



GEOCHEMICAL REPORT

on the

JOAN CLAIM

GALENA HILL

MAYO MINING DISTRICT

by

J. D. Ellerington

Accepted under Sec. 62 Y.Q.M.A.

*B.R. Baxter*  
Supervising Mining Recorder

Sheet No. 105 - M - 14

Latitude: 63° 55' N

Longitude: 135° 20' W

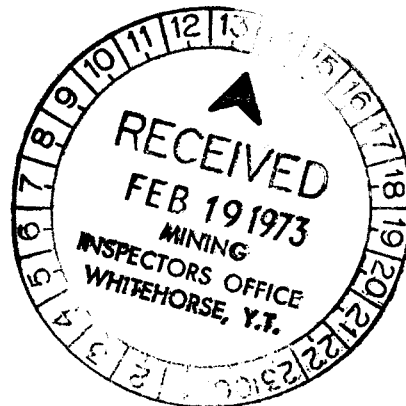
Dates: Sept 1 to 30, 1971

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 \$ 445.56

*D.B. Craig*  
Resident Geologist or  
Resident Mining Engineer

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

*[Signature]*  
Commissioner of Yukon Territory



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INTRODUCTION:

The Joan M. C. was staked on February 18th, 1971. It covers the ground formerly included in the Manzana M. C. which was allowed to lapse by Jersey Yukon Mines Limited.

A two man party soil sampled the claim and two adjoining ones in September, 1971. Soil samples were collected at one hundred foot intervals and were analyzed for silver and lead content.

LOCATION AND ACCESS:

The Joan M. C. is located on the eastern slope of Galena Hill. It is accessible by two trails from the Calumet-Keno City road.

PHYSIOGRAPHY:

Elevations on the Joan M. C. range from 3700 feet to 4600 feet above sea level. Slopes are generally steep. Hinton Creek is the dominant topographic feature.

HISTORY:

Initial staking in the area took place in 1924. A vein which came to be termed the Eagle Vein was located at the head of Hinton Creek. In the 1920's several shafts and pits were dug on the veins but no production is known to have taken place.

In the 1950's Jersey Yukon Mines Limited conducted extensive trenching on the vein system.

In 1964 further trenching plus diamond drilling was carried out on the adjoining Eagle 1 M. C. by Jersey Yukon Mines Limited.

GENERAL GEOLOGY:

The Joan M.C. is underlain predominantly by thick and thin bedded quartzites with minor graphite schist and phyllite. Several greenstone bodies form resistant ridges in the area.

Mineralization in the vein system consists of siderite, quartz, pyrite, galena, sphalerite, arsenopyrite, freibergite, limonite and manganese oxides.

GEOCHEMICAL SURVEY:

In September, 1971 United Keno Hill Mines Limited conducted a preliminary soil sampling program to try and trace the northeast extension of the Eagle Vein. A one hundred foot soil sample grid was laid out by pace and compass techniques. Samples were collected as consistently as possible at a depth of eight to twelve inches; however, the presence of slide rock made this difficult in places. A total of 206 samples were taken on the Joan M.C. Analysis was by atomic absorption spectrophotometry for silver and lead.

Results were plotted on 1" = 400' maps and then contoured. A general trend indicated the Eagle Vein northeast extension. High values for lead and silver were 2280 ppm and 10.8 ppm respectively. It is felt that to some extent the anomalous trend is downslope from the actual location of the vein system. This is due to the steep topography which coupled with factors such as soil creep, slope wash, and frost boiling would tend to cause a downhill migration. This displacement is most obvious in the immediate vicinity of Hinton Creek.

Sample processing involved the following steps:

- sample dried
- screened to minus 80 mesh
- 0.5 grams of minus 80 mesh material heated with 10 mls. of 25% nitric acid for 45 minutes
- solution made up to 10 mls with acid, shaken and filtered.
- lead and silver determined on the filtrate by atomic absorption spectrophotometry

CONCLUSIONS:

Soil sampling traced the Eagle Vein across the Joan M.C. It is thought that the Eagle Vein eventually becomes part of the Tin Can and Rico vein systems to the northeast.

RECOMMENDATIONS:

The vein should be examined with overburden drilling techniques; however, topography will be a limiting factor.

WORK PERFORMED BY:

GEOCHEMICAL SAMPLING:

T. Levicki  
Elsa, Yukon T.

J. Yule  
15203 - 74th Ave  
Edmonton, Alberta

SUPERVISION:

Dr. Alex Smith, P. Eng.  
Consulting Geologist  
Falconbridge Nickel Mines Limited  
500 - 1112 W Pender  
Vancouver, B.C.

