

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
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GEOCHEMICAL
ASSESSMENT REPORT

on the

GOLD STAR MINERAL CLAIM
WHITEMAN CREEK AREA
VERNON MINING DIVISION

by

MURRAY S. MORRISON, B.Sc.

CLAIMS: Gold Star (20 units).
LOCATION: The Gold Star mineral claim is situated on Whiteman Creek,
30 km due west of Vernon, B.C.
Lat. 50°14'; Long. 119°41';
N.T.S.: Map 82-L-4E
OWNER: Southern Gold Resources Ltd., and M.S. Morrison
OPERATOR: Southern Gold Resources Ltd.
DATE STARTED: June 23, 1996
DATE COMPLETED: August 17, 1996

FILMED

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

Kelowna, B.C.

October 15, 1996

24,634

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SUMMARY

The Gold Star mineral claim, comprised of 20 units, is located on Whiteman Creek, 30 km due west of Vernon, B.C. The mineral claim was staked as an epithermal gold prospect in 1983 by the writer.

The mineral claim covers a flat-lying sequence of Eocene volcanic flows and pyroclastic rocks that extend westward from the well-known Brett property. The Brett property features a series of northwest-striking shear zones which cut the Eocene rocks. The shear zones are gold-bearing with typical epithermal veining, textures, and indicator elements. Two of the better explored shear zones on the Brett property are the Main Brett Shear Zone and the nearby subparallel RW vein. Gold values as high as 180 g/tonne have been recorded from the RW vein. Much of the RW vein has been mined by an open cut this year, and the gold-bearing quartz vein material has been shipped to the smelter at Trail, B.C.

The Gold Star mineral claim has several features in common with the Brett property. These features include several northwesterly-striking shear zones. In spite of intense exploration efforts by Brican Resources Ltd. from 1984 to 1989 and Huntington Resources Inc. in 1994, no significant gold has been discovered on the Gold Star property. Brican Resources Ltd. conducted soil surveys, trenching programs, an Induced Polarization survey, Reverse Circulation drilling programs and two diamond drilling programs during their effort to locate gold on the property. In all, 13 km of I.P. survey were conducted, 1785 metres of R.C. drilling were completed, and 1416 metres of diamond drilling were drilled up to 1989. In 1994, Huntington Resources Inc. diamond drilled another 660 metres of core. In total, 15 R.C. and 14 diamond drill holes have been drilled to date on the east-central portion of the Gold Star mineral claim. Good interceptions of clay altered, pyritized and silicified tuffaceous rocks were encountered in several of the drill holes, but epithermal quartz veining of the type found on the Brett property with associated high gold values was not located on the Gold Star mineral claim.

SUMMARY continued

A search for the projection of the Main Brett Shear Zone on to the Gold Star property was never seriously pursued by either Brican or Huntington Resources during their options on the property.

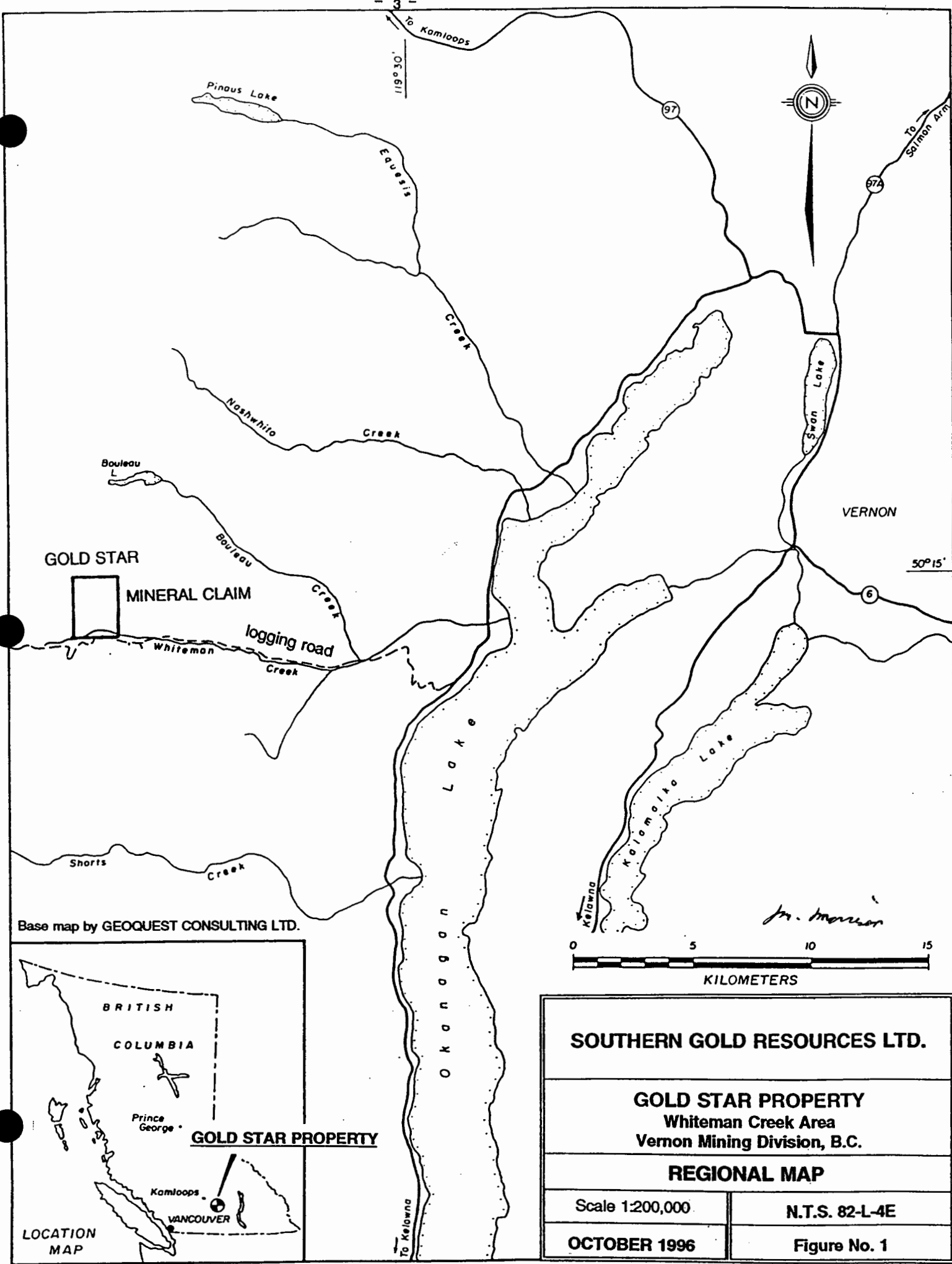
This year Southern Gold Resources Ltd. of Vancouver signed an option to purchase the property with the intent of searching for the extension of the Main Brett Shear Zone on the Gold Star mineral claim.

This year's soil geochemical and experimental biogeochemical surveys were designed to trace the Main Brett Shear Zone across the northeastern corner of the property. The surveys failed to produce any linear anomalies that could be attributed to the Main Brett Shear Zone, however, elevated gold values in soils and a coincident biogeochemical arsenic anomaly were found to cross the survey area as a zone perpendicular to the Main Brett Shear zone and the new zone may indicate a cross-cutting feature such as a dyke or fault.

A vertical zoning of the optimum gold horizon within the Main Brett Shear Zone that was recognized by Huntington Resources Inc. geologists may account for the lack of geochemical anomalies on the Gold Star property. The area of the Gold Star property surveyed this year is all well above the optimum elevation noted for gold on the Brett property.

It is recommended that a low-cost, shallow-hole, Reverse Circulation Percussion Drill be used to probe for the Main Brett Shear Zone on the Gold Star mineral claim near the Brett property boundary and that samples be collected from the Shear Zone for analyses.

A follow-up diamond drilling program is recommended to test the Shear Zone at depth if the lithogeochemical analyses from the first phase of drilling show elevated values for gold, silver or any of the typical epithermal indicator elements.



INTRODUCTION

This report, written for government assessment work requirements, discusses the results of geochemical and biogeochemical surveys which were conducted over portions of the northeast corner of the Gold Star mineral claim under the supervision of the writer during the period June - August, 1996.

The Gold Star mineral claim, comprised of 20 units, is located on Whiteman Creek, 30 km due west of Vernon, B.C. The mineral claim was staked by the writer, M. Morrison, of Kelowna, B.C. in 1983 as an epithermal gold prospect. The property was positioned to cover a sequence of Eocene Age volcanic rocks which extends westward from the Brett mineral claim. The writer recognized (in 1983) that the volcanic rocks of Whiteman Creek were similar to others found within Tertiary basins throughout the Okanagan Valley. These included the volcanic rocks located west of Okanagan Falls, B.C. which were staked as the Vault property by the writer in 1982 and the volcanic rocks hosting the Dusty Mac Mine which produced gold and silver from an open pit mine in 1975 - 76. Subsequently, gold was discovered within the Eocene volcanic rocks on the Brett property by Huntington Resources Inc. in 1984.

Since 1984, the east-central portion of the Gold Star mineral claim adjacent the Brett property has been intensely explored for precious metals by Brican Resources Ltd. (1984-1990) and by Huntington Resources Inc. in 1994 (please see History). This year (1996) Southern Gold Resources Ltd. (a private exploration company with an office in Vancouver) obtained an option to purchase the Gold Star property and financed the surveys described in this report.

This year's surveys were conducted in an attempt to trace the Main Brett Gold-Bearing Shear Zone northwesterly on to the Gold Star mineral claim from where it was last followed across the Brett property by Huntington Resources Inc.

INTRODUCTION continued

The analytical results of the two surveys are given in Appendix C. The gold, silver and barium values have been selected from the soil survey results for plotting on Figure 5, while Figure 6 illustrates the arsenic values obtained from the biogeochemical survey.

