674053
TAKLA?

M E M O

May 16th, 1968.

To: W.R. Bacon

From: J.C. Stephen

PROGRESS REPORT MAY 1 - 15, 1968

May 4 Five men travelled to Alwin Mines camp in the Highland Valley with two Land Rovers.

May 5 Three men tested SE-600 EM on designated lines on Alwin property. Two men soil-sampled where practical -hampered by deep snow.

May 6 Five men visited Bethlehem Mines and toured pit and mill. Visited Lornex and examined small open pit. Tested SE-600 vertical loop configuration. Examined Alwin Mine plans and sections.

May 7 Mailed Alwin soil samples to Bondar-Clegg lab. Drove to Vanderhoof.

May 8 Visited Endako during the morning and drove to Fort St. James. Set up accounts at store, garage, etc.

May 9 Picked up groceries; visited Pinchi open pit and adit entrance. Drove up road to point 13 miles south of Kalder (Horseshoe) Lake. Road blocked by snow here and reported solidly snowed in from there north. Drove back to Quesnel River area and made camp.

May 10 Fixed up camp. Checked trenches in granite area. Road to Nyland Lake blocked by snow. Started base line along shear zone northwest of Smitty Lake. Left message for Vanderkamp at Twin Motel, Quesnel.

May 11 Ran dip angle EM on lines 12E, to 56E, inclusive, at 400' intervals. Vanderkamp in - sent to work in area south of Quesnel River in search of mercury.

May 12 Altenberg prospecting Smitty Lake area; two men line cutting. Stephen on magnetometer.

May 13 Dip angle EM on lines 60E to 128E at 400' intervals. Mag. on same lines. Possible conductors indicated.

May 14 Four men cut 2 miles picket line for horizontal loop EM.

May 15 Ran mag. and horizontal loop EM on two miles line. Staked 16 claims. Scouted area to find areas of previous prospecting. Plotted EM results - wide area poor conductivity indicated.

The area explored northeast of Quesnel River covers an inferred shear zone along the northeast contact of a granitic intrusive. Exploration was directed to finding a possible conductive sulphide zone along this shear zone. It was assumed that the Triassic volcanics in the area could be a source of copper mineralization and the granitic intrusive and shear zone could provide the means of concentration and localization for economic mineralization. Some two miles of shear zone was explored and conductive zones were found in the southeast 1600 feet of this area. The conductive zones are wide, complex and of poor conductive quality. Their extent has not been fully explored. Claims were staked as protection as other parties were staking in the area.

Soil sampling was conducted on two lines at 100 foot intervals. Field tests on these 42 samples gave negative results for copper. These samples are being submitted to Bondar-Clegg for Cu and Mo determinations.

J.C. Stephen/ic

June 21, 1968.

To: W.R. Bacon

From: J.C. Stephen

Re: Progress Report June 1-14, 1968

From June 1-4 four men cut line on the anomalous area three miles west of Kalder Lake. Horizontal loop and dip angle EM surveys were carried out. Magnetometer readings were taken at all stations and soil samples were taken on certain portions based on geophysical results. On June 5th, two men prospected in this area. Results were plotted and forwarded to Vancouver Office June 7.

On June 5 two men prospected and soil-sampled in an area two and one half miles west of Otterson Lake. No outcrop was found. Overburden appears deep and all soil samples tested negative.

June 6 was spent plotting results and running geochem tests while June 7 was taken up in Ft. St. James.

On June 8th Altenburg and Stevenson were flown to Mt. Milligan by helicopter. Stephen made a very brief visit on the second trip. Rock looked barren. Also on June 8 camp was moved to a side road southeast of Otterson Lake.

On June 9 Stephen and Smith attempted to gain access to the area between Destlay Lake and the mouth of Hatdudatehl Creek. Ground access proved impractical both from the Manson Creek road and from Tezzeron Lake.

June 10-13 inclusive, Stephen and Smith backpacked into the areas of the two aeromagnetic anomalies shown four miles west of, and six miles northwest of Otterson Lake (Sheet 93K/16).

On June 14 Stephen and Smith ran geochem tests in the morning and met Bacon and Vanderkamp in Ft. St. James in the afternoon.

Altenburg and Stevenson spent the period June 8-14 inclusive on Mt. Milligan and were moved to a point two miles east of the south end of Tezzeron Lake on June 15. Though no report was received from them, it is believed nothing of any interest was found during this period.