STATEMENT OF COSTS:

A. LABOR:

1 Assistant Exploration Geologist for one day (\$725 per month)	\$24.00
1 Assistant for one day (\$525 per month)	\$17.50

B. GEOCHEMICAL ANALYSIS:

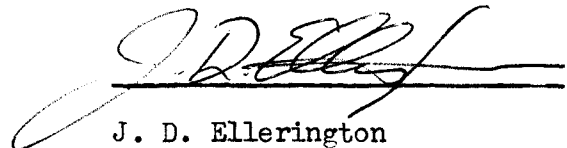
206 soil samples for silver and lead at \$0.98 per metal	\$403.96
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(Analysis by UKHM Assay Lab, Elsa)

TOTAL COST: \$445.46

NOTE:

The above costs do not include food, camp equipment & supplies, supervision, office overhead, map or report preparation.



J. D. Ellerington  
Exploration Geologist  
United Keno Hill Mines Limited

A F F I D A V I T

I, James D. Ellerington, of Elsa, in the Yukon Territory, Exploration Geologist, do solemnly declare:


1.

That I am the duly appointed agent of United Keno Hill Mines Limited, and except where otherwise stated have a personal knowledge of the facts and matters herein declared.

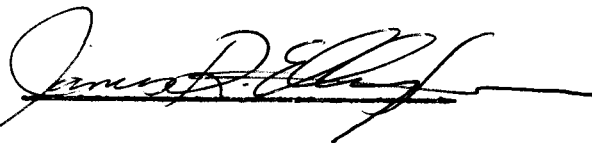
2.

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 Elsa, in  
the Yukon Territory, this 14  
day of FEBRUARY 1973

  
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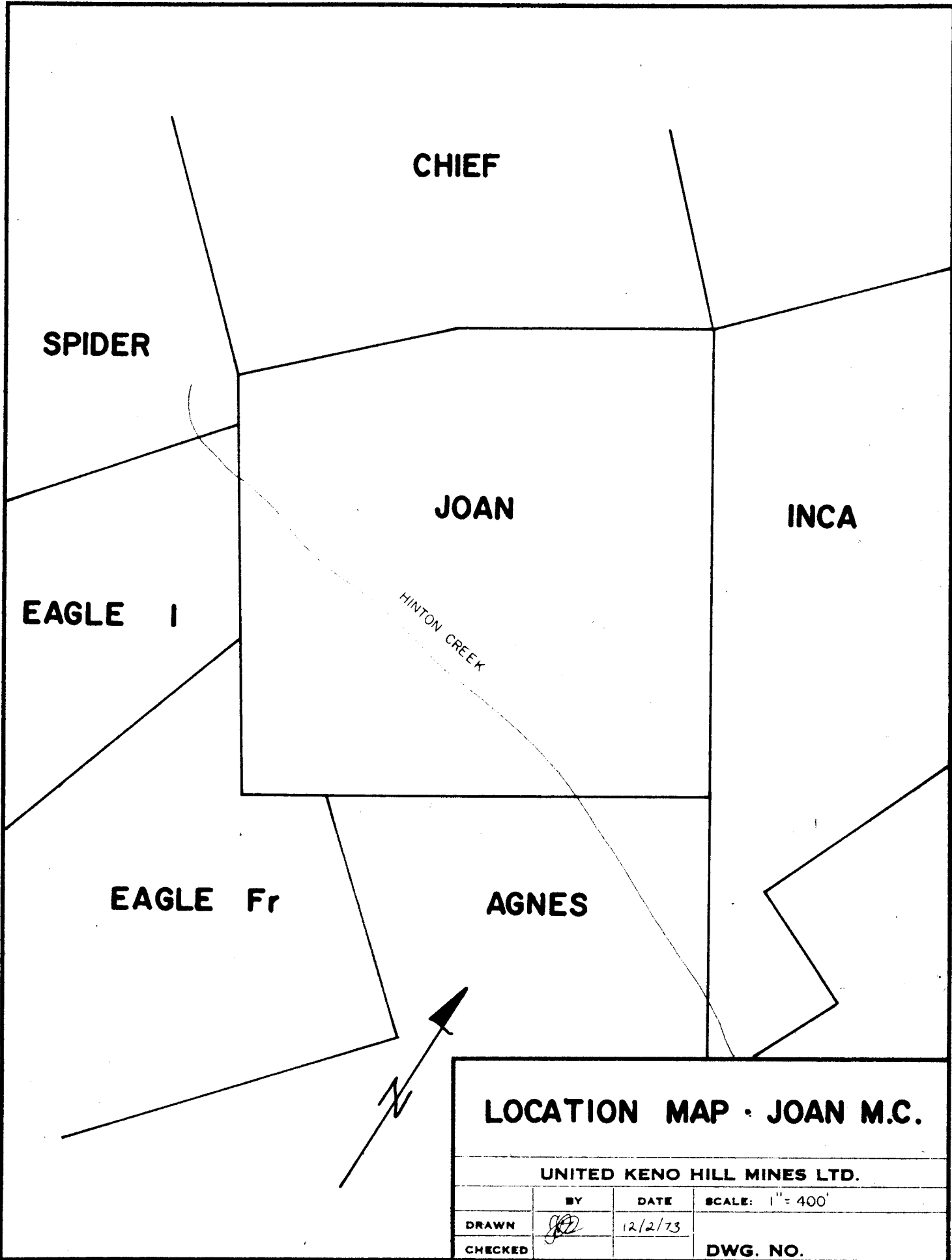
A Commissioner for Oaths  
for Yukon Territory.

