



REPORT ON PROSPECTING, RADIOMETRIC,
AND GEOCHEMICAL SURVEYS

CLAIMS FACE 1-8

Mayo Mining Division
Claim Sheet 106D-16
October 30, 1976

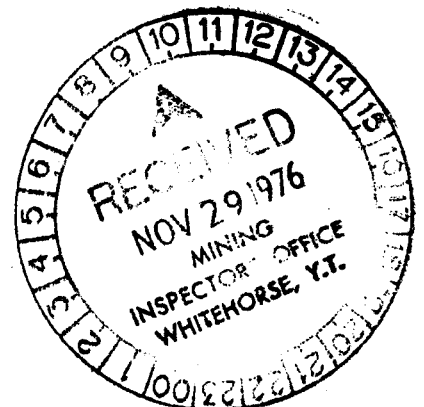
Lat. $64^{\circ}52'N$

Long. $134^{\circ}20'W$

Colin J. Riley

Geologist

061615





This report has been reviewed by the Geological Commission and is recommended to the Commission as a report of the Commission of

1765-8E

W. Sinclair

~~Assistant~~ Geologist or
~~Assistant~~ Mining Engineer

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

[Signature]
B. R. BAXTER
Supervising Mining Recorder

[Signature]
for Commissioner of Yukon Territory

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In Pocket

Figure F-1 Radiometric Survey of a Portion
 of the Face Claims.

Figure F-2 Geochemical Survey of a Portion
 of the Face Claims.

FACE CLAIMS

INTRODUCTION

The Face Claims were staked to cover a uranium occurrence discovered by Eldorado Nuclear Limited during regional exploration of an area of mutual interest with Wernecke Joint Venture (Standard Oil of British Columbia, Ltd., Aquitaine Company of Canada, Ltd., Messrs. L. and H. Clay). This programme was managed by Archer, Cathro and Associates. The occurrence was in float and eight claims were staked in late July. The initial area of float was explored by a grid radiometric survey and geochemical soil sampling while the remainder of the property was prospected. This work was carried out by geologist James Griffin on 26, 28, 29 July, field man John Cook on 29 July, and supervised by senior geologist Colin J. Riley who was on the property 26 and 28 July.

This work was carried out under Atomic Energy Control Board Exploration Permit #MX18/76.

PROPERTY LOCATION AND ACCESS

The property consists of eight contiguous mineral claims recorded in the Mayo Mining Division as follows:

<u>CLAIM NAME</u>	<u>GRANT NUMBERS</u>	<u>EXPIRY DATE</u>
Face 1-8	YA5723-YA5730	8 July, 1977

The property is located at latitude 64°52' N and longitude 134°20' W on NTS Claim Sheet 106D/16. Access was by helicopter from a base at Fairchild Lake, 19 miles to the northeast. Fairchild Lake may be reached by a float equipped fixed wing aircraft from a charter base at Mayo, 120 miles to the southwest.

GEOLOGY, PROSPECTING AND SURVEYS

The occurrence is located in argillites and quartzitic argillites which have been intruded by an explosive gas breccia event. The breccia and some of the surrounding argillites have been highly carbonitized. The mineralization located was in a siliceous border phase of the vent breccia and consisted of grains of brannerite confined to fractures. One float occurrence of argillite was observed to have yellow and green secondary uranium weathering products and ran off scale on a TV1-A broadband spectrometer.

A 2,000 metre baseline was established by topofill and compass and stations marked at 25 metre intervals with 1 metre high wooden pickets. Pace and compass lines were extended 125 metres east and 325 metres west of the baseline and radiometric readings were taken at 30 metre intervals along this line. A McPhar TV1-A spectrometer set to total count was used to conduct this survey. Readings are shown on the accompanying map, Figure F1, in c.p.m. Only background values were encountered during this survey. No radioactive zone was outlined.

Soil samples were taken at the same stations as illustrated in Figure F2. The samples were obtained from a C soil horizon by digging a shallow pit with a grub hoe and were analysed at Chemex Labs Limited, North Vancouver, B.C. for copper, molybdenum and uranium. The uranium analyses were obtained by standard fluormetric methods on an ashed and double acified minus 80 mesh fraction. Copper and molybdenum were determined using atomic absorbtion spectrometry of a nitric perchloric extraction of a minus 80 mesh fraction.

