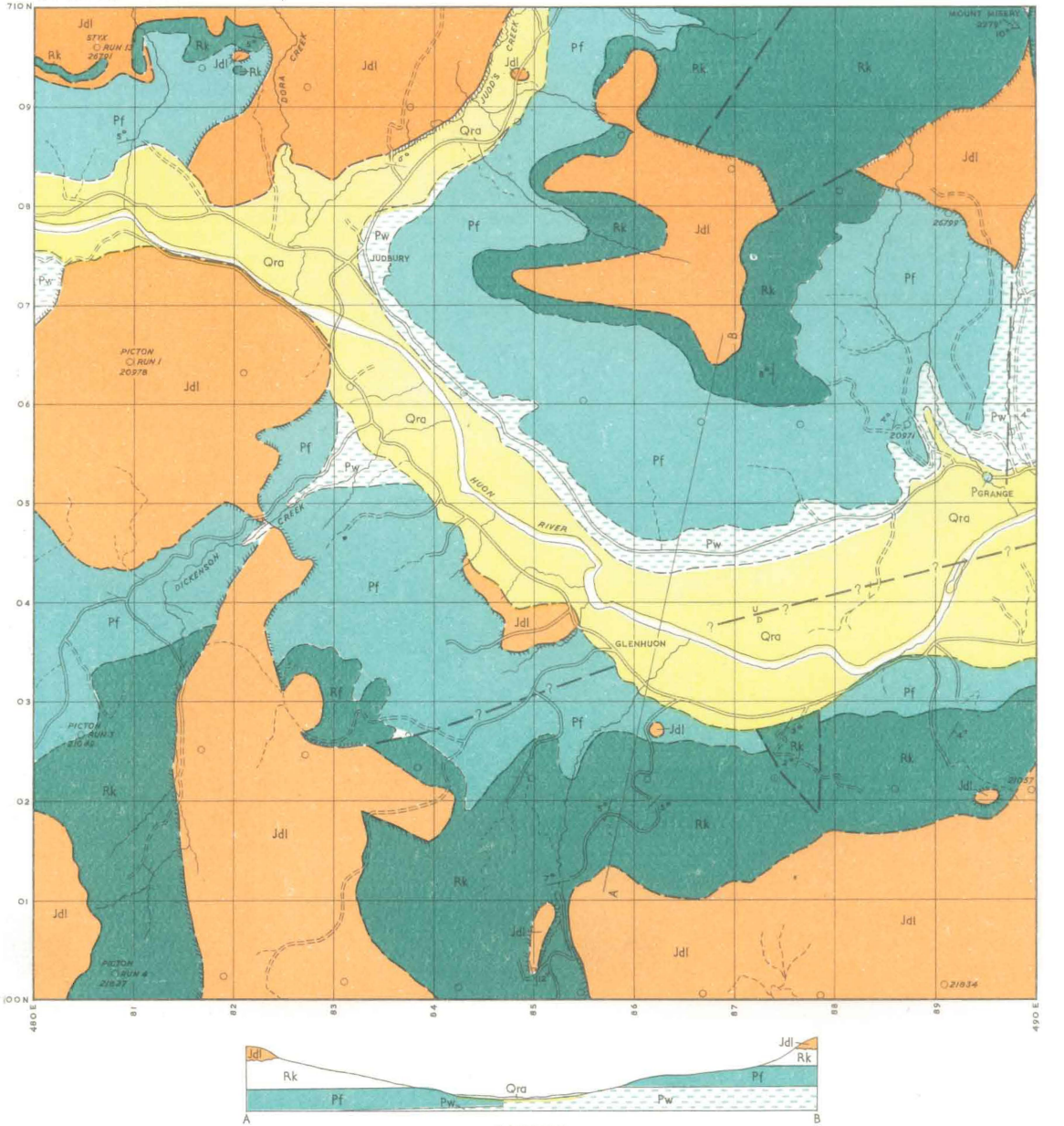
GEOLOGY OF TASMANIA
ONE INCH SERIES – UNIVERSITY OF TASMANIA, GEOLOGY DEPT.

GLEN HUON

4870



LEGEND

- FAULT WITH DOWNTHROWN SIDE INDICATED
- FAULT – POSITION APPROXIMATE
- FAULT INFERRED
- FORMATION BOUNDARY

Dolerite Boundaries

- CONCORDANT SILL
- DISCORDANT INTRUSIVE BOUNDARY
- STRIKE AND DIP
- ROAD
- VEHICULAR TRACK
- FOOT TRACK
- PHOTO CENTRE
- TRIGONOMETRICAL STATION

Cainozoic Rocks

- Qra ALLUVIUM AND SUB-BASALTIC GRAVELS

Triassic System

- Rk KNOCKLOFTY SANDSTONE AND SHALE

Permian System

- Pf FERNTREE MUDSTONE
- Pw WOODBRIDGE GLACIAL FORMATION

IGNEOUS ROCKS

Jurassic System

- Jdl DOLERITE

— SCALE —

0 1 2 MILES
0 1 2 3 4 5,000 10,000 FEET

Compilation from Aerial Photographs. Trigonometric Station Control by courtesy Lands and Surveys Department. Origin of co-ordinates 400,000 yds West and 1,800,000 yds South of True Origin of Zone 7.

