trails leading to the area of the Adam Mill from well above the Bitter Creek Road. The routes are now overgrown by dense vegetation. Do these roads lead to mineral showings and occurrences, which supplied some muck currently on the piles?

A structural fabric map should be prepared from new or available air photos, with emphasis on the major, Grove structure, parallel and orthogonal structures and their structural junctions. The currently apparent follow-up targets, which include a number of geochemical anomalies and the apparently widespread felsic geological environment outlined by the 2000 work, should be prioritized for follow-up work based on the results of the compilation.

9.B. CLEMENTS LAKE AREA, RED PROPERTY:

It is concluded that the geological environment of the Clements Lake Area of the Bitter Creek Pluton also offers interesting polymetallic exploration targets. The area, and the Bitter Creek Area apparently have not been subject to recent detailed exploration scrutiny via discovery criteria that have been used successfully, elsewhere in the Stewart Camp. The Red Property is deemed to have sufficient favourable attributes for the initiation of such detailed follow-up work.

The compilation contemplated above in 9.B. A is an important prerequisite. The delineation of the structural fabric noted above is one of the most important priorities of the compilation. Based on the integration of the results of the compilation and those from this program, exploration targets would be prioritized for detailed follow-up. Current priorities include the sulfidized tuff and tuff breccia and andesite east and south of Clements Lake Area, and the major structure and parallel structures that bisect the geology south of the lake.

9.C. 2001 EXPLORATION BUDGET, RED PROPERTY:

A proposed Phase 1, 2001, \$50,000 budget would include some helicopter time for air photo acquisition; and, the interpretation of structural fabric, bush road infrastructure and Ore Mountain access and mineral occurrence location. The 30-day program would utilize two geologists to carry out detailed follow-up geological and geochemical surveys to identify and initially prioritize drill targets. A proposed Phase 2, \$50,000 program would be contingent on the success of the Phase 1 program and would contemplate line cutting and geophysical surveying (IP and magnetometer) to precisely delineate drill step-ups.

Appendix 10

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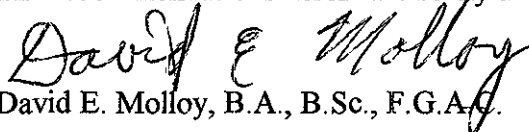
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STATEMENT OF QUALIFICATIONS:

I, David E. Molloy, of the Town of Unionville, of the Regional Municipality of York, Ontario, hereby certify that:

- i. I am prospector/consultant with a business address at 49 Normandale Road, Unionville, Ontario, L3R 4J8.
- ii. I am a graduate of McMaster University, in the City of Hamilton, Ontario, with a B.A. in Philosophy (1968); I am a graduate of the University of Waterloo, in the City of Waterloo, Ontario, with a B.Sc. in Earth Science (1972);
- iii. I have practised my profession in mineral exploration continuously for the past 28 years, including 10 years as a prospector/consultant; 10 years with St. Joe Canada Inc./Bond Gold Canada Inc./LAC Minerals Ltd. as Regional Geologist, Exploration Manager, Vice President and as Senior Vice President, Canadian Exploration; and, 8 years with Beth-Canada Mining Company as a Regional Geologist;
- iv. I am a Fellow of The Geological Association of Canada; and a Member of the Association of Professional Geoscientists of Ontario;
- v. I am a Member of the Canadian Institute of Mining and Metallurgy; of the Prospectors and Developers' Association; of the Canadian Geophysical Union; of the Association of Exploration Geochemists; and, of the BC Yukon Chamber of Mines;
- vi. I have supervised the fieldwork and the preparation of this report entitled "Report On The Red 1-6 Mineral Claims, Bitter Creek Project: 2000 Geochemical and Geological Follow-up Surveys; Bitter Creek and Clements Lake Areas, Skeena Mining Division, Stewart Gold Camp, Northwestern British Columbia"; by David E. Molloy.
- vii. The recommendations herein are solely the responsibility of the author.


David E. Molloy, B.A., B.Sc., F.G.A.C.

Dated at Unionville, Ontario, on this 15th day of January 2001.

APPENDIX A



ALS Chemex

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Page Number :1-A
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 Certificate Date: 01-AUG-2000
 Invoice No. :I0023992
 P.O. Number :RED
 Account :RIX

Project: GR-R
 Comments: ATTN: DAVID MOLLOY

CERTIFICATE OF ANALYSIS

A0023992

SAMPLE	PREP CODE	Au g/t	Ag ppm	Al %	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	Mg %
759701SS	201 202	0.36	2.8	1.46	162	< 10	50	< 0.5	< 2	2.19	4.0	31	25	139	5.67	10	< 1	0.09	< 10	1.19
759713SS	201 202	< 0.03	0.8	2.51	80	< 10	130	0.5	< 2	1.27	5.0	18	52	100	3.65	10	< 1	0.26	< 10	1.29
759714SS	201 202	0.12	0.4	1.65	40	< 10	110	< 0.5	< 2	0.43	2.0	15	34	79	3.65	< 10	< 1	0.09	< 10	1.19
759725SS	201 202	0.30	2.2	1.50	128	< 10	50	< 0.5	< 2	2.22	3.0	26	29	127	5.07	< 10	< 1	0.09	< 10	1.23
759727SS	201 202	< 0.03	0.6	2.29	26	< 10	170	1.0	2	1.27	3.0	14	25	115	3.05	10	< 1	0.07	10	0.60
759735SS	201 202	0.03	0.4	2.42	50	< 10	130	0.5	8	0.57	1.5	16	38	78	3.80	10	< 1	0.11	< 10	0.94
759736SS	201 202	< 0.03	0.8	2.19	46	< 10	140	0.5	< 2	1.13	2.0	15	32	95	3.30	< 10	< 1	0.10	10	0.82
759737SS	201 202	< 0.03	0.4	2.34	22	< 10	160	0.5	12	0.25	1.0	29	31	128	5.10	10	< 1	0.26	10	0.79
759748SS	201 202	< 0.03	1.2	2.51	< 2	10	170	2.0	< 2	0.56	1.5	1	22	111	0.38	< 10	< 1	0.01	90	0.08
759749SS	201 202	< 0.03	0.6	2.50	28	10	170	0.5	2	0.38	2.0	18	39	64	4.17	10	< 1	0.06	10	0.69
759750SS	201 202	0.27	2.6	1.48	194	< 10	50	< 0.5	< 2	2.21	5.0	32	24	138	5.60	< 10	< 1	0.09	< 10	1.21
759755SS	201 202	< 0.03	0.8	3.17	18	< 10	220	1.5	< 2	0.57	2.5	17	30	121	3.06	10	< 1	0.11	10	0.70

CERTIFICATION: 



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 Total Pages :1
 Certificate Date: 01-AUG-2000
 Invoice No. :I0023992
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 Account :RIX

CERTIFICATE OF ANALYSIS A0023992

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759713SS	201 202	1115	5	0.12	82	1180	14	0.11	< 2	5	148	0.09	< 10	< 10	160	< 10	346
759714SS	201 202	880	2	0.01	38	1050	22	0.04	< 2	5	29	0.04	< 10	< 10	62	< 10	150
759725SS	201 202	660	9	0.01	61	930	34	2.51	6	3	111	0.03	< 10	< 10	45	< 10	188
759727SS	201 202	2150	12	0.01	24	1040	12	0.10	< 2	3	98	0.04	< 10	30	52	< 10	138
759735SS	201 202	1230	16	0.01	26	840	20	0.04	< 2	5	45	0.04	< 10	10	77	< 10	130
759736SS	201 202	1785	20	0.02	25	1180	24	0.09	< 2	3	88	0.03	< 10	40	64	< 10	136
759737SS	201 202	1815	9	0.01	23	970	46	0.30	< 2	5	11	0.11	< 10	< 10	81	80	138
759748SS	201 202	1430	3	< 0.01	9	1880	6	0.21	2	3	50	< 0.01	< 10	< 10	7	< 10	24
759749SS	201 202	2040	7	0.01	30	1230	22	0.07	< 2	2	27	0.04	< 10	< 10	70	< 10	114
759750SS	201 202	670	6	0.01	66	970	104	2.94	8	3	110	0.03	< 10	< 10	47	10	258
759755SS	201 202	2160	3	0.01	32	1540	14	0.08	< 2	3	40	0.03	< 10	< 10	51	< 10	154

CERTIFICATION:



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759702SO	201 202	0.51	5.4	0.97	42	< 10	110	< 0.5	52	< 0.01	1.5	4	16	842	8.85	10	< 1	0.38	< 10	0.35
759703SO	201 202	0.45	5.4	0.90	74	< 10	130	< 0.5	42	< 0.01	0.5	5	16	514	7.99	< 10	< 1	0.34	< 10	0.33
759704SO	201 202	0.30	3.8	0.99	66	< 10	30	< 0.5	30	0.01	< 0.5	132	21	188	8.63	10	< 1	0.10	< 10	0.33
759705SO	201 202	0.48	4.4	0.52	50	< 10	70	< 0.5	34	< 0.01	< 0.5	4	9	348	5.55	< 10	< 1	0.13	< 10	0.18
759707SO	201 202	< 0.03	0.6	2.70	30	< 10	140	0.5	8	0.20	2.0	57	33	384	4.38	10	< 1	0.07	< 10	0.81
759710SO	201 202	< 0.03	0.6	2.46	34	< 10	80	0.5	< 2	0.17	1.5	20	31	108	4.24	10	< 1	0.09	< 10	0.84
759711SO	201 202	< 0.03	1.4	3.18	30	< 10	90	0.5	< 2	0.13	1.0	16	31	69	4.23	10	< 1	0.05	< 10	0.60
759712SO	201 202	< 0.03	1.0	3.99	34	< 10	130	1.0	2	0.13	2.0	22	39	88	4.64	10	< 1	0.06	< 10	0.86
759718SO	201 202	< 0.03	< 0.2	2.35	36	10	40	0.5	< 2	0.07	0.5	12	33	89	4.23	< 10	< 1	0.04	< 10	0.90
759720SO	201 202	0.03	0.4	2.00	24	10	110	< 0.5	< 2	0.15	0.5	8	41	260	5.32	10	< 1	0.25	< 10	0.82
759721SO	201 202	0.03	0.8	3.00	34	< 10	110	0.5	< 2	0.18	1.5	22	33	100	4.62	10	< 1	0.08	10	0.82
759722SO	201 202	< 0.03	0.8	2.68	48	< 10	100	0.5	2	0.16	1.5	25	35	126	4.60	10	1	0.07	10	1.03
759723SO	201 202	< 0.03	2.6	4.35	32	< 10	110	1.0	< 2	0.10	1.0	20	36	76	4.46	10	< 1	0.04	10	0.54
759724SO	201 202	< 0.03	1.4	2.63	18	< 10	70	< 0.5	< 2	0.09	0.5	5	22	29	3.56	10	< 1	0.03	< 10	0.19
759726SO	201 202	< 0.03	1.4	3.66	18	< 10	50	0.5	< 2	< 0.01	2.0	3	30	25	6.69	10	< 1	0.01	< 10	0.10
759728SO	201 202	0.12	0.2	4.30	26	< 10	120	1.5	< 2	0.01	1.5	16	38	67	4.97	10	< 1	0.03	< 10	0.48
759733SO	201 202	0.03	1.8	3.95	24	< 10	100	0.5	< 2	0.04	1.5	13	35	52	5.17	10	< 1	0.03	< 10	0.35
759734SO	201 202	0.03	0.4	2.46	40	< 10	110	0.5	2	0.19	1.5	24	32	113	4.35	10	< 1	0.06	10	0.97
759738SO	201 202	< 0.03	1.2	2.94	20	< 10	100	0.5	< 2	0.07	0.5	14	27	70	3.95	10	< 1	0.06	< 10	0.45
759739SO	201 202	< 0.03	0.8	2.27	28	10	220	0.5	< 2	1.52	1.5	15	31	98	3.39	10	< 1	0.08	< 10	0.73
759740SO	201 202	< 0.03	0.6	2.84	30	< 10	160	0.5	< 2	0.24	2.0	21	34	111	4.45	10	< 1	0.08	10	0.91
759743SO	201 202	< 0.03	< 0.2	2.57	40	< 10	120	0.5	< 2	0.16	1.5	23	35	116	4.44	10	< 1	0.07	10	1.08
759746SO	201 202	< 0.03	2.0	3.70	22	< 10	90	0.5	< 2	0.04	0.5	11	27	48	4.27	10	< 1	0.03	< 10	0.26
759747SO	201 202	< 0.03	1.2	1.59	20	< 10	70	< 0.5	< 2	0.05	< 0.5	3	15	16	3.15	10	< 1	0.01	< 10	0.10
759754SO	201 202	0.36	0.8	2.67	32	10	170	1.0	144	0.21	1.5	14	35	249	9.78	10	< 1	0.08	10	0.71
759755SO	201 202	< 0.03	< 0.2	3.66	36	< 10	70	0.5	< 2	0.08	1.5	24	34	224	5.66	10	< 1	0.08	10	0.80

