

PROSPECTUS  
Feb. 26, 1987.

062260

REPORT ON THE QUEEN PROPERTY  
WATSON LAKE MINING DISTRICT  
YUKON TERRITORY

LOCATION

N.T.S.: 105 - A - 15  
LATITUDE: 60° 58' 40"N.  
LONGITUDE: 128° 48' 54"W.

PREPARED FOR

MORENGO RESOURCES INC.  
509-736 GRANVILLE STREET  
VANCOUVER, BRITISH COLUMBIA V6Z 1G3

PREPARED BY

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AUGUST 15, 1986

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SUMMARY

The Queen Property consisting of the Queen 1 through 7, Queen 19 and Queen 20 claims covers about 465 acres (188 ha.) situated about 88 kilometers north of Watson Lake, Yukon Territory and about 3.2 kilometers north of the Canadian Tungsten Mine Road. The Queen Property is situated in the Watson Lake Mining District with claim records kept in Watson Lake and Whitehorse.

The property covers a poorly exposed silver and base metal bearing shear zone that was sampled by the writer on July 14, 1986. A grab sample from a muck pile assayed 15.30 oz Ag/ton, 1.51% Cu, 3.53% Pb, and 4.04% Zn. A ten foot chip sample across a recently excavated pit assayed 3.38 oz Ag/ton, 0.39% Cu, 0.84% Pb and 0.85% Zn. Limited exposure prevented proper sampling or determination of the dimensions and orientation of the zone. A Stage I, initial 1000 foot drill and geophysical test is recommended to define the width, attitude and grade in the showing area.

The initial Stage I, 1000 foot diamond drill and geophysical test is estimated to cost \$ 50,000. Contingent upon the results of the Stage I program, a Stage II program of geochemical sampling, geophysics, road building, and trenching may be warranted. The Stage II program is estimated to cost \$ 75,000. Contingent on the results of the initial stages, a Stage III program of 3000 feet of drilling may be warranted with a cost estimate of \$ 125,000.

## INTRODUCTION

The Queen Property, consisting of 9 two post claims, is situated about 88 kilometers north of Watson Lake, Yukon Territory. The writer was retained by the management of Morengo Resources Inc., the property owner, to confirm the location of the Queen claims and examine the geological setting of a mineral occurrence on the Queen Property. The examination was conducted on July 14, 1986 in order to recommend a program of further exploration of the property, if warranted.

This report summarizes the geological setting of the Queen Property and outlines a recommended Stage I and contingent Stage II and Stage III exploration programs for the property.

## LOCATION AND ACCESS (Figures 1 & 2)

The Queen Property is situated about 88 kilometers (55 miles) north of Watson Lake, Yukon Territory. The southern boundary of the property is about 3.2 kilometers (2 miles) north of the Canada Tungsten Road which follows Dolly Varden Creek and about 9 kilometers north of the summit of Mt. Murray.

Access to the property is via the Ross River and Canada Tungsten Mine gravel roads. A four kilometer trail extends from the Canada Tungsten Mine road to the property but access for the examination and trenching and prospecting programs have used Frontier Helicopters based in Watson Lake.

Watson Lake is the nearest center for obtaining supplies and services need for exploration of the property. Schedule air service to Watson Lake exists from Whitehorse, Edmonton and Vancouver.

