REPORT ON THE 1976 WORK PROGRAM

ON

THE CON CLAIM GROUP

Whitehorse Mining District, Yukon

For

OLYMPIAN INTERNATIONAL RESOURCES LTD.

By

J. B. P. SAWYER, P. Eng.

SAWYER CONSULTANTS INC.,
1 - 425 Howe Street,
Vancouver, B. C.

December 20th, 1976

090134

Office Of The Supervising Mining Recorder
JAN 18 1977
WHITEHORSE
Yukon Territory

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of $ 2400.00

Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder
Commissioner of Yukon Territory

TABLE OF CONTENTS

List of Illustrations

INTRODUCTION

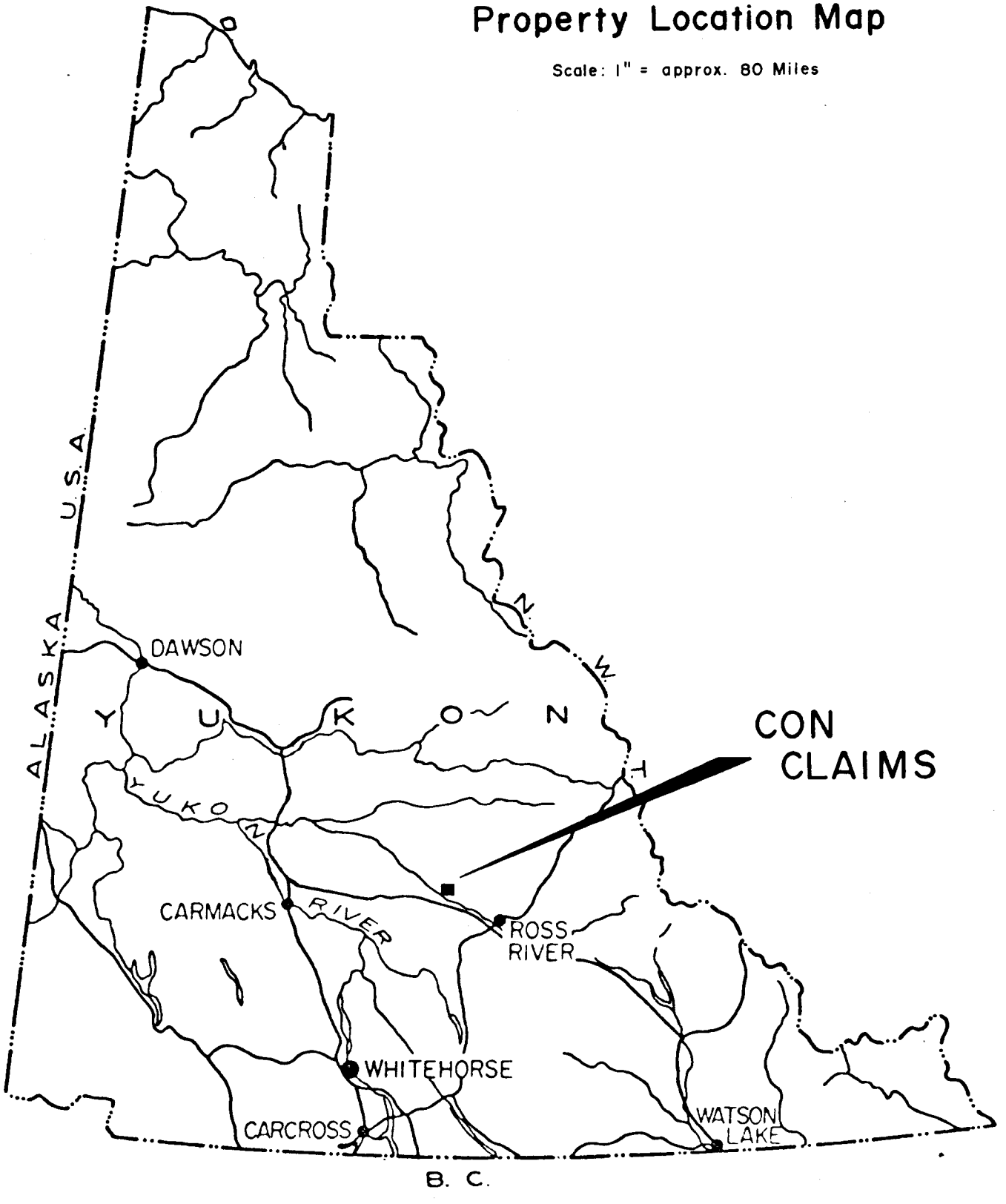
The Con claim group, consisting of 24 claims, was acquired by Olympian International Resources Ltd. in 1975. In August 1975, the writer made a visit to the claim group and in a report dated September 4th, 1975 described the general setting of the property and made some recommendations for a first stage exploration program on the claim group. These recommendations included establishment of a control grid over the property, prospecting, and a geochemical soil sampling program, at an estimated cost of approximately $11,500.