CERTIFICATION:



ALS Chemex

Aurora Laboratory Services Ltd.
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To: MOLLOY, DAVID
 PROP
 49 NORMANDEALE RD.
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Page Number :1-B
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 Certificate Date:01-AUG-2000
 Invoice No. :I0023994
 P.O. Number :RED
 Account :RIX

Project : GR-R
 Comments: ATTN: DAVID MOLLOY

CERTIFICATE OF ANALYSIS

A0023994

SAMPLE	PREP CODE		Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
759702SO	201	202	200	17	< 0.01	10	230	18	1.33	2	< 1	4	< 0.01	< 10	< 10	37	< 10	20
759703SO	201	202	190	19	0.01	9	340	68	1.07	< 2	< 1	7	0.01	< 10	< 10	41	< 10	22
759704SO	201	202	220	19	< 0.01	16	230	26	4.47	< 2	< 1	2	< 0.01	< 10	< 10	27	10	26
759705SO	201	202	120	16	< 0.01	4	110	30	0.41	< 2	< 1	1	< 0.01	< 10	< 10	24	< 10	8
759707SO	201	202	3360	4	0.01	28	940	30	0.07	2	4	14	0.05	< 10	< 10	72	20	94
759710SO	201	202	1370	5	< 0.01	28	1050	22	0.05	2	4	9	0.05	< 10	< 10	67	< 10	88
759711SO	201	202	1035	4	< 0.01	22	830	16	0.05	< 2	3	9	0.05	< 10	< 10	77	< 10	78
759712SO	201	202	1160	3	< 0.01	29	1080	16	0.04	< 2	5	9	0.05	< 10	< 10	73	< 10	102
759718SO	201	202	510	6	< 0.01	28	520	22	0.04	2	3	5	0.03	< 10	< 10	71	< 10	88
759720SO	201	202	580	4	0.01	16	860	22	0.18	< 2	6	7	0.09	< 10	< 10	90	< 10	52
759721SO	201	202	1810	6	< 0.01	28	1070	22	0.04	2	5	11	0.05	< 10	< 10	77	< 10	98
759722SO	201	202	1500	6	< 0.01	34	960	26	0.02	< 2	8	10	0.05	< 10	< 10	71	< 10	106
759723SO	201	202	950	5	< 0.01	20	860	18	0.04	< 2	4	7	0.05	< 10	< 10	66	< 10	72
759724SO	201	202	350	4	< 0.01	8	940	16	0.06	< 2	1	8	0.04	< 10	< 10	76	< 10	38
759726SO	201	202	280	4	< 0.01	5	620	20	0.05	< 2	2	2	0.06	< 10	< 10	130	< 10	30
759728SO	201	202	600	6	< 0.01	23	1300	16	0.03	< 2	5	5	0.03	< 10	< 10	94	< 10	94
759733SO	201	202	875	3	< 0.01	13	1070	14	0.05	< 2	4	4	0.04	< 10	< 10	97	< 10	64
759734SO	201	202	1500	7	0.01	33	950	26	0.02	< 2	6	11	0.04	< 10	< 10	69	< 10	98
759738SO	201	202	1355	4	< 0.01	18	960	14	0.07	< 2	2	6	0.06	< 10	< 10	82	< 10	60
759739SO	201	202	1075	4	0.01	27	720	32	0.06	2	4	39	0.06	< 10	< 10	69	< 10	172
759740SO	201	202	2070	4	0.01	34	1030	24	0.02	2	5	13	0.04	< 10	< 10	75	< 10	108
759743SO	201	202	1940	3	0.01	38	1010	24	0.02	4	6	9	0.04	< 10	< 10	70	< 10	108
759746SO	201	202	1120	5	< 0.01	10	1130	12	0.06	< 2	3	5	0.03	< 10	< 10	73	< 10	50
759747SO	201	202	225	4	< 0.01	6	550	10	0.06	< 2	1	5	0.04	< 10	< 10	133	< 10	20
759754SO	201	202	575	8	< 0.01	33	960	28	0.41	< 2	5	17	0.05	< 10	< 10	80	70	124
759755SO	201	202	875	19	< 0.01	35	890	14	0.03	< 2	4	8	0.06	< 10	< 10	99	< 10	124

CERTIFICATION:



ALS Chemex

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 49 NORMANDALE RD.
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 Certificate Date: 01-AUG-2000
 Invoice No. : 10023980
 P.O. Number : RED
 Account : RIX

Project : GR-R
 Comments: ATTN: DAVID MOLLOY CC: DAVID MOLLOY

CERTIFICATE OF ANALYSIS A0023980

SAMPLE	PREP CODE	Au g/t	Ag ppm	Al %	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	Mg %
759706 R	208 226	< 0.03	0.2	1.03	6	< 10	30	< 0.5	< 2	0.59	< 0.5	31	78	650	4.19	< 10	< 1	0.51	< 10	0.58
759708 R	208 226	< 0.03	< 0.2	1.92	8	< 10	30	< 0.5	< 2	0.77	1.5	50	142	403	6.63	10	< 1	0.86	< 10	0.89
759709 R	208 226	0.06	0.8	4.37	< 2	< 10	30	0.5	< 2	2.47	< 0.5	21	53	811	2.75	< 10	< 1	0.34	< 10	0.48
759715 R	208 226	0.06	0.2	1.80	8	< 10	20	0.5	6	1.01	0.5	20	112	296	3.77	< 10	< 1	0.11	< 10	0.73
759716 R	208 226	0.06	< 0.2	3.39	< 2	< 10	60	0.5	2	2.41	1.0	20	84	188	3.59	10	< 1	0.70	< 10	1.11
759717 R	208 226	< 0.03	0.2	0.80	128	< 10	30	< 0.5	< 2	0.60	< 0.5	47	73	395	3.43	< 10	< 1	0.23	< 10	0.43
759719 R	208 226	0.09	0.2	1.47	80	< 10	10	< 0.5	4	0.93	1.0	51	63	398	7.16	< 10	< 1	0.15	< 10	0.25
759729 R	208 226	0.87	>100.0	0.29	16	< 10	30	< 0.5	2	2.03	136.5	10	59	1305	1.62	< 10	1	0.14	< 10	0.64
759730 R	208 226	0.06	44.4	0.22	6	< 10	10	< 0.5	24	2.69	486	8	78	782	1.89	10	3	0.09	< 10	0.88
759731 R	208 226	0.87	10.0	0.12	204	< 10	10	0.5	80	< 0.01	3.0	353	85	4670	>15.00	10	< 1	0.05	< 10	0.04
759732 R	208 226	2.34	35.0	1.68	692	< 10	10	0.5	222	< 0.01	6.0	768	48	>10000	>15.00	20	< 1	0.02	< 10	0.56
759741 R	208 226	< 0.03	< 0.2	2.17	2	< 10	110	0.5	< 2	0.17	0.5	18	28	177	7.69	10	< 1	0.31	< 10	0.46
759742 R	208 226	< 0.03	< 0.2	3.75	< 2	< 10	40	0.5	< 2	1.86	0.5	14	65	154	2.73	10	< 1	0.75	< 10	0.77
759744 R	208 226	3.42	45.2	1.28	648	< 10	10	0.5	464	< 0.01	6.5	525	52	>10000	>15.00	20	< 1	0.03	< 10	0.43
759745 R	208 226	0.09	1.0	0.75	20	< 10	10	< 0.5	6	0.05	< 0.5	137	94	593	6.14	< 10	< 1	0.20	< 10	0.22
759751 R	208 226	0.03	< 0.2	0.89	< 2	10	10	< 0.5	12	0.61	< 0.5	19	46	349	3.33	< 10	< 1	0.33	< 10	0.62
759752 R	208 226	3.15	5.6	0.21	6	< 10	< 10	0.5	2160	0.20	3.0	97	103	2920	>15.00	10	< 1	0.03	< 10	0.20
759753 R	208 226	0.21	0.6	3.23	< 2	< 10	50	1.5	48	1.78	1.5	22	82	413	4.57	10	< 1	0.72	< 10	1.26
759756 R	208 226	< 0.03	< 0.2	3.82	< 2	< 10	100	0.5	2	2.08	1.5	21	88	264	3.75	10	< 1	1.33	< 10	1.68

CERTIFICATION:



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 49 NORMANDALE RD.
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Page Number :1-B
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 Invoice No. :10023990
 P.O. Number :RED
 Account :RIX

