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**PHOTO-GEOLOGICAL INTERPRETATION
OF THE
MOT 1, MOT 2, MOT 5, F.C.#13 AND F.C.#15 CLAIMS
AND SURROUNDING AREA,
OMINECA MINING DIVISION,
BRITISH COLUMBIA, CANADA**

NTS 93D/3

Latitude 56° 05'N Longitude 127° 06'W

prepared for

Electrum Resource Corp.
912-510 West Hastings St.
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by

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March 14, 2000

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**
26,000

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SUMMARY AND CONCLUSIONS

Electrum Resource Corporation owns the MOT claims located about 110 kilometres north northeast of Hazelton, British Columbia. The property is situated near the eastern margin of the Bowser Basin and is underlain mainly by clastic sedimentary rocks belonging to the Jurassic Bowser Group. These are bounded to the east by intermediate to mafic volcanics belonging to the Lower to Middle Jurassic Hazelton Group. The Bowser Group sediments have been intruded to the south and north of the property by granodioritic to monzonitic intrusives belonging to either the Late Cretaceous Bulkley suite of intrusions or to the Eocene Kastberg intrusions.

Within the claims, several quartz vein type gold occurrences are situated at or near the margins of a feldspar porphyry sill that has intruded northwesterly striking Bowser Group greywackes, argillites and pebble conglomerates. One of these, the Huestis Zone, has been drilled on a number of occasions, with intersections ranging from nil to 9.1 metres grading approximately 10 grams per tonne (gpt) of gold. Samples from two other nearby zones have returned values of 10-15 gpt gold over widths of 1-3 metres. Along with several other lesser occurrences, these have not been drilled.

A photo-geological interpretation of the area was carried out in an attempt to identify larger scale structures with which gold mineralization could be associated and which could then be the focus of further exploration attention. No such structures were found although analysis suggests the presence of a previously unrecognized magnetic intrusive immediately north of the main gold showings. No other potentially interesting geological features were identified on the property.

In summary, a photo-geological analysis of the MOT claims area has failed to identify any features associated with known mineralization that would be worthy of followup work. Information available in numerous assessment reports suggests that known mineralization has limited size potential and is situated in difficult and steep terrain. As such, no further work would appear to be warranted. However, the writer has not personally visited the property and it may be that there are other, unreported aspects or features of mineralization that would be of interest. Only a field examination could determine whether or not this was the case.

RECOMMENDATIONS

If the limited potential for a small, vein-type gold deposit were still of interest to the owners, a field examination of the known occurrences should be carried out. Assuming travel from Vancouver and helicopter access from Smithers, the approximate cost would probably be \$9,000 to \$10,000.

INTRODUCTION

Electrum Resource Corporation owns the MOT claims located about 110 kilometres north northeast of Hazelton, British Columbia. At the request of Mr. John Barakso, president of Electrum, the writer carried out a photo-geological interpretation of the property area with a view to identifying possible larger scale geological controls on known gold mineralization on the property and to make recommendations for further exploration work. The report is based on data provided by Electrum and information compiled from published sources and assessment reports.