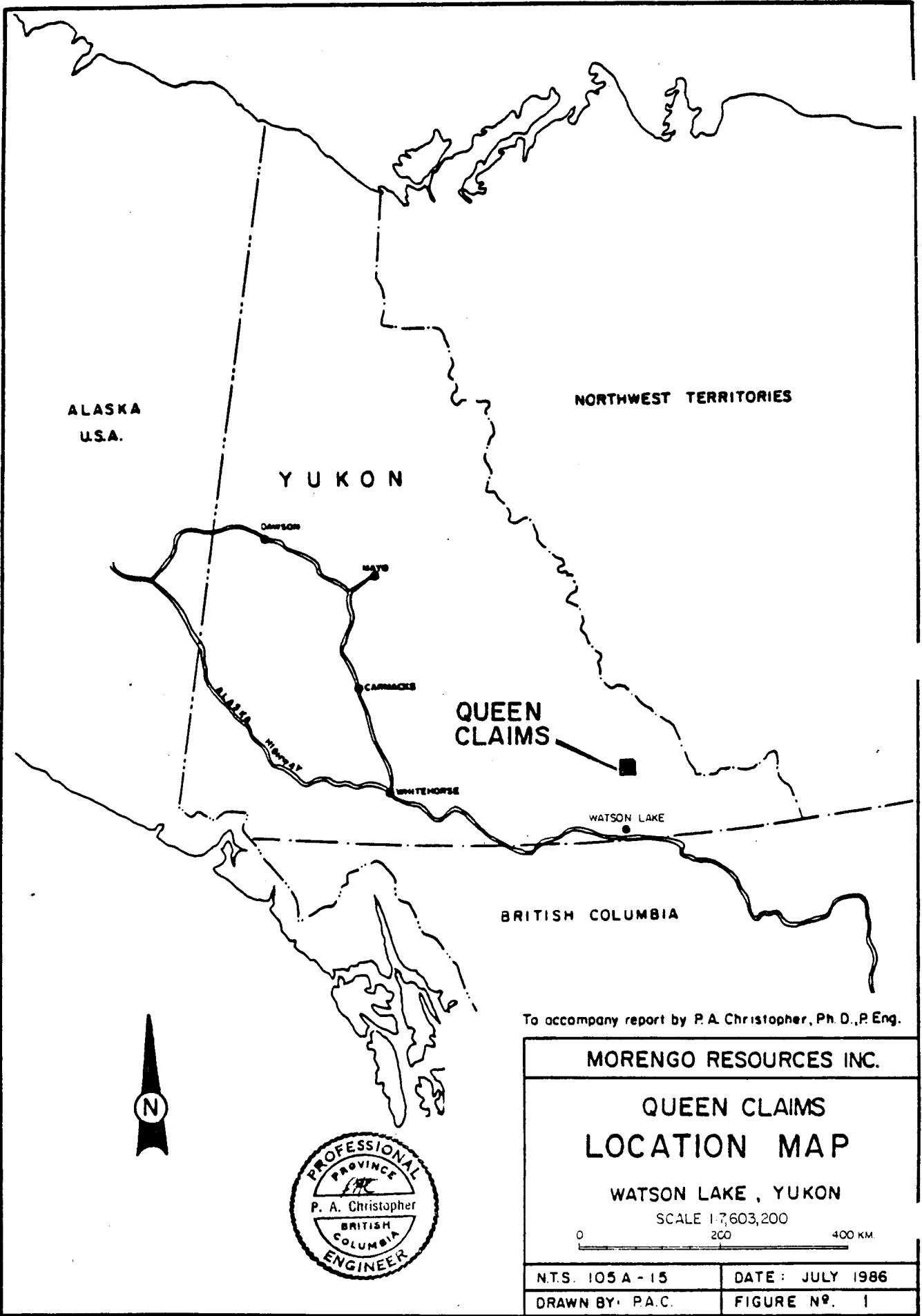
## TOPOGRAPHY AND VEGETATION

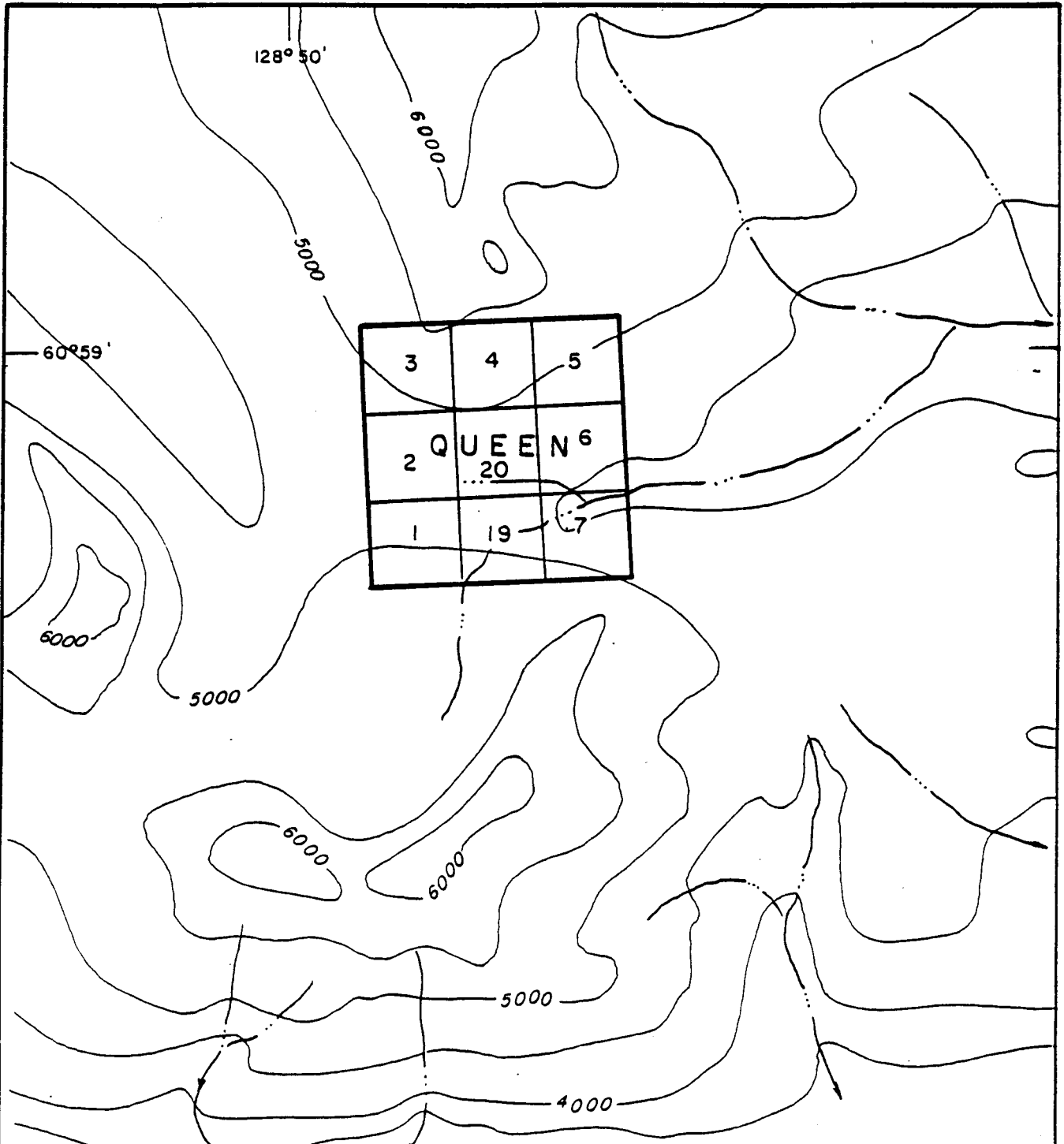
Elevations on the property range from about 4400 feet (1341 meters) to over 5500 feet (1676 meters) with most of the property having moderate relief. The Canada Tungsten Road is at about the 3500 foot (1067 meter) level. A four or five mile access road will be required to obtain a reasonable road grade.

Vegetation on the property is at or above tree line with normal stunted northern alpine growth. The claim area covers an alpine valley area with outcrops mainly restricted to higher areas.

## PROPERTY DEFINITION (FIGURE 2)

The Queen property consisting of nine two post claims covers about 465 acres (188 hectares) in the Watson Lake Mining District, Yukon Territory. Pertinent claim data summarized in Table 1 was obtained from the Department of Northern Affairs and Natural Resources in Watson Lake (Ph. 403-536-7366). The writer examined the common posts for the Queen 1, 2, 19, and 20 and located the main showing with respect to the post location (Figure 4). The claim location presented in Figure 2 is from government claim map N.T.S. 105-A-15 and





To accompany report by P. A. Christopher, Ph. D., P. Eng.

MORENGO RESOURCES INC.

QUEEN CLAIMS  
CLAIM MAP

WATSON LAKE, YUKON

SCALE 1:31,680

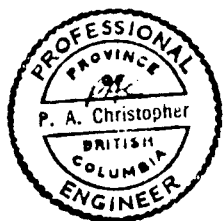


N.T.S. 105 A - 15

DATE: JULY 1986

DRAWN BY: P.A.C.

FIGURE Nº. 2



Contours at 500 ft. interval

represents an accurate location of the Queen Claims.

The Queen 1 and Queen 2 claims were located in June 1980 by Joe Steffler and the Queen 19 and Queen 20 claims were located in June 1980 by Jimmy Wolftail. The Queen 1, 2, 19, and 20 were transferred to Alex Black on September 23, 1980. The Queen 3 through 7 claims were staked by Alex Black in July 1986 and recorded in Watson Lake on August 1, 1986.

TABLE 1. Pertinent Claim Data For Queen Claims.