Project: GR-R
 Comments: ATTN: DAVID MOLLOY CC: DAVID MOLLOY

CERTIFICATE OF ANALYSIS A0023980

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
759706 R	208 226	220	9	0.09	88	1030	2	2.18	< 2	4	16	0.17	< 10	< 10	75	< 10	30
759708 R	208 226	340	7	0.13	61	920	< 2	2.64	< 2	5	25	0.17	< 10	< 10	90	< 10	40
759709 R	208 226	180	4	0.56	26	1060	2	1.59	< 2	4	129	0.09	< 10	< 10	57	< 10	30
759715 R	208 226	315	11	0.14	77	870	< 2	1.52	< 2	3	44	0.07	< 10	< 10	83	20	38
759716 R	208 226	475	2	0.28	30	1800	4	0.85	< 2	10	126	0.20	< 10	< 10	145	< 10	54
759717 R	208 226	200	61	0.09	123	1030	< 2	1.70	< 2	2	23	0.11	< 10	< 10	55	< 10	32
759719 R	208 226	185	12	0.19	257	1100	< 2	3.91	< 2	1	51	0.11	< 10	< 10	75	10	26
759729 R	208 226	1335	7	0.05	25	530	4240	1.08	18	1	166	< 0.01	< 10	< 10	19	10	8810
759730 R	208 226	1965	10	0.03	15	390	7660	2.39	14	2	211	< 0.01	< 10	< 10	17	< 10	>10000
759731 R	208 226	45	36	< 0.01	4	120	< 2	>5.00	2	< 1	4	< 0.01	< 10	< 10	13	< 10	124
759732 R	208 226	360	197	< 0.01	6	120	50	>5.00	4	< 1	3	< 0.01	< 10	< 10	45	< 10	206
759741 R	208 226	465	9	< 0.01	1	740	6	0.62	< 2	1	7	0.01	< 10	< 10	60	< 10	90
759742 R	208 226	310	4	0.43	50	1420	2	0.94	< 2	6	101	0.17	< 10	< 10	104	< 10	50
759744 R	208 226	210	206	< 0.01	5	130	84	>5.00	6	< 1	3	< 0.01	< 10	< 10	38	< 10	156
759745 R	208 226	130	22	< 0.01	5	220	< 2	4.57	< 2	< 1	5	< 0.01	< 10	< 10	9	10	14
759751 R	208 226	220	6	0.11	14	980	< 2	1.43	< 2	1	15	0.09	< 10	< 10	37	80	30
759752 R	208 226	120	21	< 0.01	204	70	64	>5.00	4	1	3	< 0.01	< 10	< 10	22	670	124
759753 R	208 226	405	18	0.35	49	1340	< 2	2.57	< 2	5	122	0.12	< 10	< 10	85	150	66
759756 R	208 226	585	5	0.21	39	1490	2	0.85	< 2	5	108	0.19	< 10	< 10	126	< 10	78

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 PROP
 49 NORMANDALE RD.
 UNIONVILLE, ON
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 Certificate Date: 08-SEP-2000
 Invoice No. : I0027913
 P.O. Number : GR A27
 Account : RIX

Project : GR-P,R
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS

A0027913

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	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	Mg %
686765	201 202	15	< 0.2	3.26	32	< 10	190	1.0	< 2	0.70	0.5	20	22	106	4.59	10	< 1	0.60	10	1.40
686770	201 202	10	0.8	1.77	24	< 10	800	0.5	< 2	1.15	3.5	32	53	81	5.47	60	3	0.14	< 10	1.02
759788	201 202	35	4.4	3.00	32	< 10	150	1.0	8	0.31	1.5	55	34	2330	4.56	10	< 1	0.12	10	1.14

CERTIFICATION: 



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 49 NORMANDALE RD.
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 Invoice No. :10027913
 P.O. Number :GR A27
 Account :RIX

Project : GR-P,R
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS

A0027913

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
686765	201 202	1700	20	0.04	21	1370	12	0.04	< 2	8	46	0.17	< 10	30	125	< 10	168
686770	201 202	>10000	20	0.02	97	1140	40	0.10	< 2	4	52	0.01	< 10	80	44	< 10	3190
759788	201 202	2280	7	0.01	34	1070	256	0.08	< 2	7	17	0.03	< 10	< 10	65	< 10	268

CERTIFICATION: *Lawrence T. G.*



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 PROP
 49 NORMANDALE RD.
 UNIONVILLE, ON
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Project: GR-P.R
 Comments: ATTN: D. MOLLOY

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 Total Pages :1
 Certificate Date: 08-SEP-2008
 Invoice No. :I0027910
 P.O. Number :GR A27
 Account :RIX

CERTIFICATE OF ANALYSIS A0027910

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Eg ppm	K %	La ppm	Mg %
686766	201 202	10	0.2	2.87	32	< 10	160	0.5	6	0.45	0.5	22	39	113	4.50	10	< 1	0.45	10	1.31
686768	201 202	50	0.2	2.49	24	< 10	160	0.5	< 2	0.47	< 0.5	21	35	80	4.38	10	< 1	0.42	10	1.20
686769	201 202	< 5	0.2	2.00	16	< 10	140	0.5	< 2	0.35	< 0.5	18	57	60	3.49	< 10	< 1	0.15	10	1.12
686771	201 202	5	0.2	3.03	30	< 10	140	0.5	4	0.32	1.0	22	41	107	4.73	10	< 1	0.37	10	1.27
686772	201 202	30	< 0.2	4.77	52	< 10	280	1.0	6	0.56	2.5	35	25	281	6.35	20	< 1	0.86	< 10	2.09
686774	201 202	30	0.2	3.16	50	< 10	240	0.5	< 2	0.73	2.5	27	27	179	5.29	10	< 1	0.83	< 10	1.56
686809	201 202	< 5	0.6	0.35	26	< 10	50	< 0.5	2	0.30	< 0.5	4	2	36	0.67	< 10	< 1	0.12	< 10	0.14
686813	201 202	60	< 0.2	4.95	124	< 10	190	0.5	< 2	0.43	1.5	31	13	271	6.17	20	< 1	0.88	< 10	1.75
686815	201 202	25	0.2	1.51	24	< 10	110	< 0.5	< 2	0.19	< 0.5	8	13	45	2.87	10	< 1	0.48	< 10	0.73
686816	201 202	< 5	0.2	0.39	2	< 10	70	< 0.5	2	0.31	< 0.5	< 1	4	27	0.68	< 10	< 1	0.21	< 10	0.19
686817	201 202	20	< 0.2	2.11	20	< 10	150	< 0.5	< 2	0.19	< 0.5	8	16	63	3.58	10	< 1	0.68	< 10	1.01
686819	201 202	35	0.6	2.15	48	< 10	140	< 0.5	2	0.39	< 0.5	10	20	103	3.40	10	< 1	0.54	< 10	0.91
686820	201 202	20	0.4	2.79	50	< 10	160	< 0.5	< 2	0.33	< 0.5	16	14	130	4.17	10	< 1	0.74	< 10	1.19
686822	201 202	25	0.2	2.62	64	< 10	190	< 0.5	2	0.56	0.5	18	13	173	3.94	10	< 1	0.72	< 10	1.18
686823	201 202	40	< 0.2	2.54	32	< 10	140	< 0.5	< 2	0.16	< 0.5	13	21	70	5.43	20	< 1	0.93	< 10	1.22
686824	201 202	10	< 0.2	1.33	14	< 10	120	< 0.5	< 2	0.16	< 0.5	6	17	43	2.69	10	< 1	0.53	< 10	0.58
686826	201 202	70	0.4	4.90	114	< 10	240	0.5	< 2	0.46	2.5	33	17	311	6.71	20	< 1	1.32	< 10	2.09
686828	201 202	30	0.6	2.47	48	< 10	140	< 0.5	< 2	0.28	< 0.5	14	17	133	3.74	10	< 1	0.60	< 10	1.07
686829	201 202	30	0.2	2.35	60	< 10	120	< 0.5	2	0.23	< 0.5	13	13	119	3.57	10	< 1	0.46	< 10	0.97
686830	201 202	< 5	0.2	1.19	14	< 10	80	< 0.5	2	0.15	< 0.5	4	15	63	2.09	< 10	< 1	0.37	< 10	0.42
686831	201 202	20	0.4	2.87	34	< 10	180	0.5	< 2	0.73	1.5	18	30	132	3.99	10	< 1	0.54	10	1.24
686832	201 202	40	0.2	3.01	42	< 10	200	0.5	< 2	0.70	2.0	23	27	168	4.77	10	< 1	0.74	10	1.44
759780	201 202	< 5	0.6	3.69	14	< 10	80	0.5	< 2	0.04	< 0.5	6	26	26	3.98	10	< 1	0.02	< 10	0.18
759781	201 202	5	0.6	4.40	22	< 10	100	1.0	< 2	0.07	< 0.5	11	32	56	4.28	10	< 1	0.03	< 10	0.50
759782	201 202	< 5	0.6	4.02	18	< 10	70	0.5	< 2	0.05	< 0.5	7	28	32	4.26	10	< 1	0.03	< 10	0.26
759783	201 202	5	1.6	4.40	32	< 10	130	1.0	2	0.09	< 0.5	16	42	121	5.55	10	< 1	0.04	< 10	0.80
759784	201 202	< 5	0.6	2.61	22	< 10	80	0.5	< 2	0.14	< 0.5	11	28	87	3.97	10	< 1	0.05	< 10	0.71
759785	201 202	10	0.8	2.14	24	< 10	150	< 0.5	2	0.05	< 0.5	5	20	35	4.12	10	< 1	0.03	< 10	0.21
759786	201 202	< 5	1.4	3.50	24	< 10	90	0.5	< 2	0.03	< 0.5	8	34	48	5.45	10	< 1	0.03	< 10	0.28
759787	201 202	10	0.4	3.18	30	< 10	90	0.5	6	0.11	0.5	17	34	85	5.19	10	< 1	0.08	10	0.71
759789	201 202	125	25.0	2.39	34	< 10	110	0.5	26	0.27	8.5	35	31	1550	5.46	10	< 1	0.16	< 10	1.04

CERTIFICATION:



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Page Number :1-B
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 Invoice No. :I0027910
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Project : GR-P,R
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS A0027910

