CANEX PLACER LIMITED EXPLORATION DIVISION


THE WATSON BAR CREEK GROUP OF CLAIMS
( $W_{1}-W_{12}$ INCLUSIVE AND LOST CHANCE)
CLINTON MINING DIVISION $51^{\circ} 7^{\prime} \mathrm{N} \quad 122^{\circ} 15^{\prime} \mathrm{W}$
OWNED BY
C.E. ROBERTSON AND H.V. WARREN

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BY
J.M. KOWALCHLKK
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SUPERVISED BY A.D. DRUMMOND, PH.D., P. ENG. (B.C.)
JUNE - OCTOBER 1973

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The following is a breakdown of expenses incurred for the work done on the Watson Bar Creek property between June 1973 and October 1973.

## GEOCHEMICAL SURVEY

|  | Dave Huston - 5 days, e $\$ 40$. a day 800 - 1030 West Georgia Street Vancouver 5, British Columbia | \$ | 200.00 |
| :---: | :---: | :---: | :---: |
|  | Dave McCashin - 5 days, @ $\$ 30$. per day 800 - 1030 West Georgia Street Vancouver 5, British Columbia | \$ | 150.00 |
|  | Mike Chapen - 5 days, $\$ 30$. per day 800 - 1030 West Georgia Street Vancouver 5, British Columbia | \$ | 150.00 |
|  | Ken Wong - 5 days, @ $\$ 30$. per day 800 - 1030 West Georgia Street Vancouver 5, British Columbia | \$ | 150.00 |
|  | Henry Leitch - 5 days, @ $\$ 30$. per day 800 - 1030 West Georgia Street Vancouver 5, British Columbia | \$ | 150.00 |
|  | Jack Miller - 5 days, @ \$30. per day 800-1030 West Georgia Street Vancouver 5, British Columbia | \$ | 150.00 |
|  | August $23-29$ <br> Bruce Macdonald - 7 days, $\$ 30$. per day <br> 800 - 1030 West Georgia Street <br> Vancouver 5, British Columbia | \$ | 210.00 |
|  | Brian Gibbard - 7 days, @ \$30. per dav 800 - 1030 West Georgia Street Vancouver 5, British Columbia | \$ | 210.00 |
| Camp Costs |  |  |  |
| Geology <br> John Kowalchuk <br> 800 - 1030 West Georgia Street <br> Vancouver 5, British Columbia |  |  |  |
|  | $\begin{aligned} & \text { June }-4 \text { days, } \$ \$ 50 \text { a day } \\ & \text { August }-5 \text { days, } \$ 50 \text {. a day } \\ & \text { October }-9 \text { days, } \$ \$ 50 . \text { a day } \end{aligned}$ | \$ | $\begin{aligned} & 200.00 \\ & 250.00 \\ & 450.00 \end{aligned}$ |

Trenching - October 14-22, 1973
Sampling - Mike Wise - 9 days, @ $\$ 40$. per day
$800-1030$ West Georgia Street
Vancouver 5, British Columbia
Assay Charges
Soil Samples - Drying and Sieving - $25 \$$ per sample Gold Analysis - $\$ 2.00$ per sample Arsenic Analysis - $\$ 2.00$ per sample Antimony Analysis - $\$ 2.00$ per sample Tellurium Analysis - $\$ 3.00$ per sample Mercury Analysis - $\$ 2.00$ per sample

In June 815 samples analysed for Au. As, $\mathrm{Sb}, \mathrm{Te}, \mathrm{Hg}$
@ $\$ 11.25$ per sample $\quad$.- $\$ 9,168.75$
In August 507 samples analysed for Au , As
© $\$ 4.25$ per sample $\$ 2,154.75$
$\begin{aligned} \text { Rock Samples - } & \text { crushing and pulverizing - } \$ 1.00 \text { per sample } & \\ & \text { gold assay - } \$ 3.00 \text { per sample } & \\ & 103 \text { samples - } \$ 4.00 & \$ 12.00\end{aligned}$
Draghting and Paper Work
10 per day - @ \$40. per day
$\$ \quad 400.00$
TOTAL
$\$ 15,205.50$



A Commissioner foktyking Affidavits witho Eri-
A Notary Public in and for the Province of Privis
Sub-mining Recordel

During parts of June and August of 1973, detailed soil sampling and mapping was done on the "Watson Bar Creek" group of claims and crown grants. In October of 1973, 3600 feet of trenching was done on the property to test geochem anomalies.