KEY MAP SHOWING MAGNETIC VARIATION

MAPPED AND COMPILED BY
R.P. MATHER JANUARY, 1952.

THE GEOLOGY OF GLEN HUON.

SHEET 48-70.

PHYSIOGRAPHY.

The Huon River is in valley tract throughout this sheet and its various tributaries mainly in mountain tract. The course of the Huon below Glen Huon is probably fault controlled. Terraces on Judd's Creek and the Huon above Judbury are at a level of about 250 feet above sea level, and the Huon is entrenched about 100 feet in these terraces.

STRATIGRAPHY.

The oldest rocks exposed belong to the Grange Mudstone of the Permian System and are overlain by the Woodbridge Glacial Formation which underlies the Ferntree Mudstone which is only 490 feet thick at Judbury, although it increases in thickness to the north-east. South of Glen Huon over 900 feet of Knocklofty Sandstone and Shale of the Triassic System overlie the Ferntree Mudstone. Dolerite occurs in this area as a sill transgressing from just above the base of the Knocklofty Sandstone and Shale north of the river to as much as 900 feet above the base to the south of the river.

STRUCTURE.

The main structure is that of horizontal or subhorizontal beds injected by dolerite along steep contacts trending somewhat east of north along Dickenson's and Judd's Creeks. These beds are displaced by a fault trending north of east along the Huon River but this fault apparently does not displace the dolerite.

REFERENCE.

Mather, R. P., 1955: The Geology of the Huon District, **Pap. Proc. Roy. Soc. Tas. Vol. 89.**

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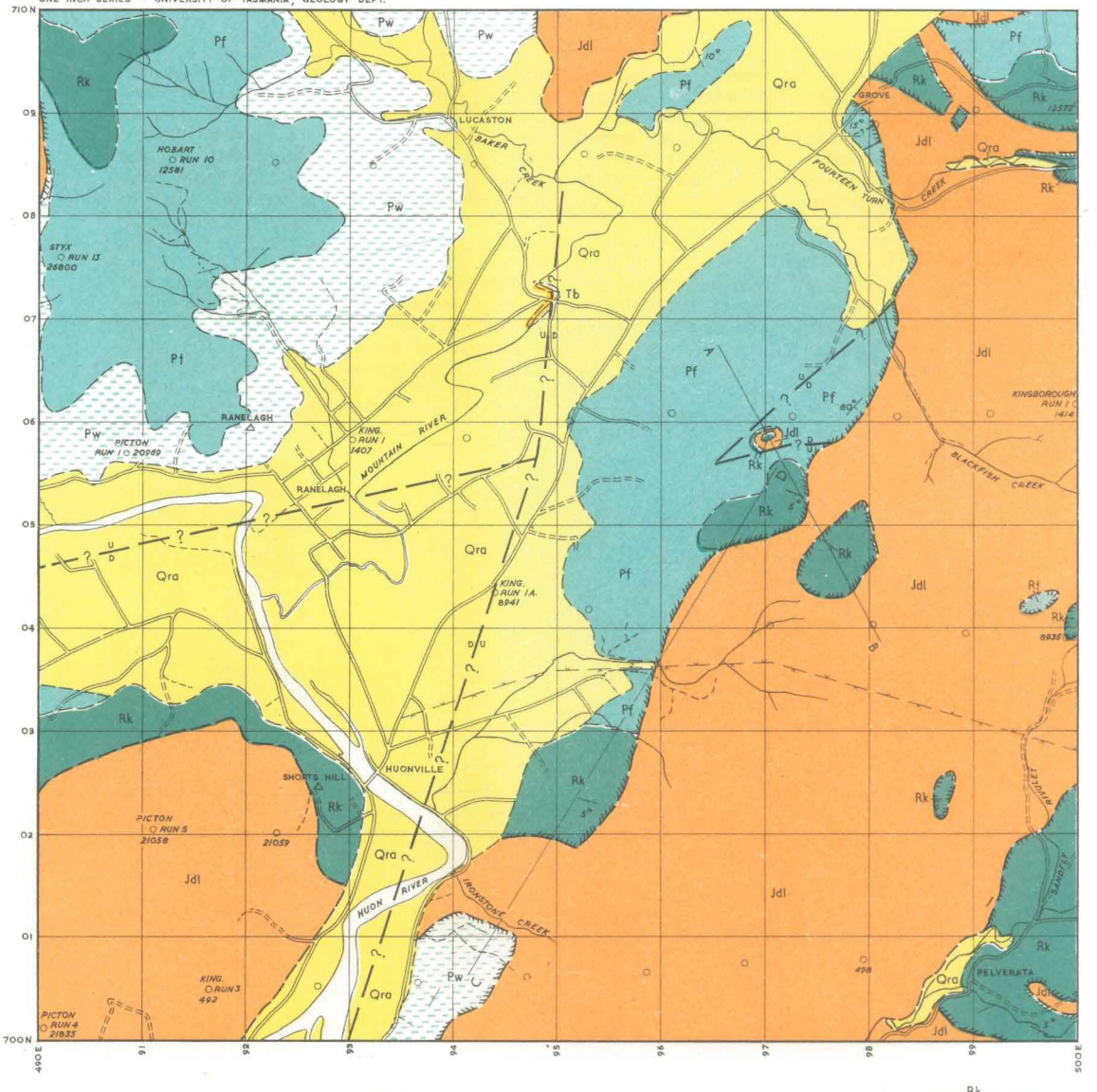
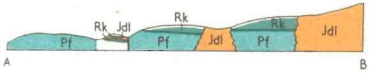
HUONVILLE