SAMPLE	PREP		Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	CODE		ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
686766	201	202	1510	17	0.02	46	1150	26	0.03	< 2	7	29	0.10	< 10	10	94	< 10	178
686768	201	202	1365	19	0.02	40	1240	28	0.03	< 2	6	27	0.10	< 10	20	92	< 10	150
686769	201	202	915	5	0.01	67	1030	24	0.03	< 2	6	22	0.05	< 10	10	54	< 10	146
686771	201	202	1395	26	0.01	46	1290	26	0.01	< 2	7	27	0.11	< 10	30	96	< 10	174
686772	201	202	1730	16	0.04	30	1480	144	0.01	< 2	10	57	0.23	< 10	10	176	< 10	358
686774	201	202	1460	11	0.04	34	1540	26	0.05	< 2	9	40	0.16	< 10	< 10	127	< 10	242
686809	201	202	245	1	< 0.01	6	720	12	0.17	< 2	< 1	15	0.01	< 10	< 10	15	< 10	42
686813	201	202	3490	3	0.04	11	1900	20	0.05	< 2	12	28	0.21	< 10	< 10	170	< 10	266
686815	201	202	485	2	0.01	11	1110	8	0.11	< 2	4	16	0.12	< 10	< 10	89	< 10	68
686816	201	202	155	< 1	< 0.01	6	720	2	0.18	< 2	1	15	0.03	< 10	< 10	24	< 10	32
686817	201	202	640	4	0.02	7	1470	8	0.09	< 2	6	22	0.17	< 10	< 10	115	< 10	84
686819	201	202	680	3	0.03	14	1100	8	0.15	< 2	6	26	0.13	< 10	< 10	101	< 10	128
686820	201	202	930	3	0.03	12	1280	10	0.12	< 2	7	28	0.16	< 10	< 10	122	< 10	172
686822	201	202	1130	1	0.03	15	1330	8	0.13	< 2	7	37	0.15	< 10	< 10	112	< 10	184
686823	201	202	975	3	0.02	9	3820	10	0.10	< 2	8	19	0.22	< 10	< 10	157	< 10	92
686824	201	202	445	3	0.01	7	1340	8	0.12	< 2	4	13	0.14	< 10	< 10	83	< 10	54
686826	201	202	2130	2	0.06	18	1580	12	0.04	< 2	14	38	0.26	< 10	< 10	194	< 10	306
686828	201	202	820	3	0.03	18	1110	10	0.09	< 2	6	23	0.13	< 10	< 10	101	< 10	144
686829	201	202	725	3	0.03	12	1030	12	0.09	< 2	6	20	0.13	< 10	< 10	99	< 10	126
686830	201	202	255	3	0.01	9	940	8	0.14	< 2	2	14	0.11	< 10	< 10	58	< 10	44
686831	201	202	760	23	0.03	30	1430	16	0.08	< 2	6	37	0.13	< 10	30	107	< 10	192
686832	201	202	1055	19	0.04	32	1400	22	0.07	< 2	8	38	0.15	< 10	10	120	< 10	204
759780	201	202	850	3	< 0.01	7	1640	8	0.05	< 2	3	5	0.02	< 10	< 10	68	< 10	46
759781	201	202	705	3	0.01	20	1520	12	0.05	< 2	3	6	0.03	< 10	< 10	67	< 10	98
759782	201	202	495	2	< 0.01	11	1680	12	0.05	< 2	3	6	0.02	< 10	< 10	82	< 10	50
759783	201	202	830	3	0.01	25	1380	20	0.04	< 2	7	5	0.05	< 10	< 10	97	< 10	94
759784	201	202	645	3	0.01	20	1140	16	0.04	< 2	4	8	0.03	< 10	< 10	80	< 10	74
759785	201	202	225	7	< 0.01	9	400	10	0.02	< 2	3	6	0.02	< 10	< 10	117	< 10	40
759786	201	202	535	5	< 0.01	12	800	14	0.06	< 2	3	5	0.06	< 10	< 10	70	< 10	56
759787	201	202	1100	5	0.01	21	910	18	0.03	< 2	5	7	0.07	< 10	< 10	87	< 10	74
759789	201	202	1450	9	0.01	39	1030	1510	0.23	< 2	5	15	0.02	< 10	< 10	54	< 10	1270

CERTIFICATION:



ALS Chemex

Aurora Laboratory Services Ltd.
 Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
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To: MOLLOY, DAVID
 PROP
 49 NORMANDALE RD.
 UNIONVILLE, ON
 L3R 4J8

Page Number :1-A
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 Certificate Date: 08-SEP-2000
 Invoice No. : I0027927
 P.O. Number : GR RF A23
 Account : RIX

Project: RED F
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS

A0027927

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	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	Mg %
759836	201 202	20	1.0	3.08	146	< 10	320	0.5	4	0.85	0.5	30	25	114	5.85	< 10	< 1	0.41	< 10	1.74
759837	201 202	< 5	0.4	3.19	72	< 10	420	0.5	< 2	0.79	< 0.5	24	19	69	5.36	< 10	< 1	0.70	< 10	2.02
759839	201 202	< 5	0.6	1.81	28	< 10	270	0.5	< 2	0.36	0.5	21	18	60	4.24	< 10	< 1	0.08	< 10	1.06
759840	201 202	5	0.8	1.98	36	< 10	260	0.5	< 2	0.95	0.5	24	19	99	4.59	< 10	< 1	0.11	< 10	1.00
759842	201 202	15	1.2	2.60	38	< 10	150	1.0	< 2	0.36	< 0.5	27	20	79	4.87	< 10	< 1	0.10	< 10	0.99
759843	201 202	5	1.0	2.06	46	< 10	200	1.0	< 2	0.43	0.5	25	15	76	4.15	< 10	< 1	0.10	10	0.58
759844	201 202	< 5	0.8	0.24	2	< 10	90	< 0.5	< 2	0.67	< 0.5	3	3	21	0.83	< 10	< 1	0.07	< 10	0.12
759845	201 202	< 5	1.8	2.14	12	< 10	350	0.5	< 2	0.37	0.5	16	36	47	3.04	< 10	< 1	0.13	< 10	0.77
759846	201 202	10	0.8	3.12	106	< 10	140	0.5	< 2	1.24	0.5	54	54	173	6.51	10	< 1	0.15	< 10	3.69

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Project : RED F
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS

A0027927

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
759836	201 202	1175	6	0.05	19	1080	22	0.05	< 2	10	53	0.23	< 10	< 10	134	< 10	138
759837	201 202	1080	4	0.04	16	950	14	0.07	< 2	11	50	0.25	< 10	< 10	145	< 10	118
759839	201 202	1350	2	< 0.01	21	1110	30	0.01	4	6	18	0.04	< 10	< 10	61	< 10	150
759840	201 202	1760	6	0.01	24	1210	30	0.11	2	6	43	0.05	< 10	< 10	67	< 10	150
759842	201 202	2630	4	0.01	20	1390	48	0.01	2	7	20	0.05	< 10	< 10	72	< 10	176
759843	201 202	2350	6	< 0.01	15	1620	46	0.05	2	5	22	0.05	< 10	< 10	59	< 10	142
759844	201 202	745	4	< 0.01	3	840	6	0.10	2	< 1	34	0.05	< 10	< 10	28	< 10	28
759845	201 202	705	1	< 0.01	52	1130	26	0.09	< 2	5	30	0.01	< 10	< 10	44	< 10	146
759846	201 202	1255	4	0.03	197	810	8	0.31	2	8	85	0.16	< 10	< 10	112	< 10	148

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Aurora Laboratory Services Ltd.
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 PROP
 49 NORMANDALE RD.
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Project: REDGR
 Comments: ATTN: D. MOLLOY

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 Certificate Date: 08-SEP-2000
 Invoice No. : I0027900
 P.O. Number : RED AU25
 Account : RIX

CERTIFICATE OF ANALYSIS A0027900

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	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	Mg %
759776	201 202	5	1.8	3.83	26	< 10	90	0.5	< 2	0.04	< 0.5	10	36	30	5.37	10	< 1	0.03	< 10	0.29
759777	201 202	< 5	1.6	4.03	32	< 10	80	0.5	< 2	0.08	< 0.5	9	44	37	5.83	< 10	< 1	0.03	< 10	0.27
759778	201 202	5	3.0	2.31	20	< 10	140	0.5	< 2	0.10	< 0.5	8	22	29	4.08	< 10	< 1	0.03	< 10	0.17
759779	201 202	< 5	1.4	3.63	18	< 10	90	0.5	< 2	0.11	< 0.5	11	37	49	6.00	< 10	< 1	0.03	< 10	0.27

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To: MOLLOY, DAVID
 PROP
 49 NORMANDALE RD.
 UNIONVILLE, ON
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Project: REDGR
 Comments: ATTN: D. MOLLOY

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 Invoice No. :I0027900
 P.O. Number :RED AU25
 Account :RIX

CERTIFICATE OF ANALYSIS A0027900

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
759776	201 202	810	5 < 0.01		11	830	14	0.07	< 2	3	6	0.06	< 10	< 10	100	< 10	48
759777	201 202	575	5 < 0.01		13	840	14	0.07	< 2	3	8	0.07	< 10	< 10	118	< 10	36
759778	201 202	875	5 < 0.01		8	780	10	0.05	4	1	12	0.02	< 10	< 10	98	< 10	38
759779	201 202	1000	4 < 0.01		13	1400	16	0.08	2	3	15	0.04	< 10	< 10	93	< 10	40

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 Invoice No. : 10027929
 P.O. Number : GR RF A23
 Account : RIX

Project : RED F
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS A0027929

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	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	Mg %
759762	205 226	< 5	< 0.2	2.01	2	< 10	120	0.5	< 2	0.64	< 0.5	14	47	5	3.22	10	< 1	0.10	10	1.17
759766	205 226	25	1.4	1.36	20	< 10	60	< 0.5	< 2	0.50	< 0.5	16	46	90	2.89	< 10	< 1	0.10	< 10	1.23
759769	205 226	< 5	0.2	3.09	< 2	10	120	0.5	< 2	0.74	< 0.5	28	63	67	5.06	10	< 1	0.17	< 10	2.74
759838	205 226	< 5	0.2	0.81	2	< 10	290	< 0.5	2	0.52	< 0.5	8	42	32	1.85	< 10	< 1	0.35	< 10	0.52
759841	205 226	< 5	0.6	1.61	< 2	< 10	310	0.5	< 2	0.46	< 0.5	16	67	637	3.68	< 10	< 1	0.94	< 10	1.18
759847	205 226	25	0.6	1.34	2	< 10	60	< 0.5	6	0.98	< 0.5	14	32	94	3.41	< 10	< 1	0.16	< 10	0.28

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To: MOLLOY, DAVID
 PROP
 49 NORMANDALE RD.
 UNIONVILLE, ON
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Project : RED F
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS A0027929

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
759762	205 226	545	1	0.08	12	1160	18	0.01	< 2	4	108	0.20	< 10	< 10	68	< 10	62
759766	205 226	870	1	0.06	54	540	12	1.44	10	4	11	0.12	< 10	< 10	86	< 10	46
759769	205 226	1035	1	0.04	27	1090	2	< 0.01	< 2	7	26	0.24	< 10	< 10	169	< 10	84
759838	205 226	80	10	0.08	5	870	2	0.77	2	1	25	0.16	< 10	< 10	30	< 10	18
759841	205 226	165	3	0.10	7	950	< 2	0.99	2	7	39	0.27	< 10	< 10	75	< 10	40
759847	205 226	165	1	0.21	7	1140	8	1.11	< 2	3	56	0.13	< 10	< 10	62	< 10	28

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To: MOLLOY, DAVID
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 49 NORMANDE RD.
 UNIONVILLE, ON
 L9R 4J8

Project: RED F
 Comments: ATTN: D. MOLLOY

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 P.O. Number : GR RF A23
 Account : RIX