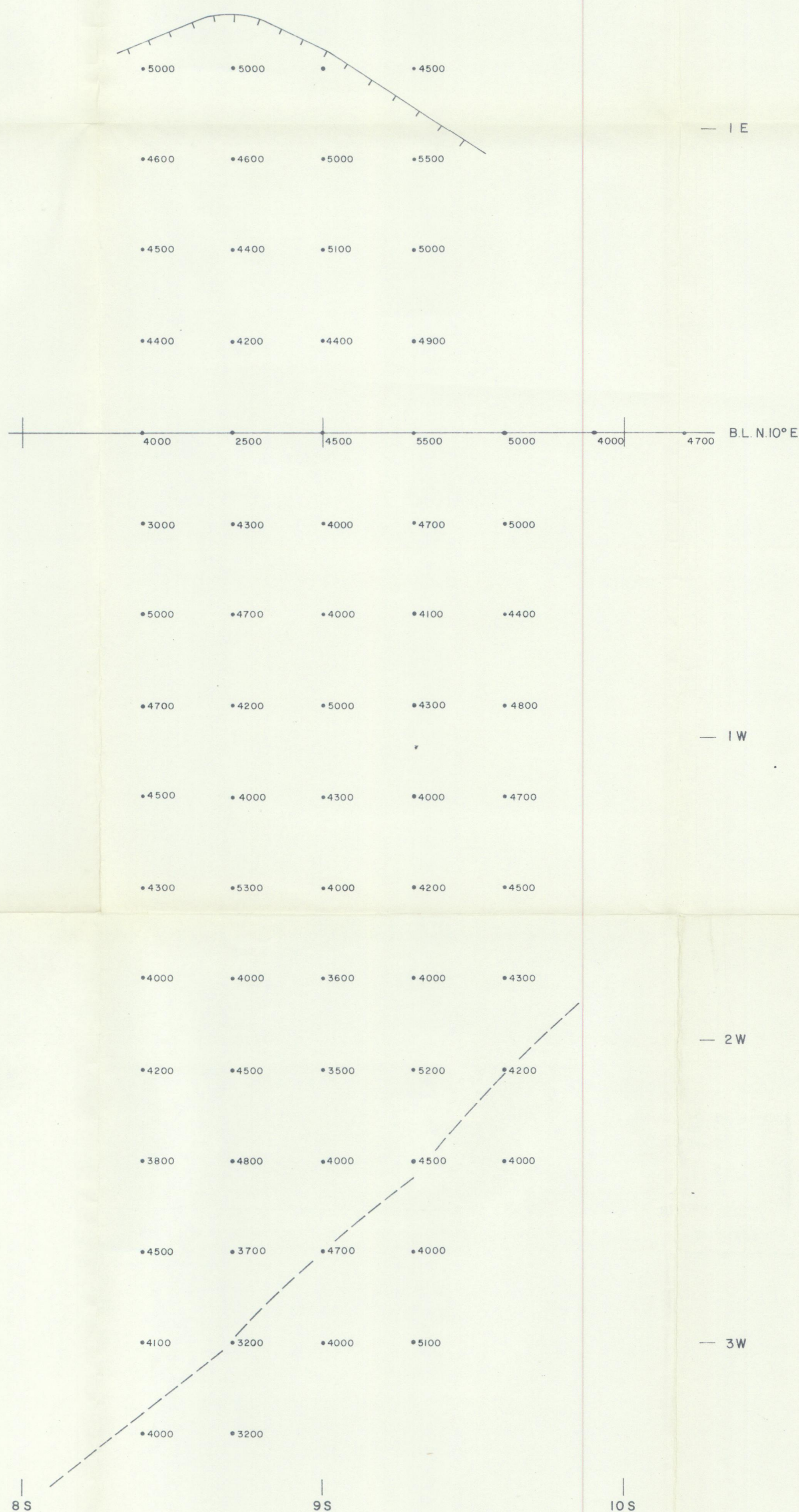
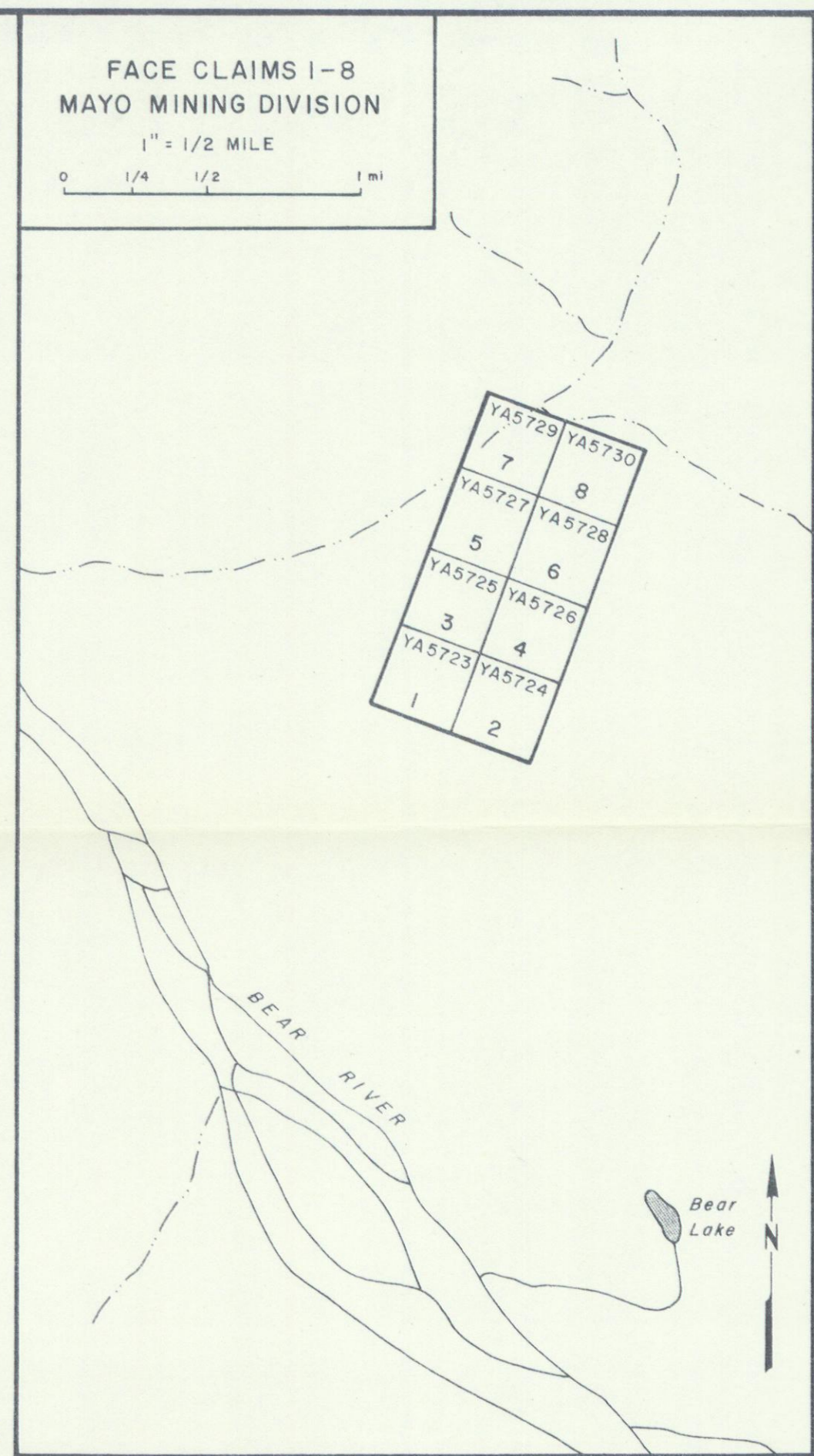
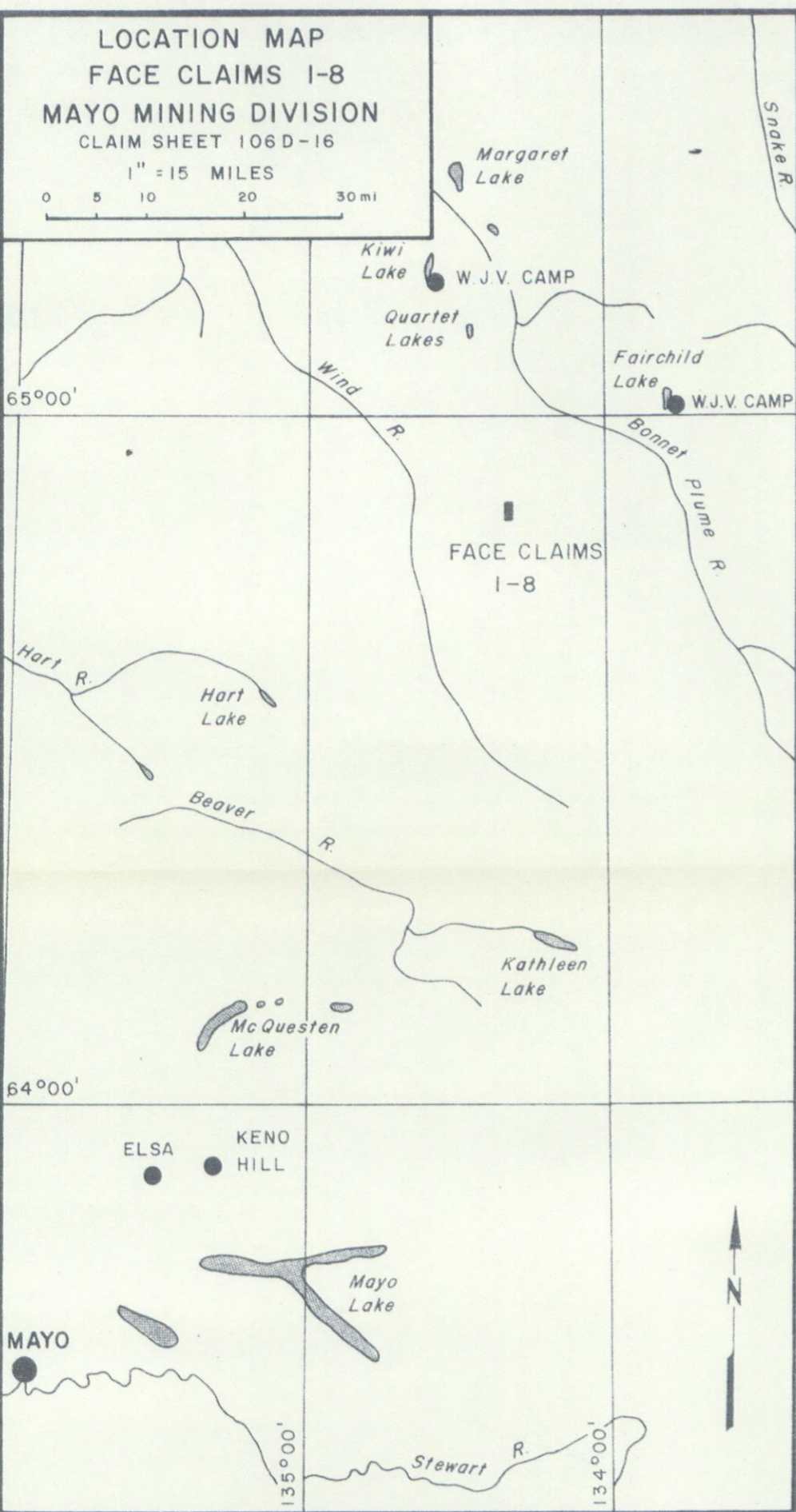
Molybdenum values were found to be background. Copper was found to be slightly anomalous with a peak 100 metres west of the baseline. Only one uranium reading which could be considered above the regional background was located and it was very low and ties in with the occurrence of mineralized argillite previously located. It was noted when this specimen was removed, that the soil surrounding it read higher than background on the spectrometer. Digging to a depth of 3 feet at this spot failed to locate further float or outcrop and the radioactive nature of the soil was lost.

