

GEOLOGICAL REPORT

ON THE

NEWMAR EXPLORATIONS LTD.

CANADIAN CREEK AREA, YUKON TERRITORY

BY

W. R. NEWMAN



SEPTEMBER 30TH, 1970

VANCOUVER, B. C.

This report has been examined by the Geological Evaluation Unit and is deemed to be of sufficient value to be considered as a valid estimate in the amount of

\$ 4800.00

D. G. Beedler

Regional Geologist or
Regional Mining Engineer

Considers an exploration work under
Section 93 (4), Yukon Quartz Mining Act.

[Signature]

Canadian Geologist, Yukon Territory

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MAP - GEOLOGY OF THE NEW CLAIMS
 SCALE 1" = 500'

MAP - PHOTOGEOLOGY OF NEW CLAIMS AND ADJOINING GROUND
 SCALE 1" = 1000'

GEOLOGICAL REPORT

ON

NEW CLAIMS

NEWMAR EXPLORATIONS LTD.

INTRODUCTION

THE COMPANY OWNS 50 CLAIMS ADJOINING AND TO THE NORTH OF THE CASINO SILVER MINES LTD. PROPERTY ON THE HEADWATERS OF CANADIAN AND CASINO CREEKS, 6 MILES TO THE SOUTH OF THE YUKON RIVER, 65 MILES WEST OF THE MAYO ROAD AT CARMACKS AND SOME 190 MILES TO THE NORTHWEST OF WHITEHORSE, YUKON TERRITORY.

A PRIVATE AIR STRIP BUILT BY CASINO IS WITHIN 2 MILES OF THE CLAIM GROUP. THE STRIP IS CAPABLE OF HANDLING PLANES UP TO THE SIZE OF DC3's. CHARTER SERVICE IS AVAILABLE FROM GREAT NORTHERN AIRWAYS AND TINTINA AIR SERVICES IN WHITEHORSE. HELICOPTER CHARTERS ARE AVAILABLE AT THE CASINO AIR STRIP.

THE WRITER VISITED THE PROPERTY ON JUNE 30, AND JULY 1, 1970, ALONG WITH T. SADLER-BROWN, GEOLOGIST, AND MAPPED THE PROPERTY ON THE GROUND AND WITH THE USE OF A HELICOPTER. THE PROPERTY WAS AGAIN VISITED BY THE WRITER ON JULY 24, 1970, FOR FURTHER MAPPING AND INVESTIGATION. A COMBINED GEOCHEMICAL, SURVEY AND PROSPECTING CREW WAS ON THE PROPERTY FOR 2 WEEKS DURING JUNE AND JULY.



CLAIMS

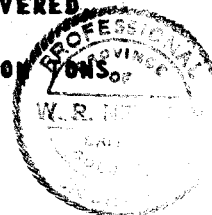
THE 50 CLAIMS ARE NUMBERED AS FOLLOWS:

<u>CLAIM</u>	<u>REGISTERED NUMBER</u>
NEW 1 TO 4	Y35946 TO Y35949
NEW 23 TO 38	Y35968 TO Y35983
NEW 55 TO 70	Y36000 TO Y36015
NEW 89 TO 102	Y36034 TO Y36047

HISTORY

THE AREA HAS BEEN EXPLORED ON VARIOUS OCCASIONS SINCE 1911 FOR PLACER GOLD AND TUNGSTEN AND SILVER-LEAD VEINS. BETWEEN 1964 AND 1967 EXTENSIVE EXPLORATION WAS DONE ON THE SILVER-LEAD VEINS. DURING THIS PERIOD A COPPER-MOLYBDENUM ZONE WAS FOUND. IN 1968 A LARGE ZONE, NOW REACHING A DIMENSION OF 4,000 FEET BY 6,000 FEET WAS OUTLINED ON PATTON HILL, ON THE HEAD-WATERS OF CANADIAN AND CASINO CREEKS. A DRILLING PROGRAM WAS INITIATED IN 1969 AND A PORPHYRY COPPER TYPE DEPOSIT WAS DISCOVERED.

