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# SUB-RECORDER <br> Rojoll Explorations Ltd. <br> Geophysical and Geochemical Survey Report.r. \# <br> $\qquad$ \$ 

RANDEB CLAIM GROUP

TEXAS BAR CREEK
NEW WESTMINSTER MINING DIVISION HOPE, BRITISH COLUMBIA
N. Lat. 49 28' $00^{\prime \prime}$ W. Long. $12123^{\prime} 00^{\prime \prime}$

NTS 92 - H / 6W
by
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## STRATO GEOLOGICAL ENGINEERING LTD. <br> 3566 KING GEORGE HIGHWAY SURREY, BRITISH COLUMBIA


 June 19, 1987
16,326 .

## Summary

Pursuant to a request by the Directors of Rojoll Explorations Ltd. a geological, geophysical and geochemical program was carried out on the Randeb Group. The work was completed between the date of May 7 and June 4, 1987.

The Randeb Group comprises six contingous mineral claims consisting of sixty-two claim units located on the eastern side of the Fraser River some 10 km due north of Hope, British Columbia. Access to the property is by means of a 4WD vehicle along logging roads.

The area has been explored intermittently since the early 1900's. The former Pride of Emory, B.C. Nickel and Pacific Nickel Mine is located about 4 mi . due west of the Randeb Showing No. 1. Nickel-copper sulphides were discovered on the Pride of Emory Mine in 1923 and a substantial tonnage of nickel and copper was produced. Production ceased in the early 1970's. Production was from steeply plunging orebodies, zoned in nature and trending nearly east-west, in an ultrabasic host rock.

The orthogneiss and paragneiss (with associated meta-volcanics) of the Paleozoic Custer Gneiss, late Cretaceous to early Tertiary quartz diorite plugs and meta-sediments and meta-volcanics of the lower Paleozoic Hozameen Group form the local geology. The strike varies from 150 to 180 degrees and the dip varies from 20 to 60 degrees to the east. It is possible that a splay of the Yale fault passes through the area. Mineralization consists of conformable nickel and copper rich meta-volcanics in the paragneiss and was probably emplaced in the Tertiary Unit. Such mineralization was found at the Randeb Showing No. 1.

A total of 17.2 km of magnetic survey and 17.9 km of geochemical survey work was completed to delinate any significant geophysical or geochemical trends. 449 soil samples, 65 silt samples, 22 rock samples and 3 alluvium concentrates were submitted to Acme Analytical Laboratories in Vancouver, British Columbia, for analysis. Inductive Coupled Plasma (ICP) analysis was carried out for the following elements: silver, copper, zinc, nickel and cobalt. Gold was determined by the Atomic Absorption (AA) method. The alluvium concentrates were fire assayed for gold and platinum.

Showing No. 1 was extended to the south side of Texas Bar Creek and was determined to have a maximum north-south extent of about 130 m . Showing No. 2, in the northwest claims area, was trenched and float from this trench was anomalous in nickel. Work on the grid in the northwest claims area revealed several isolated gold and silver anomalies although it did not establish anomalous trends which would indicate the prescence of additional "norite" zones and/or precious metals deposits .

Respectfully submitted,

A. E. Hunter

Geophysicist
June 19, 1987

R. J. Englund, B.Sc.

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## 1. INTRODUCTION

Pursuant to a request by the Directors of Rojoll Explorations Ltd., Strato Geological Engineering Ltd. carried out detailed total field magnetometer and geochemical surveys over the No. 2, No. 3 and No. 1 showing areas during the period May 7 to June 4, 1987. The field crew consisted of A.E. Hunter, assisted by P. Bartier and B. Fishel.

The purpose of the geophysical and geochemical survey work was to further delineate any structural features and/or mineralized zones outlined by previous work and airborne geophysics. Detail grid surveys were conducted over the No. 1 showing area at Texas Bar Creek and the No. 2 and No. 3 showing areas in the west- central Randeb IV claim area.

A JD-4 bulldozer was used to open the main access road as far as the No. 2 showing and expose that showing and an extension of the No. 1 showing (No. 1A showing) on the south side of Texas Bar Creek.

### 1.1 Location, Access, Topography

The Randeb Group comprises six continguous mineral claims consisting of sixty-two claim units located on the eastern side of the Fraser River some ten kilometers due north of Hope, British Columbia.

Good logging road access is available to the lower elevations of the claims, a road distance of 16 km from Hope, and the Canadian National Railway main line passes through the Randeb II claim area along the Fraser River. Repair of several washouts on the main access road was required. Several old logging roads provide access to the northern and northeastern claim areas and several washouts were repaired to give access to areas of higher elevation, including the No. 2 showing area.


Topographic relief is variable over the claims area with elevations ranging from about 200 ft at the Fraser River to over 5,500 ft above sea level in the eastern Randeb VII claim area (Figure 2). Drainage is westerly to the Fraser River and Texas Bar Creek traverses the central claim areas, cutting a deep ravine in the western Randeb I claim area. Several smaller creeks and a small lake are located in the northern areas of the claim group.

### 1.2 Claims

The Randeb claim group comprises six contiguous mineral claims containing 62 units in the New Westminster Mining Division located some 10 km north of Hope, B.C.

The claims are shown on the British Columbia Mineral Titles Map M92-H-6W (Figure 3). Information on file with the Gold Commissioner at New Westminster on June 8, 1987 was as follows:

| Claim_ | Record No. | Units | RecordedHolder |  |
| :--- | :--- | :--- | :--- | :--- |
| Expiry Date |  |  |  |  |
| Randeb I | $1224(6)$ | 12 | Rojoll Expl. Ltd. |  |
| Randeb II | $1225(6)$ | 4 | Rojoll Expl. Ltd. | June 12, 19, 1987 |
| Randeb III | $1277(9)$ | 6 | Rojoll Expl. Ltd. | Sept 16, 1987 |
| Randeb IV | $1278(9)$ | 10 | Rojoll Expl. Ltd. | Sept 16, 1987 |
| Randeb V | $1279(9)$ | 12 | Rojoll Expl. Ltd. | Sept 16, 1987 |
| Randeb VII | $1349(11)$ | 18 | Rojoll Expl. Ltd. | Nov. 9, 1987 |

Work has been filed on the Randeb I, II, IV, and V claims, this report being a part of that work, to keep the claims in good standing.


## 2. HISTORY AND PREVIOUS DEVELOPMENT

The history of the claims area is fully described by D.W. Tully, P. Eng., Engineering Report dated April 28, 1986 and is not recapitulated in this report.

IOGO Mines Ltd. held the ground presently covered by the Randeb I claim prior to 1970 and reportedly drilled several AX core drill holes in the No. 1 showing. The ground was apparently held intermittantly until 1981 when the area was staked as the Randeb claims by Rojoll Explorations Ltd.

During April and May 1982 Strato Geological Engineering Ltd. carried out a regional scale geophysical and soils geochemistry program over the western claims area.

During June, 1985 Strato Geological Engineering Ltd. carried out a geophysical test of the No. 1 and No. 2 showing areas, and in February, 1986 an airborne magnetic and electromagnetic survey was completed. Follow up geologic, geochemical and geophysical surveys, especially in the No. 2 and No. 3 showing areas, was recommended (Arnold and Hunter, February 1986).


## 3. GEOLOGY

### 3.1 Regional Geology

D.W. Tully has fully described the geological setting and local mineralization in his report dated April 28, 1986. The geology therefore need not be recapitulated for purposes of this report (See Figure 4).

Generally the oldest rocks on the property are a group of meta- sediments composed of quartz-serecite-biotite paragneiss and associated lenses of meta volcanics. These rocks have been intruded by phases of a foliated feldspar porphyry, granodiorite, and a quartz diorite. The claimed area lies between the Hozameen Fault structure on the east and the Yale Fault zone on the west, a splay of which is postulated to trend N-S through the Randeb II claim (See Figure 5).

### 3.2 Local Geology

Geological mapping was carried out over the Randeb IV and the northern areas of the Randeb I and V claims, generally to examine the areas of the No. 2 and No. 3 showings and the airborne geophysical anomalies. Geology was tied into the survey grid established for geochemical and magnetic surveys.

Three geologic units were recognized in the survey grid area (See Figure 5).

Unit 1: Rocks showing good foliation, alternate dark and light banding, with the dark bands rich in mafic minerals and the light bands with a composition equivalent to granodiorite and quartz diorite were designated paragneiss. Tully (1982) refers to this unit as:


> "a group of meta-sediments composed of quartzsericite-biotite paragneiss and associated lenses of meta-volcanics".

The paragneiss appears to be most common in the area of the No. 2 showing and could contain meta-volcanics.

Unit 2: Rocks showing fair to weak foliation, usually a massive appearance, and a composition ranging from granite to quartz diorite (although usually closer to that of granodiorite) were designated orthogneiss. Tully (1982) referred to these rocks as follows:

> "... inter-related phases of feldspar porphyry granodiorite and quartz diorite intrusives. Some of these intrusives show intense foliation which may be related chronologically to recurrent movements along the Yale Fault Zone which occupies the valley of the Fraser River."

In places the orthogneiss displayed large crystals of feldspar and quartz.

Unit 3: Massive very poorly to poorly foliated rocks of quartz diorite composition were designated as such.

A diabase dyke was also mapped near "Lake Randeb".

The foliation agreed with the regional trend on the grid in the area of the No. 2 and No. 3 showings. The strike varied from about 200 degrees to 160 degrees and the dip from 35 degrees to 50 degrees to the east. One exception to this trend is found about 100 m NW of the No. 2 showing where a foliation with a strike of 090 degrees and a dip of 47
degrees N was observed along the road. This and the presence of a deep canyon west of the No. 2 showing area was the only evidence found to support an easterly trending fault in the area of the No. 2 showing (Englund, 1985). The strange offset in Gate Creek, the deep canyon associated with it, and coincident magnetic lows lead one to conjecture a NNE trending fault in this area.

A set of water falls was investigated on Texas Bar Creek (See Figure 8). It is located about 120 m east of the mouth of the creek at the Fraser River, about 380 m west of the No. 1 showing. The cliff face revealed gneiss and possibly paragneiss and a possible and probable fault. Locally the rock contained large (up to 2 cm ) phenocrysts of feldspar and quartz. Access to rocks for close examination was difficult. A fault plane was assumed at the base of a dyke or sill of quartz rich rock where clay alteration was observed. This feature showed a strike of 120 degrees and a dip of 18 S . Another fault was inferred from a change in rock units and shows a probable east-west strike with a steep southerly dip. The evidence for this fault is less than conclusive. A possible adit was seen on a ledge on the rock face north of the falls but access was not possible. The bluffs on the south side of the falls were climbed and explored, but no other evidence of the presence of an adit in the falls area was found.

A survey grid comprising of six lines at a bearing of 135 degrees was established from the main road south of Texas Bar Creek (See Figure 8). A line of bluffs of orthogneiss were noted running across these lines. Talus was abundant below the bluffs and common in the soil throughout the grid area.

### 3.3 Mineralization

Three zones of mineralized and serpentinized peroditite were located and sampled in 1982 as reported by Tully. Additional trenching of the No. 2 and No. 3 showings during September 1982 failed to fully expose these zones.

