Office of the Supervising Mining Recorder
MAY 20 1980
WHITEHORSE
Yukon Territory

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MINING RECORDER
LAND AGENT
MAYO, Y.T.
L.A. & N.D.

ASSESSMENT REPORT

Detailed Geochemical Soil Survey and Surficial Geological Mapping

MAY 21 1980
14

Ag 8 - 14, Jo, Middlecoff, Ricky

Gopher, Whistler Mineral Claims

NTS 105 - M - 13

63°52' ~~153~~ 135°52'

Mayo Area, Y.T.

090 623

Barry C. Way, P. Geol.
Edmonton, Alberta
1st February, 1980

Work performed July 17 - July 25, 1979

Contents

	Page
Introduction	1
Exploration History	1
Geology and Mineralization	2
Geochemical Survey	2
Geological Mapping	3
Recommendations	9
Statement of Qualifications	10
Statement of Expenditures	11

Attached

Sketch Map of Claims 1 inch to 1/2 mile

Geochemical Soil Survey 1 : 250

Surficial Geological Mapping 1 : 250

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

$ 2879.6

Resident Geologist or
Resident Mining Engineer

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

B. E. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

Introduction

The work outlined in this report was conducted by the Mayag Syndicate between July 17 and July 25, 1979 under the guidance of the writer. The Mineral Claims Ag 8 - 14, Jo, Middlecoff, Ricky, Whistler, and Gopher lie on the northwest slope of Mt. Haldane, Mayo Area, Yukon.

The claims are registered in the Mining Recorder's Office in Mayo, Y.T. as follows:

Claim Name	Grant Number	Expiry Date
Ag 8 - 14	YA 30065-71	2nd May, 1980
Jo	YA 1916	20th April, 1980
Middlecoff	YA 1913	20th April, 1980
Ricky	YA 17724	10th April, 1980
Gopher	YA 17722	10th April, 1980
Whistler	YA 17723	10th April, 1980

Claims Jo, Middlecoff, Ricky, Gopher, and Whistler are held by M.H. Ewing of Mayo and Ag 8 - 14 are owned by B.C. Way.

Exploration History

The earliest reported discoveries of silver-lead-zinc mineralization in the area occurred in 1903 on Galena Hill. The Mt. Haldane mineralization may have been discovered prior to this.

Silver-lead-zinc mineralization in Bighorn Gulch, Mt. Haldane, has been vigorously explored during two periods, one between 1918 and 1920 and later between 1964 and 1967. In excess of 700 metres of drifting and 56 metres of raising and shaft sinking has been completed. The early operator was Yukon Silver-Lead Mining Co.; the latter, Silver Titan Mines Ltd.

CCH Resources Ltd., a subsidiary of Campbell Chibougamou Mines Ltd., discovered tin-tungsten mineralization during 1977 on the southeast slope of Mt. Haldane and have been conducting exploration since.

Geology and Mineralization

All of the economically minable veins in the Keno Hill District are found within the central quartzite, Keno Hill Quartzite Formation tentatively dated Upper Devonian - Mississippian. This formation is broadly folded; ore occurences have all come from the South limb of the McQueston Anticline which crosses Mt. Haldane, Keno Hill, and Galena Hill.

The Keno Hill Quartzite Formation is underlain by phyllite and schists derived from clastic sediments and overlain by sericite schist and phyllites. Greenstone sills and later quartz-biotite porphyry sills and dykes intrude the metasediments.

During anticline development Transverse and Longitudinal Vein-Faults developed. These are offset by Cross-Faults and Bedding Faults.

Mineralization in the Bighorn Gulch area probably occurs on Transverse Vein-Faults, related to and adjacent to the 'Ewing Fault' which is a Longitudinal Vein-Fault. The transverse type frequently are mineralized with argentiferous galena, sphalerite, freibergite and pyrargyrite as open space fillings along with gangue minerals such as siderite, pyrite, arsenopyrite, and quartz. Cross-Faults probably cause offsets in the Bighorn Gulch area.