THE CASINO AREA HAS BEEN EXPLORED SINCE 1911 FOR PLACER GOLD, TUNGSTEN AND SILVER-LEAD VEINS. GEOCHEMICAL AND MAGNETIC SURVEYS IN 1968, OUTLINED AN AREA OF INTEREST ON PATTON HILL, WHICH WAS FOLLOWED BY A DRILLING PROGRAM IN MAY 1969. A PORPHYRY COPPER DEPOSIT WITH SOME MOLYBDENUM WAS DISCOVERED WITH AN INFERRED TONNAGE RESERVE ESTIMATE OF 1.164 BILLION



WITH A VALUE OF \$4.05 PER TON, REPORTED ON DECEMBER 19, 1969. AN INTENSIVE ROTARY DRILLING AND EXPLORATION PROGRAM IS CONTINUING ON THE PROPERTY AND IN THE WHOLE DAWSON RANGE DURING 1970.

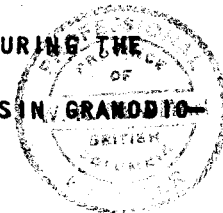
TOPOGRAPHY

THE CLAIMS ARE LOCATED IN THE YUKON INTERIOR PLATEAU, AN AREA OF SUBDUED TOPOGRAPHY, CHARACTERIZED BY SLOPES COVERED WITH MOSS AND PEATY SOIL AND BUNCHGRASS. SMALL SPRUCE GROWTH IS FOUND IN CREEK VALLEYS, ALONG WITH BUCK BRUSH. THE RIDGES ARE OPEN AND SOMETIMES CROWNED BY CASTELLATED OUTCROPS, USUALLY GRANODIORITES. THERE IS A 2,500 FOOT DIFFERENCE IN RELIEF, BUT AS A RULE RELIEF IS SELDOM MORE THAN 1,500 FEET. OUTSIDE OF THE CASTELLATED OUTCROPS, THE AREA IS MOSTLY COVERED WITH OVERBURDEN. THE YUKON RIVER IS THE MAIN DRAINAGE SYSTEM IN THE REGION. HEADWATERS OF CANADIAN CREEK OCCUR IN THE SOUTHWEST CORNER OF THE PROPERTY.

THE CLIMATE IS REPORTED TO BE NOT AS SEVERE AS IN THE ABOVE RUGGED AREAS OF THE YUKON.

GENERAL GEOLOGY

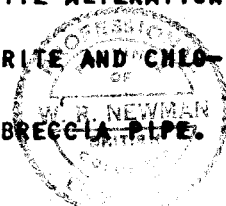
THE REGION LIES ON THE EASTERN FLANK OF THE COAST RANGE INTRUSIVES. THERE WAS NO GLACIATION IN THE AREA DURING THE PLEISTOCENE. THE MAIN INTRUSIVE BODY IS THE KLOTASSIN GRANODIO-



RITE, CONSISTING OF FELDSPAR, QUARTZ, HORNBLende AND MUSCOVITE, WHICH IN TURN HAD BEEN INTRUDED BY A YOUNGER QUARTZ - MONZONITE PORPHYRY OF LIGHT GREEN TO GREY COLORATION. PORPHYRY OUTCROPS ARE KNOWN TO OCCUR IN SMALL STOCKS THOUGHOUT THE IMMEDIATE AREA.

COPPER IS CONSIDERED TO BE ASSOCIATED WITH THE PORPHYRY BUT RECENT DISCOVERIES IN THE AREA HAVE UNCOVERED MOLYBDENITE MINERALIZATION IN THE GRANITE. THE SIGNIFICANCE OF THIS ASSOCIATION AND MINERALIZATION FOR FUTURE EXPLORATION COULD BE IMPORTANT.