CERTIFICATE OF ANALYSIS

A0027925

SAMPLE	PREP CODE		Au ppb	Ag ppm	Al %	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	Mg %
	FA+AA																				
759848	201	202	5	1.6	3.28	24	< 10	120	0.5	< 2	0.13	< 0.5	17	33	64	4.46	< 10	< 1	0.05	< 10	0.50
759849	201	202	10	1.2	3.33	30	< 10	110	0.5	< 2	0.11	< 0.5	19	33	82	4.63	< 10	< 1	0.05	< 10	0.66
759850	214	229	105	3.4	2.90	2	< 10	< 10	< 0.5	< 2	1.64	0.5	186	251	5780	7.78	< 10	< 1	0.01	< 10	2.58
759758	201	202	95	6.0	2.10	42	< 10	150	< 0.5	24	0.03	< 0.5	7	26	524	7.23	10	< 1	0.15	< 10	0.23
759759	201	202	< 5	0.8	1.36	18	< 10	60	< 0.5	< 2	0.05	< 0.5	5	17	19	3.53	10	< 1	0.02	< 10	0.08
759760	201	202	< 5	0.4	1.45	12	< 10	50	< 0.5	< 2	0.05	< 0.5	3	13	14	1.75	10	< 1	0.02	< 10	0.09
759761	201	202	< 5	0.6	4.49	24	< 10	140	1.5	< 2	0.03	< 0.5	18	38	67	4.79	< 10	< 1	0.04	< 10	0.48
759763	201	202	10	1.2	4.93	24	< 10	140	1.0	< 2	0.01	< 0.5	11	36	47	5.99	10	< 1	0.03	< 10	0.28
759764	201	202	10	1.6	4.22	32	< 10	100	0.5	< 2	0.02	< 0.5	10	41	54	7.74	< 10	< 1	0.02	< 10	0.30
759765	201	202	< 5	1.4	7.65	26	< 10	70	1.0	< 2	0.08	< 0.5	9	46	49	7.32	< 10	< 1	0.01	< 10	0.29
759767	201	202	10	1.0	3.56	22	< 10	100	0.5	< 2	0.05	< 0.5	9	31	42	6.53	< 10	< 1	0.02	< 10	0.21
759768	201	202	< 5	1.4	5.05	24	< 10	100	1.0	< 2	0.03	< 0.5	9	36	36	5.56	< 10	< 1	0.01	< 10	0.20
759770	201	202	< 5	1.4	5.10	26	< 10	70	0.5	< 2	0.01	< 0.5	8	46	47	6.56	< 10	< 1	0.02	< 10	0.32
759771	201	202	< 5	1.0	3.29	24	< 10	100	0.5	< 2	< 0.01	< 0.5	7	31	25	6.25	10	< 1	0.02	< 10	0.18
759772	201	202	< 5	1.0	4.60	26	< 10	100	0.5	< 2	< 0.01	< 0.5	8	34	35	5.66	< 10	< 1	0.03	< 10	0.21
759773	201	202	< 5	0.8	6.40	14	< 10	100	1.5	< 2	0.04	< 0.5	10	40	33	5.73	10	< 1	0.02	< 10	0.20
759774	201	202	< 5	1.6	5.15	20	< 10	90	1.0	< 2	0.07	< 0.5	9	35	40	5.49	< 10	< 1	0.02	< 10	0.22
759775	214	229	1240	3.2	3.58	136	< 10	< 10	< 0.5	2	3.53	1.5	208	21	7650	9.63	10	< 1	0.03	< 10	1.97

CERTIFICATION:



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 PROP
 49 NORMANDALE RD.
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Page Number :1-B
 Total Pages :1
 Certificate Date: 11-SEP-2000
 Invoice No. :I0027925
 P.O. Number :GR RF A23
 Account :RIX

Project: RED F
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS A0027925

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	N ppm	Zn ppm
759848	201 202	1035	5 < 0.01		23	930	18	0.06	< 2	4	8	0.05	< 10	< 10	91	< 10	74
759849	201 202	900	5 < 0.01		23	930	16	0.04	< 2	6	8	0.05	< 10	< 10	86	< 10	84
759850	214 229	235	1 0.01		2690	540	< 2	2.72	2	1	16	0.10	< 10	< 10	38	< 10	78
759758	201 202	215	12 < 0.01		8	690	44	0.48	2	2	8	0.05	< 10	< 10	123	< 10	28
759759	201 202	105	6 < 0.01		9	360	8	0.04	2	1	6	0.04	< 10	< 10	149	< 10	20
759760	201 202	85	2 < 0.01		8	340	4	0.04	2	1	9	0.03	< 10	< 10	86	< 10	16
759761	201 202	640	5 < 0.01		25	1540	14	0.04	< 2	5	7	0.03	< 10	< 10	91	< 10	96
759763	201 202	450	6 < 0.01		15	730	12	0.05	< 2	5	4	0.03	< 10	< 10	117	< 10	94
759764	201 202	455	5 < 0.01		13	930	20	0.05	< 2	5	5	0.03	< 10	< 10	148	< 10	56
759765	201 202	410	6 < 0.01		12	960	18	0.06	< 2	5	9	0.07	< 10	< 10	116	< 10	42
759767	201 202	345	4 < 0.01		15	820	10	0.06	< 2	3	9	0.03	< 10	< 10	137	< 10	56
759768	201 202	225	5 < 0.01		13	870	16	0.06	< 2	4	6	0.04	< 10	< 10	107	< 10	56
759770	201 202	270	6 < 0.01		14	840	18	0.05	< 2	4	4	0.06	< 10	< 10	119	< 10	64
759771	201 202	260	5 < 0.01		7	740	12	0.03	2	4	3	0.02	< 10	< 10	157	< 10	34
759772	201 202	295	4 < 0.01		11	880	16	0.05	< 2	4	4	0.03	< 10	< 10	115	< 10	50
759773	201 202	930	5 0.01		11	1170	10	0.06	< 2	5	6	0.07	< 10	< 10	92	< 10	54
759774	201 202	305	5 < 0.01		11	1020	12	0.06	< 2	5	8	0.05	< 10	< 10	99	< 10	62
759775	214 229	1570	3 0.05		83	170	< 2	2.49	< 2	6	10	0.03	< 10	< 10	52	< 10	132

CERTIFICATION:



ALS Chemex

Aurora Laboratory Services Ltd.
 Analytical Chemists * Geochemists * Registered Assayers
 5175 Timberlea Blvd., Mississauga
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To: MOLLOY, DAVID
 PROP
 49 NORMANDALE RD.
 UNIONVILLE, ON
 L3R 4J8

Page Number :1-A
 Total Pages :1
 Certificate Date: 11-SEP-2000
 Invoice No. :10027909
 P.O. Number :RED AU25
 Account :RIX

Project : REDGR
 Comments: ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS A0027909

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	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	Mg %
686801	205 226	1810	21.2	0.03	2150	< 10	< 10	0.5	4	0.05	0.5	6	70	121	14.45	< 10	< 1	0.04	< 10	0.01
686802	205 226	110	2.2	0.65	348	< 10	90	< 0.5	< 2	0.40	2.0	4	45	37	5.11	< 10	< 1	0.18	< 10	0.31
686803	205 226	355	3.6	0.39	604	< 10	70	< 0.5	< 2	0.27	2.5	3	46	36	4.55	< 10	< 1	0.14	< 10	0.16
686804	205 226	195	6.8	0.46	564	< 10	400	< 0.5	< 2	0.07	1.0	3	38	33	2.89	< 10	< 1	0.26	< 10	0.06
686805	205 226	20	1.2	0.96	88	< 10	90	< 0.5	< 2	0.24	6.5	4	28	27	3.03	< 10	< 1	0.29	< 10	0.34
686806	214 229	95	3.0	3.00	6	< 10	< 10	< 0.5	< 2	1.75	0.5	187	258	5820	7.88	< 10	< 1	0.01	< 10	2.63

CERTIFICATION:



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Page Number : 1-B
 Total Pages : 1
 Certificate Date: 11-SEP-2000
 Invoice No. : 10027909
 P.O. Number : RED AU25
 Account : RIX

Project : REDGR
 Comments : ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS

A0027909

SAMPLE	PREP CODE		Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
686801	205	226	210	4	0.03	1	200	644	>5.00	18	< 1	26	< 0.01	< 10	< 10	3	< 10	154
686802	205	226	2240	6	0.04	1	420	80	2.29	6	1	67	< 0.01	< 10	< 10	10	< 10	216
686803	205	226	610	2	0.05	1	500	216	3.03	4	1	56	< 0.01	< 10	< 10	7	< 10	160
686804	205	226	180	17	0.02	1	280	1010	0.66	20	< 1	12	< 0.01	< 10	< 10	3	< 10	148
686805	205	226	830	3	0.01	< 1	470	88	0.81	2	< 1	32	< 0.01	< 10	< 10	7	< 10	594
686806	214	229	235	1	0.01	2690	550	2	2.74	< 2	1	16	0.11	< 10	< 10	40	< 10	76

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Page Number : 1-A
 Total Pages : 1
 Certificate Date: 13-SEP-2000
 Invoice No. : 10027931
 P.O. Number : GR A27
 Account : RIX

Project : GR-P.R
 Comments : ATTN: D. MOLLOY

CERTIFICATE OF ANALYSIS A0027931

SAMPLE	PREP CODE		Au ppb	Ag ppm	Al %	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	Mg %
	FA+AA																				
686767	205	226	< 5	< 0.2	2.11	< 2	< 10	210	1.5	< 2	0.70	< 0.5	9	38	18	3.25	< 10	< 1	0.96	< 10	0.86
686773	205	226	50	0.2	1.50	< 2	< 10	100	1.5	8	1.03	< 0.5	19	24	142	3.61	< 10	< 1	0.49	< 10	0.92
686807	205	226	20	0.4	5.30	1.44	< 10	50	2.5	< 2	3.33	< 0.5	26	31	212	6.03	10	< 1	1.56	< 10	1.39
686808	205	226	15	0.2	3.56	8	< 10	430	2.5	< 2	1.37	< 0.5	22	16	141	5.80	10	< 1	2.65	< 10	2.01
686810	205	226	20	0.6	6.59	< 2	< 10	100	2.5	< 2	2.86	1.0	18	36	196	4.82	10	< 1	1.88	< 10	2.10
686811	205	226	15	0.6	3.20	6	< 10	90	2.0	< 2	1.62	< 0.5	30	18	293	6.52	10	< 1	1.82	< 10	1.67
686812	205	226	200	0.4	2.76	< 2	< 10	130	2.0	34	0.84	< 0.5	22	25	189	4.89	10	1	1.44	< 10	1.61
686814	205	226	25	< 0.2	1.87	< 2	< 10	190	2.0	< 2	1.07	< 0.5	20	25	172	3.76	< 10	< 1	0.89	< 10	0.98
686818	205	226	45	0.4	2.01	< 2	< 10	140	1.5	12	0.76	< 0.5	15	27	188	4.77	< 10	< 1	0.91	< 10	1.19
686821	205	226	185	0.2	2.38	< 2	< 10	230	2.0	12	1.34	< 0.5	21	14	152	4.47	10	< 1	1.20	< 10	1.28
686825	214	229	100	2.6	3.00	2	< 10	< 10	1.0	< 2	1.73	< 0.5	183	254	5830	8.07	10	< 1	0.01	< 10	2.69
686827	205	226	270	0.2	3.78	< 2	< 10	260	3.0	< 2	2.34	< 0.5	24	14	193	6.25	10	2	2.88	< 10	2.41
686833	205	226	15	0.2	2.29	2	< 10	160	1.5	< 2	0.88	< 0.5	24	18	145	4.53	< 10	< 1	1.11	< 10	1.42
759788A	214	229	1875	2.2	3.60	128	< 10	< 10	0.5	2	3.56	< 0.5	198	21	7360	9.82	10	1	0.03	< 10	2.00