Geochemical Soil Survey

The purpose of the work undertaken by the Mayag Syndicate during 1979 was to attempt to extend the potential for silver occurence southward from the old workings in Bighorn Gulch using closely spaced soil samples and detailed surficial geological mapping.

Soil samples were collected at 12 metre intervals on grid lines spaced at 61 metres. Analyses were done by Chemex Labs (Alberta) Ltd. in Calgary using the -80 mesh fraction. Lead assays were completed for 232 samples; 42 samples were also analysised for tin and tungsten. The

results are shown below. Geological mapping and plots for the geochemical results are attached.

Lead anomalies near the old workings do not repeat in a southerly direction as witnessed by work outlined in this report. Several weakly anomalous tungsten anomalies occur near a talus exposure of quartz-biotite porphyry.

Geological Mapping

Pace and compass control was utilized to map overburden geology at a scale of 1:250. Active solifluction and frequent frost boils together with a thin covering of surficial material lends itself to reasonable accuracy in outlining bedrock geology. This has been shown to be valid elsewhere in the Keno Hill District.

Detailed prospecting for mineralized vein material accompanied the mapping project, but failed to find sulfide or oxide minerals south from the Middlecoff workings.

Geochemical Soil Survey

Ag 8 - 14, Jo, Middlecoff, Ricky, Gopher, Whistler Mineral Claims

NTS 105 - M - 13

Sample No.	Pb	W	Sn
100	18		
101	2740		
102	5500		
103	965		
104	84		
105	45		
106	81		
107	36		
108	26		
109	18		
110	21		
111	53		
112	35		
113	46		
114	108		
115	24		
115 A	17		
116	26		
117	19		
118	27		
119	16		
120	24		
121	27		
122	24		
123	14		
124	14		
125	23		
126	29		
127	33		
128	26		
129	25		
130	34		
131	26		
132	21		
133	35		
134	27		
135	22		
136	4		
137	8		
138	5		
139	9		
140	8		
141	18		
142	13		
143	18		
144	34		
145	33		

Geochemical Soil Survey

Ag 8 - 14, Jo, Middlecoff, Ricky,

Gopher, Whistler Mineral Claims

Sample No.	Pb	W	Sn
146	21		
147	25		
148	30		
149	18		
150	19		
151	35		
152	32		
153	26		
154	15		
155	20		
156	44		
157	36		
158 A	7		
159 B	7		
160	6		
161	11		
162	13		
163	8		
164	6		
165	6		
166	5		
167	5		
168	5		
169	6		
170	7		
171	5		
172	11		
173	7		
174	10		
175	9		
176	13		
177	8		
178	8		
179	9		
181	20		
182	10		
183	27		
184	15		
185	25		
186	15		
187	36		
188	23		
189	24		
190	19		
191	19		
192	24		
193	26		
194	25		
195	35		

Geochemical Soil Survey

Ag 8 - 14, Jo, Middlecoff, Ricky,

Gopher, Whistler Mineral Claims

Sample No.	Pb	W	Sn
196	24		
197	15		
198	29		
199	29		
200	19		
201	15		
202	12		
203	14		
204	9		
205	7		
206	6		
207	5		
208	7		
209	6		
210	10		
211	10		
212	11		
213	11		
214	9		
215	10		
216	14		
217	13		
218	9		
219	13		
220	17		
221	18		
222	15		
223	12		
224	14		
225	13		
226	15		
227	18		
228	24		
229	22		
230	20		
231	12		
232	36		
233	25		
234	15		
235	15		
236	14		
237	11		
238	15		
239	14		
240	31		
241	24		
242	30		
243	13		
245	20		
246	19		

Geochemical Soil Survey

Ag 8 - 14, Jo, Middlecoff, Ricky,

Gopher, Whistler Mineral Claims

NTS 105 - M - 13

Sample No.	Pb	W	Sn
247	27		
248	17		
249	16		
250	11		
251	35		
252	10		
253	28		
254	11		
255	8		
256	11		
257	28		
258	16		
259	7		
260	13		
261	12		
262	10		
263	14		
264	12		
265	11		
266	20		
267	11		
268	18		
269	6		
270	11		
271	6		
272	6		
273	10		
274	6		
275	5		
276	7		
277	5		
278	5		
279	10		
280	7		
281	6		
282	7		
284 A	8		
284	8		
285	8		
286	11		
287	7		
288	8		
289	7		
290	7		
291	14	3	1
292	6	4	1