POTASSIUM-ARGON DATING ON THE KLOTASSIN BATHOLITH HAS GIVEN AGES OF 95 AND 99 MILLION YEARS OF UPPER CRETACEOUS A G E. THE GRANITE INTRUDES THE YUKON GROUP, OF META-SEDIMENTARY ROCKS INCLUDING SCHIST, GNEISS, AMPHIBOLITE, QUARTZITE, WITH MINOR LIMESTONE AND CONGLOMERATE. THE KLOTASSIN BATHOLITH IS INTRUDED BY YOUNGER QUARTZ RICH STOCKS, WHICH MAY HAVE BEEN THE SOURCE OF THE METALLIC MINERALIZATION. THE CASINO STOCK HAS BEEN DATED BY POTASSIUM-ARGON METHOD AS 70 MILLION YEARS OR EARLY-TERTIARY AGE. INTENSE HYDROTHERMAL ALTERATION IS ASSOCIATED WITH THE STOCK, WITH A CENTRAL CORE OF K-FELDSPAR AND BIOTITE ALTERATION SURROUNDED IN TURN BY ARGILLIC, QUARTZSERICITE-PYRITE AND CHLORITE ZONES. BRECCIATION IN THE STOCK SUGGESTS A BRECCIA PIPE.



THE PORPHYRY IS CONSIDERED TO BE SIMILAR TO THE PORPHYRY COPPER BODIES OF THE SOUTHWESTERN UNITED STATES, WITH MINERALIZATION, ALTERATION AND FRACTURING TYPICAL OF PORPHYRY COPPER DEPOSITS.

MINERALIZATION

THE ABSENCE OF EROSION DUE TO GLACIATION IN THIS AREA OF THE YUKON HAS CREATED UNIQUE CONDITIONS FOR ENRICHMENT OF MINERALIZATION, SIMILAR TO CONDITIONS IN THE FAMOUS PORPHYRY COPPER BELT OF THE UNITED STATES. ON THE CASINO PROPERTY, THE TYPICAL SUCCESSION OF A LEACHED CAP ZONE WITH LIMONITE WITH JAROSITE AND VERY LITTLE MALACHITE, OF ABOUT 150 TO 250 FEET IN THICKNESS, IS UNDERLAIN BY A ZONE OF SUPERGENE ENRICHMENT WITH CHALCOCITE 100 TO 250 FEET IN THICKNESS, FINALLY PASSING INTO THE PROTORE ZONE OF PRIMARY CHALCOPYRITE, MOLYBDENITE AND PYRITE, THE LATTER ZONE OF AS YET UNDETERMINED THICKNESS. HOLE 10 DRILLED TO A THOUSAND FEET INTERSECTED COPPER MINERALIZATION TO THE BOTTOM OF THE HOLE.

HYDROTHERMAL ALTERATION, SERICITIZATION, KAOLINIZATION, WITH LIMONITE CAPPING, ALL CHARACTERISTIC OF PORPHYRY COPPER HAVE BEEN REPORTED.

MANY DRILL HOLES HAVE BEEN COMPLETED ON THE CASINO



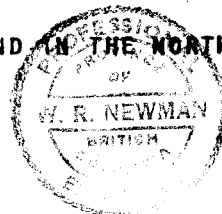
6.

GROUND, WITH HOLE P 1 BEING TYPICAL AND REPORTING HEAVY OXIDATION FROM 6 FEET TO 165 FEET. FROM 165.5 FEET TO 381 FEET, THE WEIGHTED ASSAY AVERAGE WAS 0.50% COPPER AND 0.037% MOLYBDENITE. GOLD AND SILVER ARE ASSOCIATED BUT IN QUANTITIES AS YET UNDETERMINED. PYRITE AVERAGES ABOUT 40% CORE RECOVERY HAS BEEN POOR AND IT HAS AS YET NOT BEEN POSSIBLE TO COME UP WITH ANY FIRM ESTIMATES OF GRADE, BUT IT HAS BEEN REPORTED AS COMPARABLE TO THE HIGHLAND VALLEY. MOLYBDENITE MINERALIZATION HAS BEEN FOUND BOTH IN THE PORPHYRY STOCK AND THE OLDER GRANODIORITE.