A cleaning up of the trenches at the No. 2 Showing during the 1987 program again failed to expose bedrock (See Figure 5 for location). However, rock samples RS 87-5 and RS 22-1-87 did sample float of a mafic rock, possibly norite, from the trench. Rock Sample RS 22-1-87 showed anomalous amounts of Ni and Co . The source of these rocks remains unknown.

As part of the road repair work, a trench was cut on the south side of Texas Bar Creek to expose bedrock at the base of a cliff beside the road (See Figure 8). This trench revealed the southerly extension of the No. 1 showing across Texas Bar Creek. This extension is designated the No. 1A showing. This trench was cut along the main acess road to allow sampling and the trench was recovered. Rock Samples RS 16-1-87 and RS 16-2-87 were taken from a dark black, dense mafic rock, probably norite, exposed by trenching. Both of these samples showed anomalous amounts of $\mathrm{Cu}, \mathrm{Ni}$, Co quartz immediately above the nortie, RS 16-3-87, did not run.

Rock sample RS 29-1-87, collected from quartz rich rock in the falls area (See Figure 8) of Texas Bar Creek, was not anomalous.

Other rock samples collected on the grid in the No. 2 and No. 3 showing areas did not run. Many of these samples were collected in the proximity of the airborne EM anomalies.

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## 4. SURVEY PROCEDURE

Normal procedures were used to establish the survey grids. Grid lines were compassed and measured using a metric tapofil hip chain. Magnetic readings and soil sampling was completed as the grid was established. Geological mapping was tied in to the survey grid. Junvenille spacing, old logging, and steep terrain made much of the upper grid difficult to traverse.

Total field magnetic readings were taken at 25 m intervals, lines were "looped" in accordance with normal practice and an established base station was measured at least twice daily to allow for correction for diurnal variations.

## 5. GEOPHYSICAL RESULTS

A magnetometer survey was conducted in conjunction with soil sampling on the Randeb claim group. A proton precession magnetometer, measuring total field strength in gammas, was used in this survey. Two areas were surveyed: a $1.2 \times 1.2 \mathrm{~km}$ grid (with outlying lines) in the western portion of th Randeb IV claim and the north and northwest portions of the Randeb I and Randeb V claims; two 250 m lines bearing 135 degrees, 30 m apart, run from the road about 100 and 130 m south of the bridge over Texas Bar Creek in western and eastern portions of the Randeb I and Randeb II claims respectively. The former is in the general area of the No. 2 and No. 3 showings while the latter is near the No. 1A showing. A total of 17.1 line Km of magnetometer survey data was collected.

### 5.1 No. 1 Showing

This work was carried out south of the No. 1 showing expecting that the mafic rocks uncovered at the No. 1A showing would have a magnetic signature that could be traced across the hill to the south (See Figure 8). Lines $1+00 S$ and $1+30 S$ were tested with magnetometer, no anomaly was detected, and the survey was discontinued. All survey lines were geochemically tested.

### 5.2 No. 2 Showing

This work was done in the general area of the No. 2 and No. 3 Showings (See Figure 6) to assist geologic mapping of the area and test airborne magnetic and electromagnetic anomalies (Hunter/Arnold, 1986). The lines were spaced at 100 m (except for outlying lines) and measured at 25 m . All lines were looped and a base station was used to correct for divrnal variations. A total of 16.6 km of line were surveyed.

A base datum of 56,000 gammas was used for the plotting of results and a relief of just over 2,000 gammas are observed over the grid area. Contouring the data reveals a NNW trend in agreement with the regional and local geology.

A northerly trending magnetic low with the two centers parallel to Gates Creek is found in the western area of the grid. Gates Creek is offset in this region and follows a deep canyon. The magnetic and physiographic evidence supports the presence of a NNE trending fault in this area (See Figure 5). A low, centered at $3+00 \mathrm{~S}$ and $10+00 \mathrm{~W}$, is over 500 gammas in magnitude and correlates with $\mathrm{Ag}, \mathrm{Zn}, \mathrm{Cu}$ and Ni anomalies. A low, centered at $2+00 \mathrm{~N}$ and $10+00 \mathrm{~W}$, is 100 gammas in magnitude and coincides with numerous geochemical anomalies.

The No. 2 Showing is just NW of a three line magnetic high trending NNW with a magnitude in excess of 500 gammas.

In all but one case (on line $13+00 \mathrm{~W}$ ) the airborne VLF anomaly centers are connected with magnetic highs.
$\mathrm{Co}, \mathrm{Cu}, \mathrm{Zn}$, and minor Ni geochemical anomalies located on line 7 +00 W between $3+50 \mathrm{~S}$ and $5+00 \mathrm{~S}$ are correlated with a 200 gamma magnetic low trending NE (across regional trend) and an airborne VLF anomaly center.

## 6. GEOCHEMICAL RESULTS

A total of 515 silt and soil samples and 22 rock samples were submitted to Acme Analytical Laboratories of Vancouver, B.C. for geochemical analysis. Inductive Coupled Plasma (ICP) analysis was done for the following elements: silver ( Ag ), copper ( Cu ), cobalt ( Co ), zinc $(\mathrm{Zn})$, and nickel ( Ni ). Gold was determined by the Atomic Absorption (AA) method. The results of the geochemical analysis are shown in Appendix I. Rock sample locations are shown on Figures 5 and 8. Geochemical anomalies are shown on Figure 7 and 9.

The $B$ soil horizon was sampled at depths of 20 cm to 35 cm and the sampler attempted to avoid organic-rich material. A soil pit was dug at each locations and approximately 500 g of material was placed in a standard Kraft envelope.

A grid comprising 16.6 km of line is located in the western portion of the Randeb IV claim and the north and northwest portions of the Randeb I and Randeb V claims, respectively. This grid is in the general area of the No. 2 and No. 3 Showings. The grid lines were soil sampled every 50 m and silts were collected from creek beds that crossed the lines. Where warranted rock samples were also taken, 349 soil samples, 65 silt samples and 18 rock samples (See Figure 5) were taken from this area.

A second grid comprising 1.3 km of line is located in the eastern and western portion of the Randeb II and Randeb I claims respectively (See Figures $9 \& 8$ ). The grid lines were soil sampled at a 10 m intervals. A total of 100 soil samples were analysed.

Three rock samples, RS-16-1 to 3-87 were taken from the No. 1A Showing and one, RS-29-1-87, from the falls area of Texas Bar Creek. These are discussed in section 3.3. A silt sample, \#59, taken from the falls area of Texas Bar Creek was not anomalous.

Three pan samples were taken from the Randeb claim group. One tests the alluvium of Gate Creek along the main road (See Figure 5) and the others test the alluvium of Texas Bar Creek above the road and below the falls (See Figure 8). The stream bed material was concentrated down to the grey and heavy sands using 10 to 20 pans. Fire assay did not reveal significant amounts of gold or platinum.

### 6.1 No. 1 Showing

The soil, silt and rock samples were submitted to Acme Analytical Laboratories, for analysis. Histograms and statistical analysis of the results of soil analysis are included in Appendix II and the geochemical results in Appendix I. A total of 100 soil samples were collected from this grid. A further 4 rock and 1 silt samples were collected nearby.

For the purpose of plotting, the followining limits were established for geochemical anomalies:

Weakly Anomalous
$\mathrm{Au}(\mathrm{ppb}) \quad 10 \quad 50$
$\mathrm{Ag}(\mathrm{ppm})$
0.3
$\mathrm{Cu}(\mathrm{ppm}) \quad 56$
Co (ppm) 20
Zn (ppm) $\quad 230$
$\mathrm{Ni}(\mathrm{ppm}) \quad 200$,350

It must be recognized that talus was abundant in the grid area and soil samples might not reflect bedrock values in the immediate vicinity. Referring to Figure 9 most of the geochemical anomalies are located near the road. All lines analysed, except line $1+60 \mathrm{~S}$, are anomalous in this area. The highly anomalous values in Ni and Co on lines $1+00 \mathrm{~S}$ and $1+90 \mathrm{~S}$ are interesting and suggest the mafic rock of the No. 1 and No. 1A showings continues across the bottom of the hill near the road. Two highly anomalous Au values located at $1+00 \mathrm{~S}, 2+20 \mathrm{E}$ and $2+20 \mathrm{~S}, 0+00 \mathrm{E}$ are also interesting. The former is 185 ppb and the latter is 52 ppb Au . These anomalies should be checked to establish if they are representative of bedrock or talus from higher elevations.

### 6.2 No. 2 Showing

The soil, silt and rock samples were submitted to Acme Analytical Laboratories, for analysis. Histograms and statistical analysis of the results of soil analysis are included in Appendix II and the geochemical results in Appendix I. A total of 349 soil samples, 65 silt and 18 rock samples were collected from this grid. A further 4 rock and 1 silt samples were collected nearby.

For the purposes of plotting the following limits were established for geochemical anomalies:

WeaklyAnomalous
Highly Anomalous

| $\mathrm{Au}(\mathrm{ppm})$ | 10 |  |
| :--- | :--- | :--- |
| $\mathrm{Ag}(\mathrm{ppm})$ | 0.4 | 0.6 |
| $\mathrm{Cu}(\mathrm{ppm})$ | 59 | 70 |
| $\mathrm{Co}(\mathrm{ppm})$ | 20 | 26 |
| $\mathrm{Zn}(\mathrm{ppm})$ | 220 | 260 |
| $\mathrm{Ni}(\mathrm{ppm})$ | 115 | 150 |

Two areas of paragneiss (See Figure 5) are associated with anomalous geochemical results (See Figure 7), especially in Ni. The first area of paragneiss extends from $6+00 \mathrm{~W}, 0+00 \mathrm{E}$ to $8+00 \mathrm{~W}, 1+50 \mathrm{~N}$, reaches a width of about 150 m and encompasses the No. 2 Showing area. Soil from trenches of the No. 2 showing are highly anomalous in Ni and Co . Soil at $6+00 \mathrm{~W}, 0+00 \mathrm{E}$ is highly anomalous in Ni. Silt and Soil at $7+00 \mathrm{~W}, 1+00 \mathrm{~N}$ are highly anomalous in Ni and the soil is also weakly anomalous in Co. The same stream also showed silt highly anomalous in Ni and weakly anomalous in Cu at $8+00 \mathrm{~W}, 0+75 \mathrm{~N}$. Streams draining this area are also weakly anomalous in Ni at $9+00 \mathrm{~W}, 0+75 \mathrm{~S}$ near the main road. Of the rock samples taken in this area of paragneiss only one out of these are anomalous. Two of these samples were taken from the trench at the No. 2 showing and both were from float. Rock Sample RS 22-1-87 showed 1921 ppm Ni and 73 ppm Co , and was taken from float of mafic composition.