Geochemical Soil Survey

Ag 8 - 14, Jo, Middlecoff, Ricky,

Gopher, Whistler Mineral Claims

NTS 105 - M - 13

Sample No.	Pb	W	Sn
293	8	3	1
294	6	2	1
295	7	2	1
296	13	4	1
297	13	2	1
298	12	2	1
299	13	2	1
300	14	3	1
301	12	2	1
302	20	1	1
303	58	7	1
304	35	11	1
305	13	1	1
306	23	13	1
307	31	9	1
308	25	4	1
309	13	1	1
310	10	1	1
311	9	12	1
312	12	1	1
313	10	1	1
314	38	4	1
315	10	1	2
316	9	1	1
317	6	1	1
318	6	1	1
319	5	3	1
320	6	2	1
321	8	2	1
322	11	2	1
323	9	2	1
324	11	3	1
325	10	9	1
326	9	4	1
327	10	5	1
328	7	4	1
329	5	3	2
330	9	10	1
331	7	1	1
332	8	2	1

Recommendations

The soil sample grid following the Ewing Fault southward should be extended to test for any repeats of vein mineralization. Lead analyses are recommended and in anomalous areas silver assays added. Geological mapping and prospecting should be conducted, as well, along the Ewing Fault.

Geological mapping eastward from the Ewing Fault is recommended to locate quartz-biotite porphyry intrusives and potential tin-tungsten mineralization in stockworks. A geochemical soil grid is recommended, as well, to test this area for anomalous tin and/or tungsten in soils.

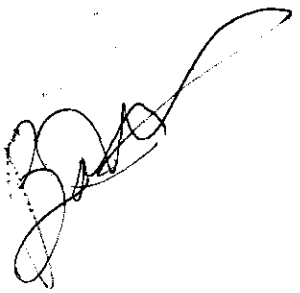
B.C. Way
Edmonton, Alta.
1st February
1980

Statement of Qualifications

Work performed on claims held by M.H. Ewing and B.C. Way on Mt. Haldane, the subject of this report, was conducted by myself and under my direction.

I am a self-employed geologist having graduated from the University of Alberta in 1973 with a B.Sc., specialization in Geology. I am a member of the Association of Professional Engineers, Geologists, and Geophysicists of Alberta. I have practised my profession for 7 years.

I was assisted by M.G. Roberts of Turner Valley, Alberta and N.R. Way of Stellarton, Nova Scotia.