In July 1976, Olympian International Resources Ltd. engaged field crews of Pelly River Syndicate to carry out the recommendations contained in the 1975 report. The work was carried out in the field under the supervision of Mr. C.R. Wolfe, of Pelly River Syndicate. The writer was not on the property in 1976 and has no personal knowledge in the work which was actually done. The description of work contained in this report is therefore based on information supplied by Mr. Wolfe and Olympian International Resources Ltd. and is accepted as being correct and reliable. The soil samples were shipped to the Kamloops Research & Assay Laboratory for analysis and the interpretation of these results was made by the writer based on his familiarity with the Con claim group gained in 1975 and on several years experience in the Anvil Range and adjacent areas of the Yukon.

Olympian International Resources Ltd.

Property Location Map

Scale: 1" = approx. 80 Miles



SUMMARY

A limited work program carried out for Olympian International Resources Ltd. by personnel of Pelly River Syndicate in the summer of 1976 included prospecting, line cutting and geochemical soil sampling. In general the results of this work have not been encouraging although there are some indications of above background concentrations of copper in the southeastern quadrant of the property. In addition, some scattered zinc values occur associated with quartzitic rocks in the northwestern corner of the claim group and in the light of other occurrences in this North Anvil Range a very limited amount of further work could be justified to try and improve on this basic data by more careful sampling, mapping and trenching.

In general terms the best sulphide mineralization observed on the property appears to be associated with volcanic rocks in which visible pyrrhotite, pyrite and chalcopyrite mineralization occurs. Further work on the property should be of a restricted nature and aimed specifically at clarifying the geochemical picture in respect of copper in the southeastern quadrant of the property and with respect to zinc in association with quartzites in the northwestern corner of the claim group. On the basis of the results of the 1976 work program, no extensive or costly further program would appear to be justified.

PROPERTY

The Con claim group consists of 24 claims, Con 1-24 inclusive, in the Whitehorse Mining District, Yukon, which were staked in August 1975 by C.R. Wolfe, and were recorded on August 29th, 1975. Olympian International Resources Ltd. acquired these claims by purchase from C.R. Wolfe. The details of these claims are as follows:

Claim	Grant No.	Recorded	Expiry Date
CON 1-24 incl.	YA3352-YA3375 incl.	Aug. 29th, 1975	Aug. 29th, 1977

These claims are shown on Yukon Claim Sheet 105 K/11 and in Figure 2 in this report.

LOCATION

The Con group lies in the Anvil Range area of Yukon at an elevation of about 4,500 ft., north of the Anvil Batholith, and approximately 15 miles north of the Anvil lead/zinc mine operated by Cyprus Anvil Mining Corporation.