LOCATION AND ACCESS

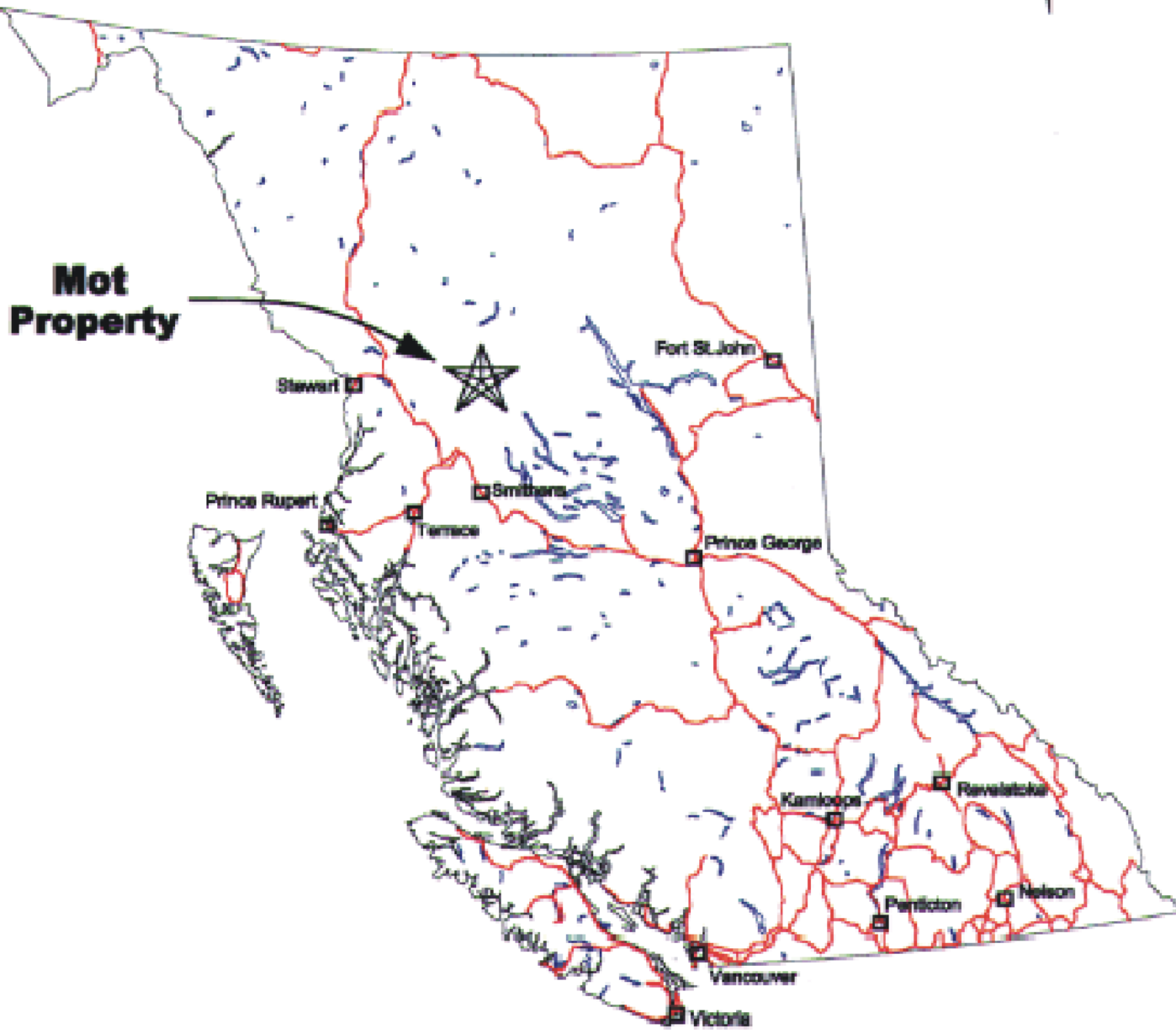
The MOT property is located immediately northwest of Motase Lake, about 110 kilometres north northeast of Hazelton and 152 kilometres north of Smithers, British Columbia (Fig. 1). It is centred more or less at Latitude 56° 05'N and Longitude 127° 06' W in NTS area 94D/3. There are no roads in the immediate area and access is probably most convenient via helicopter from Smithers.

The claims are situated in the Skeena Mountains. There is considerable relief on the property, with elevations ranging between about 1,300 and 2,400 metres A.S.L. Valleys are wide and filled with glacial drift and numerous glaciers are present around the property. The climate is cool temperate to sub-arctic, depending on the elevation. Lower reaches are typified by thick coniferous forest and tree-line is at about 1,500 metres. Surface exploration work is probably feasible between May and early September at lower elevations while the known gold showings are probably only snow-free in July and August.

TENURE

The property is 100% owned by Electrum Resource Corp., consists of five claims totalling 48 units and is located in the Omineca Mining Division (Fig. 2). Table One lists their particulars.

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Mot 1	8	239865	February 15, 2000
Mot 2	18	239220	February 15, 2000
Mot 5	20	355434	April 30, 2000
F.C. #13	1	243672	January 22, 2002
F.C. #15	1	243673	January 22, 2002