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 PROP
 49 NORMANDALE RD.
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Project: GR-P.R
 Comments: ATTN: D. MOLLOY

Page Number :1-B
 Total Pages :1
 Certificate Date: 13-SEP-2000
 Invoice No. :I0027931
 P.O. Number :GR A27
 Account :RIX

CERTIFICATE OF ANALYSIS

A0027931

SAMPLE	PREP CODE		Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
686767	205	226	520	2	0.15	2	950	8	0.28	< 2	4	39	0.18	< 10	< 10	84	< 10	78
686773	205	226	435	10	0.11	11	1520	16	0.88	< 2	3	44	0.15	< 10	< 10	91	< 10	86
686807	205	226	1255	2	0.41	11	2210	20	1.39	2	12	141	0.19	< 10	< 10	187	< 10	138
686808	205	226	1065	1	0.07	7	2060	10	0.15	< 2	7	64	0.29	< 10	< 10	184	< 10	98
686810	205	226	1125	< 1	0.69	7	2070	14	1.77	2	16	88	0.19	< 10	< 10	210	< 10	194
686811	205	226	925	< 1	0.24	6	2140	18	2.39	2	13	53	0.23	< 10	< 10	203	< 10	122
686812	205	226	590	3	0.15	10	1860	10	0.96	< 2	10	38	0.22	< 10	< 10	167	< 10	148
686814	205	226	410	4	0.15	13	1580	10	0.85	< 2	5	51	0.20	< 10	< 10	113	< 10	88
686818	205	226	535	137	0.11	9	1330	12	0.72	< 2	6	31	0.17	< 10	< 10	131	110	96
686821	205	226	675	< 1	0.13	7	2290	10	0.74	< 2	7	47	0.20	< 10	< 10	140	< 10	136
686825	214	229	230	< 1	0.01	2820	510	24	2.81	< 2	1	10	0.11	< 10	< 10	42	< 10	76
686827	205	226	1305	3	0.09	11	2170	10	0.81	2	17	39	0.35	< 10	< 10	231	< 10	128
686833	205	226	560	< 1	0.12	13	1590	10	0.96	2	5	36	0.18	< 10	< 10	150	< 10	128
759788A	214	229	1570	2	0.05	82	120	16	2.39	2	6	< 1	0.03	< 10	< 10	52	< 10	126

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Page Number : 1
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 Certificate Date: 10-JAN-2001
 Invoice No. : I0110302
 P.O. Number : RED
 Account : RIX

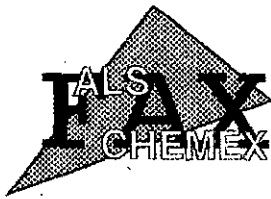
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 Comments : ATTN: DAVID MOLLOY

CERTIFICATE OF ANALYSIS

A0110302

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759722SO	244 --	20									
759738SO	244 --	10									
759739SO	244 --	30									
759740SO	244 --	15									
759743SO	244 --	25									
759746SO	244 --	10									

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 49 NORMANDALE RD.
 UNIONVILLE, ON
 L3R 4J8

Page Number : 1-A
 Total Pages : 1
 Certificate Date: 17-JAN-01
 Invoice No. : I0110614
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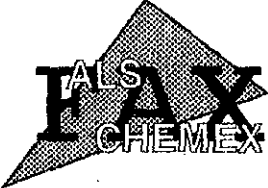
Project : GR-R
 Comments: ATTN: DAVID MOLLOY

CERTIFICATE OF ANALYSIS

A0110614

SAMPLE	PREP CODE	Au ppb FA+AA									
759707SO	244 --	25									
759710SO	244 --	20									
759718SO	244 --	45									
759723SO	244 --	80									
759724SO	244 --	5									

CERTIFICATION: _____



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To: MOLLOY, DAVID
PROP
49 NORMANDALE RD.
UNIONVILLE, ON
L3R 4J8

Page Number : 1-A
Total Pages : 1
Certificate Date: 19-JAN-01
Invoice No. : 10110708
P.O. Number : RED
Account : RIX

Project : GR-R
Comments: ATTN: DAVID MOLLOY

CERTIFICATE OF ANALYSIS A0110708

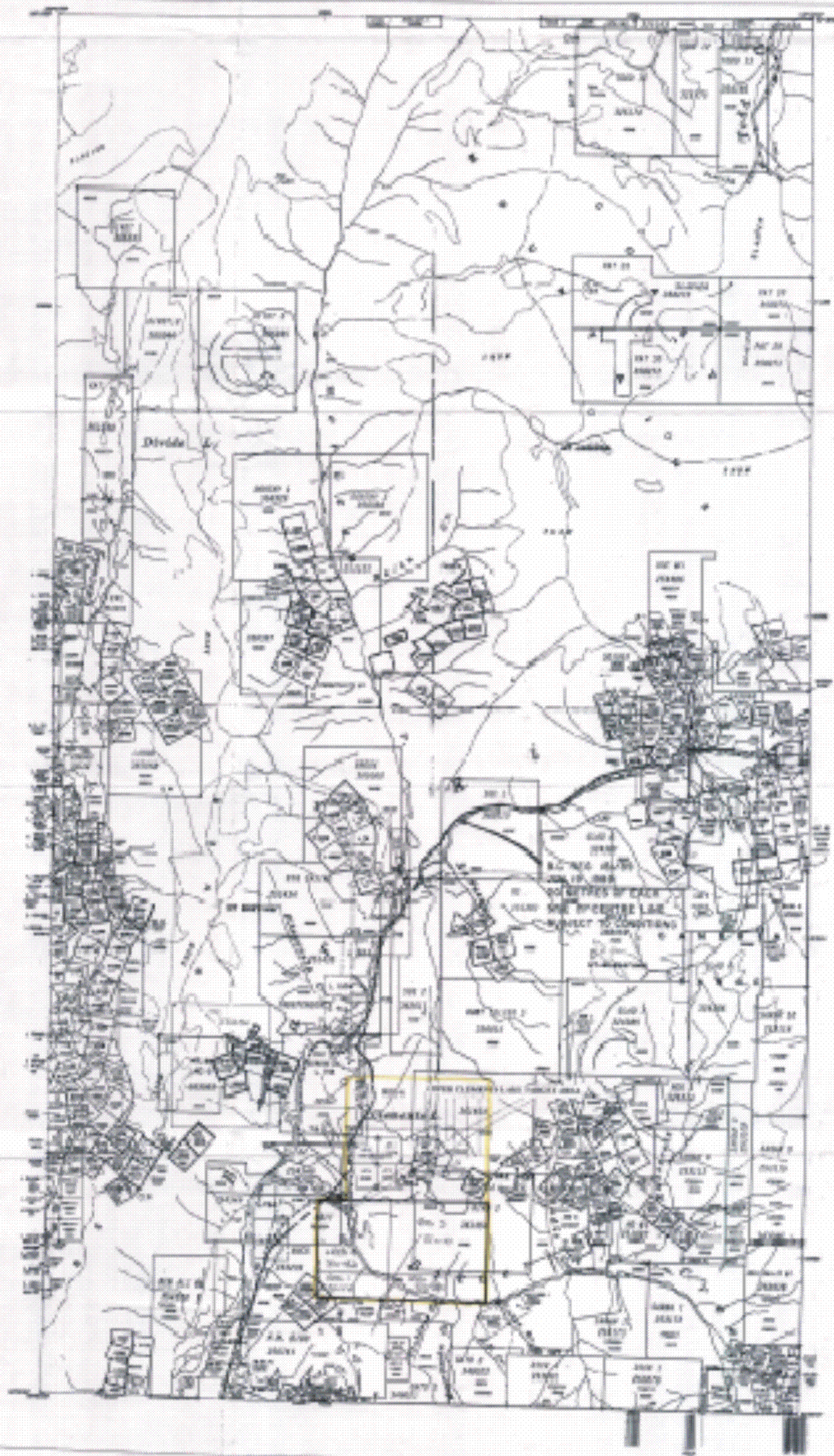
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759712SO	244 --	5																		

01/19/00 12:43PM CHEMEX LABS Alpha-FAX

PAGE 002

CERTIFICATION:

MAP POCKET A



MINISTRY OF ENERGY AND MINES

**ENERGY AND MINERAL TENURE
MINERAL TITLE BRANCH**

AERIAL PHOTO REFERENCE

- 13-2-30000
- 1:50,000



ADMINISTRATIVE AREAS

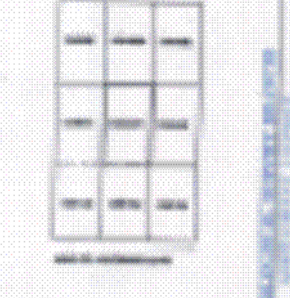
LEGEND

- ADJACENT**
- ADJACENT LAND
 - ADJACENT MINE
 - ADJACENT ROAD
 - ADJACENT RAILROAD
 - ADJACENT CANAL

- CADASTRAL AREAS**
- ADJACENT LAND
 - ADJACENT MINE
 - ADJACENT ROAD
 - ADJACENT RAILROAD
 - ADJACENT CANAL

- MINERAL TENURE**
- ADJACENT LAND
 - ADJACENT MINE
 - ADJACENT ROAD
 - ADJACENT RAILROAD
 - ADJACENT CANAL

THIS MAP IS A SUMMARY OF THE CURRENT STATUS OF THE MINERAL TENURE IN THE AREA SHOWN ON THE MAP. IT IS NOT A LEGAL DOCUMENT AND SHOULD NOT BE USED AS SUCH. FOR MORE INFORMATION, CONTACT THE MINISTRY OF ENERGY AND MINES.



