



A GEOLOGICAL REPORT
ON
THE BUD, DAGO, AND SCOTTY CLAIMS OF PAN ACHERON RESOURCES LTD.,
KATHLEEN LAKES AREA, YUKON TERRITORY.

090811



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

\$ 9,864.14

18000

~~Resident Geologist or
Resident Mining Engineer~~

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

Ruth Debré *Oct 1/01*
Commissioner of Yukon Territory
for

ROM. Mining Recorder at MAYO
O. Supervising Mining Recorder at Whitehorse, Y.T.



OR ACTION ARE:

NEW APPL'N for PLACER LEASE to PROSPECT: Name: _____ Lease No. _____

RENEWAL APPL'N PLACER LEASE to PROSPECT: Name: _____ Lease No. _____

AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name: _____ Lease No. _____

ASSIGNMENT of PLACER LEASE No. _____
From: _____ To: _____

GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
Owner: _____

DIAMOND DRILL LOGS:
Claims: _____ Claim sheet no. _____

QUARTZ ASSESSMENT REPORT
Claims: "SCOTTY" 1-32 Claim sheet no. 106-D-8

Type of report: GEOLOGICAL Submitted by: PAN AMERON RESOURCES LTD.

Cls. work performed on: "SCOTTY" 1-32
"Bud" 1-28
"DAGO" 3-5
\$ Req. for ren. application ~~1000.00~~

[Signature]
Signature

REPLY ACTION:

No form c's accompany rep't

Date Ret. _____

32
28
3
6300 → 9864.14 qualifies

Signature _____

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA:

In the Matter of the geological survey
on the Scotty Claims.

To Wit:



I, Ronald Philp

of 1458 - 409 Granville Street, Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that the following personnel were employed and costs incurred in conducting the surveys.

PERSONNEL:

Chris McAtee - geologist - field - 35 days @ \$170.46/day =	\$5,966.10
Chris McAtee - geologist - office - mobilization, report - 4½ days =	767.07
R. Philp - supervision, report - 1½ days @ \$250/day =	375.00
J. Gillanders - gridding - 8 days @ \$81.81/day =	654.48
D. Conway - gridding - 8 days @ \$81.81/day =	654.48
	<hr/>
	\$8,417.13

DISBURSEMENTS:

Meals and accomodation, travel, misc supplies (1/3 total)	210.61
Prints	59.52
Groceries and supplies (1/3 total)	438.44
Charter aircraft (½ total)	549.60
	<hr/>
	\$1,258.27
Plus 15% service charge on disbursements	188.74
	<hr/>
	188.74
	<hr/>
TOTAL	<u>\$9,864.14</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the CITY
of VANCOUVER, in the
Province of British Columbia, this 14th
day of SEPTEMBER, A.D. 1981

A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

PAN ACHERON RESOURCES LTD.

1458 - 409 GRANVILLE STREET
VANCOUVER, B.C. V6C 2J5
TEL: (604) 688-1508

March 17, 1981

Department of Indian and Northern Affairs.
P.O. Box 10
Mayo, Yukon Territory
YOB 1M0



ATTENTION: Mr. R.G. Ronaghan,
Mining Recorder

Dear Sir:

RE: "Scotty" Quartz Claims

Enclosed please find 2 copies of a geological report on the Scotty, Bud and Dago Claims, Mayo, M.D., to accompany previously filed certificates of work for the Scotty Claims. Additional certificates will be filed on the Bud and Dago Claims.

The report is not signed by Mr. McAtee as he left before it was typed and we can't locate him. However, I supervised his work and assisted in the report and maps thus have endorsed the report with my signature and seal.

I apologize for the long delay in forwarding this.

Yours truly,

PAN ACHERON RESOURCES LTD.

per: U. D. Schmidt

Ron Philp

RP/ds

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AREA, YUKON TERRITORY.

PAN ACHERON RESOURCES LTD.

A GEOLOGICAL REPORT

ON

THE BUD, DAGO, AND SCOTTY CLAIMS OF PAN ACHERON RESOURCES LTD.,

KATHLEEN LAKES AREA, YUKON TERRITORY.