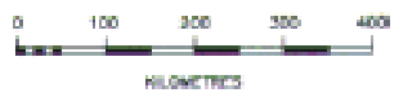


Mot Property

— Highway

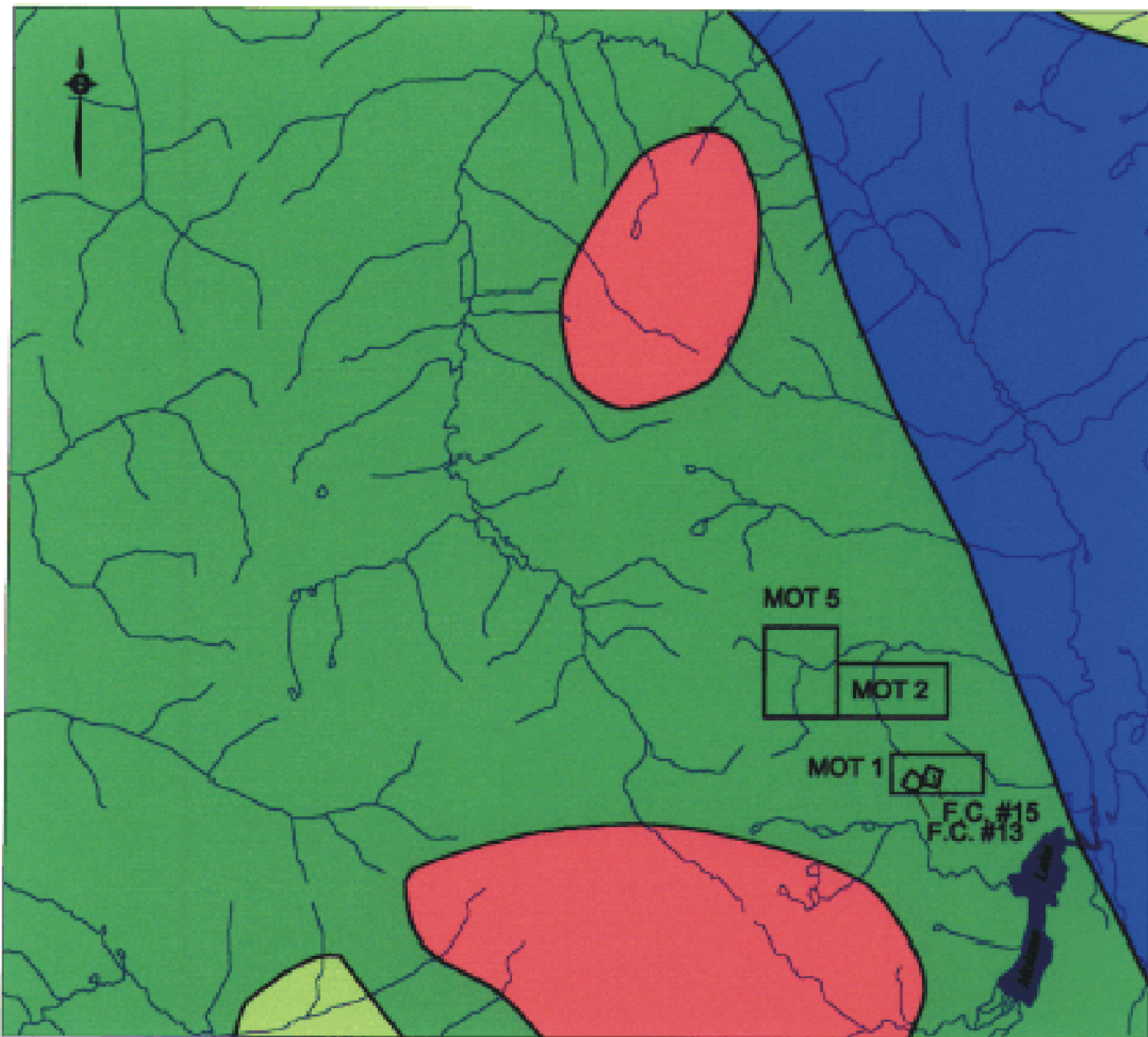


C.F.
3/14/2000



ELECTRUM RESOURCE CORP.
Mot Property
Moose Lake Area, B.C.





Location



50° 0' N
120° 30' W



C.F.
3/14/2000

-  L/Jr Bulkley Intrusions
-  K Skeena Group sediments
-  Jr Bowser Lake Group sediments
-  Im/Jr Hazelton Group volcanics

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 Mot Property
 Motsee Lake Area, B.C.

Claim Location
 and
 Regional Geology
 (from BCMEPR MapPlace website)

REGIONAL GEOLOGY

The west half of NTS area 94D is one of the few remaining areas in British Columbia that has not been geologically mapped at a scale of 1:250,000 or better. According to the 1:5 million scale geological map published as BC Open File 1712, the property is situated near the eastern margin of the so-called Bowser Basin, which places it within the Stikinia terrane contained in the larger Intermontane superterrane.

Figure 2 shows that most of the area is underlain by clastic sedimentary rocks belonging to the Jurassic Bowser Group. These are bounded to the east by intermediate to mafic volcanics belonging to the Lower to Middle Jurassic Hazelton Group. A fault-bounded block of Cretaceous Skeena Group greywackes and sandstones is located to the west of the MOT property. The Bowser Group sediments have been intruded to the south and north of the property by granodioritic to monzonitic intrusives. These belong either to the Late Cretaceous Bulkley suite of intrusions, which generally are found somewhat to the south, or to the Eocene Kastberg intrusions.

Other than the MOT prospect, several other mineral occurrences are known in the region, including various porphyry molybdenum ± copper showings generally associated with the larger intrusions and a number of gold and/or base metal-bearing shear zones and veins.

HISTORY OF WORK

- 1945** Yukon Northwest Explorations Limited carried out some prospecting, geological mapping and sampling in the area. They found two small copper occurrences consisting of fracture fillings and disseminations of bornite and/or chalcocite along with minor galena, pyrite, chalcopyrite and possibly tetrahedrite.
- 1948** The area was staked by H.H. Huestis. His prospecting led to the discovery of three vein-type gold occurrences now known as the Huestis, Goudridge and Moran showings.
- 1962** Huestis optioned the property to Noranda who completed a small program of mapping, EM and magnetic surveys as well as 92 metres of EX and X-ray drilling in five holes in the Huestis showing.
- 1981** Amoco Canada staked a number of claims surrounding some claims on the showings that were now owned by Bethlehem Copper and carried out grid-based soil and lithogeochemical sampling, geological mapping and a total of 916 metres of diamond drilling distributed among four different locations. None of these involved the previously discovered gold occurrences and were instead aimed at porphyry-style targets. None encountered significant mineralization.
- 1984** Cominco inherited the core claims from Bethlehem Copper in 1982 and in 1984 prospected and sampled in the vicinity of the known gold showings, eventually collecting 56 chip samples. The claims were allowed to lapse.
- 1986** The MOT and MOT 2 claims were staked by B.H. Kahlert and J.J. Barakso, who carried out minor rock sampling.