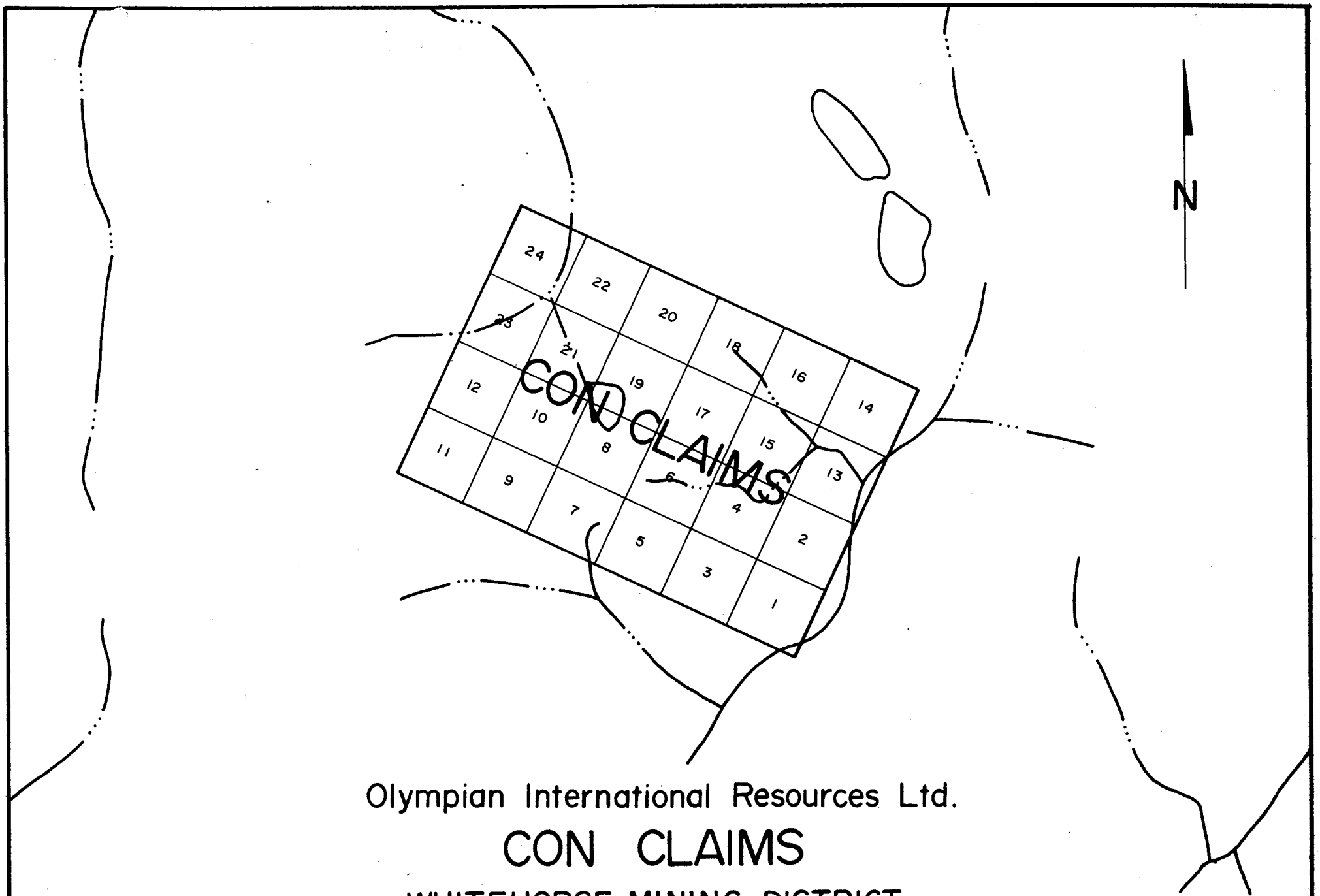
Access to the property is by helicopter only since there are no roads in the area.

TOPOGRAPHY

There is very little relief over most of the claim group which in part is swampy. At the eastern and south-central parts of the claim group the land rises into low ridges. Vegetation is confined mainly to buck brush and Arctic birch, there being almost no trees of any size in the area. The property has a fairly general, though thin, soil cover with relatively little outcrop over the greater part of the claim group.

REGIONAL GEOLOGY

The area within which the Con claim group lies, Map Sheet 105K, Tay River, was mapped by Roddick & Green of the Geological Survey of Canada in the late 1950's and the results of their work are shown on Map 13-1961. Reference to this map shows that the actual area of the Con claim group is shown as being covered by unconsolidated glacial and alluvial



Olympian International Resources Ltd.

CON CLAIMS

WHITEHORSE MINING DISTRICT
YUKON

Scale: 1" = 1/2 Mile

Map Ref. 105 K/11

Figure 2

deposits, however, it is bounded by areas mapped as being underlain by unit 8 (Roddick & Green) which is described as consisting of altered dark green andesite and basalt flows and tuffs, commonly schistose, rarely porphyritic, minor phyllite, dark argillite, and light grey quartzite.