<u>Name</u>	<u>Record Number</u>	<u>Date Recorded</u>	<u>Expiry</u>	<u>Staker</u>
Queen 1	YA54813	June 11, 1980	1987	Joe Steffler
Queen 2	YA54814	June 11, 1980	1987	"
Queen 3	YA91228	August 1, 1986	1987	Alex Black
Queen 4	YA91229	August 1, 1986	1987	"
Queen 5	YA91230	August 1, 1986	1987	"
Queen 6	YA91231	August 1, 1986	1987	"
Queen 7	YA91232	August 1, 1986	1987	"
Queen 19	YA54831	June 11, 1980	1987	Jimmy Wolftail
Queen 20	YA54832	June 11, 1980	1987	"

## HISTORY

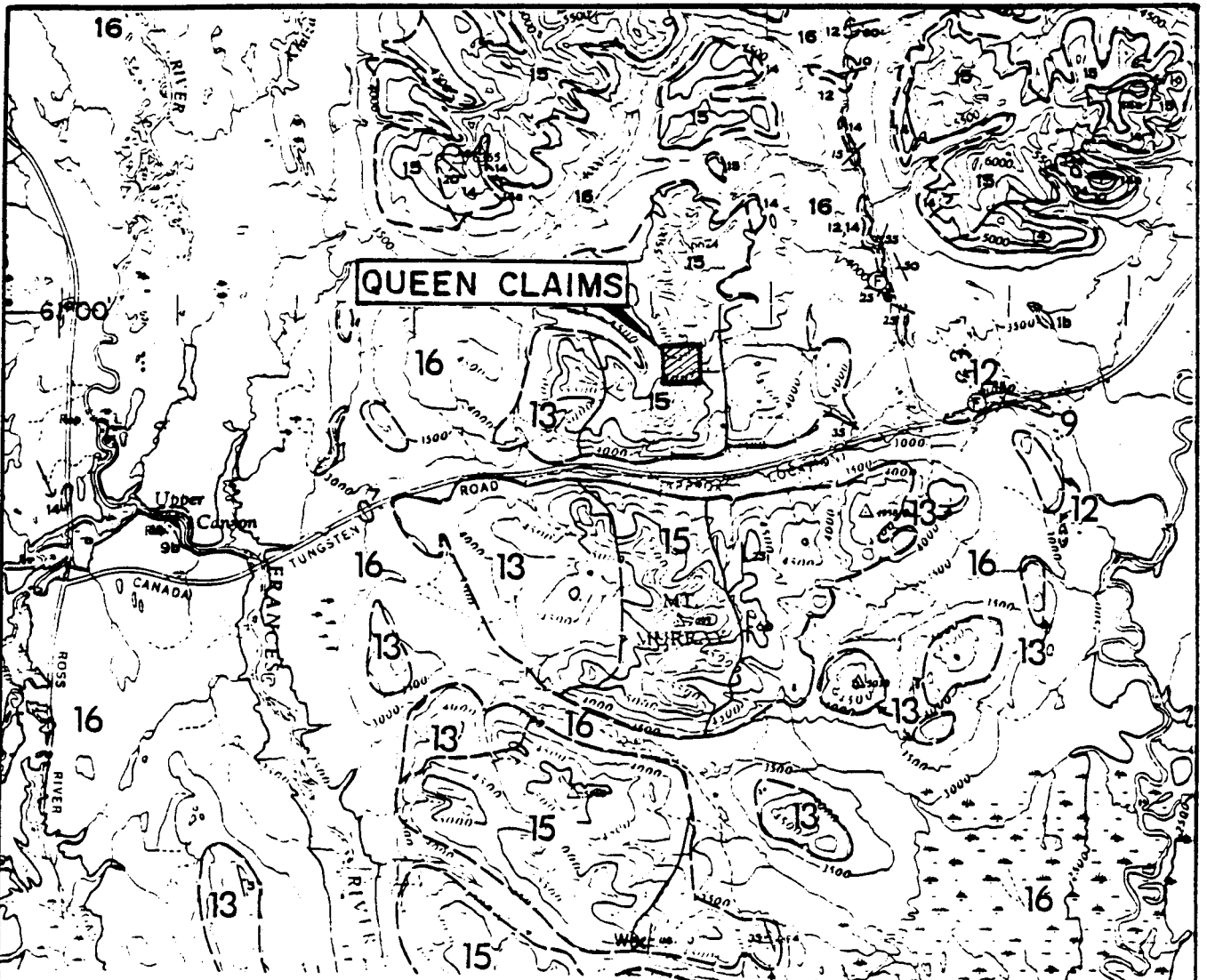
Staking records indicate that claims have been held in the area of the Queen Property for a number of years with the names Wayne and Alice previously applied to the property. The claims were held by Westgold Resources Inc. from January 1983 to September 1984 but no significant work program was conducted on the property. The recent blasting and trenching program appears to be the first effort to expose the mineralized zone (Alex Black personal Communication July 1986).