The results of the radiometric survey and geochemical soil analysis appear to indicate that there is no major zone of uranium mineralization in this particular area. The rest of the claim group was prospected thoroughly and no further radioactive occurrences were found.

CONCLUSIONS AND RECOMMENDATIONS

The only mineralization located on this property was small amounts of brannerite in fractures or micro fractures. They are widely enough separated so that no tonnage or grade potential would exist. Prospecting failed to locate any other occurrences beyond the initial discovery. It is recommended that no further work be carried out on these claims.

Cecil V. Riley

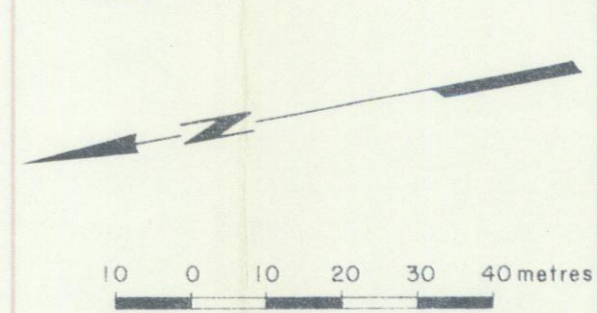


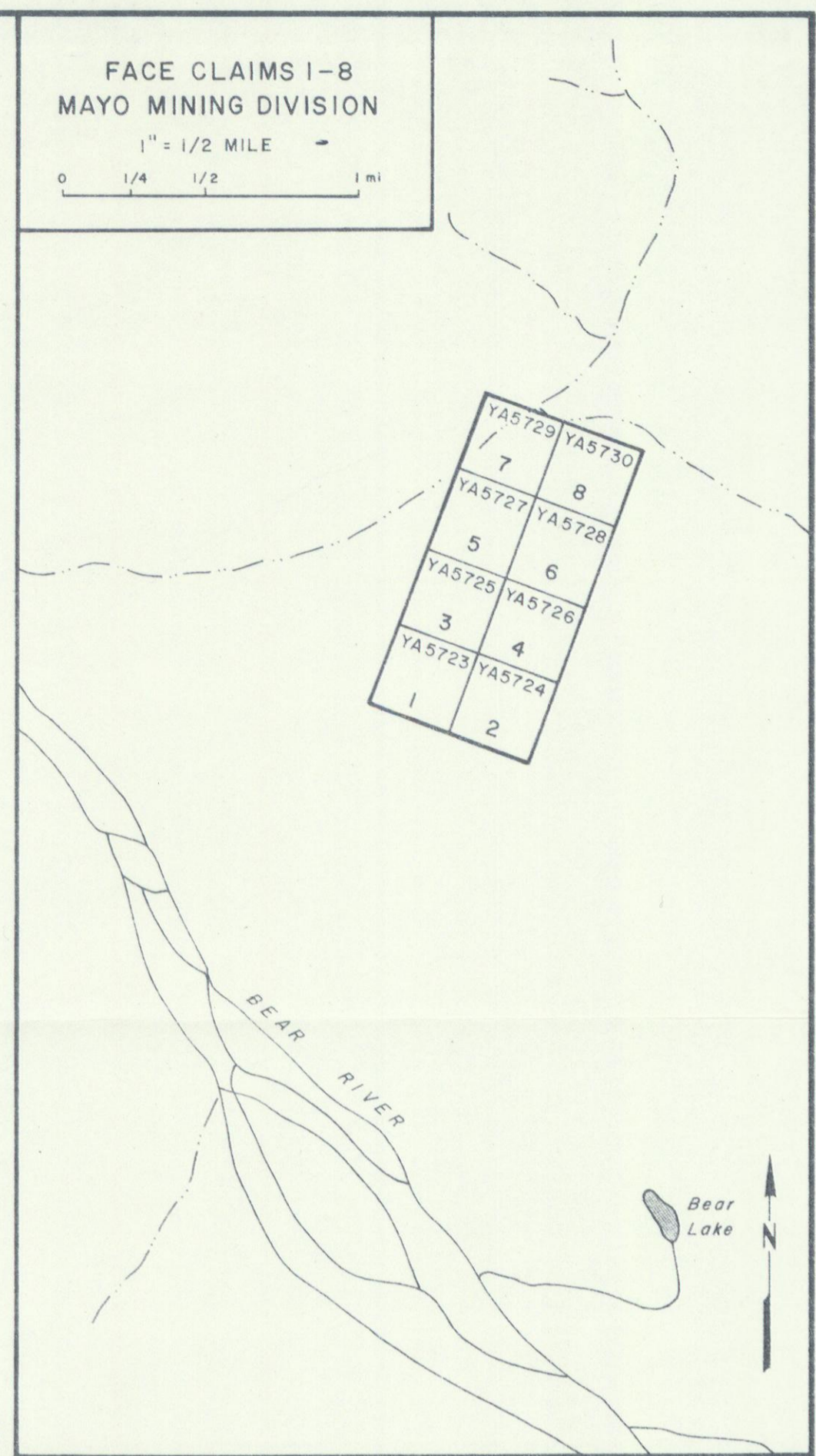
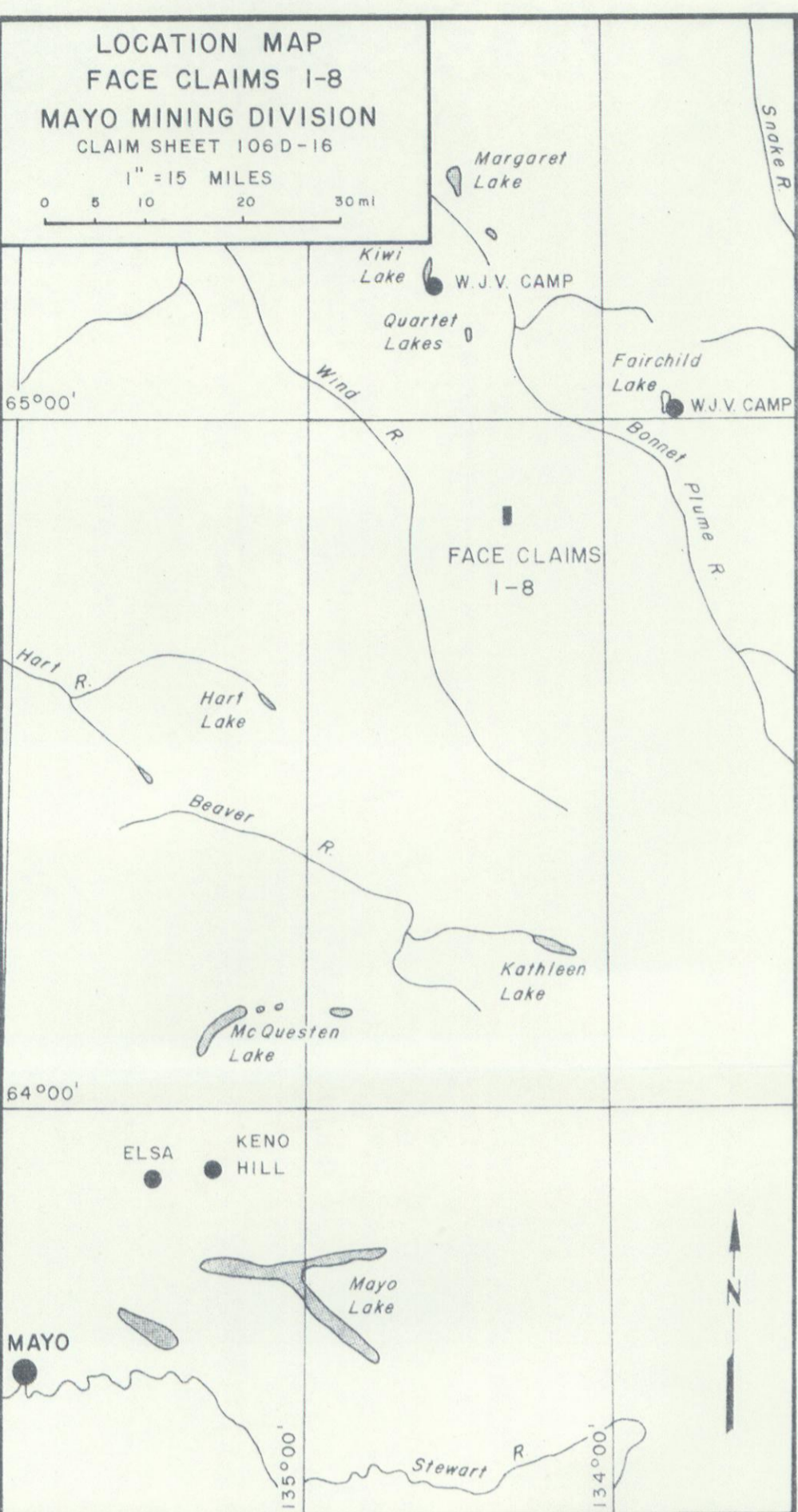
• 4000 RADIOMETRIC READING IN C.P.M.
MCPHAR TV I-A
— LIMIT OF OUTCROP
--- BREAK IN SLOPE