INTRODUCTION:

During the period of July 17 to August 8, 1980, a geochemical soil survey was carried out on the southern and western parts of the Bud claim group, and geological mapping was carried out on the Scotty, Bud, and Dago claims. The purpose of this work was to carry out the recommendations of G.A. Noel (Noel, 1980), and to further evaluate the mineral potential of the claim groups.

HISTORY OF THE PROPERTY:

The property was originally located by Gordon Dickson in 1951, and subsequently explored by Leitch Gold Mines Ltd. in 1953 and Prospectors Airways Ltd. in 1954. The claims, which were allowed to lapse, were restaked by G. Dickson in 1959, and were optioned to Atlas Explorations Ltd. in 1966. In 1968 and 1969 Rackla River Mines Ltd. was formed to develop the property, and geological mapping and bulldozer trenching were completed. Casino Silver Mines Ltd. optioned the property in 1969 and did an IP survey in that year and 500 metres of diamond drilling in 1970. In 1972 Rackla River Mines undertook extensive soil surveys and some packsack diamond drilling. In 1974 Anvil Mining Corp. optioned the property and completed geological mapping, a geochemical soil survey and magnetometer survey followed by the diamond drilling of two holes.

Pan Acheron Resources Ltd., who optioned the property in 1977, did a limited geochemical soil survey, and cleaned out and sampled a number of the old trenches. In 1978 a more extensive geochemical soil survey was undertaken, and 1559 metres of BQ diamond drilling was carried out in 22 holes.

PROPERTY, TITLE:

The property consists of the following mineral claims:

Dago 3 and 5
Bud 1 - 28
Scotty 1 - 32

The claims are owned by Gordon Dickson of Whitehorse, Y.T., and are currently under option to Pan Acheron Resources Ltd. of Vancouver, British Columbia(Figure 1.)

FIELD PROGRAM - 1980

The 1980 field program consisted of geological mapping on the Bud and Scotty claims, and a geochemical soil survey on the Bud claims. Field work was carried out from July 17 to August 8, 1980.

The geology of the property was mapped at a scale of 1 inch = 1000 ft. (1:12,000). A flagged grid put in with hip chain and compass served as ground control. Traverses made across country, and along creeks, grid lines, and ridges were used as a base for the geological mapping.

On Bud claims 3 - 10, 17 - 24, 33 - 40 and 41 - 48 flagged grid lines were spaced 100 metres apart, with stations along the lines spaced every 50 metres. In all, 70.5 km of grid lines were put in.

The geochemical soil survey consisted of the collection of soil samples at all of the stations on the flagged grid. Detailed notes were taken with regard to soil type, depth and colour, local vegetation, rock types nearby, and apparent origin of the soil. In all, 1409 soil samples were obtained for analysis.

Results of the geochemical soil survey will not be given in this report, but will be reported on separately.

GEOGRAPHY:

The Bud, Dago and Scotty property is located in the Wernecke Mountains 115 km northeast of Mayo, Yukon Territory, and five kilometres north of Kathleen Lakes, with the centre of the property located at $64^{\circ} 17'$ N. latitude and $134^{\circ} 12'$ W. longitude (Figure 2). The property is situated in both the Rackla and Beaver River drainage systems, which eventually flow into the Stewart River.

The physiography of the area consists of smooth, rugged east-west trending ridges rising 400 metres above the stream drainage system. The elevation of the property is from 1000 to 1500 metres above sea level. Approximately half of the property is above treeline, which is at approximately 1300 metres above sea level.

The vegetation consists of stunted spruce and fir with extensive areas of thick willow and buckbrush, especially above treeline.

The property is accessible by float plane from Mayo to Kathleen Lakes, followed by five kilometres of trail northeast to the main showings area.

GEOLOGY:

GLACIAL AND SURFICIAL GEOLOGY

The area north of Kathleen Lakes was little affected by glacial activity (Vernon and Hughes, 1966). Greenstone glacial erratics (unit 20a of Green, 1972) are common throughout the property and are probably associated with glacio-fluvial deposits in the Kathleen Lakes-Beaver River drainage and southwest flowing drainage north of Kathleen Lakes. Glacio-fluvial deposits of outwash were found in the northeast part of the property on Scotty claim 19.