- 1987** The property was optioned to Prolific Resources Ltd., which undertook a program of prospecting, geochemical sampling, mapping and approximately 1,000 metres of diamond drilling, mainly on the Huestis showing.
- 1988-92** Kahlert and Barakso completed some assessment work involving minor prospecting and sampling exercises on and in the immediate vicinity of the known gold showings.
- 1995** The property was optioned by Skeena Resources Ltd., which carried out some grid-based soil sampling, magnetic and VLF surveys on the MOT 1 and F.C. #15 claims.
- 1996-98** Kahlert and Barakso completed some minor sampling for assessment work. The claims were transferred to Electrum Resource Corp.
- 1999** Electrum Resource Corp. commissioned a satellite image interpretation of the property from Earth Science Surveys Inc.

PROPERTY GEOLOGY AND MINERALIZATION

Although some geological mapping was carried out by Amoco, it appears to have been more of a reconnaissance exercise rather than detailed outcrop mapping. All other work has focussed on the known gold occurrences and as a result, the geology of the property away from them is not known in much more detail than is shown in Figure 2. Pauwels (1984) includes a rough sketch map and the following general description of the property as a whole:

"The oldest rocks on the property are schistose green andesites of the Hazelton group (Jurassic), these rocks crop out to the north of the MOT 1 claim on the foot of 300 m high, north-facing cliffs. The cliffs consist of greywackes, argillites and quartz pebble conglomerates of the Bowser group (Upper Jurassic to Cretaceous). Bowser sediments strike W to NW and dip gently (20-50°) to the south. This ridge of sediments located in the central part of MOT 1 claim is intruded by a 50 to 100 m thick feldspar porphyry sill which outcrops near the crest and on the south-facing slopes of the ridge. The feldspar porphyry sill is often rusty weathered due to small amounts of disseminated pyrite. Alteration in the porphyry is slight and confined to partial sericitization of feldspars. Other workers on the property have mentioned molybdenite and chalcopyrite in the feldspar porphyry. Neither of these minerals were observed by us in intrusive rocks. Chalcopyrite was seen in quartz veins in both Noranda's and Amoco's drillholes and in a few quartz outcrops."

Davis (1987) describes the Bowser Group sediments in the area of the main showings as striking northwesterly and dipping moderately to the southwest. They include massive, fine-grained black argillite, lighter-coloured pebbly greywacke and coarse pebble conglomerate. Contacts between these units are generally gradational except in areas where siltstones and argillites are interbedded, where they are sharp. The sediments are commonly cross-bedded and are often graded. The feldspar porphyry sill is characterized by large (<4 cm) plagioclase phenocrysts in a grey to light grey, medium to coarse-grained matrix of feldspar, biotite, and quartz along with minor disseminated pyrite. Although Davis indicated that the porphyry is variably sericitized and silicified, Pauwels (1984) stated that alteration was limited to slight sericitization of feldspars. Both the host rocks and the veins are cut by younger, medium-grained monzonitic dykes and sills.

The three main gold occurrences, Huestis, Moran and Goudridge, are all hosted by quartz veins occurring at or near the contact between the feldspar porphyry sill and the enclosing Bowser Group sediments. The host rocks occasionally exhibit some bleaching, possibly sericitization or argillization near the veins and minor pyritization in places is probably responsible for a gossan developed in the area. Pauwels (1984) notes that the general area of the main showings is marked by abundant, steeply dipping quartz veins which strike in two main directions, N10°E and east-west. Most are less than one metre thick although a few are wider, ranging from about 2 metres true width to 12 metres in apparent width. The longest observed strike for any of the veins was about 300 metres and some 300 metres of vertical continuity were observed in veins in the cliffs bordering the Moran showing to the north. The veins carry small amounts of pyrite along with occasional sphalerite and chalcopyrite. Arsenopyrite has been noted in the Moran zone.

Other than Amoco's property-wide sampling, most of the historical exploration on the property focussed on the Huestis showing. Noranda's 1961 drilling intersected a 9.1 metre interval grading approximately 10 gpt gold as well as some higher grade but narrower intervals. Of ten holes drilled by Prolific Resources in 1987, four intersected mineralized vein material and returned intersections ranging from 1 metre grading 8.9 gpt Au to 5.5 metres grading 8.6 gpt Au. On the basis of their work and previous drilling, Prolific suggested that the Huestis zone is a southwesterly plunging quartz vein/breccia zone.

