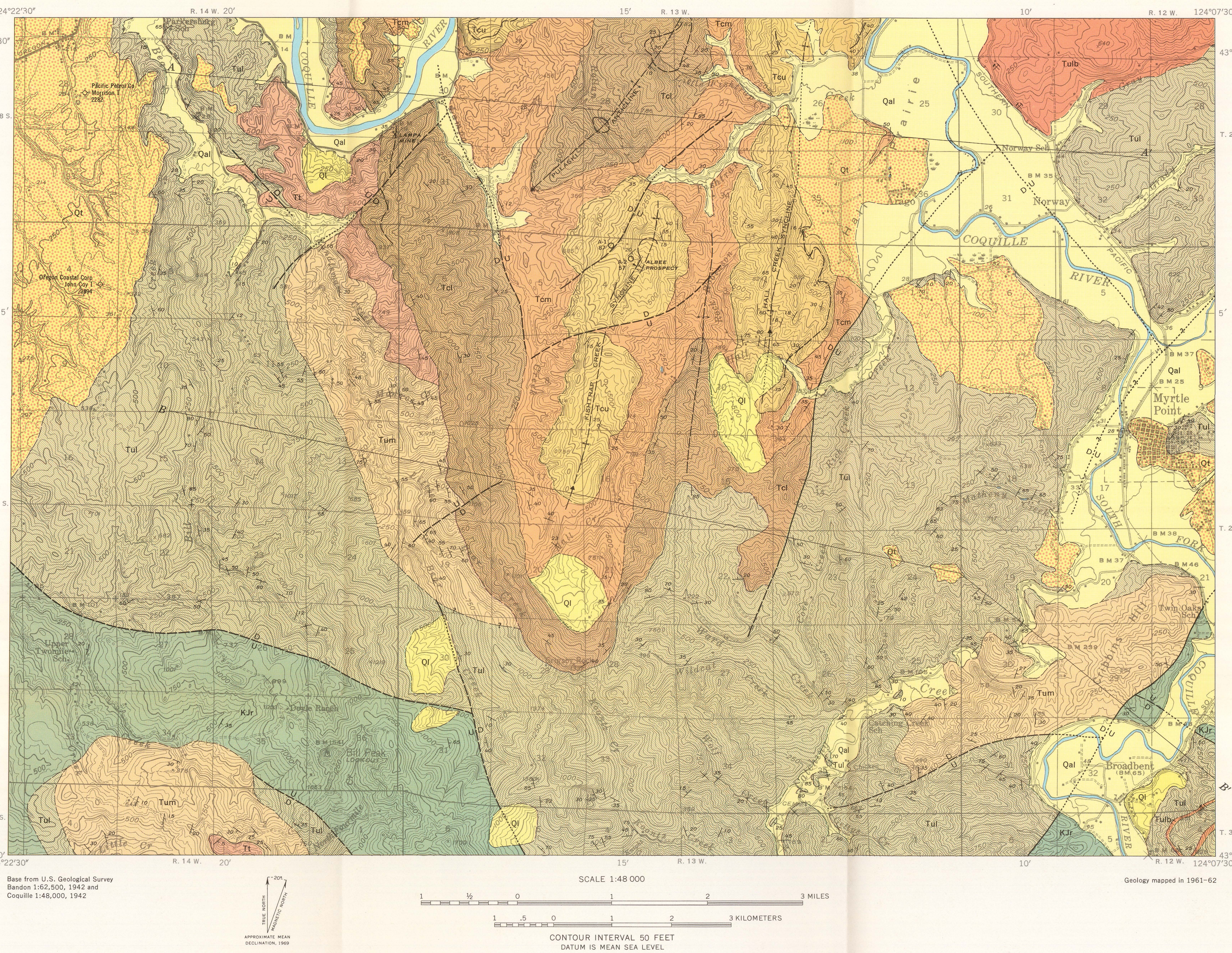
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