LOCATION AND ACCESS

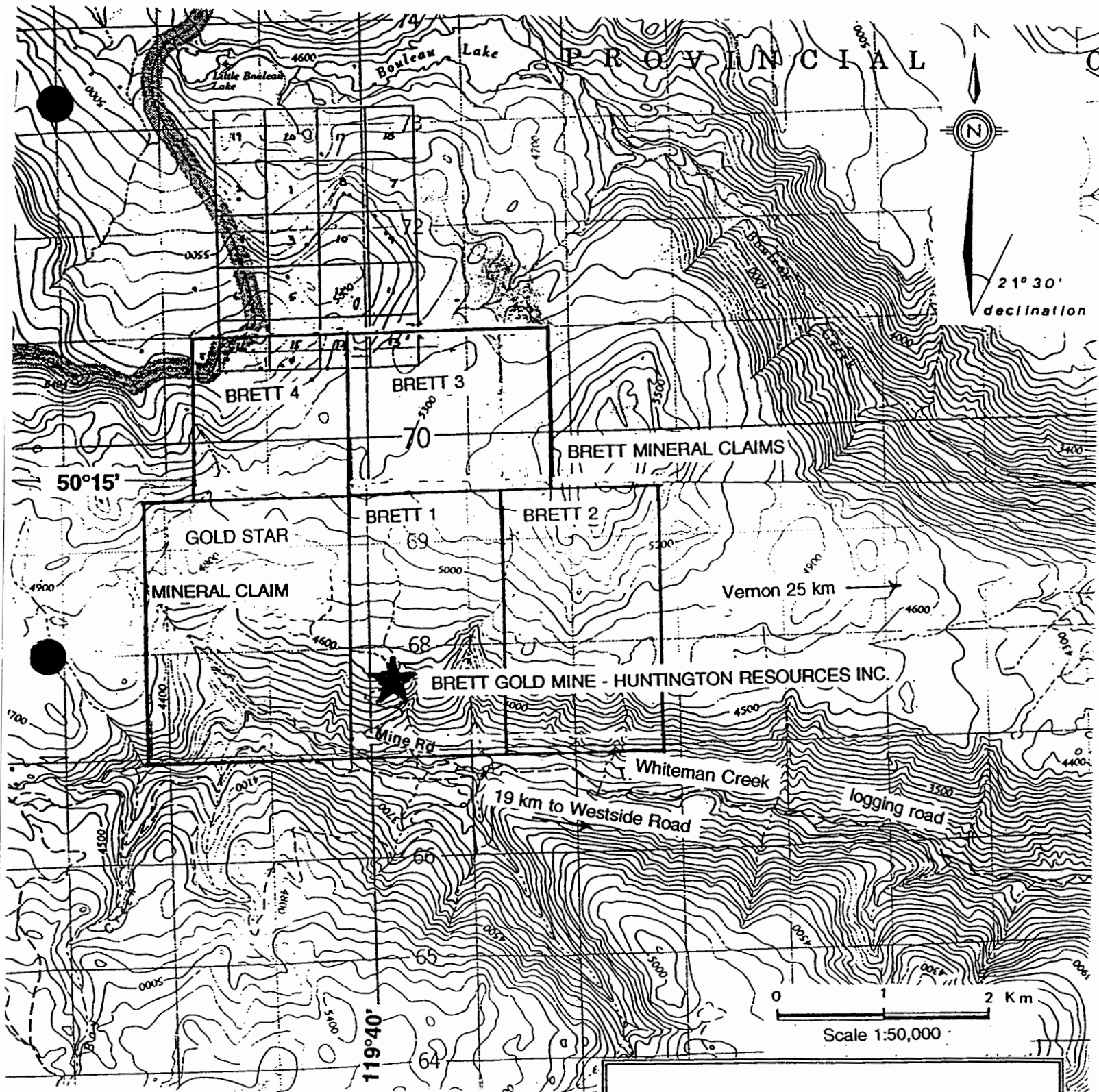
The Gold Star mineral claim is located on Whiteman Creek, 17 km west of Okanagan Lake. The property lies 30 km due west of Vernon, or 43 km northwest of Kelowna, B.C. (Lat. 50°14'N; Long. 119°41'W; N.S.T. Map 82-L-4E).

Access to the property is via the Whiteman Creek logging road which leaves the Westside road approximately 40 km north of Kelowna. The Westside road, as the name implies, follows the Westside of Okanagan Lake from Highway #97 near Westbank, back to Highway #97 again near the northwest end of the lake.

The Whiteman Creek road is an active, well-maintained logging road which follows the canyon to the headwaters of Whiteman Creek. A road which branches northwest from the main road at 19.2 km switchbacks 2.5 km up a steep slope to the Brett Gold Mine, and from the mine bush roads continue up the steep slope another 2.5 km to the northeast corner of the Gold Star property. A series of steep, 4-wheel-drive, roads give access to the central portion of the property as illustrated on Figure 3.

Travel time to the Brett Gold Mine from either Kelowna or Vernon requires 90 minutes.

The Legal Corner Post of the Gold Star mineral claim is located 20 metres north of the Whiteman Creek logging road at 20.5 km.



See Figure No. 3 for more detail

M. Morrison

SOUTHERN GOLD RESOURCES LTD.	
GOLD STAR PROPERTY Whiteman Creek Area Vernon Mining Division, B.C.	
MINERAL CLAIMS & ACCESS	
Drawn by: M.M.	N.T.S. 82-L-4E
OCTOBER 1996	Figure No. 2

PHYSICAL FEATURES AND CLIMATE

The Gold Star property is located near the head of the Whiteman Creek Canyon where several tributaries joint to form the main creek. The property, for the most part, covers the northern side of the steep-walled valley with elevations ranging form 1200 metres at the creek to 1550 metres on the northern boundary of the mineral claim. Much of the elevation difference occurs near the creek on the southern half of the property where slopes of 20 to 30 degrees are common. More moderate slopes of 5 to 10 degrees are encountered well above the creek on the northern half of the property.

Whiteman Creek is one of several creeks that drain the uplifted Thompson Plateau through deeply cut canyons that open into the Okanagan Valley (Shorts Creek to the south of the property and Bouleau Creek to the northeast have also cut deep canyons).

Continental glaciation has covered even the highest points of land on the Thompson Plateau, including Tahaetkan Mtn. at an elevation of 2088 metres. This mountain is located just 4 km northwest of the Gold Star property.

Late valley glaciation has deposited large accumulations of drift near the headwaters of the main valleys, but the steep slopes on the Gold Star property are mantled with only 2 to 5 metres of till.

The Gold Star mineral claim is forested. Douglas fir is the dominant forest species below 1400 metres, while balsam and lodge pole pine are more common above that elevation. Only the extreme northwest corner of the property has been clear-cut logged.

The property receives approximately 50 cm of precipitation annually, and half of it in the form of snow. The snow pack can reach greater than 1½ metres on the upper slopes of the property. The snow begins to accumulate in early November and lingers on the upper portions of the property until late May.

PHYSICAL FEATURES AND CLIMATE continued

Temperatures on the property range from highs of 30°C in summer to lows of -30°C in winter. Generally, the summer temperatures are 5 to 10°C cooler than those experienced in the main Okanagan Valley.

CLAIM STATUS

The Gold Star mineral claim was staked as a 4-post modified grid claim consisting of 20 units by the writer in September, 1983. The mineral claim was recorded in the Vernon Mining Division on September 8, 1983, and it has been given Tenure Number 259194.

The new expiry date of the Gold Star mineral claim will be September 8, 2000, based on the acceptance of this assessment work report.

The Legal Corner Post of the Gold Star mineral claim was staked adjacent to the southwest corner post of the Brett 1 mineral claim 20 meters north of the Whiteman Creek logging road at 20.5 km. Subsequent measuring (by others) has indicated that the perimeter of the Brett 1 mineral claim had been staked small and that the legal position of the Brett 1 southwest corner is in fact 250 metres further west than the post marking the corner. The gold Star mineral claim is thereby reduced in size by 250 metres along the entire eastern side and the mineral claim is reduced in size by approximately 62.5 hectares.

Southern Gold Resources Ltd., a private exploration company with an office in Vancouver, signed an Option to Purchase Agreement dated January 31, 1996, to obtain up to a 100% interest in the Gold Star mineral claim. The vendor, M. Morrison, of Kelowna, B.C. retains a 2% Net Smelter Royalty interest in the property.

HISTORY AND PREVIOUS WORK

The Gold Star mineral claim was staked during September, 1983, by the writer, M. Morrison, of Kelowna, B.C. to cover a sequence of Eocene volcanic rocks that extends westward from the Brett property. The altered tuffaceous rocks within the sequence bore a striking resemblance to rocks seen on the Vault gold property staked a year earlier by the writer at Okanagan Falls, B.C.

In early 1984, Brican Resources Ltd., a VSE listed company with principles working out of Vernon, B.C., optioned the Gold Star property as a result of reconnaissance heavy mineral sampling in the area. Later in 1984, Brican crews collected a single line of geochemical soil samples from a traverse along the 1190 m contour across the southern half of the Gold Star property. Only a few elevated gold values (15 to 85 parts per billion) were located and the property received no further attention for over a year.

Meanwhile, work continued on the neighbouring Brett property. An initial soil sampling program on the centre of the Brett property yielded a few isolated high gold values (190 to 255 ppb). This survey was expanded to the southern part of the property late in 1984, and linear gold anomalies were outlined with values of 80 to 400 ppb (W. Gruenwald, 1984). A trenching program in 1985 yielded positive results. Gold was discovered in quartz vein material in northwest-striking shear zones. One quartz vein, called the "RW vein," contained visible gold and assayed 6.50 oz./T gold and 10.10 oz./T silver (G.D. Belik, 1986).

The discovery of high gold values on the Brett property prompted Brican to resume work on the Gold Star mineral claim in 1986. The central portion of the mineral claim was covered by a 100 x 100 metre grid, and 566 soil samples were collected and analyzed for gold. Two weakly anomalous zones were discovered and named the "Border Gulch" and "Sunday Gulch" zones. Each zone yielded values of 20 to 50 ppb gold with one peak value of 200 ppb gold at each zone. In October, 1986 detailed soil sampling of each zone was carried out on a closely spaced grid. Eighty-five fill-in soil samples were collected. The soil anomalies were

HISTORY AND PREVIOUS WORK continued

trenched in November 1986 (15 trenches of 250 m total length) and February, 1987 (9 trenches of 225 m total length). A total of 87 rock samples were collected from the trenches and road cuts. The gold and arsenic values were found to be generally low with the highest gold value being 170 ppb and the highest arsenic value being 150 parts per million. Although the values were disappointing the rock exposed was generally highly altered (clay), pyritized, and silicified. Chalcedonic veining indicated a strong epithermal system (B.W. Kyba, 1987). An experimental VLF-EM survey conducted along exploration roads indicated that some of the pyritized shear zones show up as VLF-EM conductors (B.W. Kyba, 1987).

Continued success on the Brett property again prompted Bricon Resources Ltd. to continue work on the Gold Star property in 1987. Seven diamond drill holes, totalling 721.5 meters, were drilled into altered volcanic rocks outlined by the trenching program.

In 1988, an Induced Polarization Survey of 13 km was conducted over the southeastern portion of the Gold Star property. This survey was followed by 15 Reverse Circulation Drill Holes totalling 1785 metres. Finally, 3 more diamond drill holes totalling 695.3 m were drilled late in 1988 to further test the I.P. anomalies.

Although several of the drill holes on the Gold Star property intercepted tens of metres of highly clay altered, pyritized and silicified tuffaceous rocks only diamond drill hole 88-8 returned any significant gold values. DDH 88-8 yielded 2150 ppb gold over 3 metres. Bricon terminated their option on the property.

In 1994, Huntington Resources Inc. optioned the Gold Star property and drilled four diamond drill holes, totalling 660 metres, to further test some of the I.P. and arsenic geochemical anomalies outlined during the Bricon programs. A fifth drill hole to test the Main Brett Shear Zone extension on to the Gold Star property was planned, but cancelled due to the lateness of the season and lack of an easy source of drill water.

HISTORY AND PREVIOUS WORK continued

The results from the four holes drilled by Huntington were the same as earlier results. Large zones of clay altered, pyritized and silicified tuffaceous rocks were intercepted, but precious metal values were insignificant. Huntington Resources Inc. terminated their option on the Gold Star property in 1995.

Southern Gold Resources Ltd. of Vancouver optioned the Gold Star mineral claim in January 1996 with plans to explore for the extension of the Main Brett Shear Zone on to the northern half of the property.