M 104A46W

MAP 1: RED PROPERTY MINERAL TENURE

26.581

MOST RELEVANT ANALYTICAL RESULTS (FOR COMPLETE RESULTS SEE CHEMEX CERTIFICATES OF ANALYSIS)

INITIAL RECOMMENDATIONS (SUBJECT TO DETAILED RESEARCH & FU ACTIVITIES)

AND/OR GEOPHYSICAL FOLLOW-UP ACTIVITIES:

BASED ON GEOLOGICAL, GEOCHEMICAL PARAMETERS INCL. THRESHOLD VALUES OF 10 ppm AU, 8 ppm AS, 35 ppm CU, 25 ppm NI, 20 ppm CO, 15 ppm Pb, 150 ppm Zn, 1 ppm Cd, 15 ppm AS, 140 ppm BA, 1 ppm Hg, 2 ppm MO, 2 ppm SR

REF. NO. RECON. TARGET AREA	1.00 AU ppm	2.00 AS ppm	3.00 CU ppm	4.00 NI ppm	5.00 CO ppm	6.00 PB ppm	7.00 ZN ppm	8.00 CD ppm	9.00 AS ppm	10.00 BA ppm	11.00 Hg ppm	12.00 MO ppm	13.00 SR ppm
1.00 1602188	45.00	1.20	138.00	43.00	24.00	44.00	178.00	2.50	82.00	79.00	<1	5.00	4.00

MOST RELEVANT ANALYTICAL RESULTS (FOR COMPLETE RESULTS SEE CHEMEX CERTIFICATES OF ANALYSIS)

INITIAL RECOMMENDATIONS (SUBJECT TO DETAILED RESEARCH & FU ACTIVITIES)

AND/OR GEOPHYSICAL FOLLOW-UP ACTIVITIES:

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REF. NO. RECON. TARGET AREA	1.00 AU ppm	2.00 AS ppm	3.00 CU ppm	4.00 NI ppm	5.00 CO ppm	6.00 PB ppm	7.00 ZN ppm	8.00 CD ppm	9.00 AS ppm	10.00 BA ppm	11.00 Hg ppm	12.00 MO ppm	13.00 SR ppm
1.00 1602189	35.00	0.20	133.00	28.00	7.00	4.00	18.00	<0.5	116.00	86.00	<1	9.00	<2

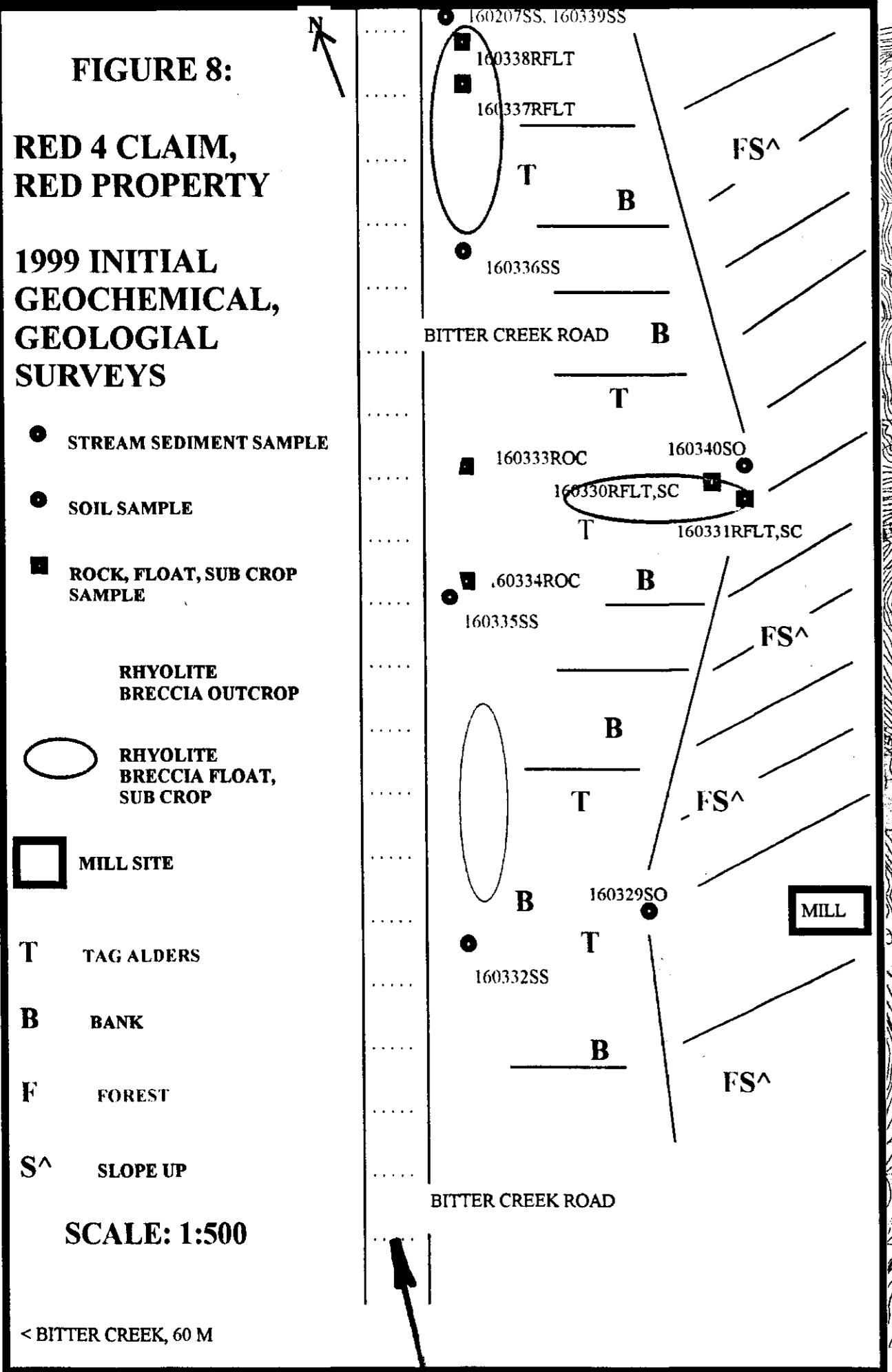
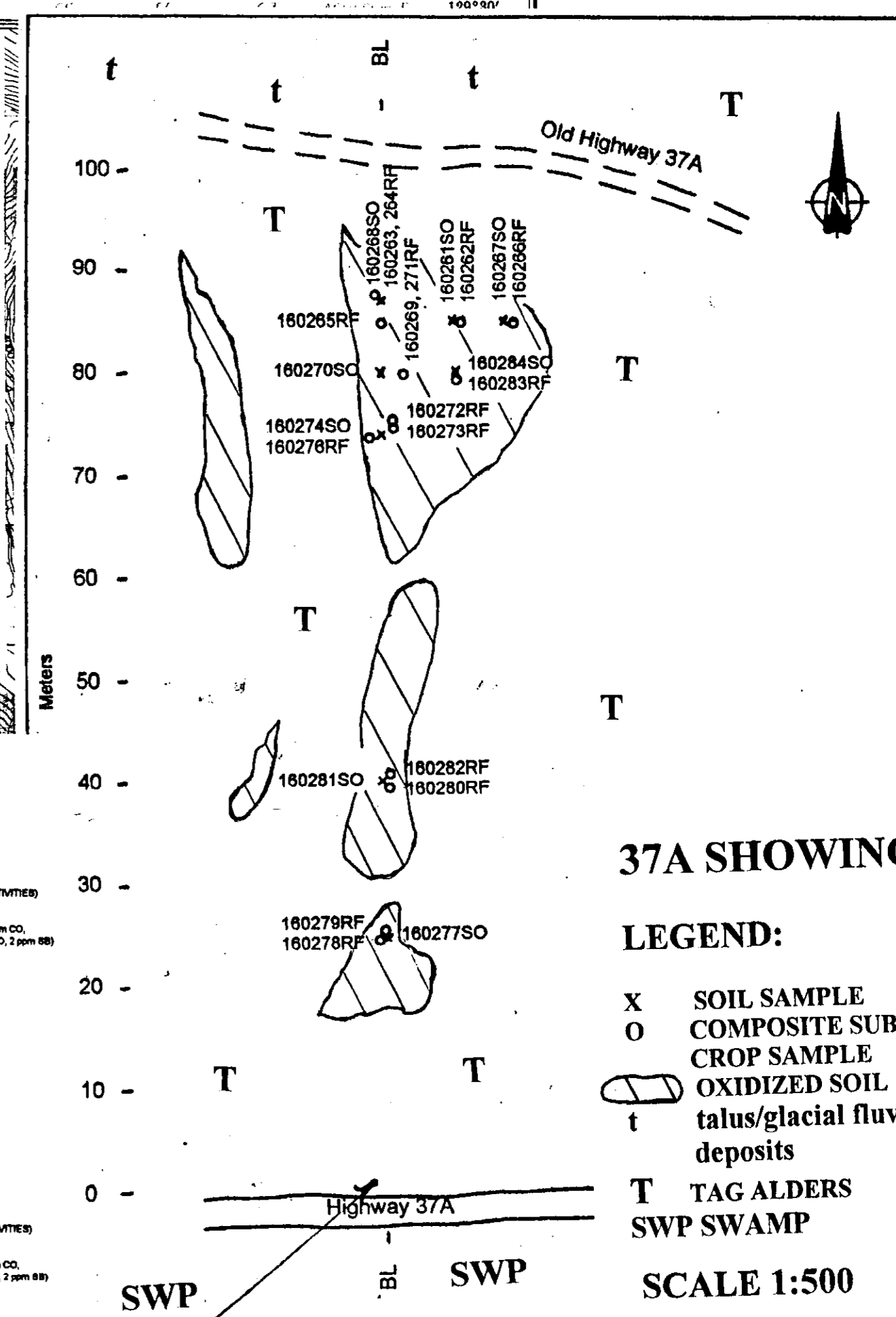
MOST RELEVANT ANALYTICAL RESULTS (FOR COMPLETE RESULTS SEE CHEMEX CERTIFICATES OF ANALYSIS)

INITIAL RECOMMENDATIONS (SUBJECT TO DETAILED RESEARCH & FU ACTIVITIES)

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REF. NO. RECON. TARGET AREA	1.00 AU ppm	2.00 AS ppm	3.00 CU ppm	4.00 NI ppm	5.00 CO ppm	6.00 PB ppm	7.00 ZN ppm	8.00 CD ppm	9.00 AS ppm	10.00 BA ppm	11.00 Hg ppm	12.00 MO ppm	13.00 SR ppm
1.00 1602190	35.00	0.20	133.00	28.00	7.00	4.00	18.00	<0.5	116.00	86.00	<1	9.00	<2



MOST RELEVANT ANALYTICAL RESULTS (FOR COMPLETE RESULTS SEE CHEMEX CERTIFICATES OF ANALYSIS)

INITIAL RECOMMENDATIONS (SUBJECT TO DETAILED RESEARCH & FU ACTIVITIES)

AND/OR GEOPHYSICAL FOLLOW-UP ACTIVITIES:

BASED ON GEOLOGICAL, GEOCHEMICAL PARAMETERS INCL. THRESHOLD VALUES OF 10 ppm AU, 8 ppm AS, 35 ppm CU, 25 ppm NI, 20 ppm CO, 15 ppm Pb, 150 ppm Zn, 1 ppm Cd, 15 ppm AS, 140 ppm BA, 1 ppm Hg, 2 ppm MO, 2 ppm SR

REF. NO. RECON. TARGET AREA	1.00 AU ppm	2.00 AS ppm	3.00 CU ppm	4.00 NI ppm	5.00 CO ppm	6.00 PB ppm	7.00 ZN ppm	8.00 CD ppm	9.00 AS ppm	10.00 BA ppm	11.00 Hg ppm	12.00 MO ppm	13.00 SR ppm
1.00 1602191	35.00	0.20	133.00	28.00	7.00	4.00	18.00	<0.5	116.00	86.00	<1	9.00	<2