MINERAL INVESTIGATIONS
FIELD STUDIES MAP MF-302

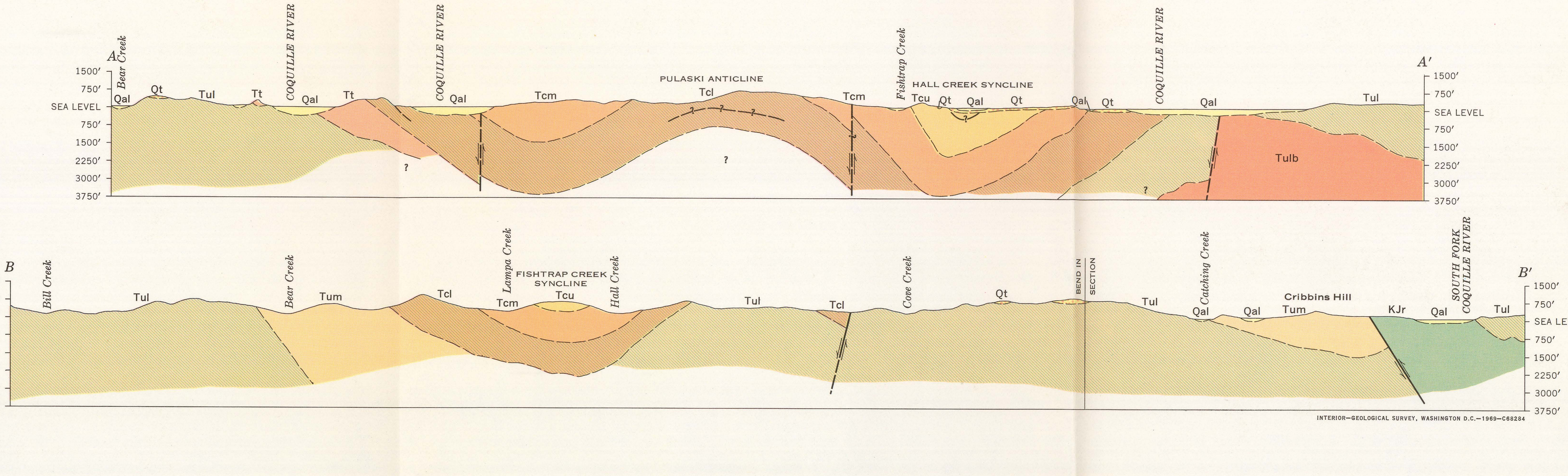


Base from U.S. Geological Survey
Bandon 1:62,500, 1942 and
Coquille 1:48,000, 1942

SCALE 1:48 000

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

Geology mapped in 1961–62



INTERIOR—GEOLOGICAL SURVEY, WASHINGTON D.C.—1969—C68284

EXPLANATION

QUATERNARY

Recent

Qal
Alluvium

Pleistocene

Ql
Landslide deposits

Qt
Terrace sand and gravel

UNCONFORMITY

TERTIARY

Upper Eocene

Tcu
Tcm
Tcl
Coaledo Formation
Tcu, *upper sandstone member*
Tcm, *middle siltstone member*
Tcl, *lower sandstone member*

UNCONFORMITY

Middle Eocene

Tt
Tyee Formation

UNCONFORMITY

Lower to middle Eocene

Tum
Tul
Tulb
Umpqua Formation
Tum, *middle member; sedimentary rocks*
Lower member:
Tul, *sedimentary rocks; may include rocks of Late Cretaceous and Paleocene age as mapped*
Tulb, *basalt*

UNCONFORMITY

KJr
Lower Cretaceous(?) and Upper Jurassic rocks

1.7 ?
Coal bed
Approximately located, queried where doubtful. Thickness, in feet, measured at triangle

?
Contact
Dashed where approximately located; queried where doubtful

U D ?
Fault
Dashed where approximately located; dotted where concealed; queried where doubtful. U, *upthrown side;* D, *downthrown side*

Anticline
Showing crestline and direction of plunge. Approximately located

Syncline
Showing troughline and direction of plunge. Dashed where approximately located; dotted where concealed

