

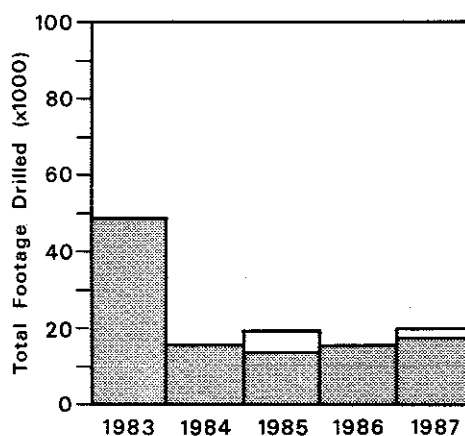
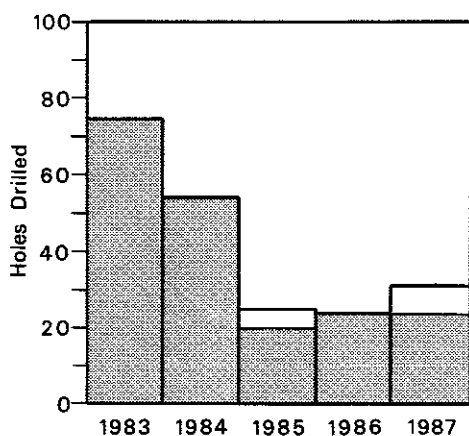
## METALLIC MINERAL EXPLORATION IN WISCONSIN: Summary of 1987 Activity

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### HIGHLIGHTS OF 1987 ACTIVITY

Metallic mineral exploration<sup>1</sup> in Wisconsin in 1987 showed some strength as compared to the previous year. Total number of holes drilled was 32, an increase of 39 percent over 1986 levels. Total footage drilled was up 30 percent to 20,220 feet; actual bedrock footage drilled was also up nearly 33 percent to 17,710 feet. Ten companies held exploration licenses at some time in 1987, but only eight companies held active licenses at year-end. One new license was issued in 1987. Three companies were actively drilling in 1987 and four counties were included in that drilling activity.

The principal highlight of 1987 was the May 27 announcement by Kennecott of its plans to pursue development of the Flambeau deposit south of the city of Ladysmith in Rusk County. The proposed development of the small, massive-sulfide orebody located immediately east of the Flambeau River returns the focus of mineral development attention to the original massive sulfide discovery in northern Wisconsin. Exploration activity associated with the current Flambeau project centers on the northeast end of the tabular-shaped, steeply dipping orebody, and is concentrated in the upper 200



Screened part of bar graph represents non-developmental exploration drilling. Nonscreened part represents development drilling on known mineral deposits.

<sup>1</sup>"Exploration" has a specific legal definition in Wisconsin under NR 130.03(3), Wisconsin Administrative Code, that is essentially synonymous with "drilling." Unless otherwise indicated, this legal definition is followed in this report.

feet of the mineralized area within the secondary enrichment zone. The principal minerals of interest are copper, gold, and silver. The exploration effort, referred to in this report as development drilling, is under the direction of a new Kennecott company, Kennecott Exploration (Australia), Ltd.

Drilling in Marathon County also received some attention in 1987 when the Canadian Mining Journal, in its June issue, noted that Noranda Exploration, Inc., continues its exploration of the Reef prospect, an area of gold-copper mineralization along the western margin of the Wolf River batholith.

Metallic mineral leasing in 1987 increased significantly over the 1986 level, according to Duncan Harkin, University of Wisconsin, who annually surveys leasing activity in northern Wisconsin. This year, 9,986 acres in six counties were leased as compared to only 2,493 acres leased in 1986.

The focus of metallic mineral exploration in Wisconsin continues to be precious metals, primarily gold. Although exploration efforts are concentrated in relatively few areas, the evaluation of Wisconsin's metallic mineral resources continues at a modest pace.