REGIONAL GEOLOGY AND MINERALIZATION

The regional geology illustrated on the 1 inch = 4 mile G.S.C. Map, 1059A - Vernon, published in 1960 is not correct in the upper Whiteman Creek area. The map indicates that Jurassic Age(?) plutonic rocks underlie much of the upper valley of Whiteman Creek up to the 1500 metre elevation and then Tertiary basalts cover the ridges to the north and south of the valley above 1500 metres. In fact, much of the upper valley of Whiteman Creek is underlain by a thick sequence of assorted volcanic flow rocks and pyroclastics that are in part correlative with Eocene rocks located within Tertiary basins throughout the Okanagan (e.g. the Kelowna-Rutland, Summerland, and Okanagan Falls Tertiary Basins).

Many of the Okanagan Tertiary basins have features that suggest quick deposition of sediments and pyroclastic debris from very local volcanic eruptions (i.e. coarse agglomerates and lahars are common features of many of the basins). The Whiteman Creek Tertiary basin is not an exception. It contains thick agglomerate and lahar units which suggest a nearby volcanic centre.

Many of the Tertiary basins throughout the Okanagan Valley have gold mineralization associated with them. Some examples are the Okanagan Falls basin which hosts the Dusty Mac Mine and Vault property; the Venner Meadows basin which hosts the AU gold prospect; and of course, the Whiteman Creek basin which hosts the Brett Gold Mine.

In each example the precious metals are associated with strong epithermal systems. Repeated late faulting and the permeability of the various units making up the Tertiary sequences are believed to have played large roles in determining where the precious metals are ultimately deposited. The nearness of a heat source is also considered important.

A monzonite/syenite stock centered in Whiteman Creek canyon, and located on the southern side of the Brett property post-dates the Eocene volcanic sequence and it may have played a role in the emplacement of the gold mineralization on the Brett property.

PROPERTY GEOLOGY

Lithology

The Gold Star mineral claim covers the same layered sequence of Eocene volcanic rocks that underlies the neighbouring Brett property to the east. The sequence is believed to be near horizontal, and it is made up of a great assortment of intermediate volcanic flows and tuffs. The flow rocks are predominantly of andesitic composition, but are of variable colours and textures. The porphyritic or fine grained andesites are green, grey, black or tan. White plagioclase phenocrysts are characteristic of some andesites, while others have both feldspar and hornblende phenocrysts. The tuffs are generally altered to tan or chalky white, and they are probably also of intermediate composition. Both ash and lapilli tuffs are common.

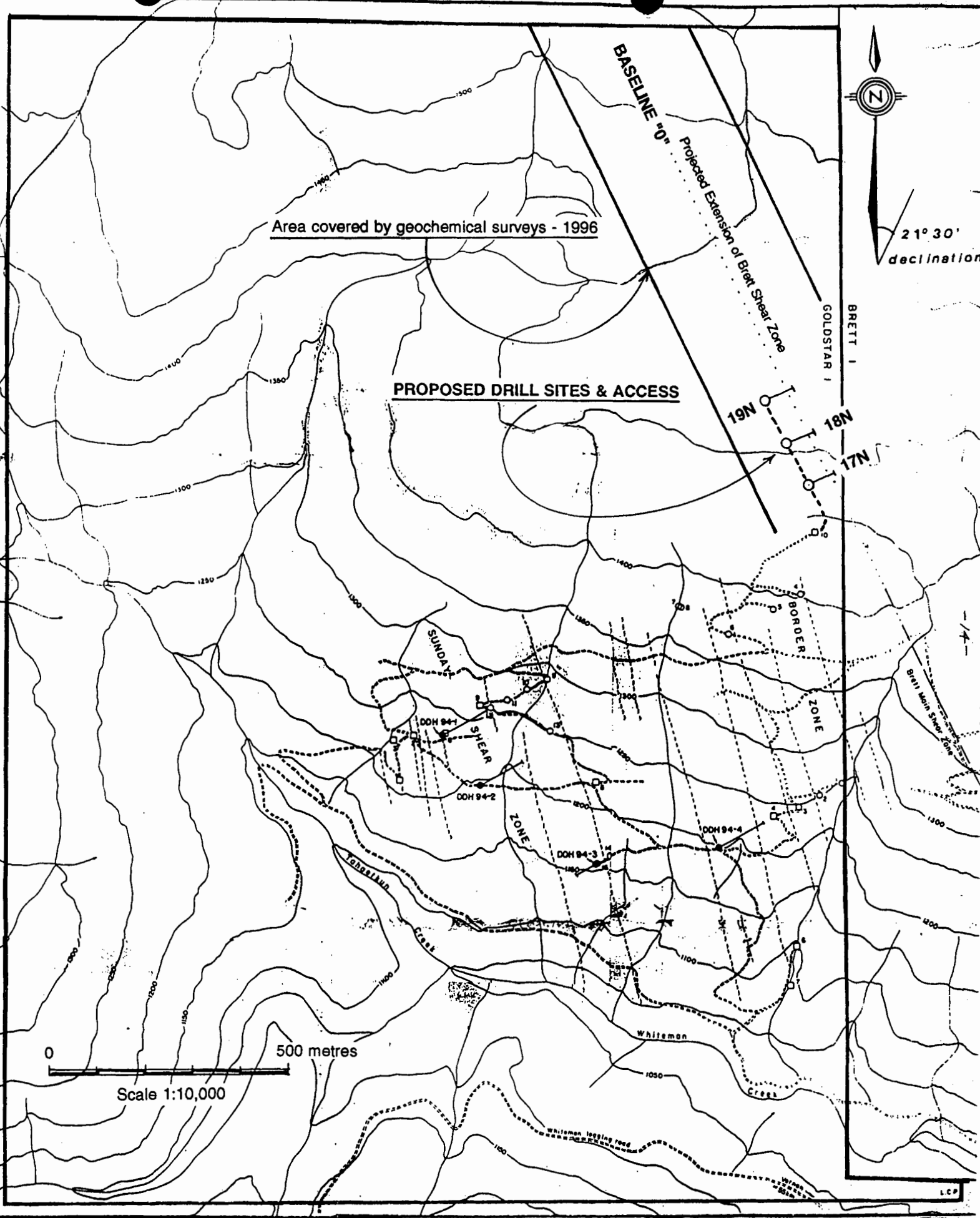
The tuffaceous beds increase in thickness to the west. One tuffaceous unit of 14 metre thickness on the Brett property reaches a thickness of 50 metres on the central portion of the Gold Star property. A lahar unit mapped on the Gold Star property wedges-out to the east and doesn't extend on to the Brett property.

The sudden thickening of the tuff and lahar units towards the west over short distances suggests that the source of the material (i.e. the volcanic centre) was probably located not far to the west of the Gold Star property.

Structure


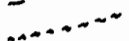



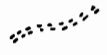


The Eocene volcanic sequence underlying the Gold Star property is believed to be near horizontal. The late intrusion of a Monzonite/Syenite Stock immediately to the southeast of the property does not appear to have been disruptive to the "layered-cake" volcanics. Offshoot dykes from the stock, however, have intruded the volcanics along a series of northwest-striking shear zones near the southeastern corner of the property.

A series of northwest-striking shear zones running subparallel to the Main Brett Shear Zone have been mapped across the Gold Star property by Brican geologists. The Main Brett Shear



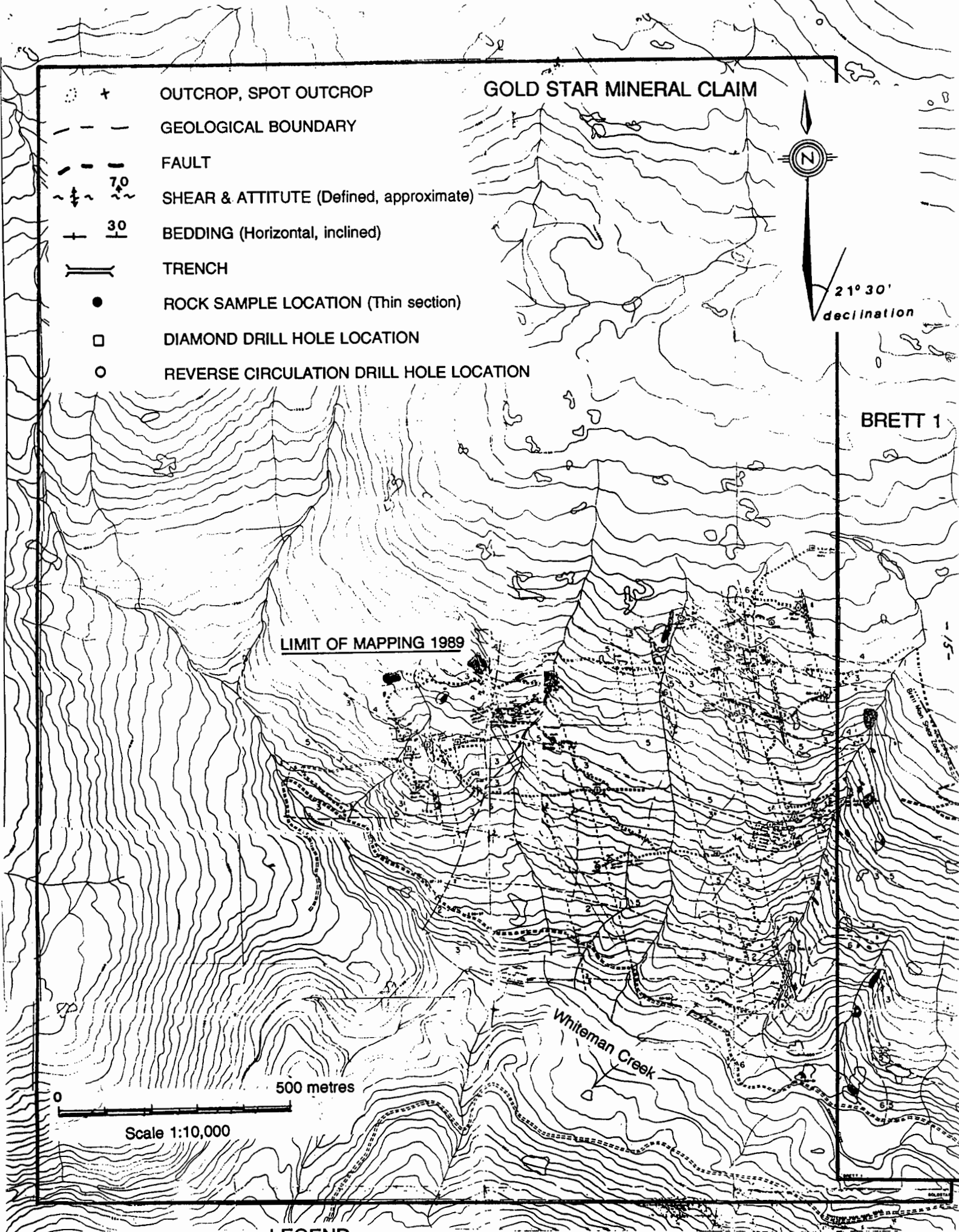
Base map by GEOQUEST CONSULTING LTD.