In general, surficial deposits on the claim group consist of weathered bedrock, alluvium and minor talus.

REGIONAL GEOLOGY:

The area has been mapped at a scale of 1:250,000 by the Geological Survey Of Canada (Green, 1972). The major structural feature is a west-northwest trending thrust fault extending westerly along the Beaver River valley and easterly along the east Rackla River and Nadaleen River. A Proterozoic clastic marine assemblage (unit 2 of Green) has been thrust over Ordovician and Silurian marine sediments (unit 8). Thrusting across this fault has resulted in tight folding along west-northwest axes, as well as some local overturning of both the Proterozoic and Palaeozoic assemblages. In general, the major structure north of Kathleen Lakes is south-dipping with the Palaeozoic units apparently overlying the Proterozoic units.

The Proterozoic rocks of unit 2 include shale, argillite and quartzite overlain by limestone and a distinctive orange-weathering platy grey dolomite. The Ordovician-Silurian assemblage includes grey-weathering limestone, black shale and chert of the Road River formation.

Lead-zinc-silver mineralization has been found along the major thrust fault (Dawson Fault) over a distance of 150 km, from the Nadaleen River showings on the east to the Silver Hill showings on the west. The mineralization generally occurs near the Proterozoic dolomite/Paleozoic shale-limestone contact.

LOCAL GEOLOGY:

The results of the 1980 geological mapping are presented as Figure 3. The rocks have been divided into four main units A,B, and C,D for convenience of discussion.

Rocks assigned to unit A consist of medium to thick bedded, massive, sometimes rubbly, aphanitic, dark grey to black limestone and dolomitic limestone. These rocks characteristically weather to a mottled dark grey and tan/orange/chalky white colour, and sometimes contain thin (<1 cm), wavy, white calcite veinlets. These

dark grey limestones correlate with Green's (1972) unit 8 of Ordovician-Silurian age.

Near the base of unit A and always close to the unit A/B contact are distinctive beds that have a banded orange and medium grey (bands 3-8 cm apart) weathered appearance. These rocks serve as helpful marker beds in mapping the unit A/B contact, which is intimately related to the mineralization.

The dark grey limestones of unit A are generally exposed in low east-west to northeast striking ridges, with shallow dips to the south or southeast. These rocks are sometimes gently folded with shallow synclinal folds exhibited.

Rocks designated as unit B consist of orange-weathering, very fine grained, platy, medium, or massive beds of medium grey to buff dolomite or, less commonly, dolomitic limestone. These rocks form immense 300 metre cliffs that overlook the major creeks, and unconformably underlie the dark grey limestones of unit A. Rocks assigned to unit C outcrop on the western part of the property and in the northwesterly flowing creek on the eastern Bud claims. They consist of thin-bedded, fractured, rubbly, greenish-black slates. These rocks, which conformably underlie the orange-weathering dolomites of unit B, show a gradation from slate to dolomite at the unit B/C contact, although at some locations an unconformity was noted.

These orange-weathering dolomites generally strike in a north-south, east-west, or northeasterly direction, with medium dips to the south, southeast, or east. Some of the beds are sheared, and shallow folding is not uncommon.

Rocks assigned to unit D outcrop only on the northeastern part of the Scotty claims. They are poorly exposed, and consist of orange-weathering green slate and dark grey argillite that probably fall within Green's unit 2.

On the Bud, Dago, and Scotty claims tight folding, shearing, and high-angle faulting are common. Grooves and corrugations, abrupt changes in attitude of bedding and linear valleys and long linear meadows in otherwise vegetated areas provide evidence for faulting on this property.