From the writer's observations in the general area, this rather broad description describes the rocks seen both in float and in place in the general area. There is a siliceous unit or series of units within this general sequence which preferentially appears to be host for copper and copper-zinc mineralization. It is not certain whether this unit is entirely sedimentary or includes both sedimentary and volcanic material but probably the latter is the case. The significant feature is the association between altered, siliceous rocks and sulphide mineralization. The source of the mineralization also is not apparent from work completed to date and at least two possible explanations have been suggested. The first of these is that the material is predominantly volcanic and that the mineralization is essentially of volcanogenic origin. In this case some of the material described as chert could possibly be interpreted as exhalative material. The second possibility is that the assemblage is a mixed one including both volcanic and sedimentary members which have been subjected to hydrothermal alteration from an unknown plutonic source. At this stage of investigations either or both of these possibilities may be right.

1976 WORK PROGRAM

The field work completed in 1976 consisted of establishment of a picket line grid to provide control for the geochemical sampling, and any future work, soil sampling, and prospecting. Claim tags were also affixed to the posts during the course of this work. Rock samples were collected from outcrop on the property by C. R. Wolfe who submitted the samples to the writer for examination. Brief descriptions of these samples are included in this report.

Line Cutting

A grid of picket lines was established covering the entire claim group. A base line, arbitrarily designated 40N, was established on a bearing of 110°(T). The line was chained and picketed at 100 ft. intervals and picket lines were turned off at right angles to the base line every 500 ft. Picket lines (bearing 020°T) were chained and picketed with pickets set up at 100 ft. stations for a total length of 6,000 ft., i.e. 3,000 ft. to the north and to the south of the base line. Picket lines at 500 ft. intervals thus extended from 10N to 70N. The most easterly line was arbitrarily designated 10W. The most westerly line is therefore designated 100W. This grid and its relationship to the claim group is shown on Map 3 accompanying this report. A total of 23.3 line miles of base lines and picket lines were cut and chained.

Soil Sampling

Soil samples were collected at 200 ft. intervals along each of the picket lines, using mattocks. The samples were collected into wet strength Kraft bags and shipped to the laboratories of Kamloops Research & Assay Laboratory Ltd. in Kamloops, B.C. where they were analysed for total copper, lead, and zinc.

The Kamloops Laboratory advises that they dried and screened the samples and used the -80 mesh fraction for analysis. Metals were extracted with hot acid and the concentrations of the several elements determined by atomic absorption techniques.

A total of 530 samples were collected from 548 possible stations. In areas where the ground was too wet or swampy no sample was taken.

Standard statistical techniques were used by the writer to determine threshold values for each of the three metals as follows:

Threshold value for total copper = 77 ppm

Threshold value for total lead = 40 ppm

Threshold value for total zinc = 177 ppm

Separate plots have been made for each of these three metals and these plots accompany this report. From an inspection of them the following points are apparent. In the case of lead only 7 samples returned values above the threshold and these occur at widely scattered locations throughout the grid. In the case of zinc 15 samples were anomalous with 4 other samples occurring in the threshold range, however, of these, 7 occurred on line 10W at the extreme eastern edge of the property and there was no correlation with lead or copper. The other anomalous zinc samples were in general fairly widely scattered although 3 samples on line 80W from 56N to 62N were anomalous or in the threshold range and 1 of these at 58N also returned an anomalous value in copper. On line 85W two samples, at 28N and 36N, returned anomalous values in zinc also. Only the copper values showed any significant pattern in terms of above background concentrations of the metal. In the southeastern quarter of the property three small zones of anomalous copper values occur, the largest extending across 4 lines (a distance of about 1,600 ft.). This largest zone extends from line 20W to line 35W approximately 800 to 1,200 ft. south of the base line, and in addition there are isolated samples with anomalous amounts of copper on line 15W at the base line and on line 20W at 46N. The second copper zone extends across lines 35W and 40W at the southern extremity of the grid, and the third of these zones is represented by three samples on lines 55W and 60W at around 20N. Some fill-in sampling may reinforce these zones or extend them.

Only one sample on the entire grid returned anomalous values in all 3 metals that being the sample on the base line at 15W.