LEGEND

-  Topographic contours in metres above sea level
-  Fault/shear zone
-  Diamond drill holes - 1986 & 88
-  Reverse circulation drill holes - 1988
-  Diamond drill holes (1994) with horizontal projection
-  4 x 4 access roads
-  Proposed drill sites
-  Proposed temporary access roads

Jm. Morrison

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PROPOSED DRILL SITES & ACCESS	
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Figure No. 3	



LEGEND

INTRUSIVE ROCKS

⑥ MONZONITE/SYENITE DYKE

EOCENE VOLCANIC ROCKS

⑤ FELDSPAR, PYROXENE, PORPHYRITIC TRACHYANDESITE

④ FELDSPAR PORPHYRITIC ANDESITE

③ MAFIC ASH TUFF, LAPILLI TUFF

② ANDESITE, MINOR ANDESITE BRECCIA

① ANDESITE LAHAR

Geology by Discovery Consultants for Brican Resources Limited, 1989

Jm. Morrison

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GEOLOGY	
OCTOBER 1996	N.T.S. 82-L-4E
Figure No. 4	

PROPERTY GEOLOGY continued**Structure** continued

Zone is also expected to cross the northeast corner of the Gold Star property as an extension from the Brett property. Huntington Resources Inc. has drilled the shear zone to a point near the Brett property west boundary.

The northwest shear zones are vertical or dip steeply west. Vertical displacements across the shear zones vary from a few metres to several metres.

The northwest shear zones are believed to have been the main conduits for the epithermal solutions that have invaded the volcanic sequence of rocks on the Gold Star property.

Alteration and Mineralization

Argillic alteration of the ash and lapilli tuffs on the Gold Star mineral claim is intense and widespread. The andesitic flow rocks are similarly altered, but the alteration is confined to shear zones or the wall rock immediately adjacent shear zones. The tuffaceous rocks, on the other hand, are intensely altered up to tens of metres from the shear zones, which are thought to be the conduits for the epithermal solutions that brought about the alteration.

Silica replaces the tuffaceous minerals (sometimes entirely) and late banded chalcedony veins occur at several sites across the property. Disseminated pyrite equals up to 5% in many of drill intercepts that display clay or silica replacement of the tuff.

Quartz veinlets are rare, but significant in that most of the elevated gold, silver or arsenic geochemical values recorded on the property have been associated with quartz. Some of the best gold values (30 to 180 g/tonne) on the neighbouring Brett property occur with vuggy and banded white quartz veins up to 60 cm. wide.

PROPERTY GEOLOGY continued**Alteration and Mineralization continued**

It is possible that a stockwork system of quartz veins lies at some depth below the pyritized shear zones on the central portion of the Gold Star mineral claim, but so far these systems have not been intercepted by any of the drilling programs.

The best exploration target in the Gold Star property at this time is the Main Brett Shear Zone. The shear zone has been drill tested to near the east boundary of the Gold Star mineral claim by Huntington Resources Inc., and there is no geological reason to suggest that the shear zone stops at the boundary.

The Main Brett Shear Zone and subparallel RW quartz vein contain most of the gold reserves that have so far been drilled on the Brett property. A Huntington Resources Inc. News Release dated December 11, 1995, stated that:

- (a) 250 tons of ore grading 0.997 oz./T gold and 1.850 oz./T silver had been extracted from the RW vein in late 1995 and was ready for shipment to the mill;
- (b) the main drift that had been driven into the mountain to mine the Bonanza Zone was at 800 feet, but caved-in;
- (c) the Bonanza Zone is 500 feet in length and that it contains approximately 13,200 tons grading 1.141 oz./T gold; and
- (d) the North Extension Zone, 1,620 feet north of the Bonanza Zone, contains an estimated 18,000 to 20,000 tons of 0.467 oz./T gold.

This year (1996) a deep open cut was excavated to extract much of the gold-bearing quartz vein material from the RW vein and two shipments of sorted ore were made to the Smelter at Trail, B.C. The amount of gold recovered from the shipments has not yet been reported.

GEOCHEMICAL AND BIOGEOCHEMICAL SURVEYS - 1996

Grid

The Baseline which follows the Main Brett Shear zone across the Brett property at 330 degrees azimuth was extended 1000 metres to cross the northeast corner of the Gold Star mineral claim this year. Flagged grid lines were then established at 100 metre intervals perpendicular to the Baseline. The new lines were marked with 25 metre stations for distances of 100 metres to the northeast and southwest of the Baseline for the geochemical survey as illustrated on Figure 5.

A Topolite belt chain and a Silva Ranger Compass were used to establish the 1.8 km of flagged grid lines.

Sampling - Soils

The B-horizon of the soil profile was selected for the geochemical survey. A mattock was used to obtain a sample from each site. Generally the B-horizon was comprised of silty soil located within 10 cm of the surface. Samples weighing approximately 250 grams were placed in 10 x 25 cm kraft sample bags for shipment to the lab. Occasional organic-rich samples were recorded.

Once dried, the soil samples were transported to Eco-Tech Laboratories in Kamloops for 28 element ICP analyses plus gold by Atomic Absorption (see Appendix C).

GEOCHEMICAL AND BIOGEOCHEMICAL SURVEYS - 1996 continued**Sampling - Biogeochem**

Four of the soil geochem grid lines were resampled using biogeochemical methods as an experiment. The most abundant species of tree in the survey area is balsam, so it was used as the sample medium.

Dead twigs of 1/2 to 1 cm diameter were removed from three to five trees near each sample site. Trees of equal size and age were selected where possible and the average size of choice was 15 cm. The small limbs were broken into 10 cm lengths and placed in plastic "kitchen-catcher" garbage bags with identification.

The dead twigs were used in place of live wood or bark, because the writer has had some success using dead twigs on other properties in Southern B.C. over the years (Morrison, 1990).

The samples were shipped to Acme Laboratories in Vancouver for ICP analyses of 30 elements plus gold by Atomic Absorption. The lab procedures are listed in Appendix C along with the results.

Results - Soils**Gold**

The only gold values that have been plotted on Figure 5 are gold values that are greater than 5 parts per billion (ppb). Several values of 5 to 35 ppb gold are located on grid lines 18N and 19N. Although these are not particularly high gold values, they do stand out from the rest of the survey area. They occur on a portion of the property where the overburden is thought to be relatively shallow and the elevated numbers are thought to represent bedrock mineralization.

GEOCHEMICAL AND BIOGEOCHEMICAL SURVEYS - 1996 continued**Results - Soils** continued**Gold** continued

The slightly elevated gold values (15 - 25 ppb) on the southwest side of grid line 23N occur in an area of organic soils within a broad creek valley. The values of these samples may not represent bedrock mineralization.

Silver

Only a few silver values of greater than 0.2 parts per million (ppm) were recorded in the survey area and these are also illustrated on Figure 5. Generally, the values are scattered and show little correlation with the gold values. One exception occurs on line 17N at 19+25W where 2 ppm silver was obtained from a sample with 35 ppb gold.

The silver numbers are of little or no value for outlining exploration targets.

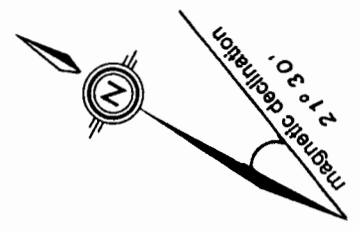
Barium

All of the barium values obtained during the survey have been plotted on Figure 5. The 180 ppm value has been arbitrarily chosen for contouring.

There is generally a good correlation between the higher gold values and values of barium over 180 ppm on lines 18N, 19N and on the southwest half of L23N.

Barium at the 180 ppm level extends across the survey area from line 18N to line 23N, whereas elevated gold values do not. The barium appears to get through to surface in areas where the overburden is thought to be relatively deep. The gold, on the other hand, does not appear to get through the deeper overburden. The biological-geochemical cycle may move barium through deep overburden to surface with greater ease than gold.

24N 23N 22N 21N 20N 19N 18N 17N 16N 15N



Please see Figures 3 & 4 for full mineral claim outline.

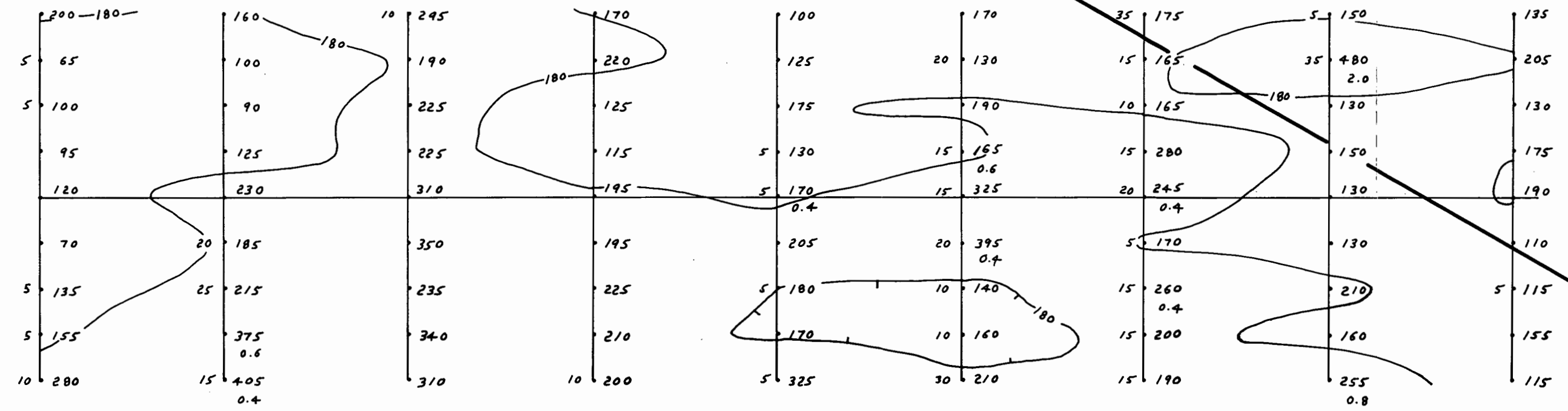
BRETT 1 MINERAL CLAIM
GOLD STAR MINERAL CLAIM
L.C.P. of the Gold Star mineral claim is 1800m S. and 250m E. of here.

