MINERAL RESOURCES OF ALASKA

REPORT ON PROGRESS OF INVESTIGATIONS IN

1921

BY

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1923
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This volume is the eighteenth of a series of annual bulletins summarizing the results achieved during the year in the investigation of the mineral resources of Alaska and treating of the mining industry of the Territory, especially of the statistics of mineral production, with the collection of which the Geological Survey is charged by law.

The reports included in this volume are primarily intended to give prompt publication of the more important economic results of the work of the year. The time available for their preparation does not permit full office study of the field notes and specimens, and some of the statements made here may require modification when the study has been completed. Those who are interested in any particular district should therefore procure a copy of the complete report on that district as soon as it is available.

Again, as for many years in the past, the Geological Survey is under great obligation to residents of the Territory for valuable data. Those who have thus aided include the many mine operators who have made reports on production as well as developments. There are still some Alaskan mineral producers, though a constantly decreasing number, who fail to respond to the request for information. Therefore, it is still necessary to supplement the figures obtained from mine operators by estimates from other reliable sources. In this work the writer has received invaluable aid from many prospectors and miners, Federal and Territorial officials, engineers, and officers of banks and transportation and commercial companies.

1 The preceding volumes in this series are U. S. Geol. Survey Bulls. 259, 284, 314, 345, 379, 442, 480, 520, 542, 592, 622, 642, 662, 692, 712, 714, and 722.
It is impracticable to mention by name all who have aided in this work, but it should be stated that without the assistance of these public-spirited citizens the preparation of this report would have been impossible. Special acknowledgments should be made to B. D. Stewart, Territorial mine inspector, and B. W. Dyer, Federal mine inspector; the Director and other officers of the Bureau of the Mint; the Director and other officers of the Bureau of Mines; officers of the Alaska Customs Service; the officers of the Alaskan Engineering Commission; the American Railway Express Co.; Stephen Birch, Kennecott Copper Corporation; Sumner S. Smith, resident engineer of the Alaskan Naval Coal Commission; George Parks, of the General Land Office; E. H. Bartholf, of Hyder; R. L. Cline, of the United States Forest Service, Ketchikan; Thomas Vogel, of Porcupine; G. Howard Birch, of Nizina; M. J. Knowles; of McCarty; J. M. Elmer, of Chistochina; Charles A. Spongberg, of Valdez; F. E. Youngs, of Seward; Sidney Anderson, N. O. Anderson, and A. G. Thompson, of Anchorage; Edw. McConnell and Jos. Krumenacher, of Talkeetna; Z. T. Halferty, of Kodiak; Fred Phillips, of Iliamna; Paul Buckley, of Unalaska; W. F. Green, Peter McMullen, and Thomas Aitken, of McGrath; D. E. Stubbs and Joseph Lewis, of Aniak; G. A. Stecker, John Haroldson, A. Gabrielson, and J. L. Jean, of Kwinak; E. Larsen and Charles Zielke, of Nenana; A. W. Amero and James Funchion, of Caro; William Yanert, of Purgatory; D. P. Thornton, of Chisana; J. J. Hilliard, of Eagle; K. T. Sparks, of the Bureau of Mines, Luther C. Hess, First National Bank, and T. H. Deal, of Fairbanks; J. F. Zimmerman, of Fox; E. Chesworth and J. H. Elden, of Steel Creek; Charles M. Cole, of Jack Wade; Ronald Campbell, of Hot Springs; B. B. Smith, Frank Speljack, and J. E. Nollet, of Ophir; A. V. Thorn, of Tacotna; Harry Madison, of Tolstoi; R. C. Button, of Iditarod; Daniel Webster and H. S. Wanamaker, of Nolan; A. J. Griffin and Paul Solka, of Richardson; George M. Pilcher, of Marshall; Rev. John Chapman and Charles D. Wulf, of Anvik; George W. Ledger, of Rampart; John Minook, of Tanana; T. A. Parsons, of Ruby; B. J. Bower, of Long; Henry Willeke, of Poorman; A. M. Bainbridge and H. J. Patterson, of Livengood; R. W. J. Reed and Robert B. Benson, of Nome; William N. Marx, of Teller; H. L. Stull, of Deer-ing; E. A. Fox, of Candle; Lewis Lloyd and James C. Cross, of Shungnak; and George L. Stanley, of Kiana.

A manuscript copy of Messrs. Stewart and Dyer's annual report was received in advance of publication.