The second area of paragneiss extends from $3+00 \mathrm{~N}, 10+00 \mathrm{~W}$ to $2+00 \mathrm{~S}, 11+00 \mathrm{~W}$ and reaches a width of 200 m . Three silts located near $10+00 \mathrm{~W}$ and $0+00 \mathrm{E}$ are highly anomalous in Cu and weakly anomalous in $\mathrm{Ni}, \mathrm{Au}$, and Ag . A silt at $11+00 \mathrm{~W}, 0+75 \mathrm{~N}$ is weakly anomalous in Au and a nearby soil is highly anomalous in Zn . A soil at $11+00 \mathrm{~W}, 1+50 \mathrm{~S}$ is weakly anomalous in Cu and a nearby silt is weakly anomalous in Ni. A soil at $0+50 \mathrm{~S}, 9+00 \mathrm{~W}$ and two nearby silts are weakly anomalous in Ni . Three rock samples taken in the area are not anomalous.

Four soils taken between $3+50 \mathrm{~S}$ and $5+00 \mathrm{~S}$ on line $7+00 \mathrm{~W}$ are anomalous in $\mathrm{Co}, \mathrm{Cu}, \mathrm{Zn}$, and Ni. These correspond with a NE trending magnetic low of two hundred gammas and an airborne VLF anomaly centre. Rock samples taken at $7+00 \mathrm{~W}, 4+00 \mathrm{~S}$ and $6+00 \mathrm{~S}$ are not anomalous.

In the western area of the grid a silt at $10+00 \mathrm{~W}, 3+00 \mathrm{~S}$ and a soil at $11+00 \mathrm{~W}, 2+50 \mathrm{~S}$ are associated with a magnetic low of over 300 gammas, the silt is highly anomalous in Ag and the soil is highly anomalous in Zn . A silt at $9+00 \mathrm{~W}, 7+00 \mathrm{~S}$ and a soil at $7+50 \mathrm{~S}, 12+00 \mathrm{~W}$ are highly anomalous in Ag and Au respectively.

On the eastern part of the grid there are eight isolated geochemical anomalies. Zn is highly anomalous in two soils taken 25 m either side of $0+00 \mathrm{~W}, 6+25 \mathrm{~S}$ and 70 m away on $1+00 \mathrm{~W}$ a soil is highly anomalous in Co. A silt is highly anomalous in Ag and weakly anomalous in Cu at $0+00 \mathrm{~W}$ and $10+50 \mathrm{~S}$ and a soil is highly anomalous in Ag at $0+00 \mathrm{~W}$, $0+50 \mathrm{~S}$ and a nearby soil and silt are weakly anomalous in Ag. A silt at $1+00 \mathrm{~W}, 2+25 \mathrm{~S}$ is highly anomalous in Ag and Co. A soil at $2+00 \mathrm{~W}$, $1+00 \mathrm{~S}$ is highly anomalous in Au. A silt located at $1+30 \mathrm{~S}, 4+00 \mathrm{~W}$ is highly anomalous in Ag as is another silt at $0+80 \mathrm{~N} 5+00 \mathrm{~W}$. A soil at $3+00 \mathrm{~W}$, $3+50 \mathrm{~S}$ is highly anomalous in Ni and weakly anomalous in Zn .

These anomalous results, in themselves, could be significant and may warrant follow-up detailed sampling. However the anomalies are generally isolated and no significant basemetals and/or precious metals trend has been established.

## 7. CONCLUSIONS AND RECOMMENDATIONS

A soil sampling survey conducted in the western half of the Randeb IV claim and the north and northeast sections of the Randeb I and Randeb V claims respectively did not reveal any major precious and/or base metals trends. A magnetometer survey over the same area revealed a regional trend to the NNW, in agreement with the regional and local geology. It also revealed some evidence for a fault on the lower (NNE trending) reaches of Gate Creek. Geologic mapping revealed the bedrock in the area to be orthogneiss with two areas fo paragneiss or meta-sediments (both located near the No. 2 Showing) and minor amounts of quartz diorite intrusives. An attempt to uncover bedrock at the No. 2 Showing failed although a rock sample collected from mafic float in the trench was anomalous in nickel and cobalt.

The No. 1 Showing was extended to the south side of Texas Bar Creek and trenching in this area revealed mafic rock, probably norite, which tested high in copper, nickel, and cobalt. A soil grid established to the south and southeast of this extension failed to reveal any further significant extension of the Showing. Hence, the maximum extent of the mafic rock of the No. 1 showing is 130 m .

Panning of Texas Bar and Gate Creek did not reveal significant amounts of gold or platinum.

Additional work on this claim group should be conducted to further define the three known Nickel showings with respect to grade and tonnage. Survey work in the northern and northeast claims area does not establish a very good potential for locating additional "norite" zones and/or precious metal deposits.

Several isolated gold anomalies warrent additional exploration. Results to date indicate that further work could be concentrated on followup of anomalies established on the Randeb I, II, IV, and V claims.

Respectfully submitted,
Strato Geological Engineering Ltd.

A.E. Hunter, B.A.Sc.

Geophysicist

June 19, 1987

## 8. CERTIFICATE

I, AL E. HUNTER, of Vancouver, British Columbia, Canada do hereby certify the following:

1. I will receive the degree of Bachelor of Applied Science with Specialization in Geophysics from the University of British Columbia, Vancouver, British Columbia in 1987.
2. Since leaving university I have practised my profession in western and northern Canada for approximately 6 years.
3. I have no direct, indirect or contingent interest, nor do I expect to receive such interest, in the securities or properties of Rojoll Explorations Ltd.

Dated at Surrey, British Columbia, this 19th day of June, 1987.

A. E. Hunter, Geophysicist

## 8. CERTIFICATE

I, Ralph J. Englund, of 17948-24th Avenue, Surrey, British Columbia, do hereby certify that:

1. I am a Consulting Geophysicist with offices at 3566 King George Highway, Surrey, BC V4A 5B6.
2. I graduated from the University of British Columbia, with a degree of Bachelor of Science.
3. I have been engaged in the practice of exploration geophysics continuously for a period of 15 years. I have worked as a geophysical consultant on numerous projects in Western North America since 1972.
4. I am a member in good standing of the British Columbia Geophysical Society.
5. The field work and interpretation of results of this report were carried out under my direct supervision.

Dated at Surrey, Province of British Columbia, this 19th day of June, 1987.

R.J. Englund, B.Sc.

## 9. REFERENCES

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Geologic, geochemical and geophysical investigations of the RANDEB claim group. Unpublished report for ROJOLL EXPLORATIONS LTD. Hope, B.C. area, New Westminister M.D.

Tully, D.W. (1986)
Geologic assessment of the RANDEB claim group. Unpublished report for ROJOLL EXPLORATIONS LTD., Hope, B.C. area, New Westminister M.D.

APPENDIX I: Analytical Data for Soils, Rocks and Rock Descriptions

DATE RECEIVED: JUNE 61987 BS2 E. HASTINGS ST. VANCOUVER B.C. VGA 1 R6 PHONE 253-3158 DATA LINE 251-1011 DATE REPDRT MAILED:

## GEDCHEMICAL ICF ANALYSIS

 this leach is partial for mw fe ca p la cr hg ba it y and limited for na and k. au detectian limit by icp is 3 pph. - SAMPLE TYPE: SOILS AU ANALYSIS BY AA FROH 10 GRAH GAMPLE.

ASSAYER: NCOLM. DEAN TOYE, CERTIFIED B.C. ASSAYER

| STRATO GEOLOGICAL FFOJECT | - ROJOL File | F | $87-1616$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SAMFLE\# | CU | ZN | AG | NI | CO | AU* |
|  | FPM | FFM | FFM | FFM | FFM | FFB |


| FN $0+50$ | 18 | 91 | -1 | 49 | 10 | 1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| RN $1+00$ | 14 | 138 | -1 | 3. | 8 | 1 |
| FN $1+50$ | 30 | 103 | -1 | 52 | 11 | 2 |
| FN $2+00$ | 14 | 189 | -1 | 38 | 9 | 2 |
| FN 2+50 | 42 | 230 | .1 | 71 | 14 | 1 |


| FN $3+00$ | 31 | 99 | -1 | 64 | 12 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| FN $3+50$ | 36 | 94 | -1 | 57 | 12 | 1 |
| FN 4+00 | 30 | 95 | -1 | 54 | 11 | 1 |
| FN 4+50 | 18 | 76 | -1 | 53 | 8 | 1 |
| FN 5+00 | 22 | 98 | .1 | 51 | 11 | 1 |



. 500 gran sanple is digested with jhl 3-1-2 hCl-hmoz-hzo at 95 deg.c for ome hour and is diluted to 10 ml mith mater. this leach is partial for min fe ca pla cr mg ba it buand limited for ma and k. aul detection limit by icp is 3 pph.


ASSAYER:


| SAMFLE\# | CLI | ZN | AG | NI | CO | AU* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FFM | FFM | FFM | FFM | FFM | PFB |
| L13W $3+005$ | 13 | 93 | . 1 | 34 | 7 | 1 |
| L13W 3+50s | 13 | 126 | . 2 | 28 | 8 | 2 |
| L13W 4+00s | 10 | 75 | . 1 | 35 | 8 | 5 |
| L13W 4+50s | 14 | 95 | . 1 | 27 | 7 | 1 |
| STD C/AU-S | 61 | 138 | 7.1 | 69 | 29 | 46 |
| L13W 5+00s | 1.3 | 8.3 | . 1 | 32 | 7 | 1 |
| L13W 5+25S | 19 | 132 | . 2 | 15 | 10 | 1 |
| L13W 5+50s | 24 | 103 | . 2 | 53 | 11 | 1 |
| L15W 5+75s | 18 | 93 | . 1 | 48 | 10 | 2 |
| L13W 6+00S | 22 | 104 | - 1 | 54 | 9 | 2 |
| L13W 6+255 | 29 | 84 | . 1 | 60 | 11 | 1 |
| L13W 6+505 | 40 | 154 | . 2 | 79 | 15 | 1 |
| L13W 6+755 | 19 | 72 | . 1 | 5.3 | 10 | 2 |
| L13W 7+00s | 42 | 165 | . 2 | 62 | 11 | 1 |
| L13W 7+50S | 13 | 66 | . 3 | 51 | 10 | 4 |
| L13W 8+00S | 31 | 69 | . 1 | 54 | 12 | 3 |
| L12W 2+00N | 16 | 111 | . 1 | 34 | 8 | 2 |
| L12W 1+50N | 10 | 84 | . 2 | 30 | 8 | 1 |
| L12W 1+00N | 15 | 80 | . 2 | 38 | 9 | 1 |
| L12W O+50N | 14 | 85 | . 1 | 33 | 8 | 1 |
| L12W 0+00s | 15 | 61 | . 2 | 33 | 7 | 23 |
| L12W O+50s | 19 | 62 | . 1 | 42 | 9 | 1 |
| L12W 1+00s | 13 | 56 | . 3 | 33 | 8 | 1 |
| L12W 1+505 | 14 | 74 | . 2 | 29 | 8 | 3 |
| L12W 2+00S | 21 | 79 | . 1 | 35 | 8 | 2 |
| L12W 2+50S | 14 | 64 | . 1 | 28 | 6 | 1 |
| L12W S+00s | 18 | 55 | . 1 | 43 | 9 | 1 |
| L12W 3+50S | 22 | 70 | . 1 | 44 | 10 | 1 |
| L12W 4+00S | 13 | 69 | . 1 | 36 | 7 | 2 |
| L12W 4+50s | 10 | 85 | . 1 | 18 | 5 | 13 |
| Li2W 5+00s | 16 | 78 | . 1 | 40 | 8 | 9 |
| L12W 5+505 | 19 | 83 | . 1 | 46 | 10 | 2 |
| L12W $6+005$ | 17 | 68 | . 1 | 42 | 9 | 3 |
| L12W 6+50s | 21 | 159 | . 1 | 53 | 10 | 1 |
| L12W 7+00s | 23 | 83 | . 1 | 50 | 11 | 4 |
| L12W 7+50S | 26 | 140 | . 1 | 37 | 9 | 55 |
| L12W 8+00S | 32 | 71 | . 1 | 36 | 8 | 2 |