ECONOMIC GEOLOGY:

On the Bud and Dago property zinc with minor silver and lead occurs in breccia zones of orange-weathering dolomite (unit B) near its contact with overlying dark grey limestones (unit A). The mineralized zone has been traced for over 1100 metres along a trend of N 60° E by drilling, trenching, geochemistry, and geological mapping completed in 1978. This zone, which varies in thickness from 5 to over 50 metres and has a width of 100 metres, shows an average grade of 3 to 5% zinc, 0.2 to 0.5% lead, and 0.5 oz/ton silver. Drilling has indicated that the mineralized breccia occurs in shallow folds, which show good continuity along strike but extreme variability in thickness.

Several new mineral showings and many new potential areas for more detailed exploration were found in the 1980 field season. Figure 3 shows areas of rock alteration and mineralization on the Bud, Dago, and Scotty claims. All of these showings are associated with the unit A/B contact.

At approximately 2700 N, 1600 W on the Scotty claims galena was found in a white and brown dolomite breccia of unit A, dark grey limestone. The mineralization here is related to a fault and deserves more detailed prospecting.

At 2600 N, 900 E a small outcrop of dark grey limestone, unit A, contains minor galena and chalcopyrite associated with friable "sandy" coarse crystalline pinkish-buff dolomite that probably indicates a fault. The area from 2200 N to 2800 N and 750 E to 900 E has been trenched by both hand and bulldozer. All of the trenches are in unit A and contain angular dark grey to rusty brown rock chips. These are apparently an iron or manganese sinter and may be related to mineralization in the area.

Rocks of this type are also found near the unit A/B contact at 2500 N, west of 2800 W, and in orange-weathering dolomite (unit B) at 2100 W, 850 N.

Sphalerite was found in thin 1-2 mm bands in unit B orange-weathering dolomite at 1500 N, 300 E and in float west of here on a gentle west facing valley slope.

RECOMENDATIONS:

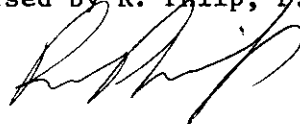
The areas of mineralization and altered rocks mentioned in the above section should be prospected in more detail. This should include detailed geologic mapping, collection of samples for assay, and possibly hand trenching.

A reconnaissance geochemical soil survey should be undertaken on the entire Scotty claim group.

A detailed geochemical soil survey should be undertaken in anomalous areas after evaluation of the 1980 reconnaissance geochemical soil survey data.

