

ALASKA MINERALS DATABASE

DGGS Staff

Digital Data Series 18

2022

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS



STATE OF ALASKA

Mike Dunleavy, Governor

DEPARTMENT OF NATURAL RESOURCES

Corri A. Feige, Commissioner

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

David L. LePain, State Geologist & Director

Publications produced by the Division of Geological & Geophysical Surveys are available to download from the DGGs website (dgggs.alaska.gov). Publications on hard-copy or digital media can be examined or purchased in the Fairbanks office:

Alaska Division of Geological & Geophysical Surveys (DGGs)

3354 College Road | Fairbanks, Alaska 99709-3707

Phone: 907.451.5010 | Fax 907.451.5050

dggspubs@alaska.gov | dgggs.alaska.gov

DGGs publications are also available at:

Alaska State Library, Historical
Collections & Talking Book Center
395 Whittier Street
Juneau, Alaska 99801

Alaska Resource Library and
Information Services (ARLIS)
3150 C Street, Suite 100
Anchorage, Alaska 99503

Suggested citation:

DGGs Staff, 2022, Alaska Minerals Database: Alaska Division of
Geological & Geophysical Surveys Digital Data Series 18, 3 p.
<https://doi.org/10.14509/30873>



ALASKA MINERALS DATABASE

DGGS Staff

ABSTRACT

The Alaska Minerals Database (AMDB) is a working, internal database that supports multiple data products developed by Alaska Division of Geological & Geophysical Surveys (DGGS), including the Alaska Mineral Industry Report series (<https://dggs.alaska.gov/pubs/minerals>) and a web service of significant mineral industry occurrences and industry activity in 2020. DGGS anticipates developing additional products from the database in the future. This abstract and data dictionary will be updated as more of the database becomes publicly available over time.

The full, unpublished database contains information about significant mineral occurrences in Alaska, including industry activity by year, mineral resource estimates, mine production statistics by year, and an interpreted mineral system type using the classification scheme of Hofstra and Kreiner (2020). The database also associates records in Alaska Resource Data File (ARDF; U.S. Geological Survey, 1996) with significant mineral occurrences, as interpreted by DGGS. DGGS annually compiles mineral industry information from past-year statements issued by companies, including press releases and corporate annual and financial reports, as well as phone interviews, replies to questionnaires, and news media articles. Only publicly available data compiled by DGGS are visible; confidential data are incorporated into statewide figures.

The database is actively updated as new mineral activity data become available each year. Property information and previous years' data will be updated to resolve errors, reflect new geologic interpretations, and display newly available data. Consequently, products developed from the database may change over time as information and figures are updated. DGGS encourages members of the public to contact DGGS' Mineral Resources Section staff to discuss potential changes to the data or errors to be resolved in our derivative products.

DATA DICTIONARY

This data dictionary is the portion of the AMDB structure that supports the web service of significant mineral industry occurrences and industry activity in 2020. Additional sections of the data dictionary will be released to the public in the future as new derivative products are developed and released.

Table Name	Attribute Alias	PostgreSQL Datatype	Null Option	Key	Domain	Attribute Definition
mineral_prop_occurrence	PropertyID	int4	NOT NULL	PK		Primary key; relates to tables mineral_activity, mineral_prod_stats, mineral_prop_resource, and mineral_prop_ardf_xrc.
mineral_prop_occurrence	Property	varchar(255)	NOT NULL			Name of property.
mineral_prop_occurrence	Major Commodities	varchar(255)	NULL		Suggested values	Major commodities roughly in order of economic significance.
mineral_prop_occurrence	Critical Minerals	varchar(255)	NULL		Suggested values	Common critical minerals from ARDF and public data sources; in alphabetical order.
mineral_prop_occurrence	Commodity Group	varchar(255)	NULL		Suggested values	Commodity group with which the property is associated.
mineral_prop_occurrence	Deposit Type	varchar(255)	NULL		Suggested values	Deposit type with which the property is associated.
mineral_prop_occurrence	Public Resource	varchar(10)	NULL		Y/N	Flag for whether the property has public resource information; can be either modern or historical resource.
mineral_prop_occurrence	Past Producer	varchar(10)	NULL		Y/N	Flag for whether the property has produced a resource; small production noted in ARDF may not be included.
mineral_activity	ActivityID	SERIAL	NOT NULL	PK		Primary key of mineral_activity table.
mineral_activity	PropertyID	int4	NOT NULL	FK		Foreign key to mineral_prop_occurrence table.
mineral_activity	Mining Year	int4	NULL			Mining year that the activity took place; generally equates to calendar year.
mineral_activity	Property Status	varchar(100)	NULL		Suggested values	Status of the property during the mining year. For example, a property with significant production is a mine. A property preparing for production such as building infrastructure, conducting advanced permitting, or conducting pre-extraction activities is in development. Searching a property for an economic mineral resource is exploration.

ACKNOWLEDGEMENTS

This material is based upon work originally supported by the U.S. Geological Survey, National Geological and Geophysical Data Preservation Program, under Grant No. G19AP00077 and the State of Alaska General Fund. The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Geological Survey. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Geological Survey. The project continues to be supported by State of Alaska General Funds.

REFERENCES

- Hofstra, A.H., and Kreiner, D.C., 2020, Systems-deposits-commodities-critical minerals table for the earth mapping resources initiative (ver. 1.1, May 2021): U.S. Geological Survey Open-File Report 2020–1042, 26 p. <https://doi.org/10.3133/ofr20201042>
- U.S. Geological Survey, 1996, Alaska Resource Data File, (ver 1.7, March, 2018): U.S. Geological Survey data release. <https://doi.org/10.5066/P96MMRFD>