| STRATO GEOLOGICAL FROJECT - ROJOL FILE \# 87-1613 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMF'LE\# | CU | ZN | AG | NI | CO | AU* |
|  | FFM | FFM | FF'M | PPM | FPM | FPE |
| L12W 8+50S | 60 | 142 | . 1 | 44 | 14 | 1 |
| L12W 9+00s | 11 | 64 | . 2 | 6 | 4 | 1 |
| L12W 9+50S | 28 | 88 | . 1 | 54 | 11 | 1 |
| L12W $10+005$ | 25 | 92 | . 1 | 60 | 12 | 4 |
| L11W 2+00N | 58 | 87 | . 3 | 58 | 12 | 1 |
| L11W 1+50N | 46 | 135 | . 1 | 66 | 14 | 5 |
| L11W $1+00 \mathrm{~N}$ | 21 | 118 | . 1 | 56 | 9 | 1 |
| L11W O+50N | 19 | 374 | . 1 | 54 | 11 | 1 |
| L11W O+00S | 23 | 203 | . 1 | 46 | 11 | 1 |
| L11W0+50S | 3 | 139 | . 1 | 56 | 12 | 2 |
| L11W 1+00s | 18 | 126 | . 2 | 27 | 8 | 1 |
| L11W 1+50S | 65 | 126 | . 1 | 47 | 12 | 4 |
| L11W 2+00S | 29 | 102 | . 1 | 81 | 17 | $\leq$ |
| L11W 2+50S | 20 | 279 | . 1 | 44 | 12 | 1 |
| L11W $3+005$ | 22 | 100 | . 3 | 46 | 11 | 7 |
| L11W S+50S | 22 | 118 | . 1 | 50 | 11 | 1 |
| L11W 4+005 | 18 | 95 | . 2 | 44 | 9 | 5 |
| L11W 4+50s | 8 | 95 | . 1 | 50 | 10 | 4 |
| L11W 5+00S | S. | 94 | . 1 | 41 | 10 | 2 |
| L11W $5+255$ | 63 | 24.3 | .2 | 17 | 10 | 1 |
| L11W 5+505 | 17 | 147 | . 1 | 39 | 11 | 3 |
| L11W $5+755$ | 15 | 281 | . 1 | 18 | 12 | 1 |
| L11W $6+00 \mathrm{~S}$ | 31 | 102 | . 1 | 42 | 11 | 1 |
| L11W $6+055$ | 18 | 143 | . 1 | 29 | 9 | 1 |
| L11W 6+25s | 22 | 138 | . 3 | 49 | 13 | 1 |
| L11W $6+505$ | 24 | 126 | . 1 | 60 | 13 | 2 |
| L11W $6+755$ | 20 | 125 | . 2 | 49 | 12 | 14 |
| L11W 7+005 | 18 | 150 | . 1 | 33 | 11 | 1 |
| LIIW 7+50S | 19 | 113 | . 2 | 46 | 10 | 6 |
| L11W 8+00S | 11 | 128 | . 2 | 28 | 7 | 1 |
| L11W 8+50S | 14 | 113 | . 1 | 47 | 9 | 1 |
| L11W 9+00s | 18 | 108 | . 1 | 4.3 | 10 | 1 |
| L11W9+50S | 15 | 135 | . 1 | 27 | 7 | 2 |
| L11W 10+00S | 20 | 74 | . 3 | 59 | 11 | 1 |
| L10W 2+OON | 3.4 | 106 | . 1 | 82 | 14 | 1 |
| L1OW $1+$ OON | 41 | 106 | . 1 | 84 | 14 | 1 |
| STD C/AU-S | 60 | 136 | 7.0 | 72 | 29 | 51 |

ACME ANALYTICAL LABORATORIES
DATE RECEIVED:
852 E. HASTINGS ST. VANCOUVER B.C. VGA ARG
PHONE 253-3158 DATA LINE 251-1011 DATE REPORT MAILED:
GEOCHEMICAL ICE ANALYSIS
. 500 gran sample 16 digested with JKL 3-1-2 hCL-hkoj-h20 at 95 deg.c for one hour and is diluted to 10 me with mater. this leach is partial for mi fe ca fla cr mg ba it b and limited for na and k. au detection limit by ice is a pah. - sample type soil -bo mesh au t analysis by aa from 10 gram sample.
assayer: Now er. dean tore, Certified bic. assayer STRATO GEOLOGICAL FROJECT - FOJOL File \# 87-1615 Page 1

| SAMPLE\# | CU <br> FAM | FF M | FF | FRI | CO | AU* |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| SHF | FF M |  |  |  |  |  |


| STRATO G |  | OLOGI | PROJECT - ROJOL |  |  | FILE \# | 87-1615 |  | Fage 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMFLE\# |  |  | CU | ZN | AG | NI | CO | AU* |  |
|  |  |  | PFM | FFM | FPM | $F F M$ | FFM | FF'E |  |
| SHI | $1+305$ | $0+70 E$ | 19 | 139 | . 1. | 83 | 13 | 1 |  |
| SHI | $1+305$ | $0+80 E$ | 20 | 134 | . 1 | 75 | 12 | 1 |  |
| SHI | $1+505$ | $0+90 E$ | 21 | 130 | . 1 | 77 | 12 | 1 |  |
| SHI | $1+305$ | $1+00 E$ | 15 | 210 | . 1 | 39 | 11 | 1 |  |
| SHI | $1+\mathrm{SOS}$ | $1+10 E$ | 12 | 166 | . 1 | 43 | 11 | 1 |  |
| SHI | $1+305$ | $1+20 E$ | 22 | 177 | . 1 | 50 | 12 | 3 |  |
| SHI | $1+305$ | $1+30 E$ | 13 | 143 | . 1 | 40 | 10 | 1 |  |
| SHI | $1+305$ | $1+40 E$ | 22 | 88 | . 1 | 65 | 12 | 1 |  |
| SHI | $1+305$ | $1+50 \mathrm{E}$ | 7 | 67 | . 1 | 20 | 6 | 1 |  |
| STD | C/AU-S |  | 57 | 1.36 | 7.0 | 70 | 28 | 49 |  |
| SHI | $1+305$ | $1+60 E$ | 17 | 98 | . 1 | 67 | 12 | 1 |  |
| SHI | $1+305$ | $1+70 E$ | 20 | 89 | . 1 | 56 | 11 | 1 |  |
| SHI | $1+305$ | $1+80 E$ | 18 | 135 | . 1 | 48 | 10 | 1 |  |
| SHI | $1+305$ | $1+90 E$ | 18 | 142 | . 1 | 48 | 10 | 1 |  |
| SHI | $1+305$ | $2+00 E$ | 15 | 101 | . 1 | 44 | 10 | 1 |  |
| SHI | $1+305$ | $2+10 E$ | 16 | 106 | . 1 | 38 | 9 | 1 |  |
| SHI | $1+305$ | $2+20 E$ | 10 | 80 | . 1 | 23 | 6 | 1 |  |
| SHI | $1+305$ | $2+30 E$ | 21 | 71 | . 1 | 46 | 9 | 1 |  |
| SHI | $1+305$ | 2+4OE | 7 | 39 | . 1 | 29 | 7 | 1 |  |
| SHI | $1+305$ | $2+50 E$ | 20 | 67 | . 3 | 59 | 12 | 1 |  |
| SHI | $1+605$ | $0+00 E$ | 38 | 88 | . 1 | 133 | 14 | 1 |  |
| SHI | $1+605$ | $0+10 \mathrm{E}$ | 20 | 104 | . 1 | 96 | 12 | 1 |  |
| SHI | $1+605$ | $0+20 E$ | 22 | 138 | . 1 | 77 | 12 | 1 |  |
| SHI | $1+605$ | $0+30 E$ | 21 | 97 | . 2 | 5. | 10 | 2 |  |
| SHI | $1+605$ | $0+40 E$ | 13 | 103 | . 1 | 32 | 8 | 1 |  |
| SHI | $1+605$ | $0+50 \mathrm{E}$ | 28 | 93 | . 1 | 64 | 11 | 1 |  |
| SHI | $1+605$ | $0+60 E$ | 22 | 96 | . 2 | 67 | 12 | 1 |  |
| SHI | $1+605$ | 0+70E | 26 | 122 | . 1 | 88 | 14 | 1 |  |
| SHI | $1+605$ | $0+80 \mathrm{E}$ | 57 | 105 | . 1 | 83 | 12 | 1 |  |
| SHI | $1+605$ | $0+90 E$ | 13 | 196 | . 1 | 3.3 | 8 | 1 |  |
| SHI | $1+605$ | $1+00 E$ | 20 | 285 | . 1 | 48 | 10 | 1 |  |
| 5 HI | $1+605$ | $1+10 E$ | 14 | 164 | . 1 | 60 | 11 | 3 |  |
| SHI | $1+605$ | $1+20 E$ | 12 | 112 | . 1 | 44 | 9 | 1 |  |
| SHI | $1+605$ | $1+30 E$ | 14 | 97 | . 2 | 41 | 9 | 1 |  |
| SHI | $1+605$ | $1+40 \mathrm{E}$ | 13 | 59 | . 2 | 46 | 9 | 1 |  |
| SHI | $1+605$ | $1+50 E$ | 11 | 94 | . 1 | 45 | 9 | 3 |  |
| SHI | $1+605$ | $1+60 E$ | 15 | 124 | . 1 | 40 | 10 | 1 |  |