## TOPOGRAPHY, LOCATION AND ACCESS

The "Watson Bar Creek" property consists of 13 located claims $W_{1}-W_{12}$, the Lost Chance claim, and seven crown granted claims. Astonisher Lot 7979, Monitor Lot 7980, Chevalier Lot 7981, Ajax Lot 7982, Monty Lot 7983, Lot 8192, and the Sun Fraction 8199.

The property lies between elevations of $5,800^{\prime}-6,700^{\prime}$ and is primarily above tree line. Vegetation consists of alpine meadow, jackpine and spruce.

The property is located at latitude $51^{\circ} 7^{\prime}$ and longitude $122^{\circ} 15^{\prime}$ within NTS 92-0-1. The claims are situated at the headwaters of Stirrup Creek, a tributary of Watson Bar Creek which flows east into the Fraser River.

The area may be reached by road, a distance of 60 miles from Clinton, crossing the Fraser River at Big Bar Ferry.

## SURVEYING

A baseline was surveyed with a Brunton compass and nylon chain. Soil sample lines were run at right angles to the base line every 200' with sample stations marked every 100 ' along these lines.

## GEOCHEMICAL SURVEY

A) Sampling Method

Where possible, samples were taken in the "B" horizon, a rusty zone ranging from $6-15$ inches in depth. When necessary, samples were taken in the rocky "C" horizon. The southern part of the property had up to 10 feet of glacial overburden; however, the overburden was a basal till and should be a representative of local bedrock. The northern part of the property was covered with up to 3 feet of volcanic ash. In most cases it was possible to sample below the ash.

In June, 815 soil samples were taken over the southern part of the property. Snow conditions prevented sampling of the rest of the property at that time. These samples were analysed for gold, arsenic, tellurium, antimony and mercury. These other elements were analysed in an attempt to obtain a geochemical relationship with the gold in order to obtain a reliable target for further work. Arsenic was found to be a good marker for the anomalous gold areas.

In August, the rest of the grid was completed with these soils being analysed only for gold and arsenic. The total number of soil samples taken on the property was 1,322 samples.

## B) Assay Methods

Samples were dried on a hot air drier and then sifted in -80 mesh sieves.

Gold Procedure - Portions of the -80 mesh fraction were digested with concentrated hydro-bromic acid; thin gold was extracted with methyl isobutyl ketone and analysed with a Perkin-Elmer 403, atomic absorption spectrophotometer, using a wave length of $2438 \AA$.

Arsenic Procedure - Portions of the -80 mesh fraction were digested with a perchioric acid-sulphuric acid solution containing elemental sulphur. The arsenic is extracted with Benzine containing potassium iodide. It was analysed with a Perkin-Elmer 403, at a wave length of $1947{ }^{\circ}$.

Antimony Procedure - Portions of the -80 mesh fraction were digested with an hydrochioric acid solution and then the antimony was extracted with an N-trioctylphosphene oxide solution. It was analysed with a Perkin-E1mer 403 at a wave length of $2176 \AA$.

Tellurium Procedure - Portions of the -80 mesh fraction were digested with $a$ Solution of Aqua-Regia and Sulphuric acid. It was brought up to volume with hydrochioric acid and filtered. Selenium, copper and hypophosphorus acid were added. The precipitate was filtered in a milipore filter. The filtrate was washed with aqua-regia-sulphuric acid and dissolved in hydrochloric acid. The tellurium was then extracted into methyl isobotyl ketone. It was analysed with a Perkin-Elmer 403 set at a wave length of 2143 .