  
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BIBLIOGRAPHY:

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- Smith and Archer          Acquisition of Mineral Claims, Keno Area, Nov. 15, 1964
- Stockwell, C.H.            Galena Hill, Mayo District, GSC 1925, from GSC Memoir 284, Yukon Territory, compiled by H.S. Bostock, p556



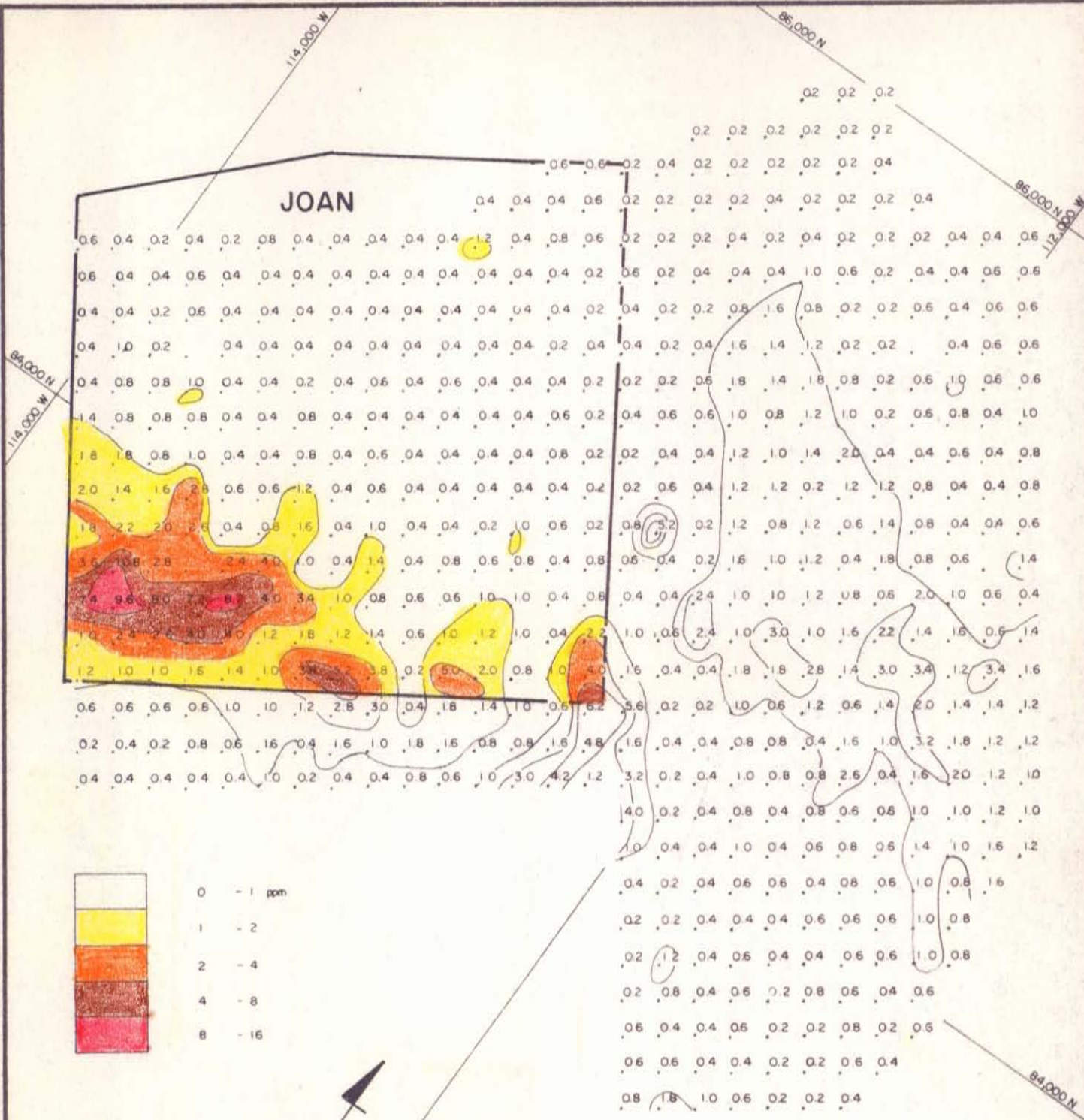
**LOCATION MAP · JOAN M.C.**

**UNITED KENO HILL MINES LTD.**

	<b>BY</b>	<b>DATE</b>	<b>SCALE: 1" = 400'</b>
<b>DRAWN</b>	<i>[Signature]</i>	12/2/73	
<b>CHECKED</b>			<b>DWG. NO.</b>



JOAN



EAGLE VEIN NE. EXTENSION  
1971 SOIL SAMPLING  
SILVER PLOT

UNITED KENO HILL MINES LTD.

	BY	DATE	SCALE: 1" = 400'
DRAWN	<i>[Signature]</i>	27/3/72	
CHECKED			DWG. NO. F. 29