By C.L. McAtee, Geologist

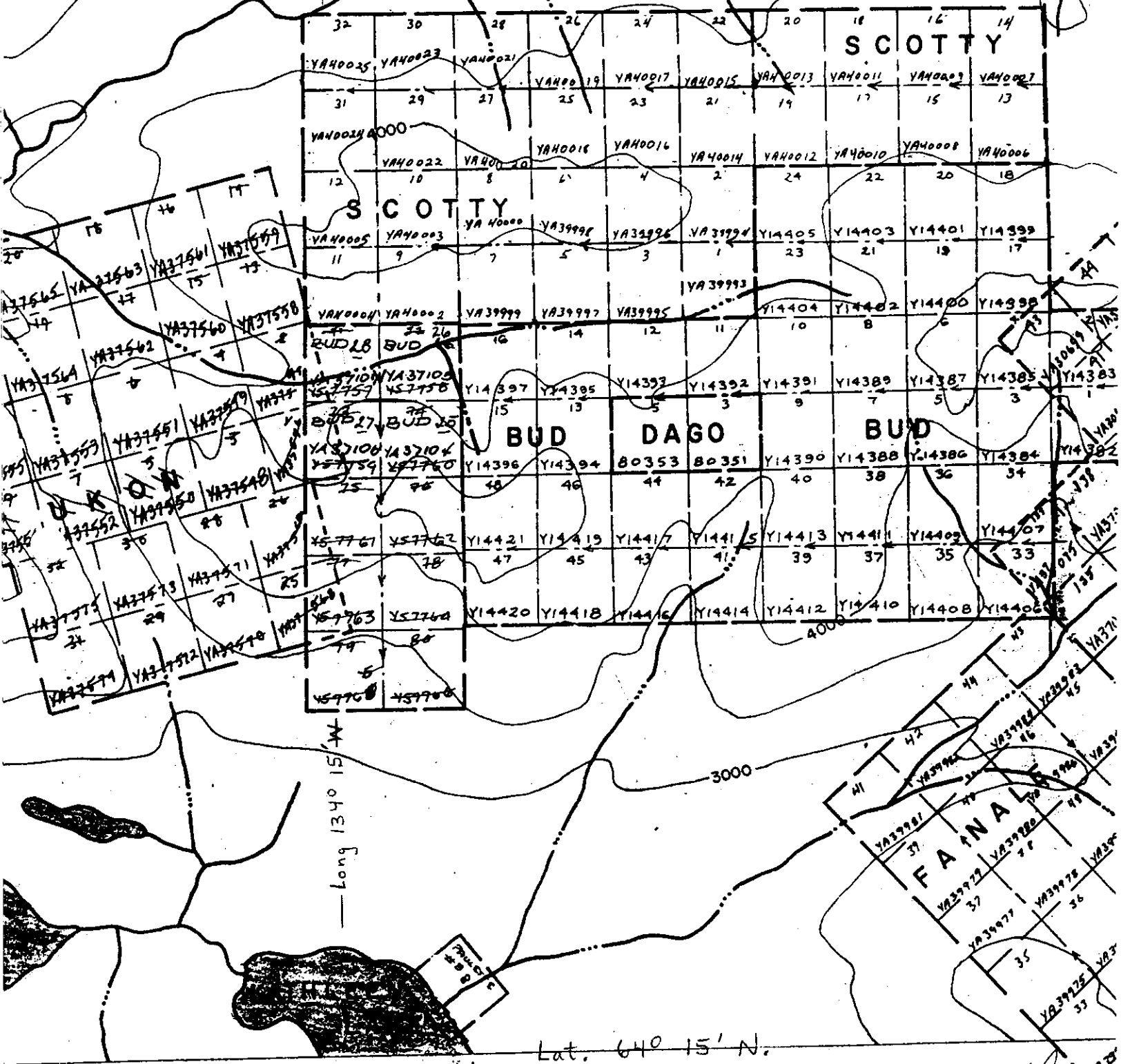
Endorsed by R. Philp, P.Eng.

A handwritten signature in black ink, appearing to read 'R. Philp', is written over the text 'Endorsed by R. Philp, P.Eng.'.

REFERENCES:

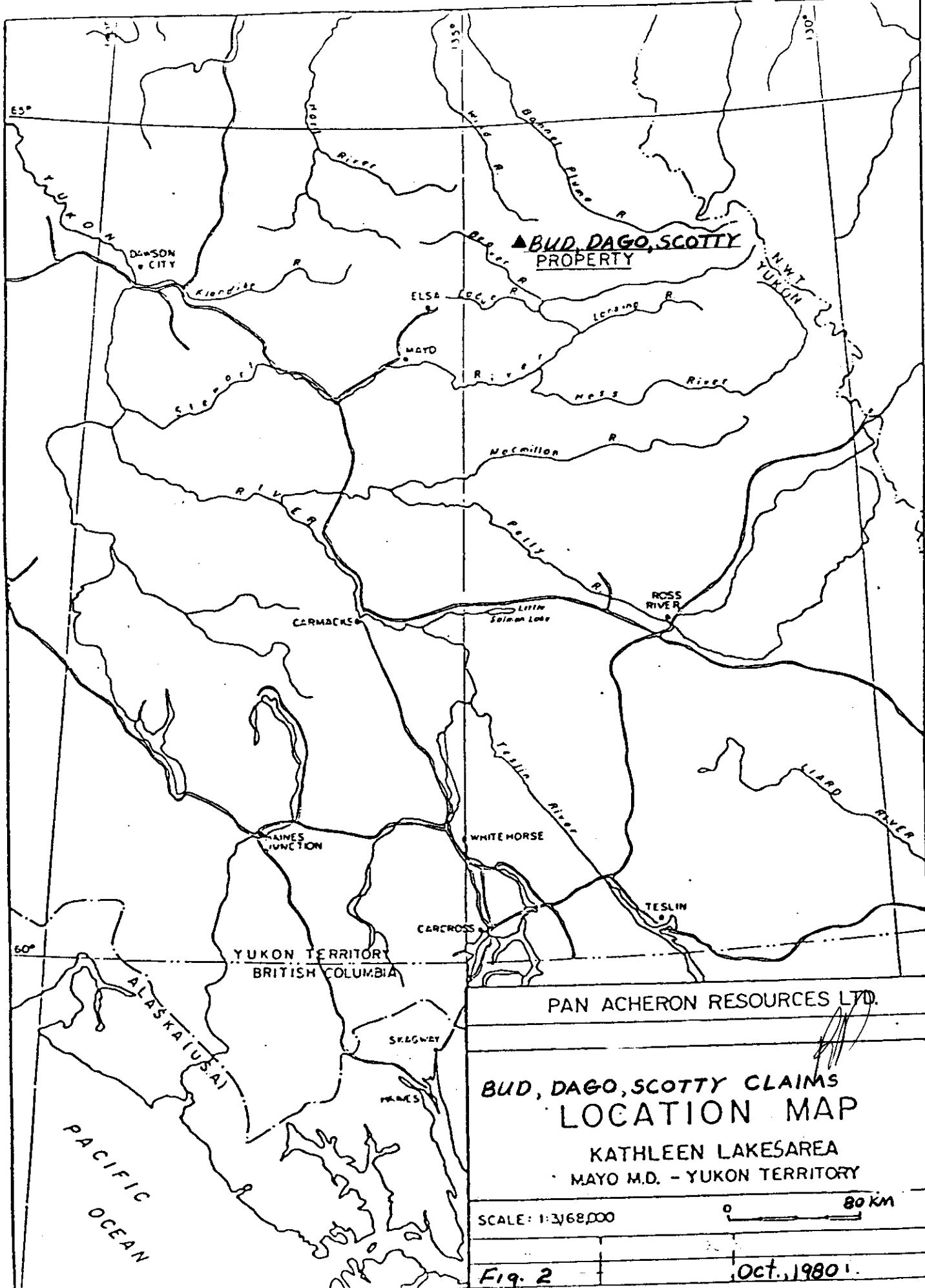
1. Green, L.H. 1972. Geology of Nash Creek, Larsen Creek, and Dawson Map - Areas, Yukon Territory. Geological Survey of Canada Memoir 364.
2. Noel, G.A. 1980. Report on The Bud and Dago claims, Kathleen Lake Area, Mayo Mining District, Yukon Territory.
3. Vernon, P. and Hughes, O.L. 1966. Surficial Geology, Dawson, Larsen Creek, and Nash Creek Map - Areas, Yukon Territory. Geological Survey of Canada Bulletin 136.

Scale in Meters



Source : Department of Northern Affairs Map 106-D-4

Figure 1: Claim Map - Bud, Dago, Scottie



▲ BUD, DAGO, SCOTTY PROPERTY

PAN ACHERON RESOURCES LTD.

BUD, DAGO, SCOTTY CLAIMS LOCATION MAP

KATHLEEN LAKES AREA
MAYO M.D. - YUKON TERRITORY

SCALE: 1:3,680,000

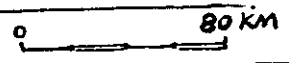


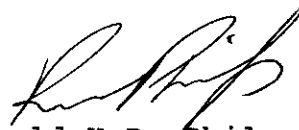
Fig. 2

Oct., 1980

CERTIFICATE

I, RONALD H.D. PHILP, of 1458 - 409 Granville Street., Vancouver, British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia (B.A. Sc. 1961)
2. Since graduation I have been engaged in mining exploration in North America, Central America, Australia and Fiji.
3. I am a registered member in good standing of the Association of Professional Engineers of British Columbia.
4. I supervised the work carried out during the period May 26 - June 16, 1980, as described in the Geological Report on the Len #1-32 Claims of Tally Resources Inc, Mayo Mining District, Yukon Territory dated November 7, 1980.