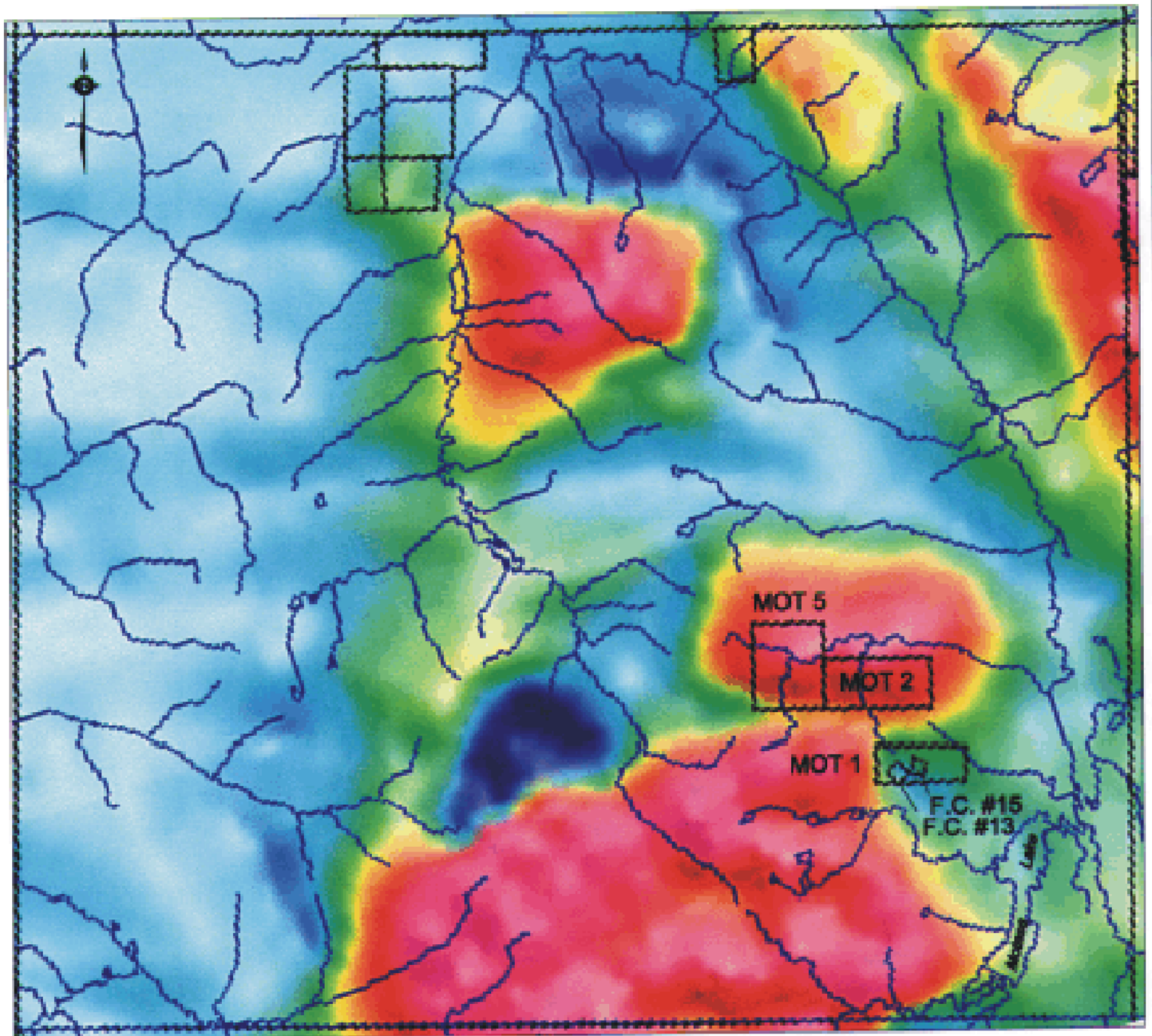
Samples collected from the Goudridge and Moran zones during various past exploration campaigns have returned values of up to 10-15 gpt Au over 1-3 metres although neither has been drilled. Finally, in their 1987 work program, Prolific Resources prospected in the vicinity of a number of Cu ± Au ± Mo ± Ag soil anomalies outlined elsewhere on the property by Amoco in 1981 and located some new but low grade, auriferous float in one area.

PHOTO-GEOLOGICAL INTERPRETATION

The writer was commissioned by Electrum Resource Corp. to carry out a photo-geological interpretation of the Motase claims area with the objective of identifying possible geological controls on the auriferous quartz veins that would complement a previous, lower resolution satellite image analysis (Campbell, 1999). A recent, high resolution photographic survey was found to have been flown by the B.C. government in 1998, from which excellent black and white images at a scale of 1:40,000 were available.

A review of MINFILE and regional magnetic data posted on the BCMEMPR website was carried out in conjunction with photo-interpretation. Magnetic patterns show a discrete positive anomaly centred on the MOT 5 and MOT 2 claims, suggesting the presence of a previously unrecognized intrusion (Fig. 3). Similar anomalies to the north and south are shown on the government maps and described in MINFILE records as being due to granitoid intrusives, either the Late Jurassic Bulkley Intrusions or the Eocene Kastberg Intrusions.

