

ASSESSMENT REPORT

1980 Geochemical Survey Program Undertaken On The

Dauntless Claim

Stewart, British Columbia

Claims Involved:

Dauntless

Mining Divison:

Skeena

NTS Location:

Map 104 BIE

Latitude - Longitude:

56'05'N:130°00W

Owner of Claims:

Tournigan Mining Explorations Ltd.

Operator:

Western Mines Ltd.

Author:

Shaun M. Dykes  
Project Geologist  
Western Mines Ltd.

Date:

July 30, 1980



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## INTRODUCTION

The Big Missouri Property is located 25 km north of the town of Stewart, B.C. situated between the Silbak Premier and Granduc Mines in northwestern British Columbia (Fig. 1)

The property is accessible by road during snow-free months by way of the Granduc road from Stewart to Premier, and then by the Big Missouri's road into Joker Flats and the claims area.

The Big Missouri Mine was discovered in 1904, and was subsequently put in production between 1938 and 1942 by Consolidated Mining and Smelting Co. (Cominco). Subsequent to the mine closure in 1942, there have been several attempts by various mining companies to re-evaluate the mineral potential in the area. This includes:

- Work by Hecla Mining
- Geological work by Falconbridge in 1966
- Geological and Geochemical work by El Paso in 1970
- Extensive underground sampling by Aetna Mines in late 1960s and early 1970s; and
- Diamond drilling by Giant Mascot Mines in 1974

Since the fall of 1973, Tournigan Mining Explorations Ltd. has held title to the property. In 1979 Tournigan and Western Mines Ltd. entered into an agreement whereby Western Mines Ltd., by fulfilling certain obligations, could earn an interest in the property. It is in conjunction with this agreement that the 1979-80 diamond drilling program was undertaken.

## Description

A total of 60 soil samples were taken, (samples MW-154-194 including 157.5, and RM 149-178), at 50 m intervals or grid lines spaced 50 m apart (Fig. 3) Samples were taken within the "B" soil horizon at depths ranging from 12cm to 30cm using a maddock. Care was taken to remove all visible contaminating material i.e. large rock fragments, wood chips and roots.

Purpose

Survey was designed to test for bedrock related geochemical anomalies in an area covered by overburden.

Analysis

The samples were sent to Min-En Laboratories Ltd. in North Vancouver and were analyzed for Gold, Silver, Copper, Lead, and Zinc. The soils were sieved to a -80 mesh and were analyzed using acid digestion and atomic absorption techniques. The lead, zinc, silver and copper underwent nitric- perchloric acid digestion, while the gold was done using Aqua Regia A.A. analysis.

The analytical results were given in terms of parts per million for lead, zinc, silver and copper, and in parts per billion for gold.

## INTERPRETATION

The area covered by the Dauntless claim contains several areas displaying anomalous gold values ( 300 ppb. Au). Gold values have been contoured at 100 ppb. and 300 ppb. Au. The highest value obtained from the results was 1,650 ppb. Au.

Five zones are plotted from which high gold values were found. These zones are elongate perpendicular to the dip slope of the hill except the most easterly which is situated atop a small ridge. The zones, with the exception of the most westerly, are associated with silicified and sericitized amphibole feldspar porphyry andesites containing quartz veins with visible galena and spalerite. The fifth zone could be transported as it is situated in a small valley elongate perpendicular to the dip slope. The two most westerly anomalies are accompanied by high zinc values ( 500 ppm Zn). This may be due to the presence in this area of a vuggy quartz vein containing coarse grained sphalerite.

In summary there is a prospect for economic gold mineralization on the Dauntless claim. The units with which the anomalies are associated, closely resemble mineralized zones further north on the main body of the Big Missouri Claim group.

ITEMIZED COST STATEMENT

- Wages - 3 man days @ \$60.80/day	\$ 182.40
- Board and Lodging - 3 man days @ \$14.00/day	42.00
- Analytical cost 60 samples analyzed for Pb, Zn, Au, Ag, Cu @ \$7.155/sample	429.30
- Freight charges to Vancouver	16.00
- Equipment for grid setup, flagging, picket posts, sample bags	20.00
- Cost of preparation of report 1 man day @ \$96/day and drafting and typing	<u>325.00</u>
TOTAL	<u><u>\$ 1,014.70</u></u>

STATEMENT OF QUALIFICATIONS

University Education:

- 1976 Graduated with B. Sc. (Eng.) degree in Geology from Queen's University, Kingston, Ontario;
- 1979 Graduated with M. Sc. (Eng.) degree in Geology from Queen's University, Kingston, Ontario;
- Courses taken based on mineral exploration, igneous petrology, and mineral economics;

Practical Experience:

- 4 Summers experience in Northern Ontario and Northeastern British Columbia;
- Summer 1979 began work for Western Mines Ltd. on Big Missouri property.