Figure F1 ARCHER, CATHRO & ASSOC.

WERNECKE JOINT VENTURE

RADIOMETRIC SURVEY
of
Face Claims 1-8
1 cm = 10 metres
TO ACCOMPANY REPORT DATED
DATE: July, 1976 C.J. RILEY





	40 * 1.5 <1	40 * 1.5 <1	32 * <0.5 <1	56 * 0.5 <1	
	64 * 1.0 <1	34 * <0.5 <1	56 * 1.0 <1	44 * 1.5 <1	
	58 * 1.5 <1	52 * <0.5 <1	56 * 1.5 <1	32 * 2.0 <1	
	40 * 1.0 <1	54 * <0.5 <1	46 * <0.5 <1	42 * 1.5 <1	
	44 * <0.5 <1	131 * 1.0 2	38 * 1.0 1	58 * 0.5 <1	54 * 1.0 5
				63 * <0.5 4	44 * 1.0 3
	228 * 3.0 6	2000 * 1.5 7	100 * 1.0 <1	60 * 0.5 <1	128 * 2.0 <1
	278 * 1.5 5	323 * 1.0 4	62 * 1.0 <1	60 * 1.0 <1	63 * 1.5 <1
	156 * <0.5 <1	670 * 0.5 5	222 * 2.0 <1	215 * 0.5 <1	102 * 0.5 <1
	248 * <0.5 <1	74 * <0.5 <1	144 * 1.5 <1	128 * 2.0 <1	154 * 1.5 <1
	255 * <0.5 <1	64 * <0.5 <1	228 * <0.5 <1	24 * 2.5 <1	120 * 1.5 <1
	68 * <0.5 <1	104 * 0.5 <1	165 * 1.0 <1	186 * 1.5 <1	48 * <0.5 <1
	86 * <0.5 <1	80 * 1.0 <1	160 * 1.0 <1	110 * 2.0 <1	68 * <0.5 <1
	126 * 1.0 6	96 * 1.5 <1	80 * 2.0 <1	146 * 2.5 <1	72 * <0.5 <1
	88 * 2.0 <1	148 * 2.0 <1	38 * <0.5 1	131 * 0.5 <1	
	161 * 2.0 <1	60 * 2.5 <1	54 * <0.5 <1	120 * 3.5 <1	
	136 * 1.5 <1	98 * 2.5 <1			

LEGEND

24 * 1.0
4
Cu, Mo, U IN PPM

— LIMIT OF OUTCROP

- - - BREAK IN SLOPE

Figure F 2 ARCHER, CATHRO & ASSOC.

WERNECKE JOINT VENTURE

GEOCHEMISTRY
of
Face Claims 1-8

COPPER, MOLYBDENUM, and URANIUM
1 cm = 10 metres

TO ACCOMPANY REPORT DATED 30/10/76

DATE: July, 1976 C.J. RILEY