| SAMFLE\# |  |  | Cu | ZN | AG | NI | CO | AlJ* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FFM | FFM | FFM | PFM | FFM | FFE |
| SHI | $1+605$ | $1+70 E$ | 15 | 82 | - 1 | 46 | 10 | 3 |
| SHI | $1+605$ | $1+80 E$ | 12 | 85 | . 1 | 47 | 10 | 2 |
| SHI | $1+605$ | $1+90 \mathrm{E}$ | 13 | 70 | . 1 | 38 | 8 | 1 |
| SHI | $1+605$ | $2+00 \mathrm{E}$ | 9 | 6.5 | . 1 | 33 | 8 | 2 |
| SHI | $1+905$ | O+OOE | 64 | 107 | . 1 | 811 | 25 | 1 |
| SHI | $1+905$ | $0+10 \mathrm{E}$ | 20 | 87 | . 2 | 211 | 14 | 3 |
| SHI | $1+905$ | $0+20 E$ | 25 | 75 | . 1 | 395 | 17 | 1 |
| SHI | $1+905$ | $0+30 \mathrm{E}$ | 12 | 83 | . 1 | 295 | 14 | 3 |
| SHI | $1+905$ | O+40E | 20 | 80 | . 1 | 113 | 13 | 1 |
| SHI | $1+905$ | O+50E | 19 | 91 | . 1 | 64 | 11 | 1 |
| SHI | $1+905$ | O+60E | 20 | 78 | . 1 | 71 | 11 | 1 |
| SHI | $1+905$ | O+80E | 22 | 80 | . 1 | 68 | 10 | 1 |
| SHI | $1+905$ | $1+\mathrm{OOE}$ | 15 | 249 | . 1 | 29 | 7 | 1 |
| SHI | $1+905$ | $1+20 E$ | 12 | 121. | . 1 | 37 | 8 | 1 |
| SHI | $1+905$ | $1+40 \mathrm{E}$ | 15 | 66 | . 1 | 41 | 8 | 1 |
| SHI | $1+905$ | $1+60 E$ | 12 | 170 | . 1 | 28 | 7 | 2 |
| SHI | $1+905$ | $1+80 E$ | 12 | 66 | . 1 | 47 | 9 | 1 |
| SHI | $1+905$ | $2+00 \mathrm{E}$ | 35 | 76 | . 1 | 35 | 13 | 1 |
| SHI | 2+205 | O+OOE | 38 | 142 | . 2 | 91 | 10 | 52 |
| SHI | $2+205$ | O+20E | 56 | 100 | . 1 | 171 | 13 | 2 |
| SHI | $2+205$ | O+40E | 14 | 70 | . 1 | 66 | 9 | 1 |
| SHI | $2+205$ | $0+60 \mathrm{E}$ | 15 | 80 | . 1 | 57 | 9 | 2 |
| SHI | $2+205$ | O+80E | 36 | 101 | . 2 | 53 | 10 | 1 |
| SHI | $2+205$ | $1+20 E$ | 22 | 92 | . 1 | 75 | 11 | 1 |
| SHI | $2+205$ | $1+40 \mathrm{E}$ | 13 | 85 | . 2 | 35 | 8 | 1 |
| SHI | 2+20s | $1+60 \mathrm{E}$ | 20 | 86 | . 2 | 41 | 8 | 11 |
| SHI | $2+205$ | $1+80 \mathrm{E}$ | 22 | 78 | . 1 | 65 | 10 | 1 |
| SHI | $2+205$ | $2+00 \mathrm{E}$ | 20 | 74 | 1 | 59 | 9 | 1 |
| STD | C/AU- |  | 57 | 1.32 | 6.9 | 67 | 28 | 51 |


| STRATO GEOLOGICAL FROJECT - FOJOL FILE \# 87-1613 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMFLE\# | CU | ZN | AG | NI | CO | AU* |
|  | PFM | FFM | FF'M | PFM | PPM | FFE |
| L10W 0+50N | 15 | 72 | . 1 | 24 | 7 | 1 |
| Liow otoos | 21 | 156 | . 2 | 46 | 9 | 2 |
| L10W ot50s | 34 | 155 | . 1 | 49 | 13 | 1 |
| Llow $1+005$ | 11 | 111 | . 1 | 14 | 4 | 2 |
| L10W 1+505 | 24 | 111 | . 1 | 39 | 10 | 1 |
| L10W 2+00s | 18 | 111 | . 1 | 53 | 10 | 4 |
| L10W 2+50S | 23 | 110 | . 1 | 51 | 12 | 2 |
| L10W S+00s | 49 | 108 | . 2 | 67 | 13 | 1 |
| L10W 3+50S | 19 | 125 | . 1 | 45 | 11 | 1 |
| L10W 4+00s | 17 | 119 | . 1 | 47 | 10 | 1 |
| L10W 4+25s | 17 | 114 | . 1 | 49 | 9 | 2 |
| L10W 4+50S | 14 | 6.3 | . 1 | 28 | 6 |  |
| L10W 4+75s | 13 | 91 | . 1 | 41 | 9 | 1 |
| L10W $5+005$ | 35 | 87 | . 3 | 39 | 9 | 1 |
| L10W 5+25s | उ9 | 95 | . 1 | 38 | 11 | 2 |
| L10W 5+50S | 27 | 96 | . 1 | 42 | 10 | 1 |
| L10W 5+75s | 39 | 94 | . 1 | 55 | 13 | 1 |
| Liow 6+oos | 18 | 103 | . 2 | 52 | 11 | 1 |
| STD C/AU-S | 59 | 132 | 7.0 | 69 | 28 | 49 |
| Liow 6+50S | 26 | 87 | . 1 | 48 | 12 | 1 |
| Liow 7+005 | 29 | 94 | . 1 | 36 | 12 | 3 |
| L10W 7+505 | 28 | 92 | . 1 | 29 | 9 | 1 |
| L10W 8+00s | 26 | 93 | . 1 | 31 | 9 | 1 |
| Liow 8+50s | 30 | 249 | . 1 | 15 | 7 | 1 |
| L10W 10+00s | 31 | 96 | . 1 | 32 | 8 | 1 |
| L9W $2+00 \mathrm{~N}$ | 36 | 85 | . 1 | 94 | 13 | 1 |
| L9W $1+50 \mathrm{~N}$ | 10 | 147 | . 1 | 38 | 9 | 1 |
| L9W $1+00 \mathrm{~N}$ | 30 | 162 | . 2 | 45 | 11 | 1 |
| L9W O+5ON | 80 | 69 | . 1 | 45 | 10 | 2 |
| L9W O+00S | 65 | 111 | . 2 | 111 | 15 | 2 |
| L9W O+50S | 41 | 120 | . 1 | 118 | 18 | 1 |
| LOW $1+005$ | 30 | 114 | . 1 | 76 | 15 | 1 |
| Low 1+50S | 19 | 221 | . 2 | 30 | 8 | 4 |
| L9W $2+005$ | 16 | 68 | . 1 | 30 | 12 | 2 |
| L9W 2+50s | 26 | 75 | . 1 | 36 | 8 | 1 |
| L9W 3+00s | 25 | 164 | . 1 | 31 | 11 | 1 |
| L9W 3+50s | 46 | 158 | . 1 | 70 | 15 | 2 |


| STRAT | TO GEOLO | AL F | JJECT | ROJ |  | \# | 1613 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMF | LE\# | CU | ZN | AG | NI | CO | AU* |
|  |  | F.F.M | FFM | FFM | FFM | PFM | PFE |
| L.9W | 4+005 | 38 | 257 | . 1 | 42 | 19 | 1 |
| L9W | $5+005$ | 11 | 165 | . 2 | 19 | 7 | 6 |
| L9W | $5+255$ | 32 | 170 | . 1 | 47 | 19 | 2 |
| L9W | $5+505$ | 59 | 177 | . 1 | 71 | 25 | 1 |
| L9W | $5+755$ | 15 | 108 | . 2 | 36 | 8 | 1 |
| L9W | $6+005$ | 11 | 240 | . 2 | 23 | 8 | 2 |
| L.9W | $6+505$ | 36 | 128 | . 1 | 69 | 13 | 2 |
| L9W | 7+00s | 49 | 102 | . 1 | 67 | 16 | 1 |
| L9W | $7+505$ | 21 | 179 | . 1 | 41 | 11 | $\underset{\square}{ }$ |
| L9W | $8+005$ | 16 | 215 | . 1 | 49 | 13 | 1 |
| L9W | $8+505$ | 18 | 89 | . 1 | 44 | 11 | 2 |
| STD | C | 59 | 1.34 | 7.0 | 69 | 29 | 52 |
| L9W | $9+005$ | 21 | 77 | . 2 | 45 | 11 | E |
| L9W | $9+505$ | 24 | 106 | . 2 | 44 | 10 | 2 |
| L9W | $10+005$ | 14 | 145 | . 1 | 22 | 8 | 4 |
| L8W | $2+00 \mathrm{~N}$ | 19 | 53 | . 2 | 27 | 7 | 2 |
| L8W | $1+50 \mathrm{~N}$ | 54 | 141 | . 1 | 41 | 13 | 1 |
| L8W | $1+0 \mathrm{ON}$ | 54 | 127 | . 1 | 110 | 14 | 1 |
| L8W | $0+50 \mathrm{~N}$ | 26 | 105 | . 1 | 63 | 17 | 1 |
| L8W | $0+005$ | 19 | 184 | . 3 | 69 | 16 | 1 |
| L8W | $0+505$ | 20 | 86 | . 1 | 56 | 12 | 2 |
| L8W | $1+005$ | 44 | 140 | . 1 | 131 | 19 | 1 |
| L8W | $5+505$ | 18 | 113 | . 2 | 55 | 11 | 1 |
| L8W | $6+005$ | 14 | 122 | . 1 | 48 | 11 | 2 |
| L8W | $6+505$ | 15 | 200 | . 2 | 30 | 12 | 7 |
| L8W | $7 .+005$ | 27 | 156 | . 2 | 62 | 13 | 1 |
| LBW | $8+005$ | 26 | 91 | . 2 | 64 | 12 | 4 |
| L8W | $8+505$ | 19 | 103 | . 1 | 41 | 10 | 2 |
| L8W | 9+005 | 20 | 129 | . 3 | 38 | 9 | 1 |
| L8W | $9+505$ | 20 | 103 | . 1 | 35 | 11 | 2 |
| L8W | $10+005$ | 11 | 81 | . 2 | $\pm 1$ | 7 | 2 |
| L7W | $2+00 \mathrm{~N}$ | 28 | 80 | . 1 | 39 | 9 | 2 |
| L7W | $1+5 \mathrm{ON}$ | 25 | 89 | . 1 | 29 | 7 | 1 |
| L7W | $1+00 \mathrm{~N}$ | 47 | 135 | . 1 | 168 | 22 | 1 |
| L 7 W | $0+50 \mathrm{~N}$ | 18 | 152 | . 1 | 36 | 11 | 1 |
| L7W | 0+005 | 42 | 98 | . 1 | 75 | 17 | 1 |
| L.7W | $0+505$ | 25 | 100 | . 1 | 47 | 10 | 7 |