Respectively Submitted,



Shaun M. Dykes



**PROJECT AREA**

130° 00'

-FROM N.T.S. 104 A B B, B 103 P.

**BIG MISSOURI PROJECT**

**LOCATION MAP**

SCALE; 1:250,000 - 1" = 4 mi.

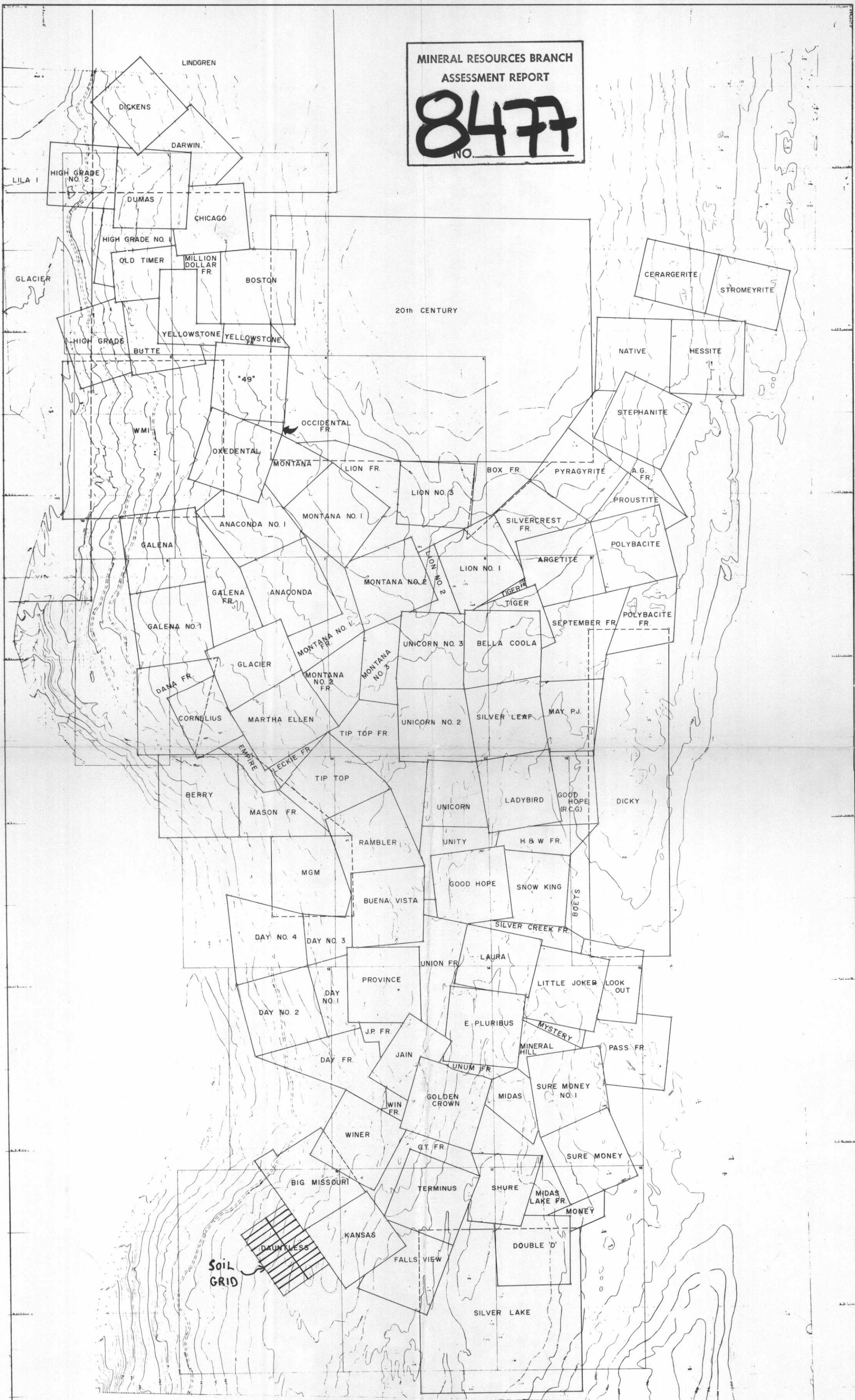
**FIG. 1**

BAC

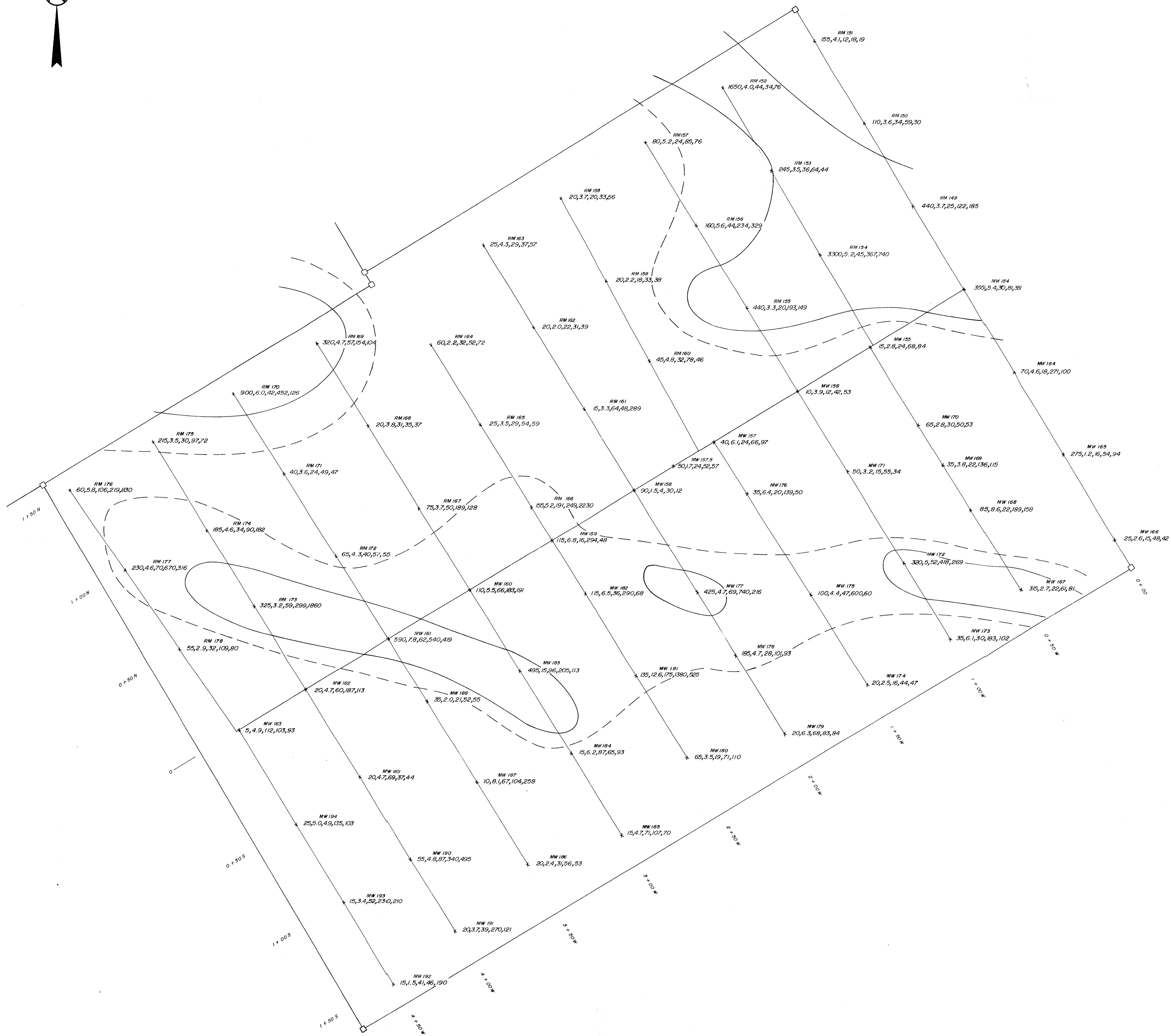


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
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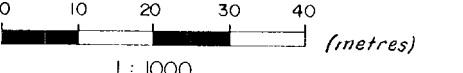
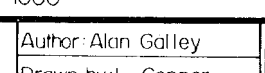
WESTERN MINES LIMITED	
BIG MISSOURI - UNICORN PROPERTY	
FIG. 2: CLAIMS	
Scale	1:50,000
Date	1950
Author	McPherson, W.P.



LEGEND

-  ≥ 300 ppb Au
-  ≥ 100 ppb Au
- MW 187 Sample number
- 20,3,5,29,54,59 oz/1 Au, Ag, Cu, Pb, Zn
-  Claim post & boundary

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WESTERN MINES LIMITED	
BIG MISSOURI PROJECT	
GEOCHEMICAL SOIL SAMPLE GRID	
DAUNTLESS CLAIM	
SCALE	
	
DATE: AUG 1980	REVISED: 
FIGURE: 3	