

63
Geochemical Study
DARK CLAIMS
115-P-16
65° 47' N 136° 15' W
Scheelite Dome, Yukon.



H.D. Pilkington, District Geologist
International Minerals & Chemical Corp.
Vancouver, B.C.
October 8, 1971.

This report was prepared by the
Geological Survey of Canada and is hereby
certified as a true and correct copy of the original
as submitted to the Department of
Mines and Technical Surveys
\$ 7,600.00

D.B. Craig
District Geologist
International Minerals & Chemical Corp.

Considered as representation work under
Section 53 (9) Yukon Quartz Mining Act.

[Signature]
Commissioner of Yukon Territory

CONTENTS

	<u>Page</u>
INTRODUCTION	1
Location and Access	1
Ownership	1
GEOCHEMICAL SURVEY	3
Sampling	3
Analytical Methods	5
Interpretation	5
Evaluation of Anomalies	6
APPENDIX I	11
APPENDIX II	12

ILLUSTRATIONS

Figure 1	Location Map	2
Figure 2	Claim Map	4
Figure 3	Location Map - Check Geochem Samples	7
Figure 4	Location Map - Check Geochem Samples	8
Figure 5	Trench #1 with Sample Locations	9
Figure 6	Trench #2 & #2 with Sample Locations	10
Map 1	Tungsten Geochemical Map	(In Pocket)

INTRODUCTION

M.J. Linn, A.Z. Nasiri, and D.M. MacQuarrie conducted a geochemical study at the Scheelite Dome area, from June 1 through August 12, 1971, under the writer's supervision. The purpose of the study was to evaluate the prophyry-type tungsten potential of the Scheelite Dome intrusive by:

- 1) conducting soil geochemistry survey, supplemented by rock geochemistry where applicable, to determine the tungsten distribution, and
- 2) to trench by dozer the anomalous areas in order to obtain bulk samples for assay purposes.

Location and Access

The DARK Claims are situated at $63^{\circ}47'N$, $136^{\circ}15'W$ on claim sheet 115-P-16 about 18 miles northwest of Mayo, Y.T. (Figure 1). The DARK Claims cover the Scheelite Dome intrusive near the heads of Savage Gulch, Scheelite Gulch and Rudolph Gulch (Figure 2). Access to the property is by a summer road which leaves Highway 2 at a point about 10 miles north of Mayo, Y.T.

Ownership

The DARK Claim group comprising 72 Contiguous claims (Figure 2) is registered in Mayo as follows:

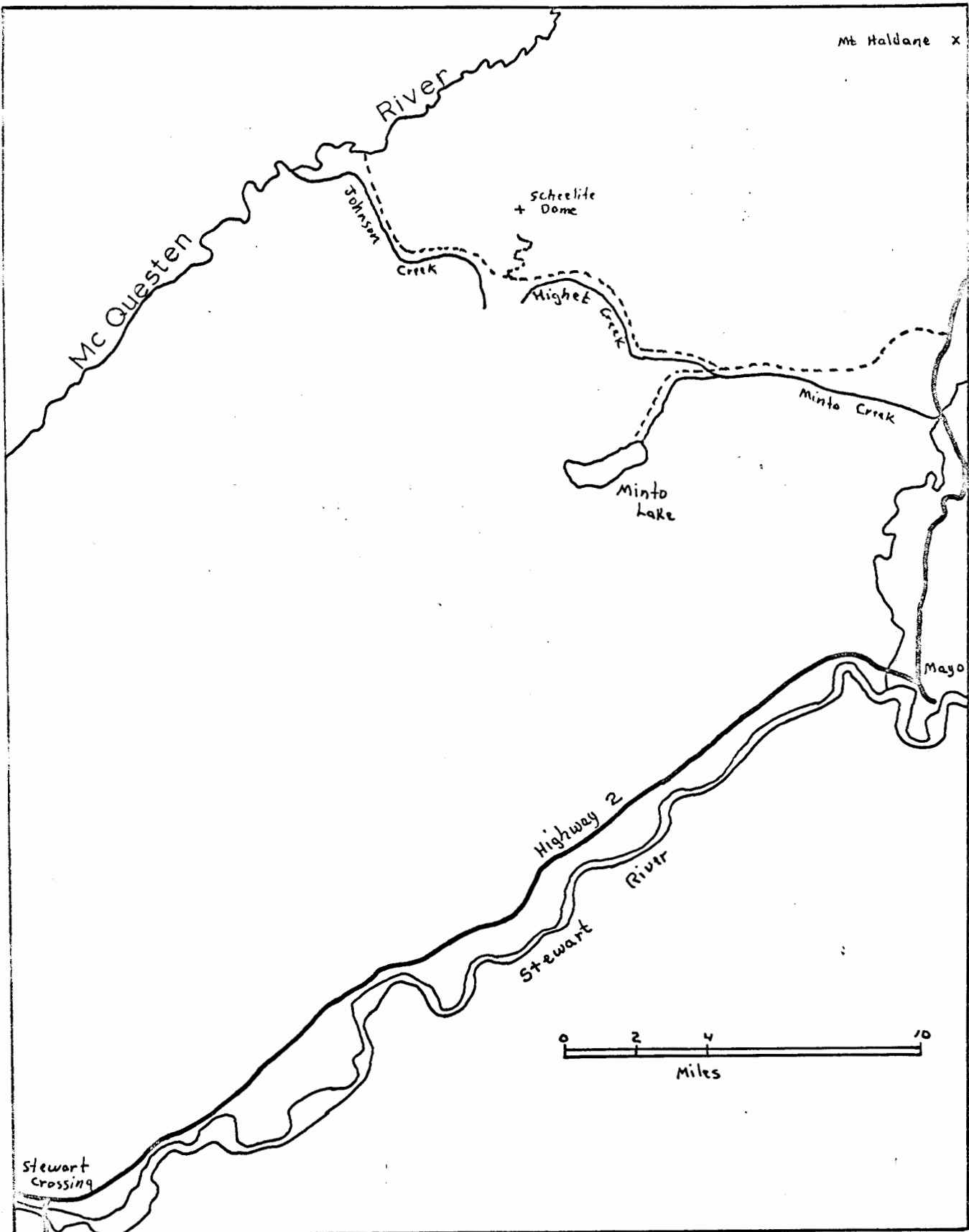


FIGURE I - Location Map Scheelite Dome Area, Yukon Territory.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Owner</u>	<u>Expiry Date</u>
DARK 1-8	Y33581-588	G. Elvins	October 16, 1971.
9-24	Y55787-802	G. Elvins	March 12, 1972.
25-72	Y55915-962	International Minerals & Chemical Corp.(Canada) Ltd.	May 7, 1972.

International Minerals & Chemical Corporation (CANADA) Ltd., performed the work on the Dark Claims 1-24 under an option agreement with Mr. G. Elvins.

GEOCHEMICAL SURVEY

The preliminary geochemical investigation of the Scheelite Dome area by R.J. Cathro (1969) for Mr. G. Elvins established that soil geochemistry would effectively outline target areas. The baseline for the geochemical grid was flagged and chained for a distance of 19,500 feet (Figure 2 and Map 1). Stations were established at 500 foot intervals along the baseline. The primary grid lines with a 1500 foot spacing were laid off by means of chain and compass. Sample stations were flagged at 300 foot intervals. Detail lines were then established with a spacing of 500 feet and a sample interval of 300 feet.

Sampling

The soil samples collected at each site were obtained by digging through the tundra, usually six to eight inches thick, and taking a sample of the organic free B horizon. The size of sample taken was approximately 100 grams. If the sample station fell on a bedrock area, or talus area, rock