Vanderkamp and Orr worked in the Horsefly-Beaver Valley area. They visited Patenaude Lake and Lemon Lake anomalies and investigated the ground from Suey Bay to Ingram Lake.

Upon receipt of the Hg results from Barringer, they commenced further soil sampling in the Beaver Valley area.

McBeath and Struthers are reported to have completed work in the Little Fort area and had moved to Teapot Lake.

Some encouragement has been had from geophysical and prospecting results on the anomaly three miles west of Kalder Lake and on the one four miles west of Otterson Lake. It is proposed to stake these areas as the TEZ and HAT groups respectively. Some ground geophysical work will be done on the HAT group. The anomaly between these two - on Tashincheko Creek - was to have been staked at the same time as the LIN group but this will now be left for a time pending results on the other two.

Geochem results have been received for three projects:

Alwin Mines = The soil samples run by Bondar-Clegg for Alwin gave some extremely high results. All samples were submitted to Barringer for checking. It should be noted that very similar results were obtained on all but the extremely high values. This would suggest Bondar-Clegg's North Van lab can do adequate work for our purposes.

Nyland Lake area = About 45 samples were submitted to Bondar-Clegg from the EM anomalous area encountered during prospecting here in May. None of these samples give significant Mo results. The copper results are similar to those given by Coast Eldridge in this same general area in 1964-65. Background values range from 15-30 ppm Cu with several isolated values of 56 to 98 ppm Cu. As the EM results are not available to me at the moment, I cannot say whether or not these values coincide with the geophysical results but my impression is that they coincide with an anomaly on the north side of the zone - the strongest EM area probably - but they do not give any indication over the zone to the south. The significance of such low anomalies is open to serious question.

Beaver Creek = Results giving mercury values for soil samples taken by Vanderkamp and Orr in this area were received. These samples were taken at one mile intervals along roads indicated by myself. No further work was to have been done at this time. Two large areas showing values in excess of 350 ppb are indicated. These zones are several square miles in extent and their significance is still in doubt. The highest value was over 800 ppb but this is still far below that expected over mercury deposits - more in line with what should occur over some lead zinc and silver lead deposits. These results should be examined in conjunction with the results of Cariboo Project 1966. Several of the highest samples should be run for zinc lead and copper although these metals are really not expected in this area.

July 17th, 1968.

To: W.R. Bacon

From: J.C. Stephen

Re: N.B.C. Syndicate
- Progress Report July 1-15, 1968

Over the July 1 weekend, J.C. Stephen, S.B. McBeath, J. Struthers, B. Vanderkamp and N. Orr returned to Vancouver to review progress and assign new areas. B. Vanderkamp was in effect transferred from prospecting to more detailed and specific assignments on claim groups. Sam McBeath was transferred from the North Cariboo area to Takla Lake.

During the time these crews were in Vancouver, J. Altenburg, J. Stevenson and R. Smith did some work in the vicinity of the Nation River and along the road to Manson Creek. Nothing of interest was found.

On Friday, July 5th, Stephen, Vanderkamp and McBeath met in Ft. St. James. Due to forest fires no Beaver aircraft were available and the Northern Mountain helicopter was broken down. As a result, McBeath and Struthers were moved to Takla Lake late in the day with the Goose. On Saturday the Goose was substituted for a Cessna 185 and Stephen and Smith were moved to Inzana Lake, leaving Vanderkamp and Orr to be moved to the HAT claim group when the helicopter became available.

Altenburg and Stevenson were assigned an area bounded by Omenica River, Pinchi Fault and Kwanika and Twenty Mile Creeks. They are to silt sample streams and investigate the vicinity of known copper showings.

On Inzana Lake three geophysically indicated areas were investigated. Although very little outcrop was found, one zone showed argillite and it is thought these zones are due to graphitic sediment. Soil and silt sampling was negative. An attempt was made to visit the Chuchi tungsten showing on Jean Marie Creek which is supposed to show copper molybdenum and tungsten mineralization. Due to bad weather and extremely difficult bush, the showing was not reached. However, two silt samples from a small tributary creek about 1/4 mile east of the supposed location of the showing ran weakly positive for copper in field tests. On this traverse of some 13 to 15 miles, not one single outcrop was found. No indication of recent staking or other systematic work was observed. Bush and overburden conditions are very bad but it is thought a two-man crew should be placed here by helicopter for two weeks to do soil sampling, mapping, and perhaps magnetometer surveying. A small open swamp will provide an adequate landing spot.

