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Cartography by M.A. Belowich.

Base from U.S. Geological Survey, Anchorage Quadrangle, Alaska, (1962, Limited Revisions 1979).

This report is a preliminary publication of DGGS. The author is solely responsible for its content and will appreciate candid comments on the accuracy of the data as well as suggestions to improve the report.

Index map of Anchorage Quadrangle showing extent of geologic map of the Matanuska Coal Field.

Index map of Alaska showing location of Anchorage Quadrangle.

Index map showing location of Eska drill holes. (See app. F; data from Tuck, 1937)

SELECTED DRILL HOLES[1]

EXPLANATION

- Alaska Mine Land Inventory sites (Harker, 1983; see listing below)
- Coal leases (see listing below)
- Coal localities (Conwell, Triplehorn, and Ferrell, 1982)
- DGGS coal sample sites (summer 1983)
- Drill holes (see appendix F for sources)[1]
- Oil test well (Petemon Oil Chickaloon 1; Conwell, Triplehorn, and Ferrell, 1982)
- Stratigraphic sections (Clardy, B.I., 1974)
- Stratigraphic sections (Clardy, B.I., 1974)
- Stratigraphic sections (Payne, T.G., and Hopkins, D.M., 1945)
- Stratigraphic sections (Hill, W.P.T., 1923)
- Proposed region for 1984 coal lease-sale tract selections
- Coal fields
- Coal-rank progression zones
- Wishbone Hill coal groups: a = Jonesville; b = Premier; c = Midway; d = Eska; e = Burning Bed
- A — A' Geologic cross sections (Plate 3)
- Fault — showing relative horizontal movement

COAL POTENTIAL

1 High potential for coal development: includes areas where reserves have been proven by drilling (as on current leases) or detailed field investigations.

2 Moderate potential for coal development: includes areas that are reasonable distances from drill holes or coal outcrops so that significant resources are projected and inferred to be present; or the area may not be rated as high potential due to remoteness, complex geologic structure, or other constraints; these areas warrant further exploration.

3 Low to very low potential for coal development: includes areas where available evidence indicates that the potential for significant coal deposits at minable depths are not present.

4 No potential for coal development: chiefly restricted to exposures of basement rocks.

ALASKA MINE LAND INVENTORY SITES

1	Doherty Mine	11	Carpenter Creek Mine
2	Premier Mine	12	Red Mountain Mine
3	Baxter Mine	13	Young Creek Mine
4	Buffalo Mine	14	Kings River Mine
5	Wishbone, Rawson, Matanuska Center Mine Complex	15	Castle Mountain Mine
6a,b,c	Jonesville Complex	16	Chickaloon Mine
7	Eska Complex	17	Hecky Mine
8	Knob Creek (Mrak) Complex	18	Anthracite Ridge Mine
9	Sutton Washery	19	Boulder Creek Mine
10	Granite Coal Mine		

PRESENT COAL LEASES

ADL No.	LEASE HOLDER
23503	Hawley Resource Properties, Inc.
32136	Hawley Resource Properties, Inc.
32144	Hawley Resource Properties, Inc.
33978	Robert W. Gore
53509	Robert W. Gore
324600	American Exploration
309947	Hawley Resource Properties, Inc.

Surface and subsurface Tertiary stratigraphic correlation chart for the Matanuska Valley. (a from Magoon, Adkison, and Egbert, 1976; b from Conwell, Triplehorn, and Ferrell, 1982).

Generalized stratigraphic section for the Wishbone Hill district. (Barnes and Payne, 1956)

Detailed inset map of Eska-Moose field. (See explanation for symbols)

LITHOLOGIC SYMBOLS OF DRILL-HOLE LOGS

- Undifferentiated overburden
- Coal
- Bony coal
- Coked coal
- Claystone; shale in Coal Creek stratigraphic sections
- Silty claystone; sandy shale in Coal Creek stratigraphic sections
- Siltstone; locally with coal fragments
- Coaly claystone; locally with ironstone nodules
- Fine sandstone; locally carbonaceous
- Medium sandstone; locally crossbedded
- Coarse sandstone
- Conglomerate
- Intrusive (gabbro, diabase) sills
- Volcanic (andesite)

[1] See app. E, Tabulated data for selected drill holes from Hill, 1923; Jolley, Toenges and Turnbull, 1952; Warfield, 1962.

GEOLOGIC AND COAL-RESOURCE DATA SUMMARY FOR THE MATANUSKA COAL FIELD

by R.D. Merritt and M.A. Belowich

1984