Prospecting

Thirteen samples collected from the property were submitted by C.R. Wolfe. Brief descriptions of these and their locations are as follows:

	Location	Sample	Description
1.	100 60N	A	A fine-grained, grey, siliceous rock, - quartzite with minor disseminated sulphides, predominantly pyrite.
		B	This specimen is darker in colour but also a quartzite, very siliceous, and carries slightly more sulphides which are also coarser than in the other sample. The sulphides are pyrite and pyrrhotite.
2.	99W 55N	A	A medium to light coloured volcanic, medium-grained, with up to about 7% disseminated pyrite and some chalcopyrite.
		B	Also a volcanic, slightly darker coloured than the A sample and with less sulphide content.
3.	70W 28N		A very fine-grained, dark grey to purplish-black hornfels, finely banded with very fine disseminated sulphides, probably predominantly pyrite.
4.	50W 54N		This is a dark, medium to fine-grained, siliceous volcanic with minor sulphides, again mainly pyrrhotite, occurring as blebs and disseminations.
5.	45W 46N		This is a medium to coarse grained, light to medium grey volcanic rock with quite a lot of included carbonate material, perhaps up to 20%, and also carrying disseminated sulphides - pyrite and pyrrhotite.
6.	30W 66N		A medium grey, fine-grained, siliceous tuff or porphyritic quartz-eye volcanic. The rock is predominantly quartz in a very fine-grained groundmass with numerous small black quartz eyes.
7.	20W 26N		A light grey granite, medium-coarse grained.
8.	20W 56N		This specimen is a medium to coarse grained, tuffaceous volcanic? with abundant carbonate material.

	Location	Sample	Description
9.	40W 25N		A medium to light grey, medium-grained porphyritic volcanic or tuff.
10.	35W 18N		A medium to fine-grained, grey-green andesitic volcanic or tuff with minor disseminated pyrite and pyrrhotite.
11.	35W 19N		A fine-grained, dark grey to black hornfels with disseminated sulphides including some visible blebs of chalcopyrite.

Geological observations on the property are limited by relative lack of outcrop. In general, the soil cover, though widespread, is not very thick so that mapping could probably be aided by digging small hand pits.

CONCLUSIONS

From the description of the work completed and results given above the following conclusions can be drawn.

1. The property is underlain by a mixed assemblage of volcanic and tuffaceous rocks, some intrusives, and some metamorphosed sediments or volcanics now represented by very fine-grained hornfelses.

2. Some of these rocks, particularly in the northwestern corner of the group, are very fine-grained quartzites with disseminated sulphides, in this case predominantly pyrite, which in appearance at least are similar to other rocks in this general North Anvil Range with which copper mineralization is known to occur at other locations.

3. On the Con claim group sulphides appear to be best developed in association with the volcanic rocks. Sulphide minerals recognized include pyrite, pyrrhotite and chalcopyrite. Observations made by this writer in the field in 1975 similarly indicate the best development of sulphides, sometimes with significant amounts of chalcopyrite, in association with these volcanic rocks.

4. Geochemical soil sampling has failed to show any significant anomalous concentrations of lead or zinc within the property boundaries. There does appear to be a concentration of copper in the southeastern quadrant of the property indicated by three zones of anomalous copper values in soils. In assessing this feature it is to be remembered that soil samples were collected only on a 500 ft. by 200 ft. grid and this pattern may well be strengthened by closer sampling as recommended below. There is some

suggestion of scattered anomalous values in zinc in the northwestern corner of the property from which the fine-grained quartzite rock speciments were submitted. Some further more careful prospecting and some geological mapping, if possible, might provide further information concerning this possible association.

5. In general no strongly anomalous concentrations of metal in soils nor any apparently significant occurrences of base metal sulphides in bedrock have been discovered by the work program carried out to date. In the light of this any further work must be quite restricted in nature and aimed specifically at trying to upgrade the data obtained so far.

RECOMMENDATIONS

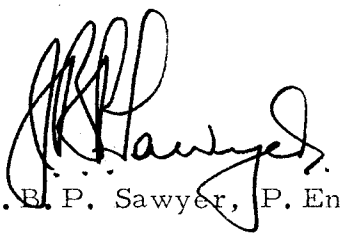
1. Additional soil sampling should be carried out to attempt to define more clearly the zones of anomalous copper in the southeastern quadrant of the property. Specifically, soil sampling should be carried out at the alternate stations (100 ft. apart) between the samples already collected from 10N to 40N on lines 10W to 75W. These lines should also be extended an additional 500 ft. to the south (note: this will extend the sampling beyond the present property boundary).

