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J.C. STEPHEN EXPLORATIONS LTD.

WEEKLY CAMP REPORT

PROJECT Spruce-Wilson Recon. Prospecting Area (S-W)

CAMP NAME Charlie - Prior Maasan Silins, Lawton

NTS MAP SHEET 104N

DATES June 18 - 25, 1981

AIR PHOTOS BC5677 #33,35
BC 5676 #215,277,279

LAT. & LONG. _____

SILT SAMPLE SERIES 81-SW-Z-301-320, 101-116, 118-134

SOIL SAMPLE SERIES 81-SW-A-301-306, 101-134

ROCK SPECIMEN NUMBERS 27662C-27666C
73663B-73669B

Talus - 81-SW-AT-301 to 302

The Spruce Creek - Wilson Creek prospecting area, from here known as the S-W area, was undertaken for a period of one week, from June 18 to 25, 1981.

S-W target area was located approximately 14 miles (25 km) south-east of Atlin, at the foothills of Sentinel mountain, and covered an area of approximately 5 square miles (≈ 8 sq. km.). Camp was located along the upper N-W arm of Wilson creek (see appendix), called Camp creek, 2 Km. downstream from where the GSC has located the granitic plug.

Original access was obtained by means of helicopter, however, there is an old road which runs north-south through the property, running south from the Spruce creek road. This road was in good condition all the way from Spruce creek road except right for where the road crosses Spruce creek itself. This was due to high flooding conditions at the time, and access by 4x4 later in the season is probably feasable. It should also be noted that Spruce Creek road has been recently extended and now reaches as far south as Slate creek.

In general the S-W area is relatively flat with gentle slopes leading to Sentinel mountain to the west of camp, and to the Laurie Range to the east. The flatness is in part due to the large amounts of glacial overburden in the valley which reaches thicknesses of 15 metres or more with an average thickness of 5-10 metres where exposed along streams. The overburden consists of coarse, reworked till and contains many large, angular erratics and glacial float.

The major purpose of the regional prospecting was to look for a possible source rock for the placer gold deposits

in the local creeks, namely Spruce and Wilson creeks.

A variety of targets were examined in the area, focusing on the small, Jurassic, granitic plug which intrudes the Cache Creek cherts and limestones; the ultrabasic bodies located in the highlands of Sentinel mountain, and finally the small occurrences of limestone in the vicinity.

Geology: Regional geology for the S-W target area was obtained from the GSC Atlin map sheet, 1082A.

According to the GSC map the granitic plug has a diameter of ½ mile (≈1 Km) and is located at the top of the drainage of Camp creek. Although the GSC map has the chert-granite contact mapped quite distinctly, 2 days of prospecting failed to turn up any granitic outcrop whatsoever in that vicinity. Large amounts of a black and white, medium grained, friable diorite, (possibly porphyritic with large, euhedral biotite crystals up to 5mm.) composed dominately of quartz and plagioclase feldspars, was found as till in the mapped area. Perhaps this was mapped as a source area for the large amounts of diorite float downstream. One large diorite outcrop was located along Camp creek approximately 1½ Km. downstream from the original GSC mapping. The outcrop was 6m x 8m and contained quartz veins up to 5cm. in width. Sample no. 73665B was taken and assayed for Au, Ag and Sb. No visible mineralization was seen in the diorite and because of the lack of outcrop, veining, alteration or mineralization of surrounding rock types could not be determined.

Four other major rock units were observed in the S-W area, one being the ultrabasic body in Sentinel mountain, which was a secondary prospecting target. This unit was approximately 2 km. in diameter and outcropped best along the south facing slopes in the north portion of Sentinel mountain. This intrusion turned out to be a Serpentinite body and was noted to be in contact with the Cache Creek cherts to the east and the greenstone to the west.

Hand specimens were dark green in colour and waxy due to the large amounts of serpentine present, and were moderately to strongly magnetic.

The serpentinite was sampled (# 73664 B) and assayed for Au, Ag, Sb, however no visible quartz veining, quartz-carbonate zones, or mineralization seemed to be associated with the body itself.

The only significant mineralization seen in outcrop in the S-W area was an abundant amount of very finely disseminated sulfides, generally pyrite, in the GSC's greenstone unit. The mineralization was seen near the contact with the serpentinite, where the greenstone was also somewhat silicified, and also in areas where the granitic plug was to be located.

The greenstone unit was generally green in colour, fine grained and andesitic in appearance but varied greatly from being siliceous with minor amounts of $CaCO_3$, to shaley and fissile and possibly even to a green schist variety.

Associated with the greenstone unit was a large amount of massive, milky quartz veining up to 15 cm in width (but was not located in outcrop) and was quite abundant as float in the streams and till.

Samples of the greenstone include # 73663 B, 73666 (float),

73668 (greenschist), 73669 (float), 27665C.
Quartz veining samples are ± 27663C, 27664, 27666.

The third target in S-W area was the Cache Creek limestones. These limestones were generally massive, blue-grey in colour and were generally very fine grained to sugary in places. The limestone unit also included a brecciated form, and in one outcrop, botryoidal vug filling calcite was observed. Sample ± 73667B was taken and assayed for Au, Ag, Co, Sb where the limestone was seen contacting a greenschist, but overall no mineralization or silicification was seen in the limestones.