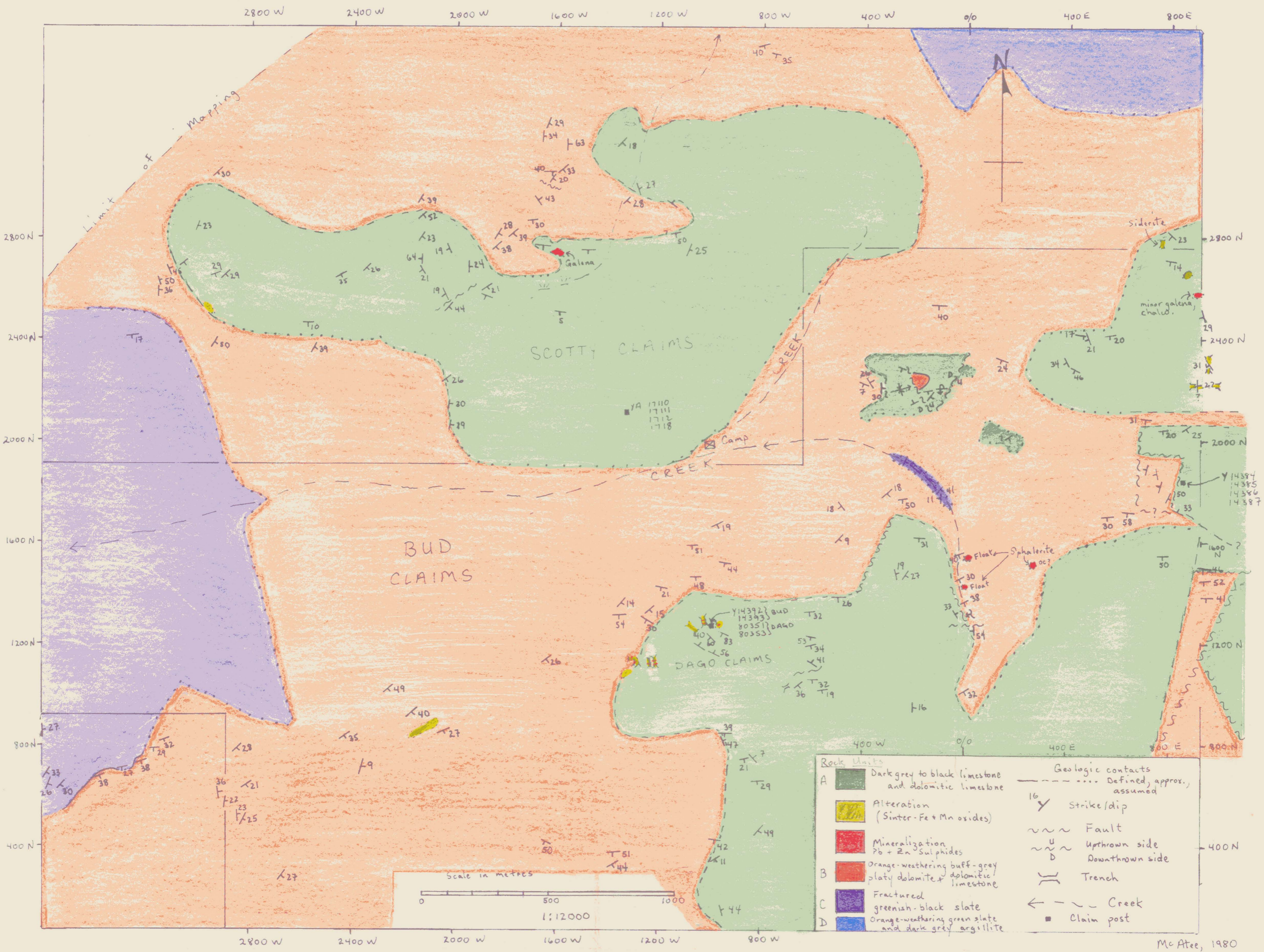


Ronald H.D. Philp

P. Eng.

Vancouver, B.C.

April 25, 1981



McAtee, 1980

PAN ACHERON RESOURCES LTD.
 FIG. 3 - GEOLOGICAL MAP
 BUD, DAGO, AND SCOTTY CLAIMS
 KATHLEEN LAKE AREA
 YUKON TERRITORY