2+00E

1+00E

1+00W

2+00W



BASELINE "0"

contour interval

180 barium 180 parts per million

parts per billion gold 5 170 barium 0.4 silver parts per million

0m 50m 100 metres

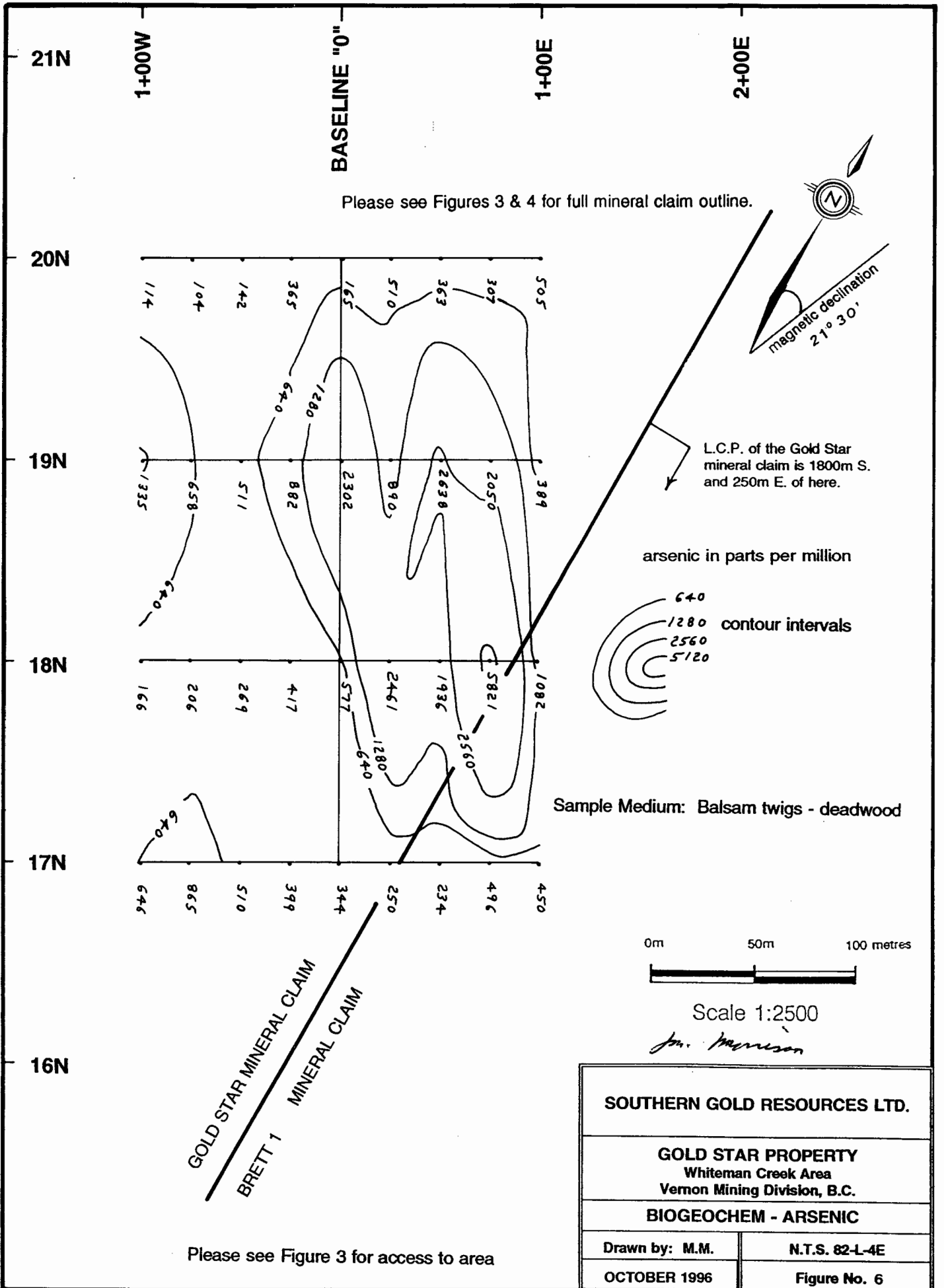


Scale 1:2500

Please see Figure 3 for access to area

M. Morrison

SOUTHERN GOLD RESOURCES LTD.	
GOLD STAR PROPERTY Whiteman Creek Area Vernon Mining Division, B.C.	
SOIL GEOCHEM: AU, AG & BA	
Drawn by: M.M.	N.T.S. 82-L-4E
OCTOBER 1996	Figure No. 5



GOLD STAR MINERAL CLAIM
BRETT 1 MINERAL CLAIM

Please see Figure 3 for access to area

GEOCHEMICAL AND BIOGEOCHEMICAL SURVEYS - 1996 continued**Results - Soils** continued**Other Elements**

Manganese, copper, nickel, lanthanum and yttrium are elements which have spot high values which correlate with some of the elevated gold values, but these elements show no patterns otherwise. Yttrium in particular has very erratic highs (up to 52 ppm) which correlate with either elevated gold or silver values. Most of the survey area has very low yttrium values (less than 1 to 5 ppm).

Results - Biogeochem

The ash of the biogeochemical samples (dead wood twigs from Balsam trees) yielded very uniform values for most of the 30 elements tested by the ICP method. There are erratic numbers for some elements in some samples, but with the exception of arsenic, none of the elements show distinct patterns that can be contoured on maps.

The arsenic values have been plotted on Figure 6 and contoured with contours arbitrarily chosen at 640, 1280, 2560 and 5120 ppm. The contour pattern distinctly outlines a strong arsenic anomaly on the northeastern sides of lines 18N and 19N. These are the same lines that show elevated values of gold in soils.

Although the Acme Analytical chemists warn that arsenic is susceptible to volatilization and contamination the anomaly on Figure 6 appears quite valid. The lead and zinc values for grid lines 18N and 19N are also elevated, but only slightly.

The only gold value of note (16 ppb) was from line 20N at 0+25E.

This is the first biogeochemical survey conducted by the writer using Balsam trees, and there are marked differences from other surveys where Lodgepole pine or Douglas fir have been used. It is not known if the differences are related to the species of tree or to the bedrock

GEOCHEMICAL AND BIOGEOCHEMICAL SURVEYS - 1996 continued**Results - Biogeochem** continued

geology. However, the molybdenum and copper values of this year's survey were very low compared with other surveys. The arsenic and manganese values, on the other hand, were very high this year. The manganese values, in particular, were ten times the values that have been encountered during other surveys.

The barium content in the ash of this year's samples is low considering that the barium content in the soil is moderately high. Apparently the barium is not drawn up into the Balsam trees during growth.

DISCUSSION

This year's geochemical and biogeochemical surveys were conducted over a portion of the northeast corner of the Gold Star Mineral Claim where the Main Brett Shear Zone is projected to cross the property. It was hoped that the surveys would yield linear anomalies aligned with the Main Brett Shear Zone on the Brett property to the southeast. It was thought that the linear anomalies, if found, would be useful in guiding a drilling program planned for the area.

No linear anomalies were outlined by the geochemical surveys, and there may be an explanation for the lack of good gold values in the survey area. Huntington Resources Inc. geologists found that the better gold values occurred between the 1200 and 1380 metres elevations during the drilling of the Main Brett Shear Zone. In other words, there seems to be a vertical control (probably related to temperature and pressure conditions) that has determined where the gold has precipitated within the Shear Zone. Although the Shear Zone extends to surface at the higher elevations on the Brett property the gold-bearing portion of the Shear Zone does not. All of the samples obtained from the Gold Star mineral claim this year were collected from elevations ranging from 1450 to 1510 metres - well above the optimum elevation for gold as determined by Huntington on the Brett property.

DISCUSSION continued

The only epithermal indicator element that reaches surface in the Gold Star survey area appears to be barium, however, the survey area was not broad enough to state this as a fact (see title Results - Soils - Barium).

Elevated gold values in soil that are coincident with a strong arsenic biogeochemical anomaly on grid lines 18N and 19N trend perpendicular to the Main Brett Shear Zone and are thought to represent a cross feature such as a dyke or a fault zone. It is thought that the cross feature has brought the gold and arsenic to a much higher level than that at which they occur within the Main Brett Shear Zone.

Although this year's surveys did not yield definitive drilling targets it is, in light of the explanation given above, recommended that a Reverse Circulation Drill be used to probe for the Main Brett Shear Zone on the Gold Star mineral claim.

Three drill sites are proposed for grid lines 17N, 18N and 19N, 40 metres southwest of the Baseline. The initial drill holes at each site should be drilled at -45° towards the Baseline in an attempt to locate the Main Brett Shear Zone. Once the Shear Zone has been located then steeper drill holes should be drilled from each site to test the Shear Zone at depths of 60 to 100 metres. Although these relatively shallow drill holes are not expected to reach the optimum gold horizon of the Shear Zone (as defined on the Brett property), it is hoped that the samples obtained from the Shear Zone will contain epithermal indicator elements such as arsenic and barium.

Deep diamond drill testing of the Shear Zone should be considered if the geochemistry of the shallow program yields favorable results.

CONCLUSIONS AND RECOMMENDATIONS

This year's soil geochemical and experimental biogeochemical surveys across a portion of the northeast corner of the Gold Star mineral claim failed to outline definitive anomalies that could be interpreted to represent the extension of the Main Brett Shear Zone on to the property from the Brett property.

Although a wide zone of elevated barium values crosses the survey area the survey was not broad enough to define the barium zone as a true anomaly. Elevated gold values in soil with a coincident strong arsenic biogeochem anomaly on grid lines 18N and 19N trend perpendicular to the Main Brett Shear Zone and are thought to represent a cross feature (see Discussion).

Huntington Resources Inc. geologists determined that there is a vertical range (1200 to 1380 metres) for the best gold values within the Main Brett Shear Zone on the Brett property. If the same vertical zoning applies on the Gold Star mineral claim then there is an explanation for the lack of good gold values in the soil samples collected this year. They were all collected from elevations ranging from 1450 to 1510 metres - well above the optimum gold horizon of the Main Brett Shear Zone.

There is no geological reason to suggest that the Main Brett Shear Zone does not cross the claim boundary from the Brett property on to the Gold Star mineral claim. Therefore, the search for the extension of the Shear Zone on to the Gold Star property is considered a valid exploration target. The Main Brett Shear Zone and subparallel RW quartz vein on the Brett property host gold values of 15 to 180 g/tonne.

It is suggested that a staged exploration program be carried out on the Gold Star mineral claim with each successive program initiated only after positive results are received from the preceding program.

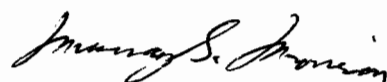
CONCLUSIONS AND RECOMMENDATIONS continued

It is recommended that a low-cost, shallow-hole, Reverse Circulation Percussion Drill Program be conducted on the Gold Star mineral claim to probe for the Main Brett Shear Zone near the Brett property boundary (please see Discussion for specifics).

Once the Shear Zone is located then deeper drill holes should be drilled to test the Shear Zone for typical epithermal indicator minerals. If the geochemical results are positive a diamond drilling program should be initiated to test the optimum gold-bearing horizon of the Shear Zone at depth.

If significant gold values are intercepted near the property boundary with the diamond drill program then the Shear Zone should be tested with a series of drill holes over the full 1000 metre potential strike length to the northern claim boundary.

October 15, 1996
Kelowna, B.C.


Murray S. Morrison, B.Sc.

REFERENCES

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APPENDIX A**STATEMENT OF QUALIFICATIONS**

I, Murray Morrison, of the City of Kelowna, in the Province of British Columbia, do hereby state that:

1. I graduated from the University of British Columbia in 1969 with a B.Sc. Degree in Geology.
2. I have been working in all phases of mining exploration in Canada for the past twenty-five years.
3. During the past twenty-five years, I have intermittently held responsible positions as a geologist with various mineral exploration companies in Canada.
4. I have conducted several geological, geochemical, and geophysical surveys on mineral properties in Southern British Columbia during the past twenty-five years.
5. I conducted the Biogeochemical Survey and supervised the Geochemical Survey outlined in this report.
6. I own a 50% interest in the Gold Star mineral claim.

