

MAR No. ~~RELEASED~~

105-H-6

ASSESSMENT REPORT
N. M. E. A. P.
CONFIDENTIAL
OPEN FILE



Watson Lake MD
TYPE OF
WORK: Prospectus Geophy.

REPORT FILED UNDER	Sovereign Metals Corp.	DOCUMENT NO. 061799
DATE PERFORMED	Dec. 6, 1978.	DATE FILED: Jan. 25, 1979
LOCATION - LAT. LONG.	61° 27.5'N	AREA: Frances Lake, Yukon
	129° 25'W	
CLAIM NO.	BARB 1-1	YA 12548-55
	9-10	YA 20216-17
	11-15	?
VALUE \$		
WORK DONE BY	C.K. Ikona	
WORK DONE FOR	Sovereign Metals Corp.	
REMARKS	A re-interpretation of the results of an EM survey conducted by G.E. White earlier in 1978. (This is the former Matt Berry property).	

PROSPECTUS
JAN. 25, 1979.

Charles K. Ikona,
208-850 West Hastings St.,
Vancouver, B. C. V6C 1E1.

6 December 1978

061799

Mr. H. S. Aikins,
Sovereign Metals Corporation,
305 - 535 Thurlow Street,
Vancouver, B. C.

re: Barb Mineral Claims,
Watson Lake M.D., Y.T.,
105 H/6

Dear Mr. Aikins:

At your request I have reviewed the Geophysical Report on the Pulse Electromagnetometer Survey conducted on the Barb Claims by Glen E. White, Consulting Geophysicist, during July and August of this year. I have also discussed this report at length with Mr. White on the telephone, and have attempted to reconcile the results of the survey as presented in Mr. White's report with my observations of the property as noted in my report of July 8, 1977.

Mr. White reports on a program consisting of some five miles of horizontal and fourteen miles of vector pulse electromagnetic surveying over the area of the known showings and their projected extensions. He reports that although selected hand samples of the mineralization were conductive, the showings themselves did not respond to the electromagnetic method.

Some vector angle changes are noted which he ascribes to lithologic contacts, along with a deep focus of weak conductivity attributed to a possible graphite bearing lithologic unit.

An examination of the survey results in the area of the projected vertical section developed from previous diamond drilling and accompanying this letter shows no indication of the mineralization located in these drill holes. While the projected section is not to be considered absolute at this stage of the properties development, these drill holes do indicate mineralization well within penetration depths of surface instruments. It would appear that only two conclusions are possible. The first is that the survey technique is not

applicable in this instance, or secondly, the interpretation of the survey is not correct.

To resolve this, I have had extensive discussions with Mr. White. He indicates that this survey technique is quite a recent innovation and that interpretation of results is still evolving. Recently, it is starting to appear that analysis of the vertical loop component will not show definitive cross-overs and good vertical focus in areas of parallel mineral zones and/or where mineralization parallels bedding of host units. In these instances, it is Mr. White's opinion that the horizontal component of the survey yields a more definitive conductor response. At my request he briefly reviewed the results of the survey and states that there are definitely conductive responses on the horizontal component and re-evaluation of the survey is warranted. His cost estimate of this re-evaluation is approximately \$1000.00.

It is my opinion that the results of the electromagnetic survey available to date have not altered the status of the Barb claims since my report of July 8, 1977. Additional work is still warranted on the claims. As the more expensive part of the electromagnetic survey (field work) has been completed the additional funds to re-work the data, as suggested by Mr. White, should most probably be expended. A further work program consisting of surface trenching, employing a small dozer should be undertaken. Subsequently, diamond drilling will have to be considered.

Estimated costs: (No diamond drilling in this phase).

Re-interpretation of electromagnetic survey	\$ 1,000.00
Camp and mobilization	3,500.00
J D 450 dozer or equivalent @ \$40/hour	10,000.00
Sampling and assaying	1,500.00
Labour and supplies	4,000.00
Engineering and supervision	2,000.00
Overhead and office	1,000.00
Contingency	2,000.00
	<hr/>
	\$25,000.00

Yours sincerely,

Charles K. Ikona, P. Eng.