| STRATO GEQLOGICAL PROJECT - FOJOL FILE \# 87-1613 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE\# |  | CU | ZN | AG | NI | CO | AU* |
|  |  | FFM | FFM | FFM | FFM | FPM | FPB |
| L7W | $1+005$ | 27 | 91 | . 1 | $\pm 7$ | 10 | 1 |
| L7W | $1+505$ | 29 | 171 | . 1 | 60 | 17 | 2 |
| L7W | $2+005$ | 43 | 195 | . 1 | 50 | 15 | 1 |
| L.7W | 3+505 | 59 | 221 | . 1 | 39 | 26 | 1 |
| L.7W | 4+00S | 115 | 215 | . 1 | 46 | 20 | 1 |
| L7W | 4+505 | 80 | 155 | . 1 | 139 | 32 | 1 |
| LフW | $5+005$ | 83 | 243 | . 1 | 85 | 54 | 1 |
| Low | $2+00 \mathrm{~N}$ | 29 | 67 | . 1 | 26 | 8 | 1 |
| L6W | $1+50 \mathrm{~N}$ | 22 | 70 | . 1 | $\leq 1$ | 8 | 5 |
| L6W | $1+\mathrm{OON}$ | 32 | 108 | . 3 | 71 | 12 | 1 |
| L6W | $0+50 \mathrm{~N}$ | 28 | 57 | . 1 | 34 | 9 | 1 |
| L6W | $0+005$ | 30 | 53 | . 1 | 195 | 17 | 2 |
| L.6W | $0+505$ | 22 | 126 | . ${ }^{-}$ | 27 | 15 | 4 |
| L6W | $1+005$ | 66 | 140 | . 2 | 69 | 20 | 1 |
| LSW | $1+505$ | 21 | 181 | . 1 | 33 | 13 | 1 |
| L6W | $2+005$ | 27 | 175 | . 1 | 24 | 18 | 1 |
| L6W | $3+005$ | 38 | 113 | . 2 | 44 | 13 | 4 |
| LGW | $3+505$ | 51 | 154 | . 1 | 6.3 | 31 | 1 |
| LSW | 4+005 | 17 | 117 | . 1 | 24 | 21 | 1 |
| STD | C/AU-S | 57 | 129 | 6.8 | 71 | 29 | 51 |
| L6W | 4+505 | 19 | 113 | . 1 | 19 | 7 | 1 |
| LGW | $5+005$ | 26 | 125 | . 1 | 52 | 16 | 1 |
| LGW | $5+255$ | 21 | 121 | . 1 | 42 | 14 | 1 |
| L6W | $5+505$ | 15 | 118 | . 1 | 25 | 13 | 2 |
| L5W | $1+50 \mathrm{~N}$ | 35 | 69 | . 1 | 24 | 9 | 5 |
| LSW | $1+25 \mathrm{~N}$ | 19 | 214 | . 1 | 24 | 10 | 1 |
| LSW | $1+10 \mathrm{~N}$ | 36 | 79 | . 1 | 28 | 9 | 1 |
| L.5W | $1+00 \mathrm{~N}$ | 18 | 109 | . 2 | 28 | 9 | 1 |
| LSW | $0+75 N$ | 17 | 139 | . 1 | 27 | 11 | 1 |
| LSW | $0+50 \mathrm{~N}$ | 10 | 91 | . 1 | 15 | 6 | 2 |
| L5W | $0+25 \mathrm{~N}$ | 28 | 70 | . 2 | 23 | 9 | 1 |
| LSW | $0+005$ | 15 | 14.3 | . 1 | 31 | 10 | 1 |
| L5W | $0+505$ | 29 | 115 | . 1 | 48 | 10 | 1 |
| LธW | $1+005$ | 29 | 119 | . 2 | 72 | 13 | 4 |
| L5W | $1+505$ | 26 | 149 | . 2 | 38 | 16 | 1 |
| LSW | $2+005$ | 26 | 88 | . 1 | 29 | 10 | 1 |
| L5W | $2+505$ | 16 | 88 | . 1 | 18 | 8 | 1 |

gTRATO GEOLOGICAL FFOJECT - ROJOL FILE \# 87-1613 Fage o

| SAMF'LE\# | Cu | ZN | AG | NI | CO | AU* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PFM | PFM | FFM | PFH | PPM | FPE |
| L5W 3+00S | 6 | 54 | . 1 | 6 | 2 | 1 |
| LSW 3+50S | 11 | 105 | . 3 | 28 | 8 | 10 |
| L5W 4+00s | 25 | 148 | . 1 | 34 | 19 | 1 |
| LSW 4+50S | 32 | 99 | . 1 | 36 | 11 | 1 |
| LSW 4+75S | 17 | 101 | . 2 | 12 | 7 | 3 |
| L5W 5+25s | 14 | 121 | . 1 | 15 | 6 | 1 |
| L5W 5+50S | 7 | 85 | . 1 | 12 | 8 | 1 |
| L4+50W 0+62.5N | 34 | 91. | . 1 | 25 | 9 | 1 |
| L4+50W O+50N | 21 | 111 | . 1 | 21 | 8 | 1 |
| L4+50W 0+37.5N | 9 | 82 | . 1 | 13 | 6 | 1 |
| L4+50W 0+25N | 12 | 42 | . 2 | 10 | 4 | 1 |
| L4+50W O+12. 5 N | 16 | 95 | . 2 | 22 | 9 | 1 |
| L4+50W O+OON | 26 | 132 | . 1 | 30 | 10 | 1 |
| StD C/AU-S | 58 | 134 | 7.1 | 72 | 29 | 50 |
| L4+50W O+OON NEAK OUT. | 28 | 75 | . 1 | 21 | 8 | 1 |
| L4+50W 0+12.5S | 33 | 72 | . 1 | 23 | 9 | 1 |
| L4+50W 0+25s | 35 | 92 | . 1 | 31 | 11 | 1 |
| L.4+50W 0+37.5s | 20 | 56 | . 1 | 19 | 9 | 1 |
| L4+50W 0+505 | 14 | 91 | . 1 | 29 | 10 | 1 |
| L4+50W 0+62.55 | 33 | 172 | . 1 | 128 | 16 | 1 |
| L4+50W 0+755 | 34 | 192 | . 1 | 114 | 16 | 1 |
| L4W 2+OON | 26 | 51 | . 1 | 19 | 7 | 2 |
| L4W 1+50N | 29 | 84 | . 2 | 34 | 9 | 1 |
| L4W 1+OON | 9 | 6.3 | . 1 | 10 | 4 | 1 |
| L4W O+50N | 29 | 127 | . 1 | 18 | 8 | 4 |
| L4W 0+00s | 17 | 70 | . 1 | 26 | 10 | 1 |
| L4W O+50S | 26 | 79 | . 1 | 29 | 10 | 1 |
| L4W 1+OOS | 42 | 207 | . 1 | 53 | 12 | 1 |
| L4W 1+50S | 19 | 119 | . 2 | 27 | 9 | 2 |
| L4W 2+OOS | 19 | 256 | . 2 | 14 | 11 | 1 |
| L4W 2+505 | 21 | 150 | - 1 | 76 | 12 | 1 |
| L4W 3+00S | 7 | 125 | . 1 | 16 | 5 | 1 |
| L4W 3+50S | 24 | 94 | . 2 | 33 | 8 | 1 |
| L4W 4+50s | 15 | 141 | . 1 | 31 | 10 | 2 |
| L4W 4+75S | 11 | 14.5 | - 1 | 34 | 17 | 1 |
| L4W 5+00s | 36 | 59 | . 1 | 16 | 7 | 1 |
| L4W 5+50S | 21 | 69 | 1 | 20 | 7 | 1 |


| SAMF'LE\# |  | Cu | ZN | AG | NI | CO | AU* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FFM | FFM | FFM | FFM | FFM | FFE |
| L4W | $5+755$ | 27 | 66 | . 1 | 20 | 7 | 5 |
| L4W | 6+005 | 23 | 83 | . 1 | 17 | 6 | 1 |
| LSW | $2+00 \mathrm{~N}$ | 16 | 83 | . 1 | 20 | 8 | 1 |
| L.3W | $1+50 \mathrm{~N}$ | 24 | 75 | . 1 | 24 | 8 | 1 |
| L.3W | $1+6 \mathrm{ON}$ | 29 | 89 | . 1 | 21 | 6 | 3 |
| LSW | 9+50N | 13 | 100 | . 2 | 15 | 6 | 1. |
| L_3W | O+00s | 13 | 96 | . 2 | 12 | 6 | 1 |
| LSW | $1+005$ | 16 | 75 | . 1 | 18 | 10 | 1 |
| L.3W | $1+505$ | 11 | 88 | . 1 | 91 | 8 | 1. |
| L3W | $2+005$ | 19 | 119 | . 1 | 59 | 16 | 1 |
| L.SW | $2+505$ | 12 | 109 | . 3 | 28 | 8 | 1 |
| L.3W | $3+005$ | 18 | 213 | . 1 | 34 | 18 | 1 |
| LSW | $3+505$ | S1 | 238 | . 1 | 178 | 24 | 1 |
| LSW | 6+00s | 12 | 115 | . 1 | 23 | 9 | 1 |
| L3W | $6+505$ | 17 | 67 | . 1 | 17 | 6 | 2 |
| LSW | 7+00s | 20 | 116 | . 1 | 21 | 8 | 1 |
| L.3W | $7+505$ | 20 | 115 | . 1 | 24 | 9 | 1 |
| L3W | 8+50s | 10 | 108 | . 1 | 29 | 9 | 1 |
| LSW | 9+00s | 15 | 93 | . 1 | 3.5 | 9 | 1 |
| L.3W | $9+505$ | 27 | 78 | . 1 | 31 | 9 | 1 |
| L3W | 10+00s | 29 | 97 | . 3 | 31 | 9 | 3 |
| L.3W | $10+505$ | 16 | 86 | . 1 | 30 | 9 | 1 |
| L.3W | $11+005$ | 7 | 151 | . 1 | 22 | 6 | 1 |
| LJW | $11+505$ | 20 | 97 | . 1 | 45 | 11 | 1 |
| L3W | 12+005 | 21 | 99 | . 1 | 54 | 10 | 2 |
| L.3W | $12+505$ | 58 | 198 | . 1 | 160 | 57 | 1 |
| LSW | $13+005$ | 28 | 92 | . 2 | 37 | 10 | 1 |
| L.3W | $13+505$ | 18 | 113 | . 1 | 59 | 10 | 1 |
| LふW | $14+005$ | 37 | 94 | . 1 | 153 | 27 | 1 |
| LSW | $14+505$ | 123 | 28 | . 5 | 23 | 3 | , |
| L.3W | 15+005 | 34 | 76 | . 3 | 51 | 12 | 1 |
| L.3W | $15+505$ | 13 | 126 | . 1 | 26 | 7 | 2 |
| L 3 W | 16+005 | 1.4 | 63 | . 1 | 43 | 1.1 | 1 |
| LSW | $16+505$ | 12 | 107 | . 1 | 32 | 8 | 1 |
| L.3W | $17+005$ | 13 | 131 | . 1 | 31 | 8 | 1 |
| L.3W | 17+505 | 45 | 114 | . 1 | 39 | 18 | 1 |
| STD | C/AU-S | 59 | 135 | 7.0 | 70 | 29 | 47 |