The final rock type in the area was the Cache Creek cherts which were generally massive and black in colour. These were of little interest and sample ± 27662C was taken on what appeared to be chert rubble.

Geochemistry: Along with the general prospecting of the S-W area, a regional geochemistry survey was also conducted. This was concentrated a Spruce, Wilson and Slate creeks. Silt samples were taken on these streams (see accompanying map) at 400 metre intervals, and soil samples were taken adjacent to silt locations.

Spruce, Wilson and Slate creeks are largely staked for placer deposits, with much of the staking being 1980, 81. Silt and soil samples were taken on claims but were not flagged.

Conclusion: Due to the poor outcroping of the granitic intrusion little idea of its size, extent and effects a surrounding rocks could be developed. Without this, very few outstanding features of the S-W area led one to a possible source rock for the

abundant placer gold deposits in the region.

The most interesting target then, was the serpentinite intrusion because of its size and strong magnetism and the greenstone which is contacting it and its finely disseminated sulfides.

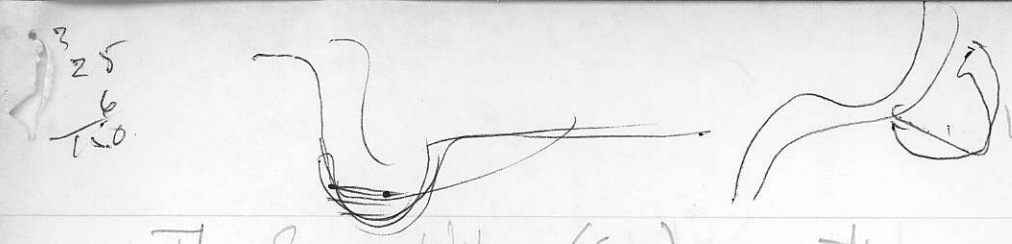
The highest geochem. values of the GSC came from the west branch of Wilson creek, suggesting a possible target in the Sentinel mountains, from which it flows and where the serpentinite intrusion lies. Further justification lies a the regional geochemistry values.

M.M.

Appendix.

Please note: Creek names on Topo. NTS 104N are different than those on the GSC map. Creek names ~~use~~ referred to in this report and on the accompanying map are those seen on the GSC map.

Mark Massey
Glen Prior.



The Spruce-Wilson (S-W) prospecting area was undertaken for a period of 1 week from June 18, 1981 to June 25.

Prospecting target was a Jurassic Granitic plug which intruded Cache Creek Cherts + Cache Creek limestones, and was hopefully a possible source area for the placer gold in Spruce + Wilson creeks.

Camp was set up along the upper NW arm of Wilson creek, just below where the GSC map shows the granitic plug.

In general the area is relatively flat with large amounts of glacial o.b., reading thicknesses of 50' or more with an average thickness of approx. 20' where exposed by creeks.

Sentinel mt. was located approx 2 miles to the west but was easily accessible by foot and 2 days of prospecting was spent in that regia.

According to the GSC map ~~_____~~ the granitic plug has a diam. of approx. 1 mile and is located at the top of the drainage of Wilson Creek. Although the GSC map has the chert-granite contact mapped quite distinctly 2 days of prospecting failed to turn up ~~any outcrop~~ granitic outcrop whatsoever ~~in that vicinity~~ in that vicinity.

Large arts. of a white+black coarse grained, friable diorite (poss. perph. with large euhedral biotite up to 5mm) was found as till in the mapped area and perhaps this was mapped as a source area for the large arts of diorite float downstream. One large diorite stc. was found along the upper Wilson creek approx. 1½ ~~½~~ km downstream from the original GSC mapping. The stc. was 20' x 25' and had minor qtz veining up to ½" in width. Sampling was done + assayed for Au, Ag, Sb.

Due to the lack of granitic stc, or stc. of any kind in that area due to the large amts of o.b. very little veining, mineralizatn or alteratn was visible at surface.

Two other target areas were also prospected one being a large ultrabasic intrusion approx size located in Sentinel mt. This intrusion turned out to be a Serpentinite and was noted to be in contact with the Cache Creek Cherts and the greenstone unit. Contacts were abrupt but generally were not exposed either being covered by talus or till.

The serpentinite was rich in serpentine (at least 60-70%) and was noted to be moderately - strongly magnetic. The serpentinite was sampled but no visible qtz veining, qtz carbonate zones or mineralization seemed to be associated with the body itself.

The only mineralization seen in the S-W prospecting area was a small amt. of v.fine disc. sulfides (probably pyrite + maybe some chalco.) in the greenstone unit.

This mineralization was seen near the contact of the Serpentinite unit and also in areas where the granitic plug was to be located. The greenstone also appeared to be somewhat silicified in places.

The last target was to examine the Cache Creek limestones and limestone breccias for silicified or bleached areas, minor sulfides and to watch for lenses rich in black carbonaceous material. The lists were examined but none of the mentioned characteristics were seen.

Along with the prospecting, a regional geochem survey was conducted which concentrated generally on silt sampling of Wiley creek and its tributaries. Samples were taken at intervals of 400 m and were taken in active silts + fines of the creek. An area give size + extent ..... was covered. Spruce creek was also sampled, see → Glen.