10
Strike and dip of beds

75
Strike and dip of overturned beds

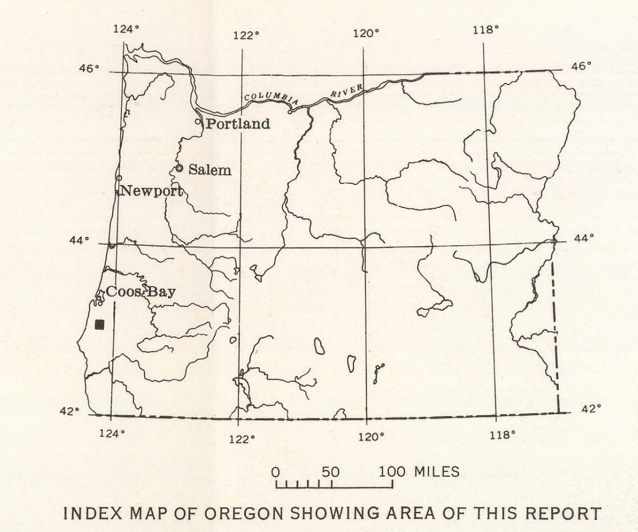
Strike of vertical beds

Coal prospect

Quarry

A-1
87
Auger hole
Showing total depth, in feet

Pacific Petrol. Co
Morrison 1
2282
Dry hole
Showing total depth, in feet



INDEX MAP OF OREGON SHOWING AREA OF THIS REPORT

DESCRIPTION OF MAP UNITS

QUATERNARY

Qal **ALLUVIUM**—mud, sand, and gravel along the Coquille River and tributaries. May be more than 200 feet thick.

Ql **LANDSLIDE DEPOSITS**—landslide and slump blocks.

Qt **TERRACE SAND AND GRAVEL**—river terraces along the Coquille River and its tributaries. Three terraces at Myrtle Point are about 75, 125, and 200 feet, respectively, above sea level. Pebbles of the highest terrace are commonly stained with limonite but not deeply weathered. Marine terraces in northwest corner of mapped area and in sec. 24, T. 29 S., R. 13 W., at 750 feet elevation.

TERTIARY

COALEDO FORMATION (ABOUT 3,000-6,000 FT):

Tcu UPPER SANDSTONE MEMBER (ABOUT 1,000 FT)–medium-gray medium-grained crossbedded shallow-water sandstone that contains minor amounts of sandy siltstone and coal. Occasional conglomeratic and pebbly layers. Basal sandstone is usually massive and easily recognized.

Tcm MIDDLE SILTSTONE MEMBER (1,000-2,500 FT)–typically medium-gray sandy siltstone streaked with darker thin beds of siltstone. Becomes more sandy to the south and east. Relatively less resistant to erosion; streams such as Hall and Lampa Creeks flow mostly in valleys cut in this member. No coal has been reported in this member.

Tcl LOWER SANDSTONE MEMBER (ABOUT 1,000-2,500 FT)–medium-gray medium-grained crossbedded shallow-water sandstone that contains lesser amounts of siltstone and coal. Pebbly sandstone and thin beds of conglomerate are scattered throughout. Many of the pebbles are basalt, chert, quartz, and greenstone. The member becomes more conglomeratic, thinner, and less coal bearing toward the south, which suggests onlap of the sediments on an old highland.

Tt **TYEE FORMATION (ABOUT 1,500 FT)**—rhythmically bedded micaceous sandstone that bears numerous plant fragments. Sole markings suggest deposition by turbidity currents. Generally, current marks trend north; this trend suggests a sediment source from the Klamath Mountains. Rests unconformably on the middle and lower members of the Umpqua Formation.

UMPQUA FORMATION (ABOUT 13,000-20,000 FT):

Tum MIDDLE MEMBER (AT LEAST 5,000 FT)–rhythmically bedded sandstone and siltstone. Generally resembles lower member in shade and texture but is less deformed. A pebbly sandstone at base rests unconformably on the lower member. Generally fossiliferous; a microfauna from Cribbins Hill was assigned to the lower B zones of Laiming (1943) by W. W. Rau (written commun., 1962). May be considered part of the Penutian stage of Mallory (1959, p. 34) and middle Eocene age.