October 15, 1996
Kelowna, B.C.



Murray Morrison - B.Sc.

APPENDIX B**STATEMENT OF EXPENDITURES - ON THE GOLD STAR MINERAL CLAIM**

Statement of Expenditures in connection with Geochemical and Biogeochemical Surveys carried out on the Gold Star mineral claim, located on Whiteman Creek, 30 km west of Vernon, B.C. (N.T.S. Map 82-L-4E) for the year 1996.

GEOCHEMICAL AND BIOGEOCHEMICAL SURVEYS

M. Morrison, geologist	3 days @ \$214.00/day	\$ 642
P. Gray, geologist	1 day @ \$150.00/day	150
M. Scheske, geologist	1 day @ \$150.00/day	150
Truck, 4 x 4 (including gasoline and insurance)	3 days @ \$80.25/day	241
Meals and Lodging (2 crew members only)	1 day @ \$140.00/day	<u>140</u>
	Sub-total:	\$ 1,323

ASSAYING COSTS

81 soil samples analyzed for the 28 elements by ICP and for gold by AA	@ \$17.80 each	\$ 1,442
36 biogeochemical samples analyzed for 30 elements by ICP and for gold by AA	@ \$17.50 each	630
Bus express samples to laboratory		<u>30</u>
	Sub-total:	\$ 2,102


REPORT PREPARATION COSTS

M. Morrison, geologist	2 days @ \$214.00/day	\$ 428
Drafting		32
Typing		128
Copying reports		<u>20</u>
	Sub-total:	\$ 608
	Grand Total:	\$ <u>4,033</u>

APPENDIX B
STATEMENT OF EXPENDITURES - ON THE GOLD STAR MINERAL CLAIM
continued

I hereby certify that the preceding statement is a true statement of monies expended in connection with the Geochemical and Biogeochemical Surveys carried out June 23 - August 17, 1996.

October 15, 1996
Kelowna, B.C.



Murray Morrison - Geologist

APPENDIX C
CERTIFICATES OF ANALYSES



GEOCHEMICAL ANALYSIS CERTIFICATE

Southern Gold Resources File # 96-3852

1540-750 W. Pender St., Vancouver BC V6C 2T8 Submitted by: N. Morrison



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	ASH	SAMPLE
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb	gm	gm
L20N 1+00W	2	131	195	1296	<.3	15	6	26409	1.07	114	<5	<2	<2	630	8.9	3	<2	20	28.79	1.535	7	19	1.71	53	.04	161	1.24	.06	1.92	<2	4	2.5	113
L20N 0+75W	<1	100	115	2555	<.3	11	7	45486	.64	104	<5	<2	<2	908	16.0	<2	<2	11	31.06	1.137	15	14	3.62	72	.02	228	.95	.06	2.15	<2	4	3.3	162
L20N 0+50W	1	147	165	2179	<.3	14	6	32145	.93	142	<5	<2	<2	689	10.4	3	<2	17	27.05	1.296	8	15	2.18	50	.03	203	1.01	.06	2.40	<2	4	1.7	129
L20N 0+25W	1	136	140	2503	<.3	14	10	34325	.76	365	<5	<2	<2	799	12.3	3	<2	14	31.45	1.174	11	17	2.80	48	.03	236	1.07	.06	2.90	<2	1	1.8	132
L20N 0+00	1	104	149	1453	<.3	13	8	20976	.95	165	<5	<2	<2	659	11.8	4	<2	18	31.11	1.252	14	17	2.03	60	.04	180	.90	.06	2.11	<2	3	2.5	161
L20N 0+25E	<1	121	115	1632	<.3	13	7	32236	.75	510	5	<2	<2	798	11.9	3	<2	14	31.55	1.164	12	14	2.73	58	.03	234	.91	.07	2.59	<2	16	2.3	147
L20N 0+50E	<1	122	134	1586	<.3	13	7	32113	.74	363	<5	<2	<2	708	13.5	2	<2	14	30.96	1.236	10	13	1.86	55	.03	210	.83	.06	2.24	<2	3	2.4	136
L20N 0+75E	1	131	183	1403	<.3	15	7	29044	1.21	307	<5	<2	<2	573	11.2	5	<2	23	25.86	1.846	8	14	1.71	51	.04	175	1.10	.09	2.83	<2	7	2.2	125
L20N 1+00E	1	155	107	1281	<.3	11	7	32027	.68	505	6	<2	<2	756	9.0	5	<2	12	31.99	1.111	7	16	2.51	51	.02	256	.80	.08	2.58	<2	<1	1.6	141
L19N 1+00W	<1	107	124	1795	<.3	13	7	43687	.72	1335	<5	<2	<2	807	18.0	6	<2	13	30.28	1.406	8	13	3.24	48	.03	210	.89	.06	2.68	<2	5	2.4	97
L19N 0+75W	<1	54	61	870	<.3	6	4	12813	.36	658	<5	<2	<2	532	6.2	6	<2	7	15.57	.586	5	5	1.06	71	.01	117	.40	.03	1.22	<2	9	1.9	117
L19N 0+50W	3	127	148	1466	<.3	16	9	21854	.91	511	<5	<2	<2	696	11.5	5	<2	16	30.74	1.619	7	13	2.28	55	.03	193	.98	.06	2.50	<2	<1	2.4	139
L19N 0+25W	3	103	129	1512	<.3	12	4	13060	.77	882	<5	<2	<2	853	5.9	5	<2	13	33.46	1.634	31	12	3.28	59	.03	238	.64	.06	2.89	<2	1	2.5	112
L19N 0+00	<1	138	115	2342	<.3	11	6	36672	.69	2302	<5	<2	<2	675	11.1	5	<2	11	31.11	1.253	10	18	3.01	46	.02	275	.66	.06	2.52	<2	6	2.2	150
L19N 0+25E	2	110	129	1648	<.3	13	7	19521	.95	890	<5	<2	<2	553	10.5	5	<2	16	29.81	1.312	10	14	2.71	59	.04	214	.78	.06	1.92	<2	5	2.4	139
L19N 0+50E	1	114	106	2347	<.3	11	6	35640	.68	2628	<5	<2	<2	676	12.2	4	<2	11	32.38	1.321	9	14	3.21	46	.02	272	.71	.07	2.30	<2	5	2.2	152
L19N 0+75E	1	136	113	1334	<.3	9	6	21470	.61	2050	<5	<2	<2	846	8.6	8	<2	10	34.01	1.600	5	13	2.44	43	.02	234	.75	.05	2.56	<2	2	2.1	149
L19N 1+00E	<1	125	101	1592	.5	9	6	31342	.65	389	<5	<2	<2	780	8.7	2	<2	11	29.47	1.573	8	15	3.55	62	.02	273	.77	.05	3.75	<2	1	2.9	138
L18N 1+00W	1	119	106	1673	<.3	10	5	27870	.71	166	5	<2	<2	729	13.4	4	<2	12	32.97	1.159	4	8	2.24	58	.03	171	.71	.05	2.14	<2	5	3.0	102
L18N 0+75W	2	115	109	1795	<.3	15	5	14876	.63	206	<5	<2	<2	925	5.4	2	<2	10	32.79	1.252	15	9	3.60	52	.02	220	.81	.06	3.99	<2	3	2.8	117
L18N 0+50W	1	99	92	1755	<.3	10	5	25170	.59	269	<5	<2	<2	731	10.2	4	<2	10	33.31	1.601	8	10	2.71	65	.02	215	.87	.07	3.50	<2	2	2.9	128
L18N 0+25W	<1	101	112	2140	<.3	10	7	34521	.68	417	<5	<2	<2	828	12.7	3	<2	12	31.52	1.220	5	8	2.43	68	.03	244	.81	.05	2.41	<2	5	2.3	125
L18N 0+00	2	110	129	1507	.4	13	7	28095	.78	577	<5	<2	<2	1039	12.5	2	<2	13	30.33	1.595	6	10	2.51	72	.03	207	.93	.06	2.89	<2	2	3.1	154
L18N 0+25E	2	118	105	1777	<.3	13	6	24037	.65	2461	<5	<2	<2	1146	9.9	3	<2	11	33.62	1.557	6	9	3.25	56	.02	216	.80	.06	3.22	<2	3	2.4	127
L18N 0+50E	<1	112	120	2402	<.3	10	7	43547	.68	1936	<5	<2	<2	1399	13.1	3	<2	11	30.33	1.248	6	9	3.15	62	.03	231	.70	.06	2.46	<2	5	2.2	155
L18N 0+75E	<1	120	176	2092	<.3	15	9	40873	1.05	5821	<5	<2	<2	974	11.7	3	<2	20	26.43	1.197	6	11	2.43	30	.04	170	.99	.08	1.90	<2	3	1.9	116
L18N 1+00E	1	135	162	1681	<.3	13	8	35092	.96	1082	<5	<2	<2	1018	16.9	4	<2	17	29.42	1.375	6	8	2.14	50	.04	175	.91	.06	1.81	<2	3	2.4	143
RE L18N 1+00E	1	136	164	1707	<.3	13	8	35637	.95	1062	<5	<2	<2	1032	16.8	5	<2	17	29.65	1.382	6	10	2.18	52	.04	176	.91	.06	1.81	<2	3	-	-
L17N 1+00W	1	104	157	2035	<.3	11	7	23157	.83	646	<5	<2	<2	1023	11.9	4	<2	15	28.40	1.908	14	14	2.94	58	.03	273	.74	.08	4.34	<2	5	2.2	114
L17N 0+75W	<1	135	146	2387	<.3	16	7	39854	.74	865	<5	<2	<2	680	20.0	4	<2	13	30.59	1.098	8	14	2.23	45	.03	216	.73	.07	2.31	<2	3	2.0	153
L17N 0+50W	2	89	116	1725	<.3	11	5	29063	.65	510	<5	<2	<2	948	8.4	3	<2	11	31.08	1.383	8	14	2.75	70	.02	199	.80	.05	3.64	<2	3	2.6	118
L17N 0+25W	<1	94	124	2171	<.3	11	6	44361	.70	399	<5	<2	<2	811	12.2	5	<2	12	29.80	1.184	7	14	2.67	64	.03	198	1.01	.06	2.58	<2	6	2.2	126
L17N 0+00	1	106	115	895	<.3	10	10	23653	.73	344	<5	<2	<2	993	6.8	3	<2	13	29.97	1.744	11	9	2.94	70	.03	204	.83	.07	4.38	<2	4	2.7	101
L17N 0+25E	<1	95	92	1624	<.3	9	8	32547	.59	250	<5	<2	<2	924	7.4	2	<2	10	28.66	1.701	5	7	4.12	63	.02	225	.63	.05	4.53	<2	3	2.2	114
L17N 0+50E	2	127	188	1299	<.3	19	10	16293	1.11	334	<5	<2	<2	942	6.0	5	<2	22	28.78	1.338	6	13	2.53	47	.04	194	1.17	.08	2.59	<2	6	2.6	142
L17N 0+75E	2	108	129	1335	<.3	12	4	6639	.74	496	<5	<2	<2	1280	4.3	5	<2	14	36.14	1.012	8	6	2.73	59	.03	223	.64	.06	1.74	<2	3	3.2	148
L17N 1+00E	2	103	134	1150	<.3	12	5	7376	.85	450	<5	<2	<2	1047	3.3	4	<2	15	33.68	1.166	4	9	2.77										