GEOLOGY OF THE CLAIMS

THE CLAIM GROUP WHERE ROCK EXPOSURES ARE FOUND, PARTICULARLY IN THE ELEVATED AREAS, ARE PREDOMINANTLY GREY HORNBLENDE-MUSCOVITE GRANITES, LOCALLY WITH SOME GNEISSIC STRUCTURE. THE STRIKE TREND OF THE GNEISSES IS SOME SLIGHTLY WEST OF NORTH.

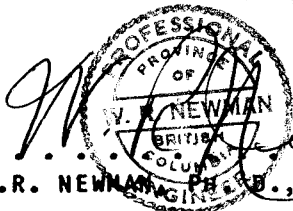
A MAJOR LINEAMENT ACROSS THE CENTRE OF THE CLAIM FROM CLAIM 2 TO CLAIM 96 FOR A LENGTH OF TWO MILES, IS INTERPRETED AS A FAULT WITH A VERTICAL FAULT PLANE AND WITH THE WEST SIDE AS THE UPTHROW SIDE. ANOTHER FAULT WAS OBSERVED WEST OF CLAIMS 59 AND 60. SOME WHITE BARREN QUARTZ FLOAT WAS FOUND IN THE NORTH WEST CORNER OF THE PROPERTY.



7.

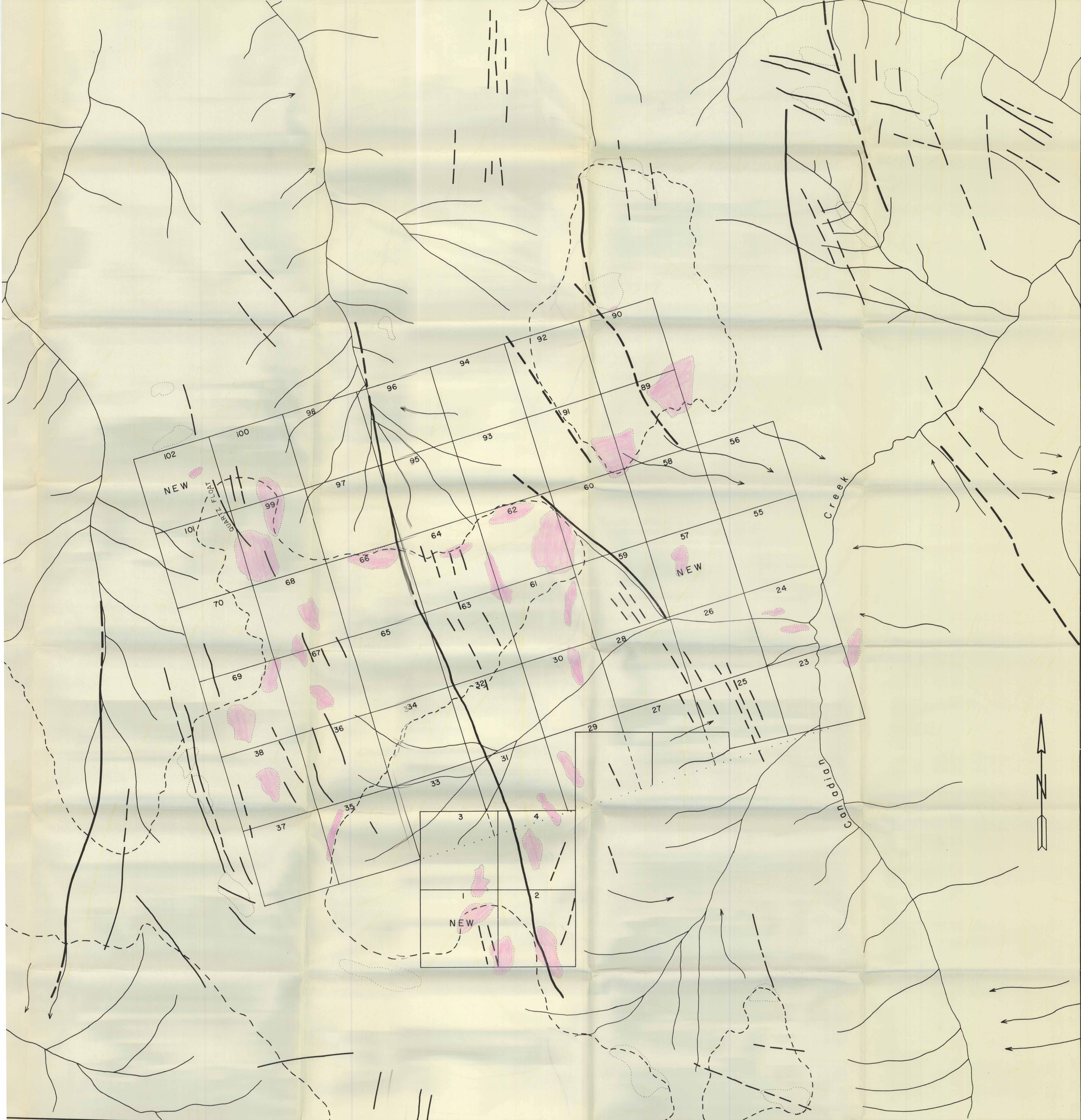
GEOMAGNETICALLY A HIGH OF 57,900 GAMMAS OCCURS IN THE CENTRAL WESTERN PART OF THE CLAIM BLOCK. JUST NORTH OF THE CENTRAL PART OF THE PROPERTY A DEPRESSION OF 57,700 GAMMAS IS LOCATED. MOLYBDENITE MINERALIZATION HAS RECENTLY BEEN FOUND IN THE GRANITE AND GRANODIORITES TO THE SOUTHWEST OF THE NEW CLAIMS. ADDITIONAL STRIPPING AND TRENCHING WILL BE REQUIRED IN THE OVERBURDEN AREAS IN THE LOWER VALLEYS OF THE CLAIMS TO DETERMINE THE CHARACTER OF THE BEDROCK AND POSSIBLE MINERALIZATION. RESULTS OF ADDITIONAL SURFACE WORK WOULD DETERMINE IF AN INDUCED POLARIZATION SURVEY AND FURTHER EXPLORATION WOULD BE WARRANTED.