Mercury Procedure - Portions of the -80 mesh fraction were dissolved in diluted nitric acid and $2 \%$ hydrochloric acid. Stannous sulphate and hydroxylamine sulphate were added and this solution was analysed by a Perkin-Elmer 403 set at a wave length of $2536.5 \AA$.
C) Results

The analyses for $\mathrm{Au}, \mathrm{As}, \mathrm{Sb}, \mathrm{Te}, \mathrm{Hg}$ are plotted separately on the five $400^{\prime}=1^{\prime \prime}$ maps in the back pocket.

Gold - A contour was placed around all gold values over 0.1 ppm Au. There are four mator regions of anomalous gold straddling the ridge. These regions lie primarily between the lines $14+00 \mathrm{~N}$ and $22+00 \mathrm{~N}$ an area of 800 feet. Anomalous areas lie west of $20+00$ West; $17+00 \mathrm{~W}-9+00 \mathrm{~W}$; $7+00 \mathrm{~W}-9+00 \mathrm{~W} ; 9+00 \mathrm{E}-14+00 \mathrm{E}$. Within these areas; the values are erratic indicating possibly coarse gold.

Arsenic - Arsenic forms an anomalous region between $14+00 \mathrm{~N}$ to $22+00 \mathrm{~N}$ and forms anomalies within that region which correspond closely to the gold anomalies. There appears to be quite a good correlation between the arsenic and gold anomalies.

Antimony - The antinony forms four weakly anomalous zones south of the ridge corresponding with stibnite mineralization observed on the ridge. A very slight correlation with arsenic and gold was noted.

Tellurium - Tellurium forms some weak linear anomalies primarily along Stirrup Creek. There are no good correlations between it and

Tellurium (continued)
the gold geochem as was hoped.
Mercury - Mercury forms two anomalous zones in areas of known cinnabar mineralization. Another large linear zone corresponds with the end of the creek.

The gold and corresponding axsenic anomalies gave good targets for further exploration and were tested by trenching during the month of October. The Stibnite and Cinnabar mineralization have been noted to be too small and spotty to be of any economic interest.

## TRENCHING

Approximately 3,600 feet of trenching was done during the period of October 15 - October 22, 1973. The costs of the trenching have already been applied to the property. These trenches were mapped and sampled. A $400^{\prime}=1^{\prime \prime}$ scale map of the trench location is iocated in the back pocket. The geology of the trenches and the analyses were plotted on $100^{\circ}=1^{\prime \prime}$ scale maps and are located in the back pocket.

## GEOLOGY

A map of the geology is enclosed in the back pocket. Geological information was required from the trenches, road cuts and ditches located on the property. The rest of the property was primarily covered with overburden. Thus, contacts and map units are extrapolated over long distances.

The sediments consist of grey-green, fine-grained argillites overlain by green, medium to coarse-grained greywackes which are composed of feldspar, chert and shale fragments in a fine-grained arenaceous matrix, similar in composition to the argillite. Overlying the sandstones, possible unconformably, is a conclomerate containing sub-rounded to rounded boulders of granodiorite, volcanics, chert and quartz in an arenaceous matrix. The Cretaceous rocks have a regional NW-SE strike and are dipping between $10-50^{\circ} \mathrm{N}$.

The NW-SE ridge cutting throught the property is underlain by a large quartz-feldspar porphyry pluton which is capped by a roof pendant of sediments. The roof pendant appears thicker over the Southeast portion of the property. The intrusive varies in composition from acid quartzfeldspar porphyry in the east to a more dioritic rock in the west. In the east, the pluton is exposed primarily as dykes.

The pluton is very altered throughout its extent and very few unaltered samples of the rock were found. The alteration consists of intense kaolinization and carbonatization. A contact halo of kaolimized sandstones and argillites was formed within 10-20 feet of the intrusive contact with the sediments.