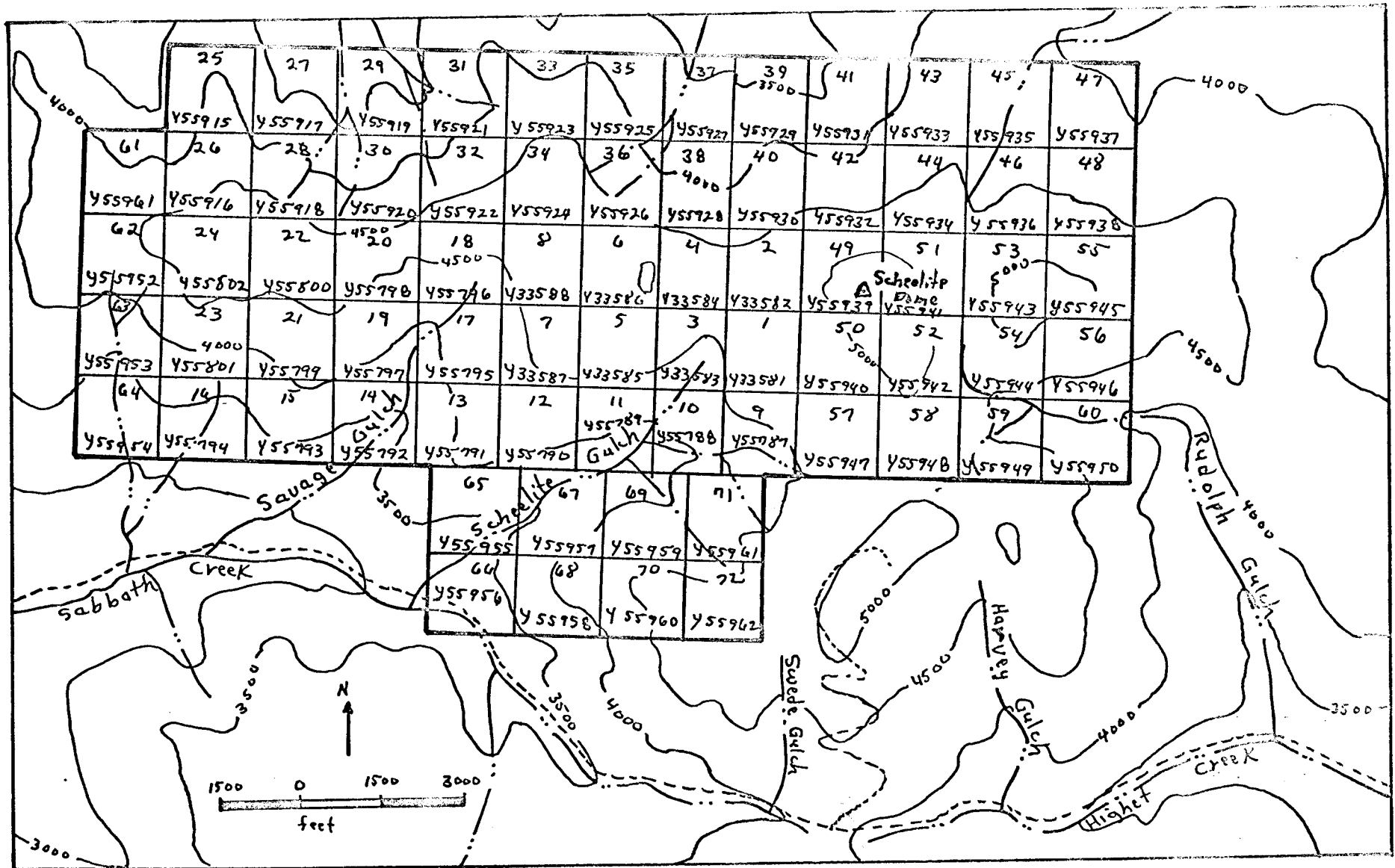


FIGURE 2 - Dark Claims, Scheelite Dome, Yukon Territory from claim map 115-P-16 at a scale of $\frac{1}{2}$ mile equals 1 inch.

samples were collected as shown on Map 1.

Analytical Methods

All geochemical samples were sent directly to the Bondar-Clegg & Company Ltd., laboratory in Whitehorse, Y.T. for sample preparation. The samples from the primary grid (Lines 0, 3W, 6W, 9W, 12W, 15W and Lines 3E, 6E, 9E, 12E, 15E, 18E) were put through the routine soil preparation techniques, and the pulps sent to the Bondar-Clegg & Company Ltd., laboratory in Vancouver, B.C. for analysis. A total of 300 samples were collected on the primary grid. *

Samples collected from the detail, or intermediate, lines were sent to the Bondar-Clegg laboratory in Whitehorse for preparation. The 290 samples were all put through the standard rock preparation techniques, i.e. the entire sample was pulverized. The sample pulps were sent to the Vancouver, B.C. laboratory for analysis.

The analytical work done by the Vancouver, B.C. laboratory of Bondar-Clegg & Company utilized the standard Colorimetric techniques of tungsten determination. The limit of detection is reported to be 2ppm. The results on samples prepared by the rock preparation technique indicate higher tungsten values than samples prepared by the standard soil preparation methods.

Interpretation

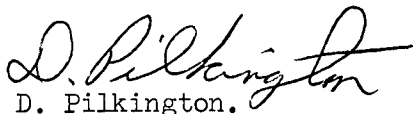
The tungsten content of the soil samples varies from 0 to 250 ppm and from 0 to 400 ppm in rock samples collected on the geochemical grid (Map 1).

Tungsten values greater than 20 ppm are probably anomalous. The highest values are found over the intrusive rocks near the head of Rudolph Gulch, Savage Gulch, and Scheelite Gulch.