2. Geological mapping should be attempted over the entire property and particularly in the southeastern and northwestern parts of the claim group. If necessary some hand trenching or pitting should be done to assist in the mapping.

3. If the work recommended in 1 and 2 above enhances the picture at all it may be desirable to consider some I.P. survey work over those parts of the property returning anomalous metal values in the soils.

4. Total further expenditures on further exploration of the property, exclusive of transportation or access costs, should not exceed about $6,000 maximum.

Respectfully submitted,



J. B. P. Sawyer, P. Eng.

100+00W 95+00W 90+00W 85+00W 80+00W 75+00W 70+00W 65+00W 60+00W 55+00W 50+00W 45+00W 40+00W 35+00W 30+00W 25+00W 20+00W 15+00W 10+00W

70+00N
60+00N
50+00N
BASE LINE 40+00N
30+00N
20+00N
10+00N

34° 30'
N

CON 24 YA 3375	CON 22 YA 3373	CON 20 YA 3371	CON 18 YA 3369	CON 16 YA 3367	CON 14 YA 3365
CON 23 YA 3374	CON 21 YA 3372	CON 19 YA 3370	CON 17 YA 3368	CON 15 YA 3366	CON 13 YA 3364
CON 12 YA 3363	CON 10 YA 3361	CON 8 YA 3359	CON 6 YA 3357	CON 4 YA 3355	CON 2 YA 3353
CON 11 YA 3362	CON 9 YA 3360	CON 7 YA 3358	CON 5 YA 3356	CON 3 YA 3354	CON 1 YA 3352

BASE LINE

Legend

CLAIM POST LINE

APPROX. PROPERTY BOUNDARY

CLAIM = CON 24

GRANT No. = YA 3375

CON 24
YA 3375

OLYMPIAN INTERNATIONAL RESOURCES LTD.

CON CLAIM GROUP

WHITEHORSE MINING DISTRICT, YUKON

CLAIMS and GRID

SCALE: 1" = 400 ft.

DATE: NOVEMBER 1976

TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED Dec. 20th 1976

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. B. P. SAWYER

100+00W 95+00W 90+00W 85+00W 80+00W 75+00W 70+00W 65+00W 60+00W 55+00W 50+00W 45+00W 40+00W 35+00W 30+00W 25+00W 20+00W 15+00W 10+00W

70 + 00 N

60 + 00 N

50 + 00 N

BASE LINE 40 + 00 N

30 + 00 N

20 + 00 N

10 + 00 N

BASE LINE

34° 30'

N

CLAIM POST LINE

APPROX. PROPERTY BOUNDARY

58 = ppm Total Copper
Threshold = 77 ppm.

OLYMPIAN INTERNATIONAL RESOURCES LTD.