Detailed examination of the airphotos resulted in the geological interpretation shown on Figure 4. Apparently intrusive contacts with Bowser Group sediments were evident in a number of places coinciding with the approximate outline of the magnetic anomalies mentioned above. One larger intrusive is interpreted more or less in the MOT 5 – MOT 2 area and can be seen in contact with both Bowser and Hazelton Group rocks. The latter occupy lower lying areas to the northeast of the claims. A second discrete magnetic intrusive is situated to the southwest of the claims and indicates that the larger magnetic anomaly in this direction evident in Figure 3 may actually reflect the presence of a



127° 30' W
56° 0' N



[Signature]
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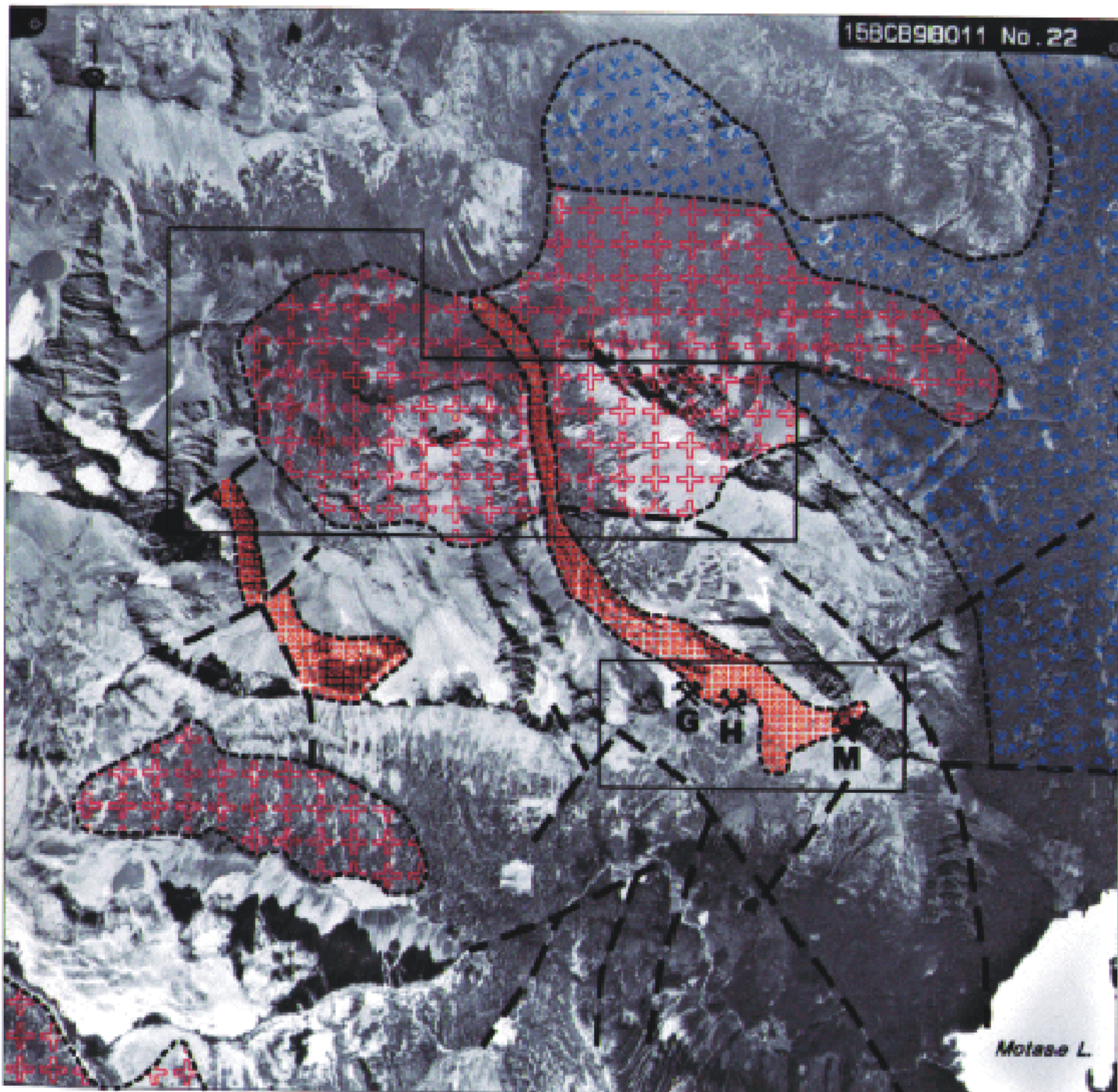
Regional magnetic image data taken from MEMPR MapPlace website. Colours at red end of spectrum denote higher values and those at blue end, lower values.

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Mot Property
Moose Lake Area, B.C.