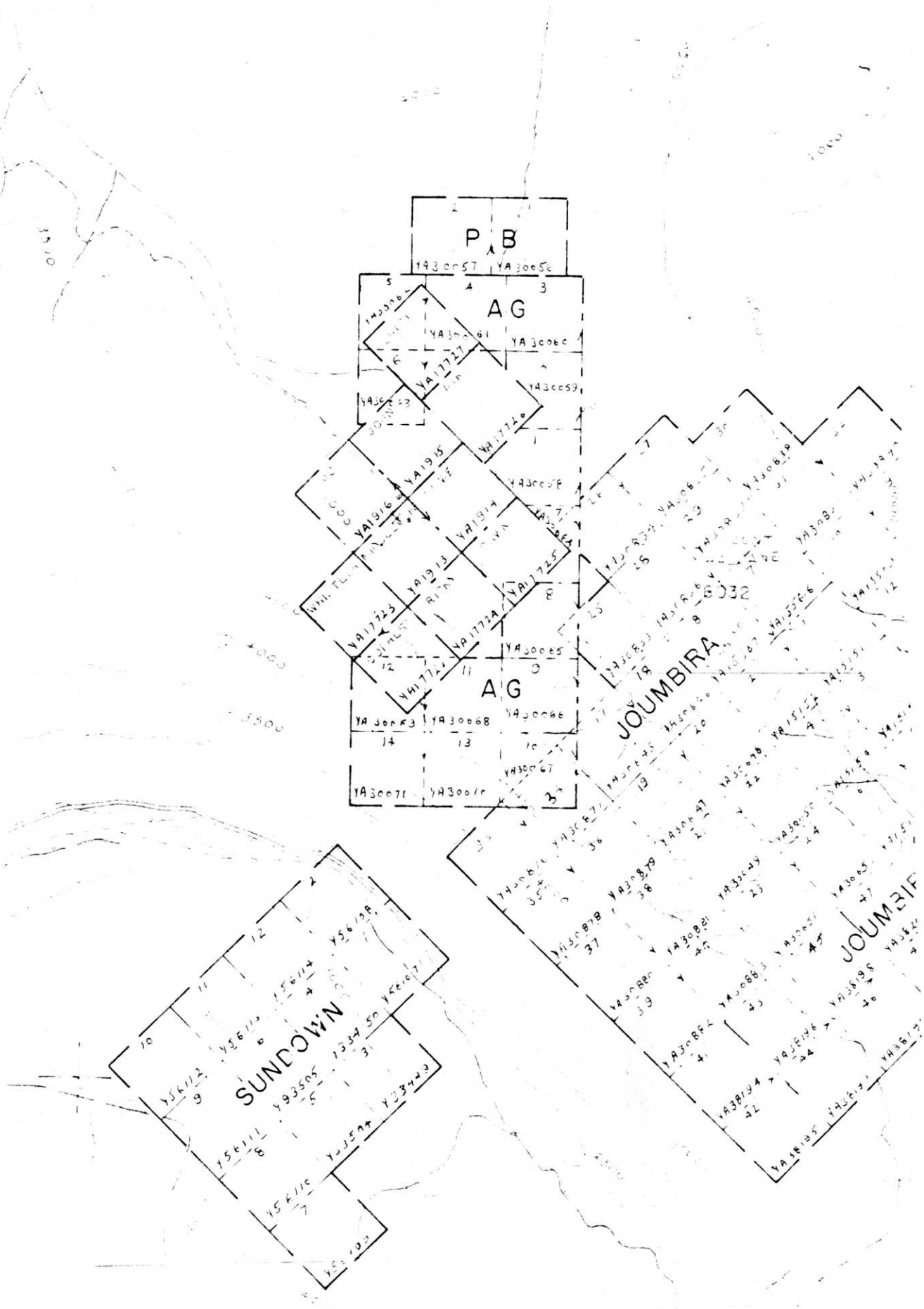


B.C. Way
Edmonton, Alberta
1st February, 1980

Statement of Expenditures

232	Soil Sample Preparations	$ 104.40
232	Geochemical Analyses for Pb	348.00
42	Geochemical Analyses for W	115.50
42	Geochemical Analyses for Sn	136.50
1	Geologist 9 days @ $50.00/day	450.00
2	Assistants 9 days @ $50.00/day	900.00
	Geologist 3 days report preparation	150.00
	Food - 9 days, 3 people @ $15.00	405.00
	3/4 Ton 4 Wheel Drive 9 days @ $30.00	270.00
		$ 2,879.40