CON CLAIM GROUP

WHITEHORSE MINING DISTRICT, YUKON

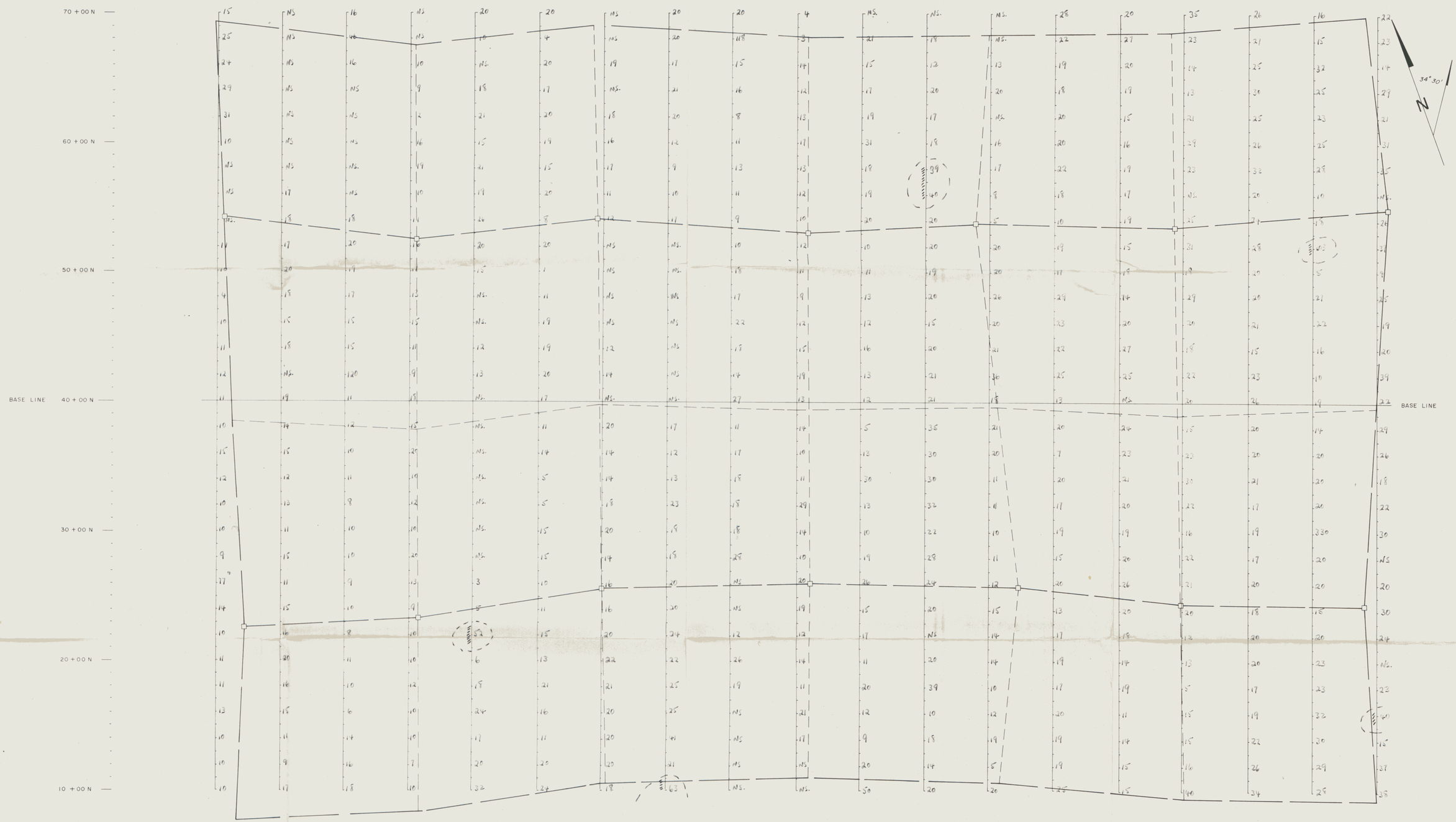
SOIL SAMPLING PLAN - COPPER

SCALE: 1" = 400 ft.

DATE: NOVEMBER 1976

TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED Dec 20th 1976.

PROFESSIONAL ENGINEER
PROVINCE OF
J.B.P. SAWYER
BRITISH
COLUMBIA
ENGINEER



TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED ~~Dec. 20th~~ 1976.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. B. P. SAWYER

OLYMPIAN INTERNATIONAL RESOURCES LTD.

CON CLAIM GROUP

WHITEHORSE MINING DISTRICT, YUKON

SOIL SAMPLING PLAN - LEAD

SCALE: 1" = 400 ft.

DATE: NOVEMBER 1976

100+00W 95+00W 90+00W 85+00W 80+00W 75+00W 70+00W 65+00W 60+00W 55+00W 50+00W 45+00W 40+00W 35+00W 30+00W 25+00W 20+00W 15+00W 10+00W

70 + 00 N

60 + 00 N

50 + 00 N

BASE LINE 40 + 00 N

30 + 00 N

20 + 00 N

10 + 00 N

BASE LINE

34°30'

N

CLAIM POST LINE

123 = ppm total Zinc
Threshold = 177 ppm

APPROX. PROPERTY BOUNDARY

OLYMPIAN INTERNATIONAL RESOURCES LTD.

CON CLAIM GROUP

WHITEHORSE MINING DISTRICT, YUKON

SOIL SAMPLING PLAN - ZINC

SCALE: 1" = 400 ft.

DATE: NOVEMBER 1976

TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED Dec. 20th 1976

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. B. P. SAWYER