## REGIONAL GEOLOGY (Figure 3)

The regional geology of the area of the Queen Property has been mapped by Roots, Green, Roddick and Blusson (1966) and Gabrielse (1966) for the Geological Survey of Canada. Parts of the Watson Lake map sheet (Map 19-1966) and Frances Lake map sheet (Map 6-1966) have been compiled to show the regional geology of the Queen Property (Figure 3). The property is underlain by part of a northerly trending Cretaceous Batholith with dimensions of 50 kilometers by 100 kilometers. The batholith intrudes and metamorphoses mainly sedimentary rocks of Proterozoic and Paleozoic age. Pleistocene and recent glacial and alluvial deposits cover valley areas.

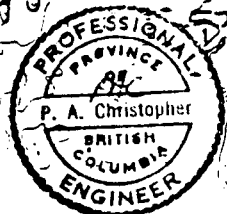
## PROPERTY GEOLOGY

The Queen Property appears to be mainly underlain by granitic rocks with a granodiorite or quartz monzonite composition. Biotite quartz monzonite in the area of the main showing is sheared or fractured with trends of 90 to 100° and steep northerly dips. Figure 4 locates rock trenches and pits with respect to granitic outcrops.



LEGEND

- QUATERNARY**
- 16 Unconsolidated glacial and alluvial deposits
- MESOZOIC CENOZOIC**
- CRETACEOUS (?)**
- 15 Fine- to medium-grained biotite-quartz monzonite, granodiorite, minor diorite and gneiss; 15a, fine- and medium-grained biotite hornblende quartz monzonite and granodiorite, in part porphyritic; 15b, hornblende syenite
- DEVONIAN AND (?) MISSISSIPPIAN**
- 13 Brown and black shale, black and grey chert, quartzite, graywacke, chert-pebble conglomerate; 13a, fine-grained light grey limestone and minor dolomite; 13b, greenstone; 13c, serpentinite
  - 14 Rusty brown weathering fine-grained schistose and spotted biotite hornfels, fine-grained quartzite, black pyritic argillite, dense light green to grey calc-silicate hornfels and fine-grained marble; minor slate, silty limestone and graywacke; 14a, light grey thin-bedded fine-grained marble and calc-silicate hornfels. May include some 1 and 2
- SILURIAN AND DEVONIAN (?)**
- 12 Fine-grained light to dark grey dolomite and quartzite; minor buff-grey dolomitic quartzite and silty to sandy dolomite
- ORDOVICIAN AND SILURIAN**
- 11 Black shale, slate; minor ch. rt., siltstone, dark limestone
- CAMBRIAN**
- MIDDLE AND LATE CAMBRIAN**
- 9 Light grey and brownish grey weathering, intercalated play argillaceous silty limestone, siltstone, and fine-grained grey limestone
  - 10 Dark grey and brown silty shale and finely laminated siltstone, dark grey slate, thin-bedded brown-grey fine-grained sandstone; minor hornfels
- EARLY AND/OR MIDDLE CAMBRIAN**
- 7 Buff-weathering dolomite, silty and sandy dolomite, minor sandstone and shale
  - 8 Dark brown-grey to black, in part pyritic, calcareous argillite, slate, shale, and minor thin-bedded argillaceous limestone
  - 6 Bright yellow and orange-weathering silty and sandy dolomite



To accompany report by P.A. Christopher, Ph.D., P. Eng.

**MORENGO RESOURCES INC.**

**QUEEN CLAIMS**

**REGIONAL GEOLOGY**

AFTER GSC PREL MAPS 6-1966, 19-1966  
WATSON LAKE, YUKON

SCALE 1:253,440

0 5 10 15 KM.

N.T.S. 105 A - 15	DATE: JULY 1986
DRAWN BY: P.A.C.	FIGURE NO. 3



Scree or talus of unmineralized quartz monzonite covers most of the mineralized trend and restricts the application of conventional prospecting methods.