Barry C. Way
Edmonton, Albert
1st February,
1980


P B
AG
AG
JOUMBIRA
SUNDOWN

MAYAG SYNDICATE

GEOCHEMICAL SOIL SURVEY

FEB. 1980

1:250

PPM
O Pb

O Pb, W, Sn

NORTH

Ag 8

Ag 9

Ag 11

Ag 12

RICKY

MIDDLECOFF

GOPHER

BASE LINE

0 + 00 S

3 + 05 S

6 + 10 S

| | | |

MAYAG SYNDICATE

SURFICIAL GEOLOGICAL MAPPING

FEB. 1980

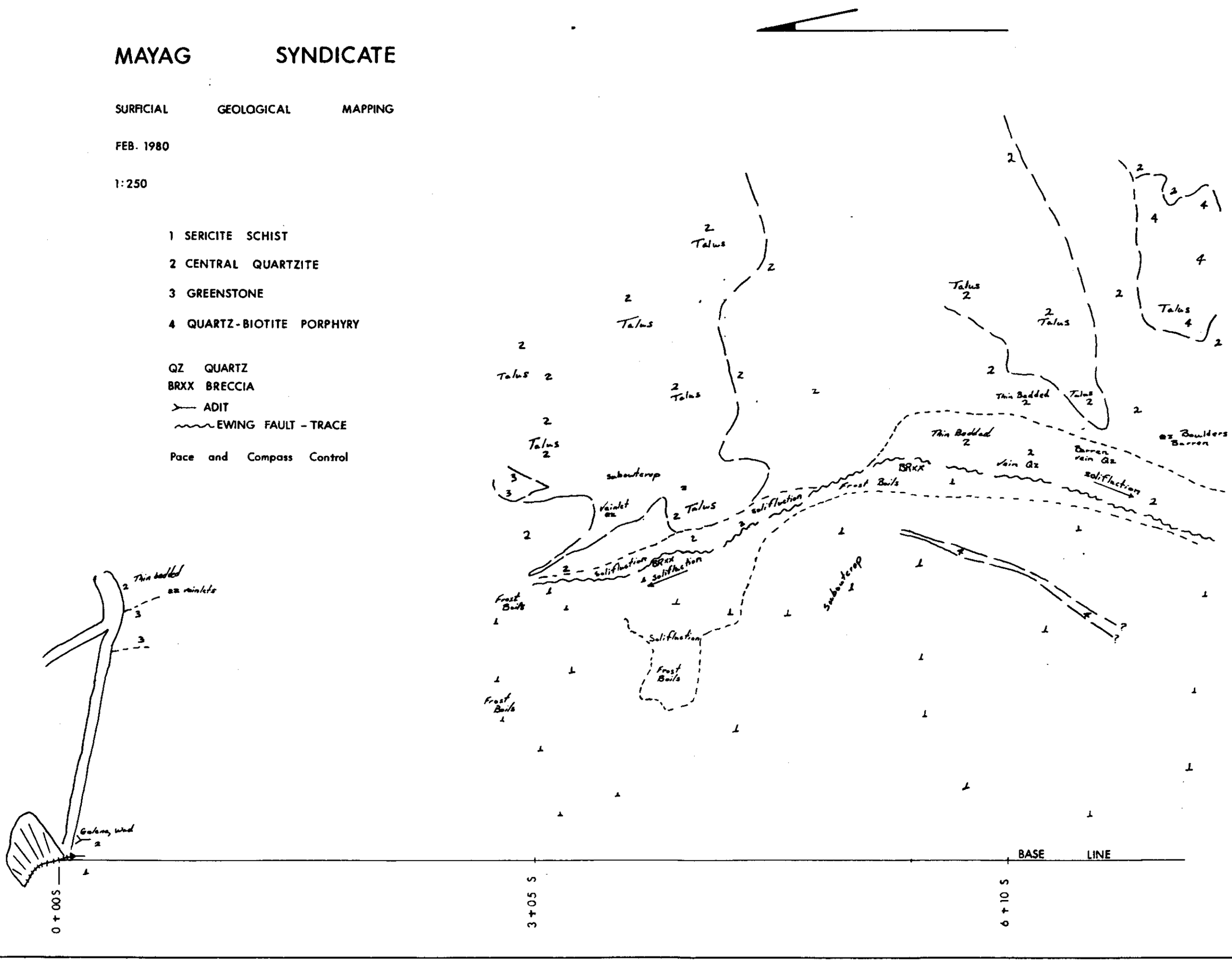
1:250

1 SERICITE SCHIST

2 CENTRAL QUARTZITE

3 GREENSTONE

4 QUARTZ-BIOTITE PORPHYRY

QZ QUARTZ
BRXX BRECCIA
ADIT
EWING FAULT - TRACE

Pace and Compass Control