19-Jul-96

ECO-TECH LABORATORIES LTD.
10041 East Trans Canada Highway
KAMLOOPS, B.C.
V2C 6T4

Phone: 604-573-5700
Fax : 604-573-4557

ICP CERTIFICATE OF ANALYSIS AK 96-591

Southern Gold Resources Ltd.
#1540-750 West Pender
Vancouver, B.C.
V6C 2T8

No. of samples received: 81
Sample type: SOIL
PROJECT #: None Given
SHIPMENT #: None Given

Values in ppm unless otherwise reported

Et #.	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	L16N 1+00 W	<5	<2	1.75	<5	115	<5	0.09	<1	6	12	1	2.03	<10	0.15	159	<1	<.01	8	1490	12	<5	<20	10	0.07	<10	35	<10	<1	45
2	L16N 0+75 W	<5	<2	1.57	<5	155	<5	0.14	<1	6	10	1	2.02	10	0.15	261	<1	<.01	7	1390	10	<5	<20	17	0.06	<10	35	<10	1	42
3	L16N 0+50 W	5	0.2	1.18	<5	115	<5	0.11	<1	6	9	<1	2.00	10	0.13	303	1	<.01	6	980	12	<5	<20	15	0.05	<10	34	<10	<1	42
4	L16N 0+25 W	<5	0.2	1.26	<5	110	<5	0.09	<1	6	9	1	1.94	<10	0.11	206	<1	<.01	6	1260	12	<5	<20	10	0.06	<10	33	<10	<1	41
5	L16N 0+00	<5	0.2	1.03	<5	190	<5	0.23	<1	6	11	2	2.22	20	0.17	588	2	<.01	6	1640	12	<5	<20	24	0.03	<10	37	<10	<1	44
6	L16N 0+25 E	<5	<2	1.55	<5	175	<5	0.20	<1	6	13	2	1.99	20	0.18	522	<1	<.01	9	1810	10	<5	<20	22	0.06	<10	34	<10	2	66
7	L16N 0+50 E	<5	<2	1.35	<5	130	<5	0.14	<1	6	11	1	1.92	<10	0.13	320	<1	<.01	9	1420	10	<5	<20	14	0.07	<10	33	<10	<1	55
8	L16N 0+75 E	<5	<2	1.12	<5	205	<5	0.15	<1	6	12	<1	1.99	10	0.18	348	<1	<.01	7	1080	8	<5	<20	19	0.10	<10	41	<10	<1	39
9	L16N 1+00 E	<5	<2	1.30	<5	135	<5	0.12	<1	6	12	1	2.08	20	0.18	274	<1	<.01	7	890	10	<5	<20	13	0.06	<10	35	<10	1	41
10	L17N 1+00 W	<5	0.8	1.61	20	255	<5	0.86	<1	7	13	5	2.31	580	0.28	690	<1	0.01	8	700	16	<5	<20	98	0.04	<10	31	<10	52	53
11	L17N 0+75 W	<5	<2	1.96	<5	160	<5	0.11	<1	7	12	3	2.24	20	0.20	484	1	<.01	9	2040	14	<5	<20	12	0.05	<10	35	<10	<1	82
12	L17N 0+50 W	<5	0.2	1.77	<5	210	<5	0.08	<1	6	10	1	2.06	10	0.22	331	1	<.01	9	640	14	<5	<20	10	0.04	<10	34	<10	<1	61
13	L17N 0+25 W	<5	<2	1.74	<5	130	<5	0.12	<1	7	8	<1	1.92	<10	0.11	608	<1	0.01	7	2380	36	<5	<20	6	0.07	<10	33	<10	<1	91
14	L17N 0+0	<5	<2	1.12	<5	130	<5	0.18	<1	5	13	1	2.05	50	0.25	200	<1	<.01	6	460	10	<5	<20	22	0.05	<10	35	<10	3	36
15	L17N 0+25 E	<5	<2	1.13	<5	150	<5	0.26	<1	6	12	<1	1.97	30	0.23	276	<1	<.01	6	650	10	<5	<20	25	0.04	<10	33	<10	2	39
16	L17N 0+50 E	<5	<2	1.51	<5	130	<5	0.12	<1	6	12	<1	2.05	10	0.18	133	<1	<.01	7	1490	12	<5	<20	15	0.05	<10	30	<10	<1	47
17	L17N 0+75 E	35	2.0	4.18	20	480	<5	1.08	<1	8	30	23	4.23	260	0.60	1435	3	0.01	18	650	20	<5	<20	108	0.07	<10	49	<10	37	61
18	L17N 0+100 E	5	<2	1.09	<5	150	<5	0.43	<1	6	14	3	2.31	30	0.28	224	<1	<.01	7	400	8	<5	<20	41	0.07	<10	41	<10	2	33
19	L18N 1+00 E	15	<2	1.26	<5	190	<5	0.13	<1	5	11	1	1.90	20	0.16	233	<1	<.01	8	480	12	<5	<20	16	0.04	<10	34	<10	<1	45
20	L18N 0+75 W	15	<2	1.10	5	200	<5	0.44	<1	5	9	2	1.88	150	0.21	258	1	<.01	6	460	10	<5	<20	44	0.04	<10	32	<10	13	45
21	L18N 0+50 W	15	0.4	1.38	10	260	<5	0.35	<1	7	13	5	2.27	200	0.22	1254	<1	0.01	8	470	14	<5	<20	34	0.06	<10	38	<10	16	54
22	L18N 0+25 W	5	<2	1.52	<5	170	<5	0.11	<1	5	11	1	1.87	20	0.16	344	<1	<.01	7	1070	12	<5	<20	15	0.05	<10	31	<10	<1	58
23	L18N 0+00 BL	20	0.4	1.56	<5	245	<5	0.16	<1	7	16	3	2.12	10	0.17	923	<1	<.01	10	1760	12	<5	<20	26	0.08	<10	42	<10	<1	73
24	L18N 0+25 E	15	<2	1.69	<5	280	<5	0.16	<1	7	16	3	2.19	10	0.22	388	<1	<.01	11	1050	10	<5	<20	29	0.07	<10	41	<10	<1	61
25	L18N 0+50 E	10	<2	1.43	<5	165	<5	0.15	<1	7	17	2	2.18	20	0.21	275	<1	<.01	9	570	12	<5	<20	32	0.07	<10	43	<10	<1	50

Et #.	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
26	L18N 0+75 E	15	<2	1.30	<5	165	<5	0.11	<1	6	15	1	2.11	10	0.18	159	<1	<.01	7	590	14	<5	<20	22	0.08	<10	45	<10	<1	36
27	L18N 0+100 E	35	<2	1.70	<5	175	<5	0.23	<1	6	11	<1	1.98	30	0.16	258	<1	<.01	7	650	12	<5	<20	32	0.06	<10	34	<10	2	51
28	L19N 1+00 W	30	<2	1.69	<5	210	<5	0.17	<1	7	12	2	2.09	10	0.17	443	<1	<.01	11	1300	14	<5	<20	15	0.05	<10	35	<10	<1	61
29	L19N 0+75 W	10	<2	1.73	<5	160	<5	0.17	<1	6	10	1	1.80	<10	0.14	259	<1	0.01	9	1530	14	<5	<20	19	0.09	<10	32	<10	<1	48
30	L19N 0+50 W	10	<2	1.84	<5	140	<5	0.08	<1	7	14	2	2.10	<10	0.18	313	<1	<.01	11	1320	12	<5	<20	8	0.08	<10	38	<10	<1	57
31	L19N 0+25 W	20	0.4	1.99	10	395	<5	0.52	<1	8	20	6	2.57	410	0.30	1974	<1	0.01	13	560	18	<5	<20	46	0.06	<10	40	<10	26	56
32	L19N 0+00 BL	15	<2	1.40	<5	225	<5	0.11	<1	5	15	<1	2.69	20	0.14	154	2	<.01	7	990	16	<5	<20	14	0.03	<10	50	<10	<1	54
33	L19N 0+25 E	15	0.6	1.72	<5	165	<5	0.14	<1	6	10	<1	1.96	20	0.13	161	1	<.01	8	1230	14	<5	<20	12	0.05	<10	30	<10	<1	63
34	L19N 0+50 E	<5	<2	1.68	<5	190	<5	0.12	<1	6	13	<1	2.09	10	0.15	276	<1	<.01	8	990	14	<5	<20	14	0.05	<10	36	<10	<1	60
35	L19N 0+75 E	20	<2	1.95	<5	130	<5	0.10	<1	7	12	<1	2.02	<10	0.14	402	<1	<.01	8	1620	12	<5	<20	9	0.08	<10	35	<10	<1	48
36	L19N 0+100 E	<5	<2	2.54	5	170	<5	0.12	<1	7	12	3	2.31	10	0.16	475	<1	<.01	8	1500	18	<5	<20	12	0.10	<10	38	<10	<1	61
37	L20N 1+00 W	5	0.2	2.33	<5	325	<5	0.40	<1	6	13	4	2.49	70	0.28	642	<1	<.01	10	790	20	<5	<20	33	0.04	<10	35	<10	1	64
38	L20N 0+75 W	<5	<2	2.50	<5	170	<5	0.13	<1	6	8	1	1.98	10	0.10	354	<1	0.01	6	1510	18	<5	<20	11	0.11	<10	30	<10	<1	73
39	L20N 0+50 W	5	<2	2.16	<5	180	<5	0.18	<1	6	8	2	1.92	20	0.10	594	<1	0.01	6	1640	16	<5	<20	15	0.10	<10	30	<10	<1	54
40	L20N 0+25 W	<5	0.2	1.77	<5	205	<5	0.13	<1	5	13	3	1.85	20	0.14	391	<1	<.01	9	820	20	<5	<20	12	0.04	<10	31	<10	<1	61
41	L20N 0+00 BL	5	0.4	0.86	<5	170	<5	0.16	<1	5	7	2	2.42	80	0.09	174	3	<.01	4	590	14	<5	<20	16	0.02	<10	32	<10	3	44
42	L20N 0+25 E	5	<2	1.31	<5	130	<5	0.14	<1	6	10	<1	2.04	<10	0.11	122	<1	<.01	5	1050	12	<5	<20	13	0.07	<10	37	<10	<1	42
43	L20N 0+50 E	<5	<2	2.15	<5	175	<5	0.08	<1	7	12	2	2.20	20	0.15	384	<1	<.01	8	1460	16	<5	<20	10	0.06	<10	35	<10	<1	69
44	L20N 0+75 E	<5	<2	2.44	5	125	<5	0.10	<1	7	11	1	2.31	<10	0.14	148	<1	0.01	7	890	14	<5	<20	8	0.10	<10	40	<10	<1	50
45	L20N 0+100 E	<5	<2	1.85	<5	100	<5	0.07	<1	6	10	1	1.97	<10	0.11	106	<1	<.01	6	1140	16	<5	<20	7	0.09	<10	34	<10	<1	44
46	L21N 1+00 W	10	<2	1.63	<5	200	<5	0.10	<1	7	11	1	2.17	20	0.14	330	<1	<.01	7	1040	14	<5	<20	8	0.08	<10	41	<10	<1	45
47	L21N 0+75 W	<5	<2	2.31	<5	210	<5	0.13	<1	7	10	2	1.92	10	0.12	1512	<1	<.01	8	1300	18	<5	<20	9	0.08	<10	31	<10	<1	75
48	L21N 0+50 W	<5	<2	1.92	<5	225	<5	0.14	<1	6	11	2	2.00	10	0.18	1199	<1	<.01	7	1050	14	<5	<20	14	0.05	<10	34	<10	<1	67
49	L21N 0+25 W	<5	<2	1.94	<5	195	<5	0.11	<1	6	7	<1	2.02	10	0.13	717	1	<.01	5	1040	18	<5	<20	13	0.05	<10	30	<10	<1	70
50	L21N 0+00 BL	<5	<2	1.81	<5	195	<5	0.11	<1	7	12	2	2.24	20	0.15	564	<1	<.01	6	1290	14	<5	<20	15	0.07	<10	41	<10	<1	56
51	L21N 0+25 E	<5	<2	1.32	<5	115	<5	0.11	<1	6	12	<1	2.09	<10	0.12	343	<1	<.01	7	1380	12	<5	<20	8	0.07	<10	42	<10	<1	41
52	L21N 0+50 E	<5	<2	1.77	<5	125	<5	0.09	<1	7	14	2	2.09	<10	0.14	240	<1	<.01	8	1210	12	<5	<20	9	0.09	<10	39	<10	<1	51
53	L21N 0+75 E	<5	<2	1.68	<5	220	<5	0.11	<1	6	15	2	2.12	10	0.16	234	<1	<.01	9	1160	14	<5	<20	11	0.09	<10	40	<10	<1	45
54	L21N 0+100 E	<5	<2	2.61	5	170	<5	0.13	<1	7	11	4	2.09	10	0.12	429	<1	0.01	6	1650	18	<5	<20	12	0.09	<10	37	<10	1	53
55	L22N 1+00 W	<5	<2	1.60	<5	310	<5	0.16	<1	6	14	3	2.29	20	0.18	210	<1	<.01	8	2420	14	<5	<20	21	0.04	<10	39	<10	1	61
56	L22N 0+75 W	<5	<2	1.72	<5	340	<5	0.30	<1	7	17	3	2.12	10	0.20	252	<1	0.01	9	2900	12	<5	<20	37	0.10	<10	43	<10	2	68
57	L22N 0+50 W	<5	<2	1.03	<5	235	<5	0.29	<1	5	15	2	1.85	40	0.19	224	<1	0.01	7	580	8	<5	<20	29	0.08	<10	43	<10	5	33
58	L22N 0+25 W	<5	<2	1.55	<5	350	<5	0.35	<1	7	16	4	2.09	20	0.14	220	<1	0.01	8	4430	10	<5	<20	45	0.09	<10	41	<10	3	46
59	L22N 0+00 BL	<5	<2	1.21	<5	310	<5	0.55	<1	9	25	4	2.55	30	0.33	243	<1	0.02	11	2170	8	<5	<20	47	0.13	<10	68	<10	5	41
60	L22N 0+25 E	<5	0.2	1.17	<5	225	<5	0.25	<1	5	13	4	1.89	30	0.17	107	<1	<.01	7	1870	10	<5	<20	30	0.08	<10	38	<10	3	46