### MINERALIZATION

Mineralization consist of disseminated and fracture controlled chalcopyrite, galena, sphalerite, pyrite, manganese stain and tetrahedrite(?). Figure 4 shows the main prospect area where mineralization has been explored by pits and rock trenches. Visual examination of the prospect area indicates that chalcopyrite > galena > pyrite > sphalerite > tetrahedrite. The mineralized zone appears to have 90 to 100° trend but scree cover prevents accurate determination of the attitude of the mineralized zone.

Two samples were collected by the writer from the mineralized zone. A grab sample of higher grade material from the muck assayed 1.51% Cu, 3.53% Pb, 4.04% Zn, 15.30 oz Ag/ton and >0.002 oz Au/ton. A ten foot chip sample sample assayed 0.39% Cu, 0.84% Pb, 0.85% Zn, 3.38 oz Ag/ton and >0.002 oz Au/ton. Limited sampling suggests that a higher proportion of lead and zinc than indicated by visual estimates of galena and sphalerite. The high silver to base metal ratio supports the visual identification of tetrahedrite. Mineralization in the small pit 12 meters south of the main pit is poorly exposed and was not sampled. Since no barren rock is exposed between the pits or south of the pit area, the zone has potential for being 15 or more meters wide. Possible extensions of the zone along strike are covered by scree and talus.

### DISCUSSION OF QUEEN PROPERTY

The Queen Property contains a significant silver and base metal occurrence that has received only limited prospecting and testing by blasting and hand trenching. Geochemical methods may help in locating other zones but heavy scree and talus cover hampers their use in tracing the known zone. Physical testing is required to define the characteristics of the occurrence and to determine if road access to the property is warranted. VLF-EM and Magnetic surveys should be conducted over the known showing to determine if wider application of the methods to test covered areas is justified.

Figure 4 shows the proposed locations of three diamond drill holes. Hole 1 should be drilled northerly at -45° from about 10 meters south of the southern pit. If the zone is found to dip steeply, a second hole should be drilled from the same site. If a northerly dip is indicated by the initial hole, the second hole should be drilled from north of the main prospect pit. After defining the orientation of the zone a third hole site should be selected by the project geologist to test for strike extensions of the mineralization.

A small grid should be centered over the showing with an east-west base line and north-south cross-lines. Magnetic and VLF-EM reading should be obtained at 20 meter interval along cross lines spaced at 50 meter intervals.

QUARTZ MONZONITE

QUEEN 1

QUEEN 20

TALUS

Proposed  
Drill Hole  
-80°

Grab sample  
Cu 1.51%, Pb 3.53%  
Zn 4.04%, Ag 15.30oz/ton

PIT  
cpy, sph, gn

QUEEN 2

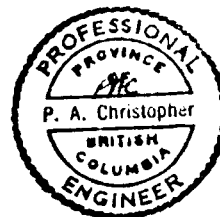
QUEEN 19

Chip sample  
Cu .39%, Pb .84%  
Zn .85%, Ag 3.38oz/ton

QUARTZ  
MONZONITE → PIT  
rt, cpy

TALUS

Proposed  
Drill Holes  
-60°  
-45°



To accompany report by P.A. Christopher, Ph. D., P. Eng.



MORENGO RESOURCES INC.

QUEEN CLAIMS  
PROPOSED DRILLING

WATSON LAKE, YUKON

SCALE 1:500

0 10 20 METRES

N.T.S. 105 A - 15

DATE: JULY 1986

DRAWN BY: P.A.C.

FIGURE N<sup>o</sup>. 4

## CONCLUSIONS AND RECOMMENDATIONS

The Queen Property contains a significant silver and base metal occurrence that can best be explored by using physical methods. An initial helicopter supported diamond drill test is recommended to evaluate the orientation, size and grade of the mineralized zone. The showing area should be surveyed with VLF-EM and magnetics to evaluate the usefulness of the methods for testing covered areas of the property. Contingent upon the results of the initial stage, a Stage II geochemical, geophysical, road building and trenching program may be warranted. A Stage III diamond drilling program is contingent on the results of the initial surveys.