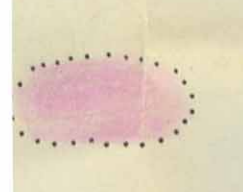
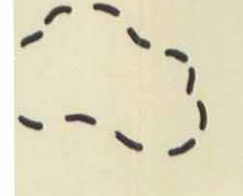
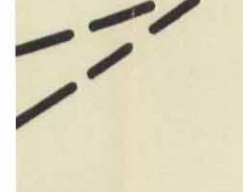
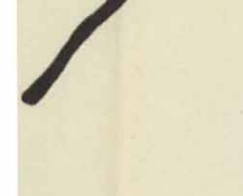
RESPECTFULLY SUBMITTED,


W.R. NEWMAN, P. ENG.

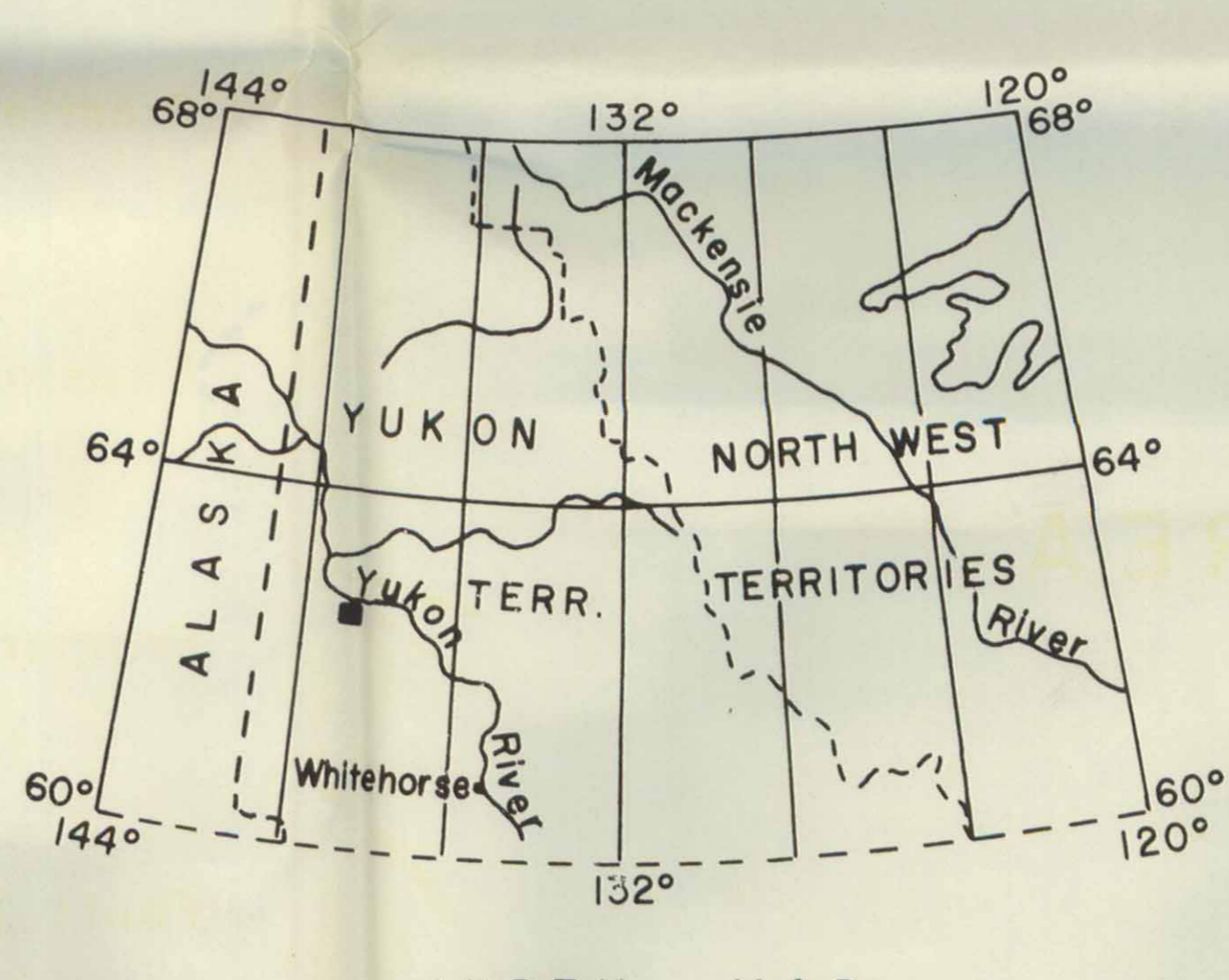
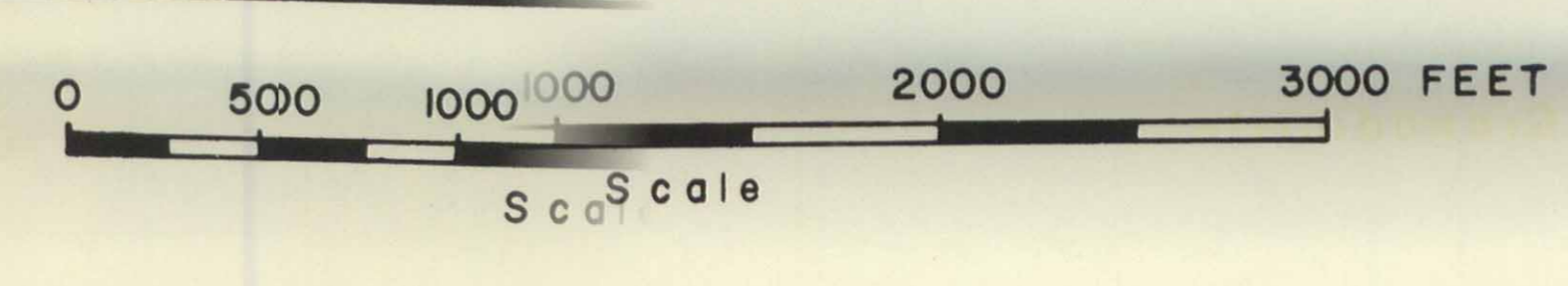
DATED AT VANCOUVER, B.C.