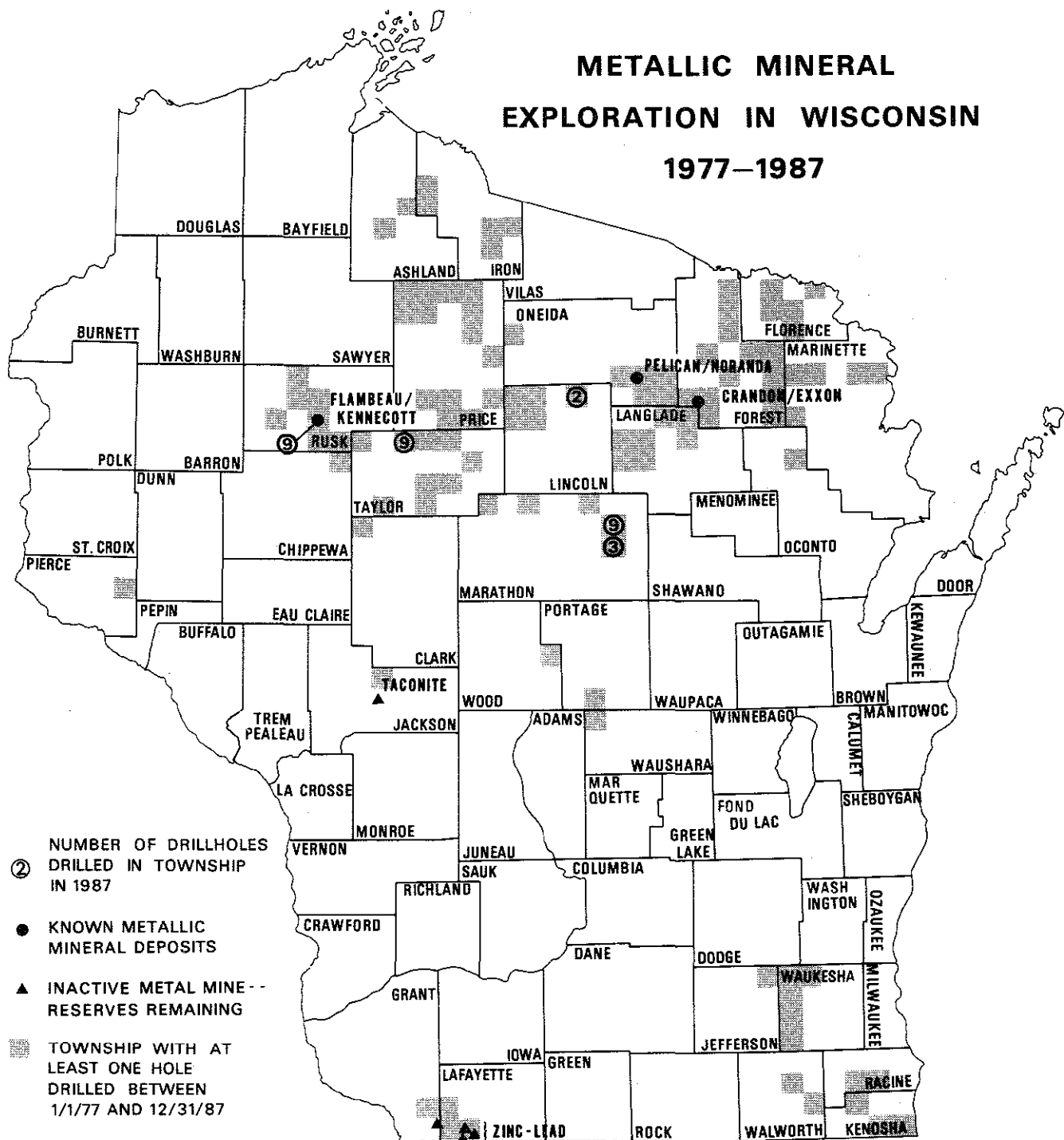
#### FIVE-YEAR METALLIC MINERAL EXPLORATION SUMMARY

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Companies licensed to drill <sup>1</sup>	17	18	16	11	10
Newly licensed companies <sup>1</sup>	3	3	1	2	1
Companies conducting drilling programs	9	8	5	4	3
Total counties with drilling activity	14	10	7	6	4
Total holes drilled (development drilling) <sup>2</sup>	74 (0)	54 (0)	24 (4)	23 (0)	32 (9)
Total footage drilled (development drilling) <sup>2</sup>	48,594 (0)	16,664 (0)	19,444 (4,753)	15,480 (0)	20,220 (2,324)
Total bedrock footage (development drilling) <sup>2</sup>	40,350 (0)	13,573 (0)	15,944 (4,343)	13,390 (0)	17,710 (338)

<sup>1</sup>An exploration license may be obtained at any time, but expires July 1st. This total includes companies licensed all or part of the indicated calendar year.

<sup>2</sup>Numbers in parentheses refer to development drilling, that is, exploration drilling completed at sites of announced mineral deposits. Totals for development drilling are included in the totals indicated.

# METALLIC MINERAL EXPLORATION IN WISCONSIN 1977-1987



All drillhole data are from public records--from drillhole abandonment reports submitted by metallic mineral exploration companies to the Wisconsin Department of Natural Resources.

# 1987 METALLIC MINERAL EXPLORATION BY COMPANY AND COUNTY

<u>Company</u> [ <u>License number</u> ]	<u>Drillholes</u>	<u>Bedrock footage</u>	<u>Total footage</u>
Chevron U.S.A., Inc. [29]	11	9,219	10,897
Kennecott Exploration [30]	9	1,986	2,324
Noranda Exploration [3]	<u>12</u>	<u>6,505</u>	<u>6,999</u>
TOTAL	32	17,710	20,220

<u>County</u>	<u>Drillholes</u>	<u>Bedrock footage</u>	<u>Total footage</u>
Lincoln	2	1,332	1,842
Marathon	12	6,505	6,999
Rusk	9	1,986	2,324
Taylor	<u>9</u>	<u>7,887</u>	<u>9,055</u>
TOTAL	32	17,710	20,220

## 1987 METALLIC MINERAL EXPLORATION LICENSEES<sup>1</sup>

<u>License number</u>	<u>Company</u>	<u>License number</u>	<u>Company</u>
1	Exxon Minerals Company	10	Amax Exploration, Inc. <sup>2</sup>
3	Noranda Exploration, Inc.	17	Kerr-McGee Corporation
5	E.K. Lehmann and Associates	21	Mineralco, Inc. <sup>2</sup>
	of Wisconsin, Inc.	28	Utah International, Inc.
9	American Copper and	29	Chevron Resources Co.
	Nickel Co., Inc.	30	Kennecott Exploration
			(Australia), Ltd. <sup>3</sup>

<sup>1</sup>Companies listed were licensed to explore for metallic minerals in Wisconsin for all or part of 1987. License numbers not listed represent licenses issued previously to companies that did not renew their license for any part of the 1987 calendar year.

<sup>2</sup>This company did not renew its license for the July 1987 to June 1988 license year.

<sup>3</sup>This company has not previously held a license to explore for metallic minerals in Wisconsin. Exploration licenses were first required in 1978.



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