Evaluation of the Anomalies

In order to evaluate the geochemical anomalies detected by the survey detailed sampling, both rock and soil, was undertaken (Figure 3 and 4). The soil samples were collected in the same manner as previously. The rock samples represent composite samples made up of one sample from each quadrant of a five (5) foot circle. A total of 60 soil samples were collected for check purposes, and 35 composite rock samples.

Three trenches were put in with a D-8 Cat (Figures 5 & 6) to test the geochemical anomalies. Approximately 1000 feet of access road had to be constructed in order to reach the trench area. Trench #1 averaged 20 feet deep and was 500 feet long. The overburden was all frozen, but could be dug with the aid of a ripper. Trench #2, 600 feet long and trench #3 400 feet long each averaged about 8 feet deep and the overburden was unfrozen. A total of 52 chip samples were collected from the three trenches. Each sample consists of chips collected across minimum widths of 5 feet. The assay results indicate that although considerable scheelite was observed associated with quartz veins the tungsten content of the whole rocks does not approach economic concentrations.


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Chemical Corp.(Canada) Ltd.

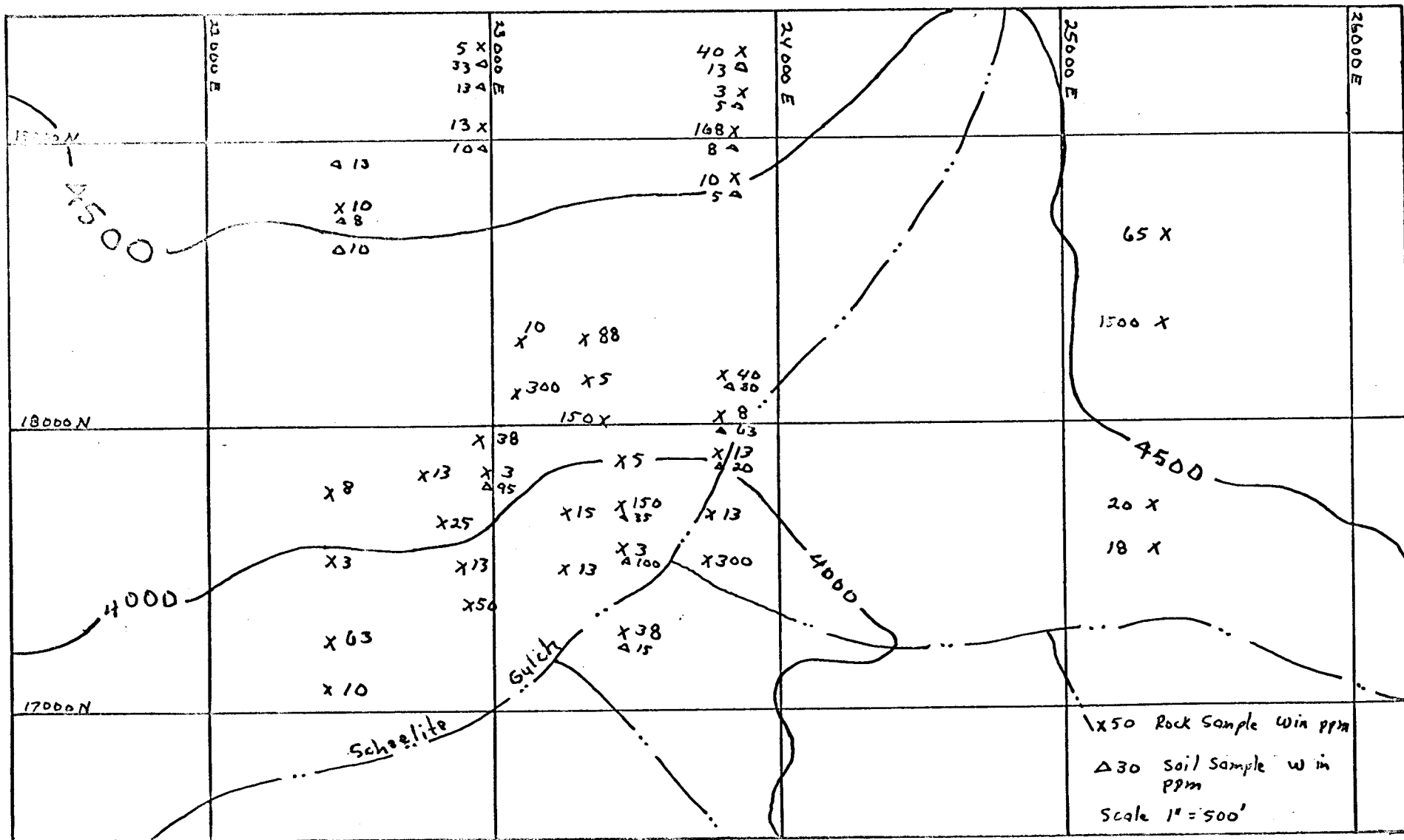


FIGURE 3 - Map showing sample location and tungsten values for rock and soil samples collected to check anomalous area in Scheelite Gulch.