Regional Magnetics

158CB98011 No. 22



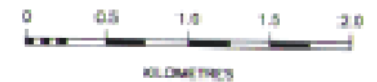
Interpreted Geology

-  felsic dyke
-  magnetic intrusive
-  Hazelton Group volcanics
-  Bowser Gr. sediments



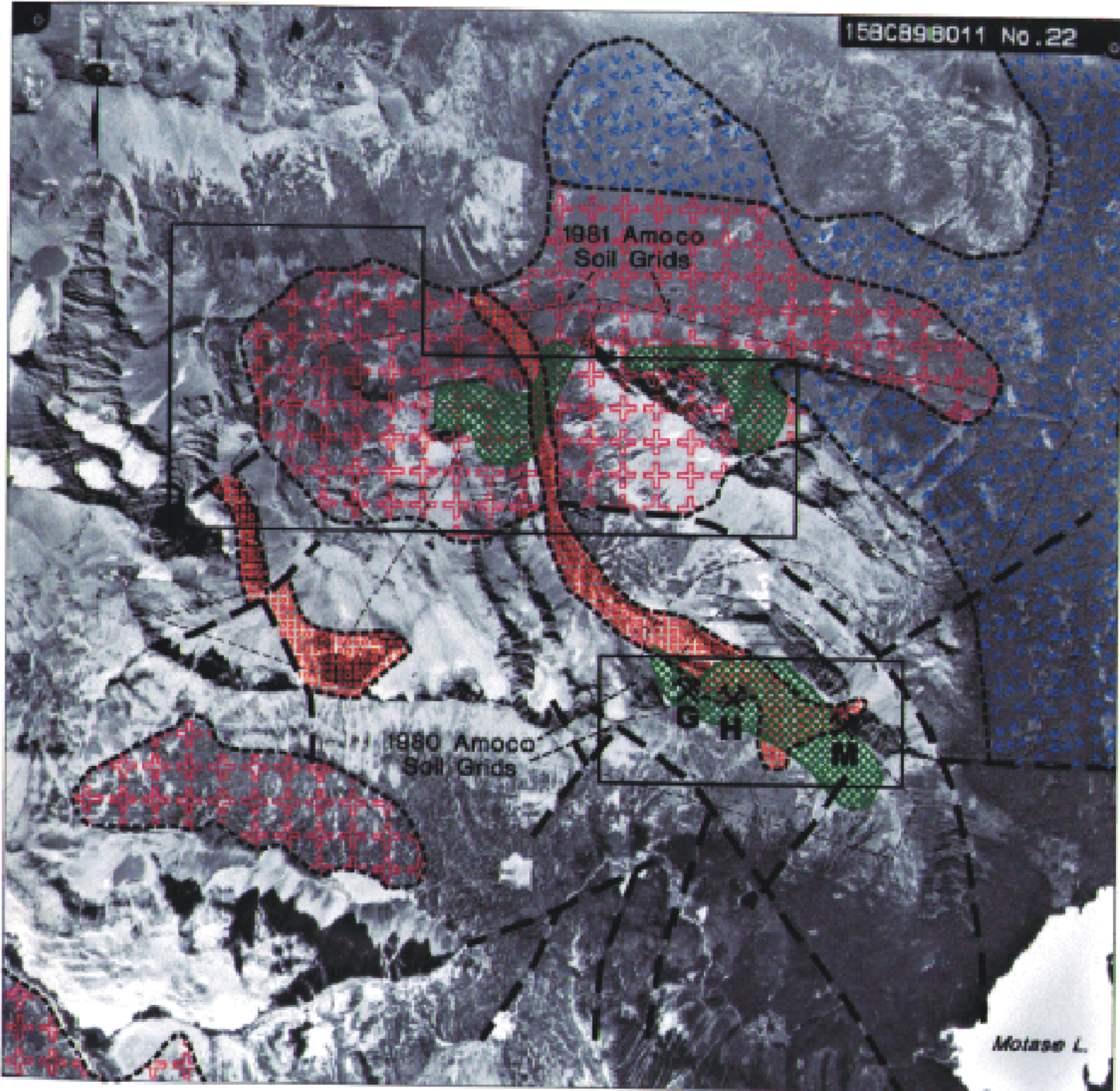
-  contact
 -  fault/linear
- CS*
3/12/2000

-  gold occurrence
- G - Goudridge
- H - Huestle
- M - Moran











ELECTRUM RESOURCE CORP.
 Mot Property
 Motase Lake Area, B.C.

Photo-geological
 Interpretation



Interpreted Geology

-  felsic dyke
 -  magnetic intrusive
 -  Hazelton Group volcanics
 -  Bowser Gp. sediments
 -  Cu +/- Au +/- Mo +/- Ag soil anomaly
 -  contact
 -  fault/linear
 -  gold occurrence
 G - Goubridge
 H - Hazelton
 M - Moran
- 0 0.5 1.0 1.5 2.0
KILOMETRES



ELECTRUM RESOURCE CORP.

Mot Property
Motase Lake Area, B.C.

Amoco Soil Anomalies and Summary Geology

cluster of intrusives rather than a single larger body. Magnetic relief within the larger anomaly would support this possibility.