| STRATO GEOLOGICAL FFiOJECT - ROJOL FILE \# 87-1613 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMFLE\# |  | Cu | ZN | AG | NI | CO | AU* |
|  |  | FPM | FFM | FFM | FFH | FFMM | FPE |
| L2W | $2+00 \mathrm{~N}$ | 9 | 92 | . 3 | 15 | 7 | 1 |
| L2W | $1+50 \mathrm{~N}$ | 25 | 98 | . 5 | 21 | 8 | 1 |
| L2W | $1+00 \mathrm{~N}$ | 24 | 112 | . 3 | 30 | 11 | 2 |
| L2W | $0+50 \mathrm{~N}$ | 19 | $10 \%$ | . 2 | 19 | 6 | 3 |
| L2W | $0+005$ | 16 | 98 | . 1 | 22 | 8 | 1 |
| L2W | $0+505$ | 20 | 174 | . 2 | 54 | 12 | 2 |
| L2W | $1+005$ | 9 | 76 | . 1 | 14 | 4 | 102 |
| L2W | $1+505$ | 13 | 75 | . 1 | 9 | 5 | 2 |
| L2W | $2+005$ | 18 | 71 | . 3 | 20 | 5 | 1 |
| L2W | $3+005$ | 18 | 100 | . 1 | 23 | 6 | $\leq$ |
| L2W | $3+505$ | 9 | 68 | . 1 | 12 | 10 | 1 |
| L2W | $4+005$ | 18 | 164 | . 2 | 52 | 14 | 5 |
| LこW | 4+505 | 7 | 44 | .2 | 7 | 2 | 5 |
| L2W | $5+005$ | 12 | 82 | . 2 | 42 | 15 | 2 |
| LiW | $2+00 \mathrm{~N}$ | 68 | 137 | . 1 | 79 | 15 | 1 |
| L1W | $1+50 \mathrm{~N}$ | 45 | 76 | . 1 | 45 | 25 | 1 |
| L.W | $1+00 \mathrm{~N}$ | 22 | 127 | . 5 | 26 | 10 | $\pm$ |
| LIW | $0+50 \mathrm{~N}$ | 13 | 78 | . 1 | 14 | 6 | 1 |
| STD | C/AU-S | 57 | 132 | 6.9 | 69 | 29 | 52 |
| L1W | O+00S | 11 | 85 | . 2 | 15 | 5 | 1 |
| L1W | $0+505$ | 9 | 54 | . 1 | 8 | 4 | 1 |
| L1W | $1+005$ | 8 | 52 | . 2 | 8 | 5 | 1 |
| L1W | $1+505$ | 12 | 57 | . 2 | 12 | 5 | 1 |
| L1W | $2+005$ | 29 | 106 | . 1 | 34 | 9 | 2 |
| L1W | $2+505$ | $\pm 2$ | 82 | . 1 | 26 | 8 | 1 |
| L1W | $3+005$ | 16 | 54 | . 2 | 12 | 4 | 4 |
| L1W | $3+505$ | 48 | 101 | . 1 | 21 | 12 | 2 |
| L1W | $4+005$ | 12 | 98 | . 1 | 19 | 8 | 1 |
| L1W | 4+50S | 22 | 106 | . 1 | 32 | 8 | 1 |
| L1W | $5+005$ | 19 | 85 | . 1 | 47 | 11 | 1 |
| L1W | $5+505$ | 11 | 76 | . 1 | 45 | 36 | 1 |
| L1W | $6+005$ | 15 | 111 | . 1 | 78 | 12 | 2 |
| Low | $2+00 \mathrm{~N}$ | 42 | 88 | . 1 | 65 | 15 | 2 |
| Low | $1+0 \mathrm{ON}$ | 19 | 58 | . 2 | 25 | 7 | 1 |
| LOW | $0+50 \mathrm{~N}$ | 29 | 192 | . 2 | 44 | 14 | 1 |
| Low | $0+005$ | 21 | 138 | . 1 | 31 | 9 | 2 |
| LOW | $0+505$ | 46 | 83 | . 8 | 47 | 11 | 1 |


|  | STRATO GEOLOGICAL | FROJECT | - FOJ |  | \# | $-1613$ | Fage 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMFLE\# |  | CU | ZN | AG | NI | CO | AU* |
|  |  | FFM | FPM | FFM | FFM | PFM | FFE |
| LOW | $1+005$ | 41 | 100 | . 5 | 25 | 12 | 1 |
| Low | $1+505$ | 15 | 119 | . 4 | 21 | 7 | 1 |
| Low | $2+005$ | 18 | 83 | . 1 | 22 | 7 | 1 |
| Low | $2+505$ | 23 | 64 | . 1 | 21 | 6 | . 1 |
| Low | $3+005$ | 16 | 47 | . 2 | 14 | 4 | 1 |
| LOW | $3+505$ | 26 | 103 | . 2 | 26 | 7 | 1 |
| Low | $4+005$ | 8 | 49 | . 2 | 10 | 3 | 2 |
| Low | $4+505$ | 27 | 98 | . 2 | 22 | 8 | 2 |
| Low | $5+505$ | 18 | 108 | . 1 | 23 | 8 | 1 |
| LOW | $6+005$ | 22 | 262 | . 1 | 53 | 19 | 1 |
| LOW | $6+505$ | 30 | 262 | . 1 | 59 | 21 | 1 |
| Low | $7+005$ | 23 | 63 | . 1 | 46 | 10 | 1 |
| Low | $7+505$ | 20 | 66 | . 1 | 16 | 5 | 1 |
| Low | $8+005$ | 16 | 97 | . 1 | 30 | 9 | 1 |
| LOW | $8+505$ | 13 | 99 | . 1 | 19 | 12 | 1 |
| Low | $8+755$ | 12 | 84 | . 1 | 16 | 6 | 1 |
| LOW | $9+255$ | 16 | 74 | . 1 | 19 | 8 | 1 |
| STD | C/AU-S | 59 | 132 | 7.2 | 69 | 29 | 47 |
| LOW | $9+505$ | 9 | 100 | . 1 | 12 | 5 | 1 |
| LOW | $9+755$ | 15 | 89 | . 1 | 16 | 5 | 1 |
| LOW | $10+005$ | 11 | 71 | . 2 | 7 | 4 | 1 |
| LOW | $10+255$ | 19 | 76 | . 1 | 18 | 6 | 1 |
| LOW | $10+505$ | 36 | 135 | . 3 | 58 | 12 | 1 |
| LOW | $11+005$ | 13 | 86 | . 1 | 18 | 6 | 1 |
| LOW | $11+505$ | 13 | 110 | . 1 | 16 | 7 | 1 |
| LOW | $12+005$ | 10 | 53 | . 1 | 6 | 4 | 2 |
| LOW | $12+505$ | 10 | 87 | . 1 | 21 | 7 | 1 |
| TFEN | NCH AT SHOWING \#2 | 26 | 56 | .2 | 202 | 8 | 1 |
| TFEN | NCH WALL SHOWING \#2 | 15 | 60 | . 1 | 1393 | 66 | 1 |

STRATO GEOLQGICAL PROJECT - FOJOL
FILE \# 87-1613
Fage 10

| SAMPLE\# Silf. | $\begin{aligned} & \mathrm{CU} \\ & \mathrm{FFM} \end{aligned}$ | $\begin{array}{r} Z N \\ \text { FFM } \end{array}$ | $\begin{array}{r} A G \\ F F M \end{array}$ | $\begin{array}{r} \text { NI } \\ \text { FFIM } \end{array}$ | $\begin{array}{r} \mathrm{CO} \\ \mathrm{FFM} \end{array}$ | $\begin{aligned} & A(J * \\ & \text { FFF } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L9W 0+55S \#1 | 44 | 78 | . 1 | 147 | 17 | 3 |
| L9W 2+75S \#2 | 14 | 49 | . 2 | 30 | 8 | 1 |
| L9W 6+80S \#S | 36 | 74 | . 6 | 48 | 12 | 2 |
| L10W 3+00S \#4 | 35 | 75 | . 5 | 32 | 19 | 1 |
| L10W 1+00S \#5 | 26 | 64 | . 2 | 105 | 12 | 1 |
| L4+00W 1+305 \#6 | 33 | 103 | 1.4 | 55 | 12 | 1 |
| L4+50W 0+25N \#7 | 20 | 69 | . 1 | 19 | 8 | 1 |
| L4+50W O+5ON \#8 | 54 | 73 | . 2 | 31 | 9 | 2 |
| L4+50W 0+25s \#9 | 24 | 72 | . 1 | 27 | 8 | 3 |
| LSW 0+10S \#10 | 14 | 77 | . 2 | 22 | 8 | E |
| LSW 0+25S \#11 | 25 | 79 | . 1 | 28 | 8 | 5 |
| \#12 | 38 | 78 | . 6 | 3 | 10 | § |
| TF 191 \#13 | 22 | 45 | . 1 | 13 | 6 | I |
| L10+10W O+00 \#14 | 28 | 73 | - 1 | 203 | 16 | 1 |
| L10+85W \#15 | 24 | 70 | . 2 | 35 | 8 | S |
| L11W 2+00S \#16 | 25 | 76 | . 1 | 147 | 14 | 2 |
| L11W 3+255 \#17 | 26 | 88 | . 4 | 25 | 10 | 6 |
| L11W 5+55S \#18 | 28 | 82 | - 1 | 29 | 9 | 5 |
| L11W 8+755 \#19 | 23 | 141 | . 1 | 28 | 15 | 3 |
| L11+25W 2N \#20 | 30 | 153 | . 1 | 54 | 12 | 2 |
| L11W O+70N \#21 | 20 | 88 | . 1 | 3 S | 8 | 14 |
| L1OW O+10N \#22 | 79 | 132 | . 5 | 142 | 17 | 10 |
| L10W O+20N \#2S | 29 | 85 | . 1 | 72 | 11 | 8 |
| L1OW O+6ON \#24 | 25 | 71 | . 1 | 32 | 7 | 3 |
| L9W 1+70N \#25 | 22 | 59 | . 1 | 24 | 7 | 4 |
| L9W O+70N \#26 | 71 | 92 | . 1 | 179 | 17 | 1 |
| L8W O+85N \#27 | 45 | 85 | . 2 | 174 | 17 | 1 |
| L8W 2+OON \#28 | 34 | 72 | . 2 | 44 | 9 | 1 |
| L2W 1+OON \#29 | 21 | 65 | . 1 | 35 | 7 | 2 |
| LOW O+20 \#30 | 49 | 90 | . 3 | 39 | 13 | 1 |
| LOW 0+55S \#3. 1 | 47 | 96 | . 1 | 72 | 16 | 1 |
| LOW 1+OOS \# 2 | 43 | 102 | . 5 | 29 | 12 | 1 |
| LOW 3+805 \#SE | 21 | 48 | . 1 | 16 | $\pm$ | 1 |
| LOW 4+OOS \#. 4 | 17 | 109 | . 4 | 15 | S | 2 |
| LOW 4+75S \#5S | 22 | 43 | . 1 | 18 | 6 | 1 |
| LOW 7+05S \#36 | 18 | 74 | . 1 | 38 | 7 | 1 |
| STD C/AU-S | 60 | 137 | 7.0 | 71 | 29 | 47 |