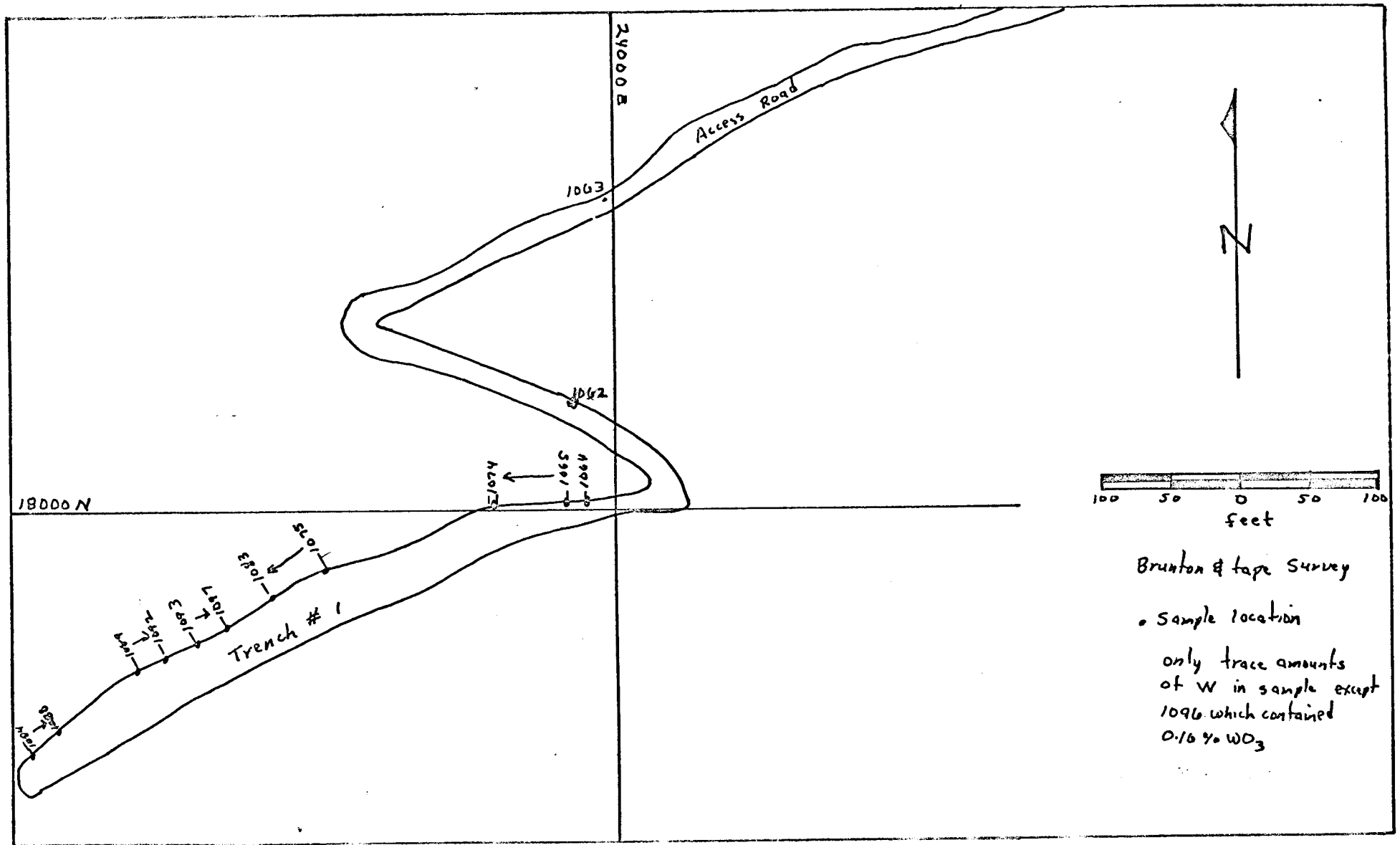


FIGURE 5 - Map of Trench #1 showing sample locations. Each sample represented by chips taken over a five(5) foot interval.