LOWER MEMBER (AT LEAST 8,000 FT):

Tul *Sedimentary rocks*–dark-gray thin rhythmically bedded siltstone and graywacke, tuffaceous siltstone, and alternating sandstone and siltstone. The rhythmically bedded siltstone and graywacke are tightly folded and give an exaggerated impression of thickness. Megafossils are rare. Foraminifera that are present have been assigned by W. W. Rau (written commun., 1962) to the C and lower B zones of Laiming (1943) or to the Penutian stage of Mallory (1959, p. 34), although some beds mapped with the lower part of this member contain faunas of Paleocene and Late Cretaceous age (Baldwin, 1965, p. 95).

Tulb *Basalt*–pillow basalt and basalt breccia. Locally thick.

KJr **LOWER CRETACEOUS(?) AND UPPER JURASSIC ROCKS**—severely deformed beds of graywacke which contain lenses of chert, carbonaceous argillite, submarine pillow lavas, conglomerates, and glaucophane schist pods. At Bill Peak, in the southwest corner of the mapped area, massive pebbly sandstone that contains substantial potassium feldspar sand grains may be of Cretaceous age. Evidence is insufficient to separate the pre-Tertiary rocks in the mapped area.

ECONOMIC GEOLOGY

The mapped area lies in the southern end of the Coos Bay coal field. Coal occurs only in the upper and lower members of the Coaledo Formation. Nearly all the coal mined in the Coos Bay coal field was from the upper member of the Coaledo Formation. In the mapped area, most of this member has been eroded; only a few hundred feet of the basal strata remains. Allen and Baldwin (1944, p. 131, 116) reported 2 feet 7 inches of coal and bone along Hall Creek in the NW¼NW¼ sec. 11, T. 29 S., R. 13 W., and 4 feet of coal and bony coal at the Albee prospect near the center of the NE¼ sec. 4, T. 29 S., R. 13 W.

Until it closed in 1942, the Lampa mine just west of the mouth of Lampa Creek in secs. 25 and 36, T. 28 S., R. 14 W., produced coal from the lower member of the Coaledo Formation. Allen and Baldwin (1944, p. 133) reported that this mine in 1941 produced 665 tons of coal rated at 9,820 Btu, air dried. A coal prospect is also reported near the head of Pulaski Creek in sec. 21, T. 28 S., R. 13 W. The lower member becomes increasingly coarse grained toward the south and chances of finding coal of economic quality and quantity probably diminish in that direction.

In the northwest corner of the mapped area, two exploratory wells penetrated the lower strata of the Umpqua. Several shallow wells were drilled on the northeast end of the Pulaski anticline just north of the mapped area. These wells disclosed gas in the Coaledo Formation, but because the yield lasted only a short time, further exploration of the area was abandoned. The Pulaski anticline seems to have several hundred feet of closure.

In the northeast corner of the area mapped, basalt is quarried for road metal; and at Arago, a brick plant operated for many years on a clay deposit in the terrace.

REFERENCES CITED

Allen, J. E., and Baldwin, E. M., 1944, Geology and coal resources of the Coos Bay quadrangle, Oregon: Oreg. Dept. Geology and Mineral Industries Bull. 27, 157 p.

Baldwin, E. M., 1965, Geology of the south end of the Oregon Coast Range Tertiary Basin: Northwest Sci., v. 39, no. 3, p. 93–103.

Laiming, Boris, 1943, Eocene foraminiferal correlations in California: Calif. Div. Mines Bull. 118, p. 193–198.

Mallory, V. S., 1959, Lower Tertiary biostratigraphy of the California Coast Ranges: Tulsa, Okla., Am. Assoc. Petroleum Geologists, 416 p.

GEOLOGIC MAP OF THE MYRTLE POINT AREA, COOS COUNTY, OREGON

By
Ewart M. Baldwin
1969

For sale by U.S. Geological Survey, price 50 cents