An initial 1000 foot ( 300 m.) diamond drill test and evaluation of the VLF-EM and Magnetic methods is estimated to cost \$50,000. A contingent Stage II geochemical, geophysical, trenching and road building program is estimated to cost \$ 75,000. A contingent Stage III drilling program is estimated to cost \$ 125,000. Cost estimates for the staged exploration follow:

### COST ESTIMATES

#### STAGE I. GEOPHYSICAL AND DRILLING PROGRAM

<u>Personnel</u>		
Field Manager	14 days @ \$200ea.	\$ 2,800
Assistant	14 days @ \$150ea.	2,100
Engineering		2,000
<u>Diamond Drilling</u> 1000 feet @ \$25ea. all incl.		
		25,000
<u>Geochemistry</u> 100 samples @ \$20ea.		
		2,000
<u>Transportation</u>		
Helicopter		5,000
Support Vehicle		500
Airfare		500
<u>Room and Board</u>	32 man days @ \$40ea.	1,280
<u>Expendables</u>		
<u>Rentals</u>	Radio, VLF-EM, Magnetometer etc.	320
		500
<u>Report Preparation</u>		
		3,000
Total		\$ 45,000
Contingency		<u>5,000</u>
Stage I Total		\$ <u>50,000</u>

Cost Estimates cont.

STAGE II. GEOCHEMICAL, GEOPHYSICAL, ROAD BUILDING, TRENCHING  
(Contingent on Stage I Results)

Personnel

Project Manager	25 days @ \$200 ea.	\$ 5,000
Geophysical Operator	10 days @ \$200 ea.	2,000
Assistants	50 man days @ \$150 ea.	7,500
Engineering	5 days @ \$400ea.	2,000

Mobilization/Demobilization

Bulldozer Rental	150 hours @ \$100ea.	15,000
Room and Board	100 man days @ \$40 ea.	4,000

Transportation

Airfares		2,000
Truck 4 x 4	25 days @ \$100ea.	2,500
Truck 2 x 4	10 days @ \$ 80ea.	800
Helicopter		3,000

Geochemical Analyses

Rentals	VLF-EM, Magnetometer, Radio, Saws etc.	10,000
Expediting		1,000
Expendables		500
Drafting		2,200
Report Writing & Preparation		1,500
		5,000

Expediting

Expendables

Drafting

Report Writing & Preparation

Total	\$ 66,000
Contingency	9,000

Stage II Total \$ 75,000

STAGE III. DIAMOND DRILLING

Diamond Drilling	3,000 feet @ \$25ea. (915 meters) (all incl. drilling)	\$ 75,000
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Engineering & Management		20,000
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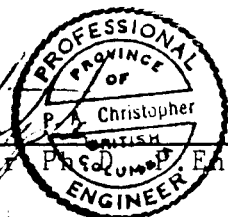
Geochemical Analyses		10,000
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Report Preparation		5,000
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Total	\$ 110,000
Contingency	15,000

Stage II Total \$ 125,000

*Peter A. Christopher*  
Peter A. Christopher P. Eng.  
August 15, 1986



BIBLIOGRAPHY


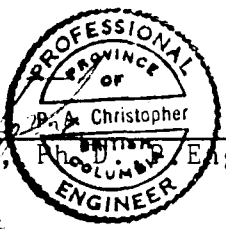
Gabrielse, H., 1966. Geology, Wolf Lake, Yukon Territory. G.S.C. Map 19-1966.

Roots, E.F., Green, L.H., Roddick, J.A., and Blusson, S.L., 1966. Geology, Frasces Lake, Yukon Territory and District of MacKenzie. G.S.C. Map 6-1966.

CERTIFICATE

I, Peter A. Christopher, with business address at 3707 West 34th Avenue , Vancouver, B.C., do hereby certify that:

1. I am a consulting geological engineer registered with the Association of Professional Engineers of British Columbia since 1976.
2. I am a Fellow of the Geological Association of Canada and a member of the Society of Economic Geologists.
3. I hold a B.Sc. (1966) from the State University of New York at Fredonia, a M.A. (1968) from Dartmouth College and a Ph.D. (1973) from the University of British Columbia.
4. I have been practising my profession as a Geologist for over 20 years.
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly in the properties or securities of Morengo Resources Inc. or associated companies.
6. I have based this report on a field examination conducted by me on July 14th, 1986 and on a review of company and government report on the area of the Queen Property.
7. I consent to the use of this report by Morengo Resources Inc. or associated companies, in any Filing Statement, Statement of Material Facts, Prospectus or assessment report issued by the company.

  
Peter A. Christopher,  Eng.  
August 15, 1986