The three main gold occurrences are described in earlier assessment reports as being located on the flank of a porphyritic felsic dyke. Interpretation suggests that the dyke crosscuts the larger magnetic intrusion to the north and therefore post-dates it. Detailed inspection of the photos showed no evidence of any larger scale structures with which mineralization could be associated. However, a possible dyke with the same approximate orientation was outlined about 2 kilometres to the west.

Figure 5 summarizes the results of grid-based soil sampling carried out by Amoco in 1980 in relation to the interpreted geology (Melnyk, 1981). One anomaly coincides with the known showings. Two more are situated within the interpreted magnetic intrusive to the north. Both had been investigated by Prolific Resources in 1987. The westernmost lies on the northern extension of the feldspar porphyry sill and their sampling returned low to moderate gold values in several grab samples of unspecified character. No possible source was found for the easternmost anomaly. No geological features of potential interest were seen in either area.

DISCUSSION

Known gold mineralization on the MOT claims consists of mesothermal quartz vein occurrences related to a late felsic dyke which itself exhibits limited alteration. The veins have been prospected and *one has been drilled. Although some high grades were encountered, available information suggests that the size potential of these occurrences is limited.*

A photo-geological interpretation of the area was carried out in an attempt to identify larger scale structures with which mineralization could be associated and which could then be the focus of further exploration attention. *Although analysis suggests the presence of a previously unrecognized magnetic intrusive immediately north of the main gold showings, no such structures were found.*

Two other gold-in-soil anomalies identified in previous work lie within the interpreted intrusive. Although past followup of these anomalies appears to have been somewhat limited, the results were not encouraging. No potentially interesting geological features were evident in photo-geological analysis of these areas. A possible second dyke, perhaps related to that associated with the known showings, was identified about 2 kilometres to the west. At least a portion of this area was prospected and sampled by Amoco in 1981 with negative results.

Finally, it should be noted that all photo-geological interpretations, while potentially very useful, cannot substitute for an actual physical inspection on the ground. All conclusions should be regarded as tentative until substantiated by field evidence.

REFERENCES

Campbell, K.V., 1999: Geological Remote Sensing Assessment Report on the MOT 1 to 5 Claims; report commissioned by J. Barakso; 11p. plus appendix.

- Davis, J.W. and Beattie, B.C., 1988: Geological, Geochemical and Drilling Report on the Motase Lake Property; report commissioned by Prolific Resources Ltd.; 35p. plus appendices.
- Jamieson, M.D., 1995: Geochemical and Geophysical Report on the MOT 1 and FC-15 Claims; report commissioned by Skeena Resources Ltd.; 16p. plus appendices.
- Melnyk, W.D., 1981: MOT 1 Claim – Soil Geochemistry; report by Amoco Canada Petroleum Co. Ltd.; BCMEMPR Assessment Report 8844, 8p.
- Pauwels, A.M., 1984: Owners Report – Geological Mapping, Rock Sampling – Motase Lake Project; report for Cominco Ltd.; 5p. plus appendices.

Statement of Qualifications and Consent

I, C.F. Staargaard, of 1470 Doran Road, North Vancouver, B.C., hereby certify that:

- a) I am a consulting geologist with offices at 912-510 West Hastings St., Vancouver, B.C.

- b) I have the following degrees:

1977	B.Sc.	Geology	The Pennsylvania State University
1981	M.Sc.	Geochemistry	Queen's University, Kingston, Ontario

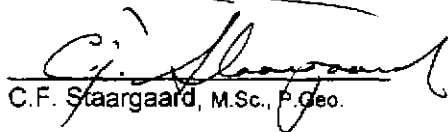
- c) I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia, Canada.

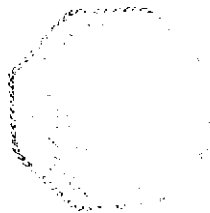
- d) I have been continuously employed in mineral exploration in Canada, the Americas and Asia since 1979 and seasonally since 1975.

- e) I have no interest, either directly or indirectly, in the subject property or Electrum Resource Corp.

- f) This document is based on my analysis of information supplied to me by Electrum Resource Corp. and various published reports and other information in the public domain. I did not visit the property.

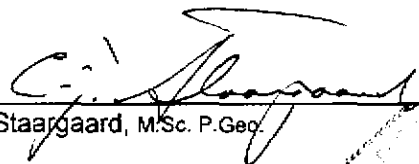
Dated this 14th day of MARCH, 2000, in Vancouver, B.C.


C.F. Staargaard, M.Sc., P. Geo.



Statement of Costs

<u>Item</u>	<u>Amount</u>
Data compilation and photo analysis C.F. Staargaard: 3.9 days @ \$600/day	2,340.00
Airphotos	159.82
Copies, maps, assessment reports and report materials	97.61
Report preparation C.F. Staargaard: 3.2 days @ \$600/day	1,920.00
	<hr/>
Total	\$4,517.43


C.F. Staargaard, M.Sc. P.Geol.