SEPTEMBER 30TH, 1970.



-  Granite, Granodiorite
-  Resistant granitic and gneissic Rock
-  Fractures and/or gneissic banding
-  Fault (movement unknown)

Claims	Registered Numbers
New 1-4	Y 35935946 - Y 35949
23-38	Y 35935968 - Y 35983
55-70	Y 36036000 - Y 36015
89-102	Y 36036034 - Y 36047

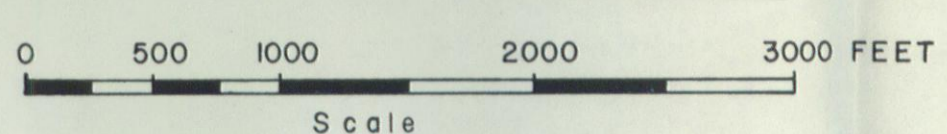



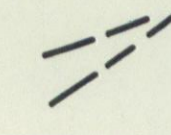
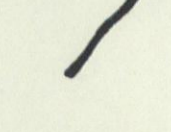
NEWMAR EXPLORATIONS LTD.
 GEOLOGICAL MAP
CANADIAN CREEK AREA
 Yukon Territory

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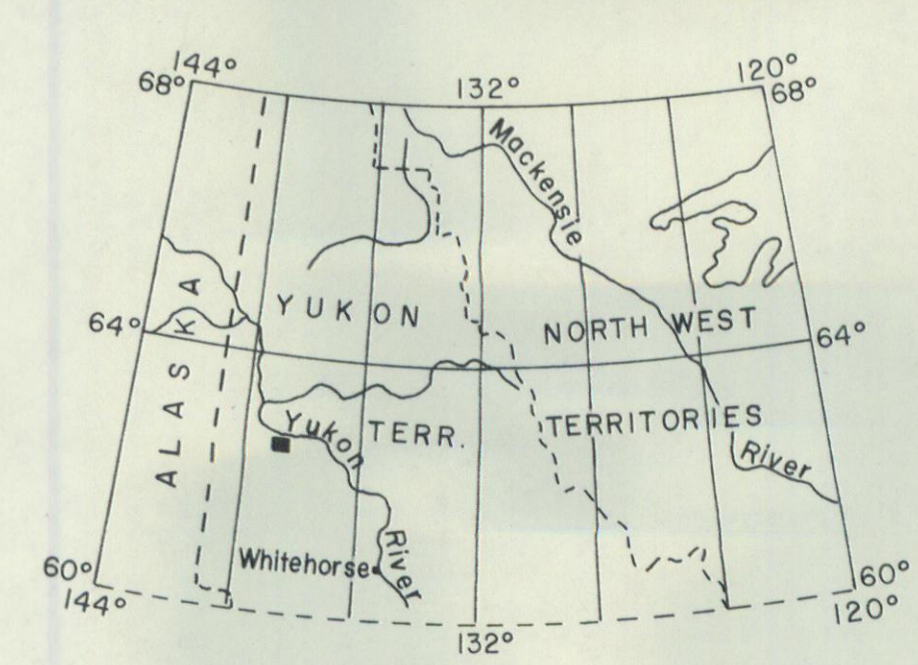


Photo Geology by Dr. R.E. KUCERA 1970



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PHOTO INTERPRETATION
CANADIAN CREEK AREA
 Yukon Territory