| STRATO SAMFLE\# |  |  | FROJECT - ROJOL |  |  |  | 87-1613 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | CU | ZN | $A G$ |  | CO | AU* |
|  |  |  | FFM | FFM | F'FM |  | PPM | PF'E |
| LOW | $10+505$ | \# 37 | 68 | 122 | . 7 |  | 17 | 5 |
| Low | $11+30 \mathrm{~S}$ | \#39 | 28 | 77 | . 1 |  | 9 | 2 |
| LOW | $0+55 \mathrm{~N}$ | \#こ9 | 43 | 89 | . 3 |  | 10 | 1 |
| LOW | $1+75 N$ | \#40 | 58 | 97 | . 4 |  | 12 | 1 |
| L6W | $0+255$ | \#41 | 22 | 72 | . 1 |  | 8 | 1 |
| L6W | $0+25 N$ | \#42 | 27 | 75 | . 1 |  | 8 | 2 |
| L6W | $1+1 \mathrm{ON}$ | \#4. | 23 | 60 | . 1 |  | 8 | 2 |
| STD | C/AU-S |  | 57 | 130 | 6.9 |  | 27 | 53 |
| LIW | $2+355$ | \#44 | 17 | 100 | . 6 |  | ड4 | 1 |
| L1W | $3+005$ | \#45 | 8 | 31 | . 1 |  | 2 | 1 |
| LIW | $1+25 N$ | \#46 | 43 | 99 | . 1 |  | 12 | 2 |
| \#47 |  |  | 42 | 92 | . 1 |  | 13 | 1 |
| \#48 |  |  | 35 | 67 | . 1 |  | 11 | 1 |
| \#49 |  |  | 5.5 | 91 | . 4 |  | 17 | 2 |
| \#50 |  |  | 58 | 92 | . 3 |  | 19 | 2 |
| \#与1 |  |  | 59 | 73 | . 1 |  | 12 | 5 |
| L2W | 0+255 | \#52 | 24 | 86 | . 2 |  | 9 | 1 |
| L2W | $1+3 \mathrm{ON}$ | \#5. | 39 | 74 | . 1 |  | 11 | 1 |
| L2W | $2+00 \mathrm{~N}$ | \#54 | 32 | 73 | . 1 |  | 10 | 1 |
| \#55 |  |  | 16 | 58 | . 1 |  | 8 | 13 |
| \#56 |  |  | 43 | 54 | . 5 |  | 9 | 1 |
| LJW | $1+70 \mathrm{~N}$ | \#57 | 27 | 58 | . 1 |  | 7 | 2 |
| L4W | $1+50 \mathrm{~N}$ | \#58 | 42 | 66 | . 1 |  | 10 | 1 |
| TEXA | AS BAR | \#59 | 46 | 81 | . 1 |  | 15 | 1 |
| LSW | $9+405$ |  | 31 | 92 | . 2 |  | 10 | 1 |
| SS-1 |  |  | 20 | 60 | . 1 |  | 11 | 1 |
| SS-2 |  |  | 18 | 58 | . 1 |  | 6 | 7 |
| 5S-3 |  |  | 18 | 58 | . 1 |  | 6 | 1 |
| SS-4 |  |  | 18 | 53 | . 1 |  | 7 | 2 |
| SS-5 |  |  | 19 | 52 | . 1 |  | 6 | 1 |
| 5s-6 |  |  | 19 | 51 | - 1 |  | 7 | 1 |


| SAMFLE\# | CU | ZN | $A G$ | NI | CO | AU* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PFM | FFM | FF'M | FFM | FPM | FFEB |
| FS-87-1 | 2 | 6 | . 1 | 1 | 1 | 1 |
| FS-87-2 | 5 | 48 | . 1 | 4 | 1 | 1 |
| FS-87-S | 23 | 38 | . ${ }^{\text {a }}$ | 8 | 7 | 1 |
| RS-87-4 | 1 | 17 | . 2 | 72 | 3 | 3 |
| FS-87-5 | 2 | 2 | . 1 | 10 | 1 | 1 |
| $\mathrm{RS}-16-1-87$ | $\bigcirc 98$ | 75 | . 1 | 3466 | 109 | 1 |
| FS-17-1-87 | 13 | 21 | . 2 | 49 | S | 2 |
| RS-18-1-87 | 2 | 18 | . 1 | 3 | 1 | 2 |
| FS-19-1-87 | 7 | 49 | . 1 | 5 | 3 | 1 |
| $\mathrm{RS}-20-1-87$ | 4 | 15 | . 1 | 2 | 1 | 1 |
| FS-21-1-87 | 8 | 5 | . 1 | 2 | 1 | 2 |
| FS-22-1-87 | 8 | 27 | . 1 | 1921 | 73 | 8 |
| FiS-27-1-87 | 51 | 17 | . 1 | 8 | 2 | 43 |
| FS-29-1-87 | 12 | 18 | .1 | 11 | 2 | 6 |
| F'S-16-2-87 | 1189 | 81 | . 3 | 4123 | 130 | 4 |
| RS-19-2-87 | 10 | 22 | . 1 | 42 | 4 | 1 |
| FS-21-2-87 | 2 | 2 | . 1 | 3 | 1 | 1 |
| FS-27-2-87 | 7 | S | . 1 | 13 | 1 | 1 |
| FSS-16-5-87 | 9 | 10 | . 1 | 31 | 2 | 2 |
| RS-17-s-87 | 15 | 58 | . 1 | 10 | 5 | 1 |
| 7w 4+00s | 67 | 56 | . 3 | 7 | 2 | 1 |
| 7W 6+00s | 40 | 129 | . 2 | 16 | 16 | 1 |
| STD C/AU-F | 60 | 1.38 | 7.2 | 71 | 29 | 510 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED JUNE 81987 DATE REPORTS MAILED $q u$ ace 7 ASSAY CERTIFICATE

SAMPLE TYPE : BLACK SAND TOTAL AUII \& FI: BY FIRE ASSAY


| RS 87-1 | quartz: white with minor biotite and chlorite and traces of iron stain. |
| :---: | :---: |
| 87-2 | gneiss: qtz. - plag. feld. - biot. with abundant Fe staining and well sheared. |
| 87-3 | Fe-altered gneiss: qtz - plag (albite) - biot. with abundant Fe stain along fractures and in gneissic planes. |
| 87-4 | shear zone in qtz. - feld. porph. - biot. gneiss: green (chlorite, actinolite) $w 5 \% \mathrm{qtz}$ and $5 \%$ biot. also. |
| 87-5 | quartz from float in trench of No. 2 Showing: milky white brittle with minor biot. \& chl. |
| 7W-4S | gneiss: qtz - plag - biot near airborne EM. |
| 7W-6S | gneiss: as above |
| 16-1-87 | mafic rx: dark, dense, competent $w$ traces of $N i$ and slickensides - Norite ?, exposed by trenching at No. 1A Showing. |
| 16-2-87 | mafic rx: as above |
| 16-3-87 | quartz: white, milky, nothing visible, expose by trenching at No. 1A Showing. |
| 17-1-87 | orthogneiss: qtz - fold - biot some Fe staining, foliated, massive o/c. |
| 17-2-87 | orthogneiss: as above |
| 17-3-87 | ```paragneiss: green, chlorite rich, foliated, banded.``` |
| 18-1-87 | orthogneiss: qtz \& feld. phenocrysts in fn. grn. matrix, foliated. |
| 19-1-87 | orthogneiss: qtz - plag - bio, coarse qtz and plag., follated, near airborne EM. |


| 19-2-87 | quartz stringer in paragneiss: up to 2 " wide showing chevron folds, white. |
| :---: | :---: |
| 20-1-87 | ```quartz rich zone in paragneiss in Gate Creek Canyon.``` |
| 21-1-87 | quartz rich zone in orthogneiss associated with jointing; Fe staining with minor biot. |
| 21-2-87 | quartz in paragneiss: white, competent. |
| 22-1-87 | ```mafic rock: black, competent, subangular float, crystals of actinolite ?, found exposed in No. Showing trench - norite?``` |
| 27-1-87 | orthogneiss: qtz - plag - biot., Fe staining. |
| 27-2-87 | quartz in orthogneiss: wht w green specks chlorite. |
| 29-1-87 | quartz bleb in orthogneiss: competent, from falls area on Texas Bar Creek. |

## APPENDIX II:

Histogramsfor Soil Samples

No. 1 Showing Area

Eu
(FFM)


| 415 Samples | Maximum: | 123 |  | Mean: | 26 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Minimum: | 6 | Standard | ation | 15 |

## 

415 Samples

| Maximum: | 374 |
| :--- | ---: |
| Minimum: | 28 |

Mean: 106
Minimum: 28 Standard Deviation: 46



415 Samples |  |  |  |
| ---: | ---: | ---: |
|  | Maximum: | 1393 |
|  | Minimum: | 6 |$\quad$ Standard Deviation: $\quad 73$




415 Samples
Maximum:
66
Mean:
Minimum: $\quad 2$
Standard Deviation:
11

## 



Maximum:
1.4
0.1

Standard Deviation:
0.2

Minimum:
0.1


Als*
(PFE)


415 Samples |  | Maximum: | 102 | Mean: | 2 |
| ---: | :---: | ---: | ---: | ---: |
|  | Minimum: | 1 | Standard Deviation: | 6 |

General Area of No. 2 and No. 3 Showings

Eu
(FFM)


100 Samples

| Maximum: | 370 |
| :--- | ---: |
| Minimum: | 6 |



100 Samples |  |  |  |  |
| ---: | :--- | ---: | :--- |
|  | Maximum: | 285 |  |
|  | 39 |  |  |$\quad$ Standard Deviation: $\quad 47$



100 Samples | Maximum: | 0.4 |  |
| :--- | :--- | :--- |
|  | Minimum: | 0.1 |$\quad$ Mean: $\quad 0.1$

STFATG GEGIGOG (BJ—1


100 Samples
Maximum:
954
Mean:
80
Minimum: 14
Standard Deviation:
126

STFPATG GEDIGE (BT—1G1E


Co
(PPM)


100 Samples
Maximum:
45
Mean:
11 Minimum:

6
Standard Deviation:

```
STFATG GEOLGGOS
```

ALI*
( $\mathrm{FF} \cdot \mathrm{B}$ )


[^0]Maximum:
185
Mean:
4
Minimum: $\quad 1$
Standard Deviation:
19

## TIME/COST DISTRIBUTION

A mineral exploration program, comprised of Geological mapping, soils geochemistry, and magnetic surveys was carried out by Strato Geological Engineering Ltd. during the period of May 7 to June 4, 1987. A listing of personnel and distribution of costs is as follows:

## Personnel

```
P. Bartier, B.Sc.
A. Hunter, B.A.SC.
B. Fishel
R.J. Englund, B.Sc.
Geologist
Geophysicist
Field Assistant
Project Geophysicist
```


## Cost Distribution

Field crew - wages (58 man days) $\$ 10,875.00$
Consulting - R. Englund (incl.
4WD Truck, rm., bd., etc.) - 4 days $1,600.00$
Room \& Board - 58 md @ 50/d $2,900.00$
Transportation - 4WD Truck
(incl. milage, gas, oil, etc.) $2,800.00$
JD-4 Cat - road repairs \& trenching

- 56 hrs @ 40/hr (incl. materials \&
labour for bridge repairs) $2,536.00$
Sample analysis for $\mathrm{Cu}, \mathrm{Zn}, \mathrm{Ag}, \mathrm{Ni}, \mathrm{Co}$, Au - 515 Soils, 22 Rock geochem., \& 3 assays for Au \& Pt .

5,465.45
Data processing, drafting, reproduction, copying, etc.
720.00

Geological/Geochemical Report
$1,800.00$

Contingencies - shipping, field supplies, L.D. telephone, office expense, etc.
115.00

Signed

\$28,811.45







[^0]:    100 Samples

