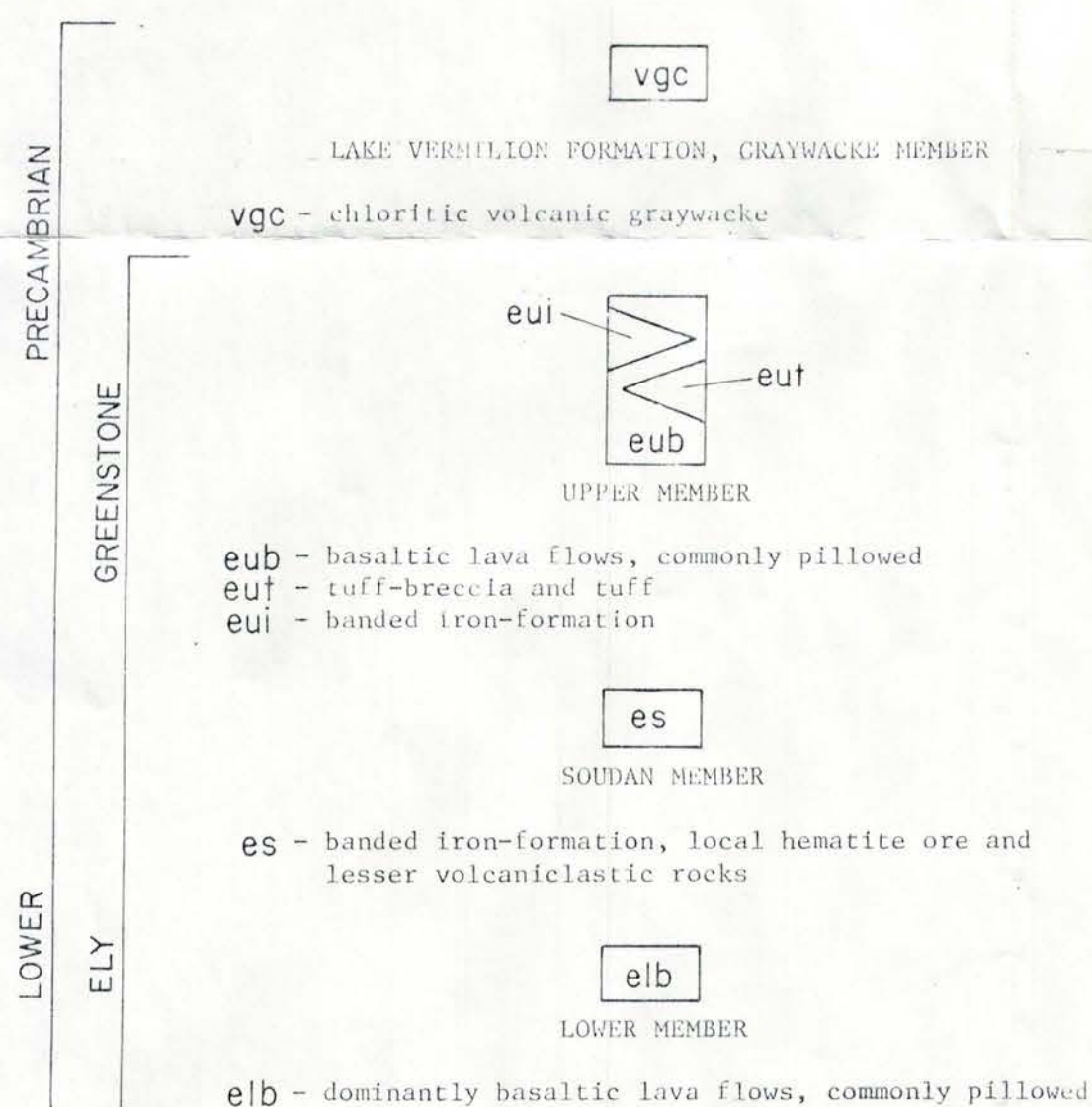


The McComber Mine is located in the Soudan Member of the Lower Precambrian Ely Greenstone (Sims, 1973). The mine was operated in 1917-19 and produced a total of 8,386 tons of hematite ore (Trethewey, 1978). The samples reported on this map sheet were collected from several small mine dumps. The mine dumps are located near adits and cuts on a south facing hill near the north shore of Armstrong Lake. Organic-rich lake sediment geochemical surveys in the Lake Vermilion-Ely region, which includes the McComber Mine, have indicated anomalous concentrations of arsenic and copper in some of the lakes shown on this map sheet (Meineke, Vadis and Klaysmat, 1976 and 1976-77).

SAMPLE NUMBER	Ag (ppm)	Au (oz/ton)	Co (ppm)	Cu (ppm)	Ni (ppm)	Pb (ppm)	Zn (ppm)	DESCRIPTION
5966	.5	.006	56	30	44	14	20	Vein quartz
5967	.5	.016	62	94	80	34	36	Metasediment with 2% pyrite
5968	.5	.024	88	74	88	40	56	Metasediment with 50% pyrite
5969	.5	.022	88	528	110	34	80	Metasediment with 20% pyrite
5870	.5	.009	52	64	8	32	24	Metasediment with 8% quartz veinlets and 2% pyrite
5971	.5	.026	70	48	80	52	124	Hematite and magnetite

All elements were analyzed by a Perkin-Elmer 303 atomic absorption spectrophotometer at the Division of Minerals. The samples were digested in concentrated HNO₃, HCl and HF using a teflon acid digestion bomb. For Ag and Au, a MIBK extraction was performed.

EXPLANATION

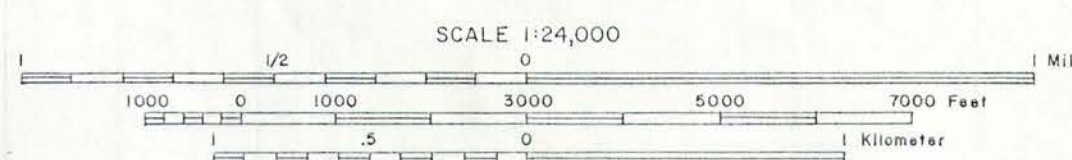


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Base from U. S. Geological Survey 1:24,000 scale Eagles Nest (1969) topographic map.



CHEMICAL ANALYSIS OF SAMPLES FROM
McCOMBER MINE, ST. LOUIS COUNTY, MINNESOTA

By

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1979