The altered intrusive is heavily mineralized with up to $2 \%$ disseminated pyrite in sections. The intrusive also contains disseminated galena, shalerite and stibnite. Along some shears just east of the monument massive stilnite and realgar is found. Along Stirrup Creek, small shears in the intrusive contain cinnabar and other sulphides. A background level of gold mineralization up to 0.05 ppm gold occurs in the intrusive. No free gold was found in thin section so just how the gold mineralization occurs is not known.

## CONCLUSIONS

There appears to be a definite relationship between the gold mineralization and the location of the intrusive in the trenches. Gold values are found either where the intrusive occurs or where the sandstone and shale have been altered by the intrusive. No free gold was found in the rocks; however, several sulphides including pyrite, galena, and chalcopyrite were found. The gold mineralization may occur within arsenopyrite which may occur, to cause part of the arsenic anomaly.

Regardiess of how it occurs, the gold appears to be of much too low a grade to be of economic interest. The best values observed were 0.04 oz . of gold over 50 feet. Most of the values were around 0.05 ppm gold.

The map area is underlain by an interesting altered and juiced up intrusive. High background gold levels in the intrusive would be sufficient to give the geochemical soil anomalies mentioned earlier; however, I believe that there is very little chance of economic mineralization in the area.

I, J.M. Kowalchuk with business address in Vancouver, British Columbia and residential address in North Vancouver, British Columbia hereby certify that:

1. I am a geologist
2. I am a graduate of McMaster University, Hamilton, Ontario with a B. Sc in 1970.
3. From 1970 until 1973 I have been engaged in mineral exploration in British Columbia, Yukon Territory and North West Territory.
4. I personally participated in the field work and have assessed and interpreted all the data resulting from this work.

Respectfully submitted


I, A.D. Drummond. with business address at $800-1030$ West Georgia Street, Vancouver, British Columbia, do hereby certify that:

1. I am a professional engineer registered in the Province of British Columbia.
2. I have examined the report by J.M. Kowalchuk, on work done in 1973, on the Watson Bar Creek group of claims, $51^{\circ} 07^{\prime} \mathrm{N}$ and $122^{\circ} 15^{\prime} \mathrm{W}$. in the Clinton Mining District.
3. To the best of my knowledge the interpretation of data and expenditure claimed for the performance of the work is correct.

Respectfully submitted,

Vancouver, B.C.
27 November, 1973


## WATSON BAR CREEK

| CLAIM | Name | TAG No. | RECORD No. | $\begin{aligned} & \text { RECORD } \\ & \text { YEAR } \end{aligned}$ | $\begin{aligned} & \text { GROUP } \\ & \text { NAME } \end{aligned}$ | $\begin{aligned} & \text { GROUP. } \\ & \text { DATE } \end{aligned}$ | ANNIVERSARY MONTH \& DAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W | 1 | 914943-M | 23370 | 1970 | Watson. Bar | 5-11-73 | Nov. 4 |
|  | 2 | 914944-M | 23371 | " | " | " | " |
|  | 3 | 914945-M | 23372 | " | " | " | " |
|  | 4 | 914946-M | 23373 | " | " | " | " |
|  | 5 | 914947 -M | 23374 | " | " | " | " |
|  | 6 | 914948-M | 23375 | * | " | " | " |
|  | 7 | 914949-M | 23376 | " | " | " | " |
|  | 8 | 914950-M | 23377 | " | " | " | " |
|  | 9 | 914951 | 23378 | " | " | " | " |
|  | 10 | 914952 | 23379 | " | " | " | " |
|  | 11 | 914953 | 23380 | " | " | " | " |
|  | 12 | 914954 | 23381 | " | " | " | " |
| LAST | CHANCE | 557266 | 10538 | 1965 | Watison Bax | 5-11-73 |  |