Between Inzana Lake and Jean Marie Creek, an aeromagnetic anomaly, similar to that on Jean Marie Creek, was investigated. No outcrop was found. Soil sample field tests gave very weak indications for copper. Samples were sent to Bondar-Clegg for copper and moly determinations.

On July 13th, Stephen and Smith rented a boat on Chuchi Lake and began investigation of three aeromagnetic anomalies southwest of this lake. The intrusive has been found to extend much farther south than indicated on the four-mile geological map. The intrusive is relatively quartz poor but very complex. Minor chalcopyrite mineralization has been noted in many places usually associated with syenitic phases and weak fracturing. This mineralization is not restricted to the areas of higher

magnetic intensity. Poorly cut lines were found on all three anomalies, one set at least having been done in the winter. IP has been run on one anomaly. No outcrop has been found on two anomalies but silt sampling on one of these indicates copper and further work appears justified.

On July 19th Stephen visited McBeath's camp at the mouth of Sakeniche River - Takla Lake. During the period Sam had prospected the south shore of the lake and south from his camp as far as practical. Nothing of importance had been found. Sam was to stay in the same camp for another week to further investigate a very minor chalcopyrite occurrence in volcanics, follow up two leads suggested by Jack Merritt, and silt sample streams on the north shore. On Friday July 24th this party is to be moved by helicopter to a camp midway between Takla and Natowite Lake.

Vanderkamp and Orr were moved out of the HAT group on July 20th. No new mineralization of any importance was found. The geological mapping indicates only outcrop areas. Numerous rock specimens were collected for lab determinations but Vanderkamp feels the whole outcrop area to be basic intrusives. There is some question about this but this may be resolved by thin section work on half a dozen selected specimens.

Altenburg and Stevenson carried out widely spaced reconnaissance work in the Silver Creek, Kwanika Creek and Twenty Mile Creek areas. Nothing was found and all silt-sampling is reported to run negative in field tests.

(sgd.) J.C. Stephen

C O P Y

June 6th, 1968.

Memo to: W.R. Bacon

From: J.C. Stephen

Enclosed are plotted results of magnetometer, horizontal EM and dip angle EM surveys over anomaly t-3.

The magnetometer results outline a sharp mag anomaly - supposedly the same as the 1600 + peak shown on the air survey. The south end of the anomaly appears to be about line 4N but further line cutting would be necessary to complete the survey to the north. Swamp makes this impractical north of line 32N.

EM methods indicate conductive material over an area approximately coincident with the mag anomaly. Neither method of EM measurement indicates a strong conductive zone but rather a number of scattered zones. Both methods indicate a somewhat more consistent conductive zone at 7W on lines 20N and 24N which may also be indicated by the more complex mag contours in that area.

Field tests for copper are negative throughout the area. Heavy metal tests gave poor but apparently positive reactions at 24N, 7W; 20N, 8W; 8N, BL; 16N BL; 16N, 2W; 12N, BL. It is unlikely however that geochem can be of any real value. No outcrop has been found within a mile of the zone and topography and EM results suggest a minimum of 15-20 feet of overburden and generally 40 feet or possibly more.

Prospecting shows fragment of rock generally mineralized with pyrite over much of the area. Near line 24N on the base line fragments of rock are mineralized with pyrrhotite and very minor chalcopyrite. These fragments are angular and predominantly volcanic but could have travelled some distance.

Coincident mag and EM indications, together with air EM and a large air mag structure indicate this target is worth further investigation. More extensive line cutting is necessary and an IP survey is indicated.

The work so far done lies nearly 3 miles from the road and requires 1¼ hours hard walking each way. Swamp and creek conditions preclude line cutting over some parts of the area - mainly to the north. Further geophysics can best be done in the winter.

Preliminary investigation of anomaly t-6 indicates no hope of outcrop, probably no value in soil sampling and fairly dense bush with

windfall. As this anomaly lies 2 hours walk from the road, soil sampling has been done in a single line along strike but further work has been put off until t-5 and the small anomaly between t-5 and t-3 can be scouted.

Eighty claims would be required to cover the area around t-3 - perhaps 40 on each of t-5 and others on similar magnetic structures.

It is proposed sending Altenburg and Stevenson to Mt. Milligan via helicopter on June 8th to investigate the syenite intrusive which appears to be at the intersection of two or more sets of fracture patterns on the air photo.

Stephen and Smith will fly camp through the area of anomalies t-6, t-5 and north.

Best regards,

"Cam"