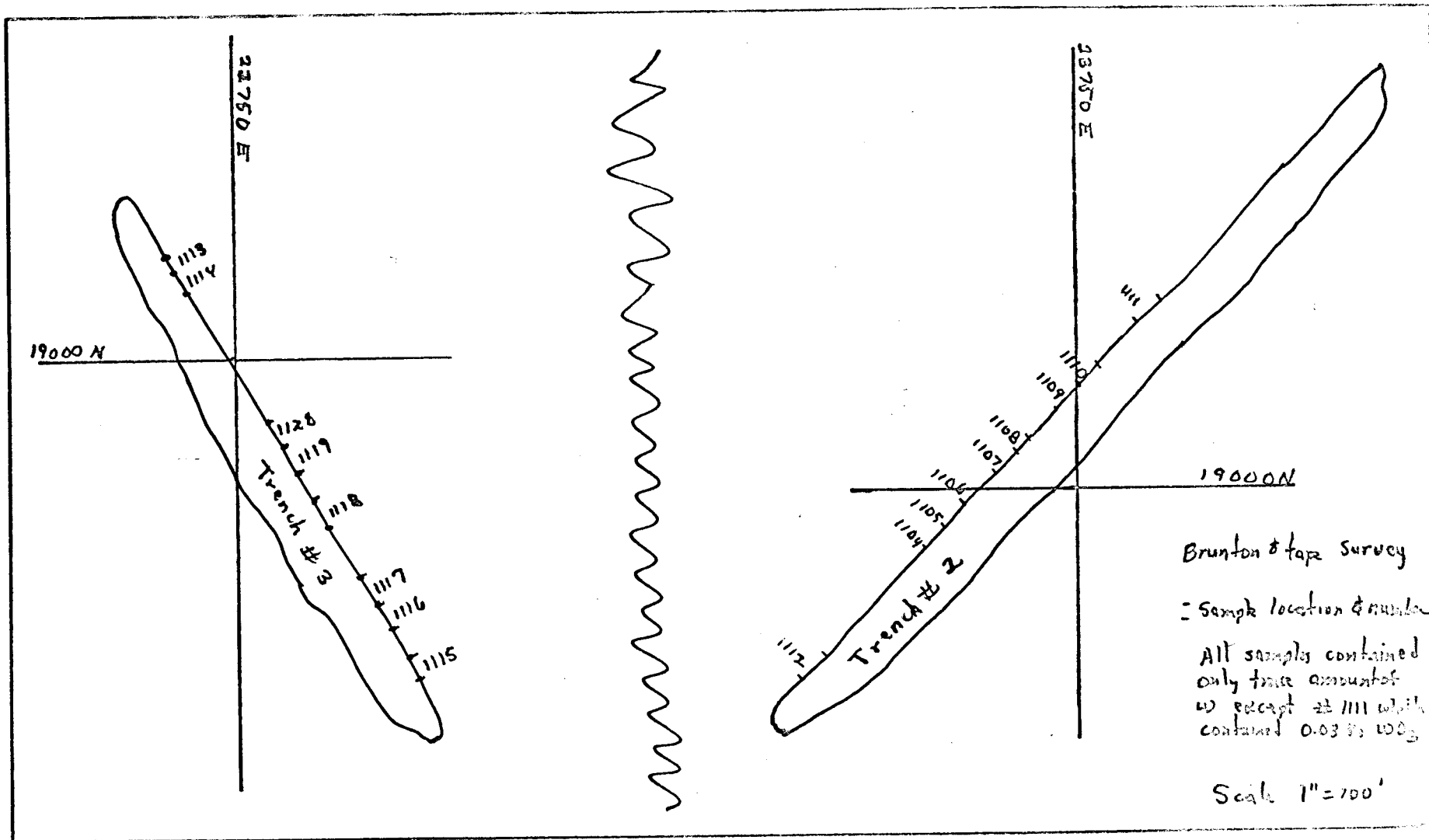


FIGURE 6 - Map showing location of Trench #2 and Trench #3 with sample locations.

APPENDIX I

Persons working on project:

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APPEXDIX II

Summary of Exploration Costs - Dark Claims

Geochemical Grid & Sampling	3,000.00
Trenching	2,437.90
Analytical	<u>2,514.75</u>
	<u>7,952.65</u>