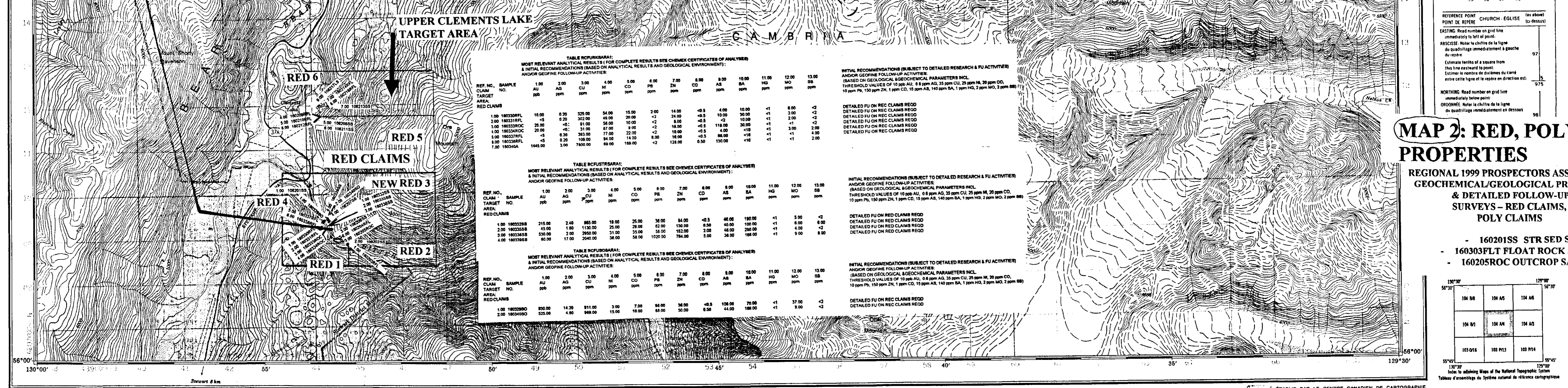
MOST RELEVANT ANALYTICAL RESULTS (FOR COMPLETE RESULTS SEE CHEMEX CERTIFICATES OF ANALYSIS)

INITIAL RECOMMENDATIONS (SUBJECT TO DETAILED RESEARCH & FU ACTIVITIES)

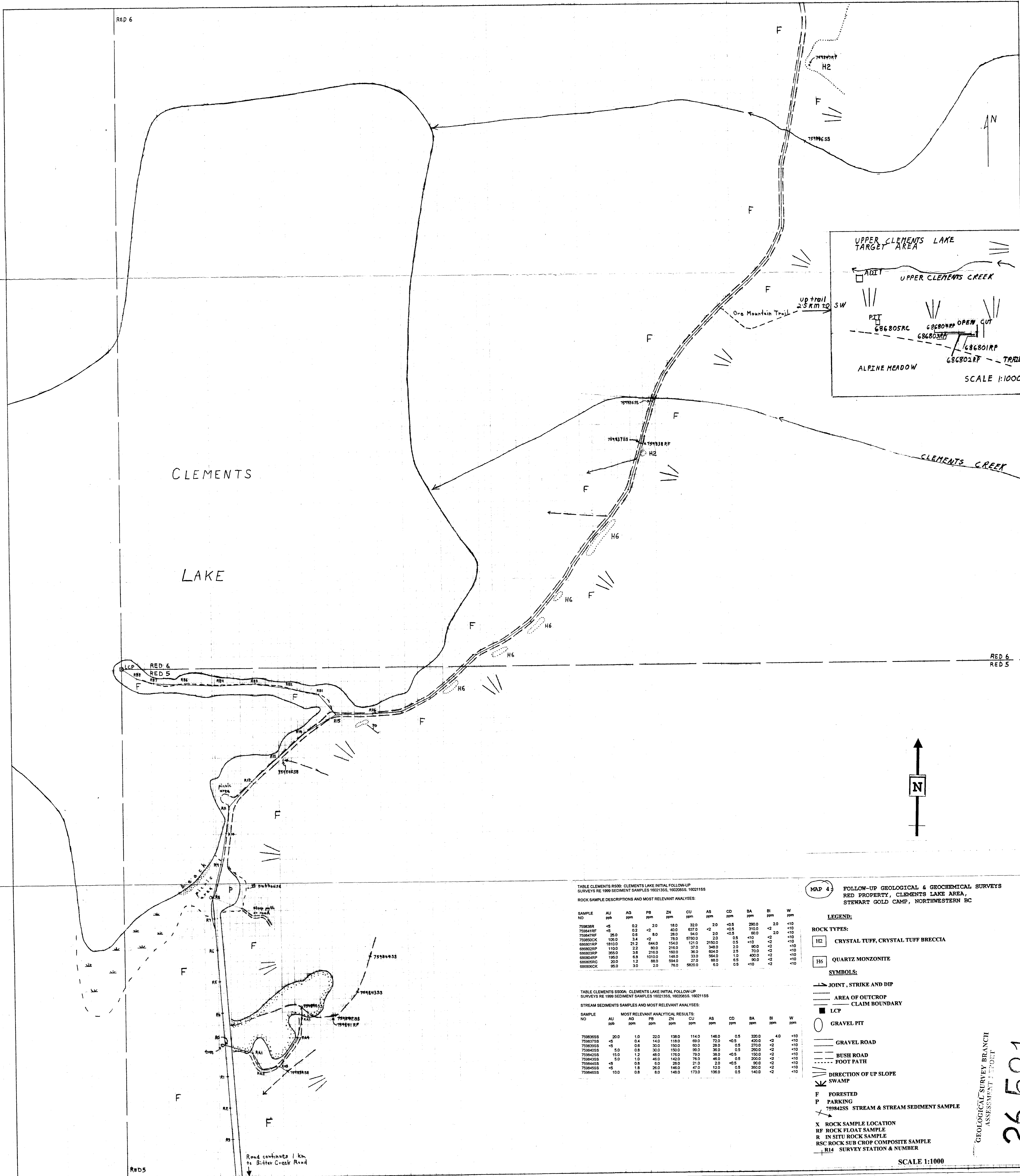
AND/OR GEOPHYSICAL FOLLOW-UP ACTIVITIES:

BASED ON GEOLOGICAL, GEOCHEMICAL PARAMETERS INCL. THRESHOLD VALUES OF 10 ppm AU, 8 ppm AS, 35 ppm CU, 25 ppm NI, 20 ppm CO, 15 ppm Pb, 150 ppm Zn, 1 ppm Cd, 15 ppm AS, 140 ppm BA, 1 ppm Hg, 2 ppm MO, 2 ppm SR

REF. NO. RECON. TARGET AREA	1.00 AU ppm	2.00 AS ppm	3.00 CU ppm	4.00 NI ppm	5.00 CO ppm	6.00 PB ppm	7.00 ZN ppm	8.00 CD ppm	9.00 AS ppm	10.00 BA ppm	11.00 Hg ppm	12.00 MO ppm	13.00 SR ppm
1.00 1602192	35.00	0.20	133.00	28.00	7.00	4.00	18.00	<0.5	116.00	86.00	<1	9.00	<2



MAP POCKET B



RED 6

N

CLEMENTS

LAKE

CLEMENTS CREEK

UPPER CLEMENTS LAKE TARGET AREA

UPPER CLEMENTS CREEK

ALPINE MEADOW

SCALE 1:1000

RED 6
RED 5

N

TABLE CLEMENTS R500. CLEMENTS LAKE INITIAL FOLLOW-UP SURVEYS RE 1999 SEDIMENT SAMPLES 1602135S, 1602085S, 1602115S
ROCK SAMPLE DESCRIPTIONS AND MOST RELEVANT ANALYSES:

SAMPLE NO	AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
759838R	<5	0.2	2.0	18.0	32.0	2.0	<0.5	280.0	<2.0	<10
759841RF	<5	0.2	<2	40.0	67.0	<2	<0.5	310.0	<2	<10
759847RF	26.0	0.8	8.0	28.0	84.0	2.0	<0.5	60.0	<2	<10
759850CK	106.0	3.4	<2	78.0	5780.0	2.0	0.5	<10	<2	<10
686801RF	1810.0	21.2	644.0	154.0	121.0	210.0	0.5	<10	<2	<10
686802RF	110.0	2.2	80.0	216.0	37.0	348.0	2.0	90.0	<2	<10
686803RF	355.0	3.8	216.0	180.0	36.0	604.0	2.8	70.0	<2	<10
686804RF	195.0	6.8	1010.0	148.0	33.0	564.0	1.0	400.0	<2	<10
686805RF	20.0	1.2	88.0	594.0	27.0	98.0	4.5	90.0	<2	<10
686806CK	95.0	3.0	2.0	76.0	8020.0	5.0	0.5	<10	<2	<10

TABLE CLEMENTS R500. CLEMENTS LAKE INITIAL FOLLOW-UP SURVEYS RE 1999 SEDIMENT SAMPLES 1602135S, 1602085S, 1602115S
STREAM SEDIMENT SAMPLES AND MOST RELEVANT ANALYSES:

SAMPLE NO	AU ppb	AG ppm	PB ppm	ZN ppm	CU ppm	AS ppm	CD ppm	BA ppm	BI ppm	W ppm
759836SS	20.0	1.0	22.0	138.0	114.0	146.0	0.5	320.0	4.0	<10
759837SS	<5	0.4	14.0	118.0	69.0	72.0	<0.5	420.0	<2	<10
759838SS	<5	0.8	30.0	150.0	60.0	28.0	0.5	270.0	<2	<10
759840SS	5.0	0.8	30.0	150.0	99.0	36.0	0.5	260.0	<2	<10
759842SS	15.0	1.2	48.0	178.0	79.0	38.0	<0.5	150.0	<2	<10
759843SS	5.0	1.0	45.0	142.0	79.0	46.0	0.5	200.0	<2	<10
759844SS	<5	0.8	6.0	28.0	21.0	2.0	<0.5	90.0	<2	<10
759845SS	<5	1.8	26.0	146.0	47.0	12.0	0.5	390.0	<2	<10
759846SS	10.0	0.8	8.0	146.0	173.0	106.0	0.5	140.0	<2	<10

MAP 4. FOLLOW-UP GEOLOGICAL & GEOCHEMICAL SURVEYS RED PROPERTY, CLEMENTS LAKE AREA, STEWART GOLD CAMP, NORTHWESTERN BC

- LEGEND:**
- ROCK TYPES:**
- H2 CRYSTAL TUFF, CRYSTAL TUFF BRECCIA
 - H6 QUARTZ MONZONITE
- SYMBOLS:**
- JOINT, STRIKE AND DIP
 - AREA OF OUTCROP
 - CLAIM BOUNDARY
 - LCP
 - GRAVEL PIT
 - GRAVEL ROAD
 - BUSH ROAD
 - FOOT PATH
 - DIRECTION OF UP SLOPE
 - SWAMP
 - F FORESTED
 - P PARKING
 - 759842SS STREAM & STREAM SEDIMENT SAMPLE
 - X ROCK SAMPLE LOCATION
 - RF ROCK FLOAT SAMPLE
 - R IN SITU ROCK SAMPLE
 - RSC ROCK SUB CROP COMPOSITE SAMPLE
 - R14 SURVEY STATION & NUMBER

SCALE 1:1000

GEOLOGICAL SURVEY BRANCH ASSESSMENT FRONT

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