Southern Gold Resources Ltd.

ICP CERTIFICATE OF ANALYSIS AK 96-591

ECO-TECH LABORATORIES LTD.

Et #.	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
61	L22N 0+50 E	<5	<2	1.28	<5	225	<5	0.14	<1	5	13	2	1.78	20	0.13	99	<1	<.01	6	2880	8	<5	<20	14	0.08	<10	35	<10	2	43
62	L22N 0+75 E	<5	<2	1.65	<5	190	<5	0.16	<1	6	20	3	2.11	10	0.16	105	<1	0.01	10	2680	10	<5	<20	18	0.10	<10	41	<10	<1	44
63	L22N 0+100 E	10	<2	1.36	<5	295	<5	0.13	<1	6	16	4	2.17	10	0.14	230	<1	<.01	7	3120	8	<5	<20	15	0.10	<10	46	<10	2	45
64	L23N 1+00 W	15	0.4	3.18	<5	405	<5	0.90	<1	7	28	24	3.03	80	0.38	564	<1	0.02	16	830	16	<5	<20	167	0.09	<10	58	<10	33	38
65	L23N 0+75 W	<5	0.6	3.69	15	375	<5	0.73	<1	9	32	41	3.55	70	0.41	771	<1	0.01	22	1050	18	<5	<20	123	0.08	<10	65	<10	29	43
66	L23N 0+50 W	25	<2	1.54	<5	215	<5	0.24	<1	7	18	4	2.28	20	0.21	142	<1	0.01	10	2780	10	<5	<20	28	0.10	<10	49	<10	2	45
67	L23N 0+25 W	20	<2	1.17	<5	185	<5	0.40	<1	6	18	13	1.67	60	0.22	311	<1	0.01	8	620	10	<5	<20	56	0.11	<10	39	<10	24	23
68	L23N 0+00 BL	<5	<2	1.88	<5	230	<5	0.36	<1	6	19	8	2.24	50	0.21	129	<1	0.02	11	1020	10	<5	<20	57	0.09	<10	46	<10	26	38
69	L23N 0+25 E	<5	<2	2.14	<5	125	<5	0.10	<1	6	12	2	1.86	<10	0.13	182	<1	<.01	9	1980	12	<5	<20	18	0.10	<10	35	<10	<1	41
70	L23N 0+50 E	<5	<2	2.26	5	90	<5	0.06	<1	5	9	<1	1.74	<10	0.07	186	<1	<.01	7	3720	14	<5	<20	7	0.10	<10	29	<10	<1	40
71	L23N 0+75 E	<5	<2	1.54	<5	100	<5	0.07	<1	7	14	2	2.33	<10	0.12	244	<1	<.01	7	1660	10	<5	<20	11	0.10	<10	54	<10	<1	39
72	L23N 0+100 E	<5	<2	2.22	<5	160	<5	0.14	<1	6	14	3	2.26	10	0.11	95	<1	0.01	9	2300	12	<5	<20	20	0.11	<10	47	<10	6	33
73	L24N 1+00 W	10	<2	1.77	<5	280	<5	0.64	<1	8	25	18	2.29	70	0.37	633	<1	0.02	13	620	10	<5	<20	108	0.11	<10	53	<10	37	33
74	L24N 0+75 W	5	<2	0.81	<5	155	<5	0.26	<1	7	13	6	1.77	50	0.19	324	<1	0.01	7	250	8	<5	<20	44	0.10	<10	42	<10	18	31
75	L24N 0+50 W	5	<2	1.52	<5	135	<5	0.15	<1	8	17	2	2.67	<10	0.16	254	<1	<.01	10	2000	10	<5	<20	16	0.12	<10	64	<10	<1	37
76	L24N 0+25 W	<5	<2	1.65	<5	70	<5	0.07	<1	5	8	<1	1.67	<10	0.06	240	<1	0.01	5	1530	10	<5	<20	9	0.10	<10	34	<10	<1	37
77	L24N 0+00 BL	<5	<2	3.00	<5	120	<5	0.08	<1	6	11	4	2.00	<10	0.09	79	<1	0.01	9	2080	16	<5	<20	15	0.12	<10	35	<10	2	38
78	L24N 0+25 E	<5	<2	2.19	<5	95	<5	0.07	<1	6	11	1	1.96	<10	0.11	199	<1	<.01	9	1720	12	<5	<20	10	0.11	<10	38	<10	<1	42
79	L24N 0+50 E	5	<2	2.02	<5	100	<5	0.07	<1	7	11	2	1.97	<10	0.12	237	<1	<.01	7	1860	12	<5	<20	6	0.12	<10	39	<10	<1	45
80	L24N 0+75 E	5	<2	2.10	<5	65	<5	0.07	<1	6	9	<1	1.87	<10	0.06	90	<1	<.01	6	1540	12	<5	<20	7	0.10	<10	38	<10	<1	36
81	L24N 0+100 E	<5	<2	1.44	<5	200	<5	0.25	<1	7	21	5	2.13	10	0.32	187	<1	0.01	9	260	10	<5	<20	45	0.14	<10	48	<10	2	40

Southern Gold Resources Ltd.

ICP CERTIFICATE OF ANALYSIS AK 96-591

ECO-TECH LABORATORIES LTD.

Et #.	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn	
QC DATA:																															
Repeat:																															
1	L16N	1+00 W	<5	<2	1.74	<5	105	<5	0.08	<1	6	11	1	2.04	<10	0.15	161	<1	<0.01	8	1480	12	<5	<20	7	0.06	<10	35	<10	<1	46
3	L16N	0+50 W	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	L17N	1+00 W	5	1.0	1.54	20	250	<5	0.83	<1	7	13	5	2.21	560	0.27	692	<1	0.01	8	660	16	<5	<20	97	0.04	<10	29	<10	50	53
19	L18N	1+00 E	20	<2	1.25	<5	190	<5	0.13	<1	5	11	<1	1.90	20	0.15	232	<1	<0.01	7	500	12	<5	<20	16	0.04	<10	34	<10	<1	46
28	L19N	1+00 W	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
36	L19N	0+100 E	<5	<2	2.51	5	165	<5	0.12	<1	7	12	3	2.34	10	0.16	459	<1	<0.01	8	1470	18	<5	<20	9	0.09	<10	39	<10	<1	61
45	L20N	0+100 E	<5	<2	1.84	<5	100	<5	0.07	<1	6	10	1	1.98	<10	0.10	104	<1	<0.01	6	1140	16	<5	<20	5	0.08	<10	35	<10	<1	44
54	L21N	0+100 E	<5	<2	2.62	5	170	<5	0.14	<1	6	11	3	2.08	10	0.12	436	<1	0.01	7	1700	18	<5	<20	9	0.09	<10	37	<10	1	53
63	L22N	0+100 E	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
71	L23N	0+75 E	<5	<2	1.58	<5	95	5	0.07	<1	7	15	2	2.43	<10	0.12	245	<1	<0.01	8	1650	10	<5	<20	8	0.11	<10	57	<10	<1	40

Standard:

GEO'96	160	1.0	1.76	60	160	<5	1.81	<1	18	60	82	4.10	<10	0.99	724	<1	0.01	26	700	20	<5	<20	57	0.10	<10	77	<10	5	72
GEO'96	135	1.0	1.78	55	160	<5	1.81	<1	19	60	82	4.10	<10	0.99	718	<1	0.01	25	700	18	<5	<20	56	0.11	<10	77	<10	5	70
GEO'96	130	1.2	1.79	60	155	<5	1.82	<1	18	61	85	4.08	<10	1.00	723	<1	0.01	25	690	20	<5	<20	54	0.11	<10	79	<10	6	74

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C.C: Mike Scheske


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