4970





LEGEND

- FAULT WITH DOWNTHROWN SIDE INDICATED
- FAULT – POSITION APPROXIMATE
- FAULT INFERRED
- FORMATION BOUNDARY

Dolerite Boundaries

- CONCORDANT SILL
- DISCORDANT INTRUSIVE BOUNDARY
- STRIKE AND DIP
- ROAD
- VEHICULAR TRACK
- FOOT TRACK
- TRANSMISSION LINE
- PHOTO CENTRE
- TRIGONOMETRICAL STATION

Cainozoic Rocks

- Qra ALLUVIUM AND SUB-BASALTIC GRAVELS

Triassic System

- Rf FELDSPATHIC SANDSTONE
- Rk KNOCKLOFTY SANDSTONE AND SHALE

Permian System

- Pf FERNTREE MUDSTONE
- Pw WOODBRIDGE GLACIAL FORMATION

IGNEOUS ROCKS

Tertiary System

- Tb BASALT

Jurassic System

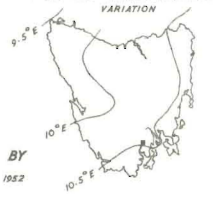
- Jdl DOLERITE

— SCALE —

0 1 2 3 4 5,000 2 MILES 10,000 FEET

Compilation from Aerial Photographs. Trigonometric Station Control by courtesy Lands and Surveys Department. Origin of co-ordinates 400,000 yds West and 1,800,000 yds South of True Origin of Zone 7.

KEY MAP SHOWING MAGNETIC VARIATION



MAPPED AND COMPILED BY R.P. MATHER JANUARY, 1952

THE GEOLOGY OF HUONVILLE.

SHEET 49-70.

PHYSIOGRAPHY.

The Huon River in this sheet is in valley tract with estuarine deltaic features below Huonville. The Mountain River, chief tributary of the Huon, is in plains tract south of Lucaston. River terraces fall uniformly in height, from about 250 feet above sea level at Grove to 50 feet at Franklin and the Mountain River is entrenched by as much as 90 feet and the Huon by 80 feet. Other terraces occur. Streams are generally entrenched by 10 feet in the lowest terraces. Tributaries of the Huon and Mountain Rivers are mainly in mountain tract. The Huon flows between the highlands of the Wellington block to the north-east and those of the Hartz block to the south-west.

STRATIGRAPHY.

Permian rocks are the oldest exposed in the area with about 200 feet of Woodbridge Glacial Formation occurring north-west of Ranelagh and overlain by from 470 to 600 feet of Ferntree Mudstone. Triassic rocks, Knocklofty Sandstone and Shale, occur on the heights west of Lucaston, near Grove, Pelverata and along the south bank of the Huon above Huonville. Isolated outcrops of Feldspathic Sandstone occur north of Pelverata. Cainozoic river deposits occupy the valley floors. Dolerite occurs mainly as a slightly transgressive sill in the Knocklofty Sandstone and Shale and as a wide dyke east of Huonville. Basalt is exposed in the bed of the Mountain River a mile and a half above Ranelagh and the base shows pillow structure.

STRUCTURE.

The main structure is a Jurassic fault trending south-west from Grove with a roughly parallel fault at Pelverata. There is probably another fault trending just east of north through Huonville. To the west of this fault the Permian and Triassic rocks are almost horizontal. A fault striking just south of west probably underlies the Huon River west of Huonville.

POINTS OF SPECIAL INTEREST.

Tertiary basalt with pillows 492100 E—705100 N
River terraces: main road near Fourteen Turn Ck.
Grange Mudstone (?): old wharf, Ranelagh.
Knocklofty Sandstone and Shale: Scott's Hill.

REFERENCES.

Hills, C. L., et. al. 1922: The Coal Resources of Tasmania. Chap. VI. the Sandfly-Cygnet Coal-field. **Tas. Dept. Mines Geol. Surv. Min. Res. No. 7.**

Lewis, A. N., 1935: Correlation of the Tasmanian Pleistocene Raised Beaches and River Terraces in Unglaciated Areas. **Pap. Proc. Roy. Soc. Tas. (1934), pp. 67-76.**

1945: Time scales in the Development of Tasmanian Physiography. **Pap. Proc. Roy. Soc. Tas.** (1944), pp. 19-39.

Mather, R. P., 1955: Geology of the Huon District. **Pap. Proc. Roy. Soc. Tas. Vol. 89.**

Nye, P. B., and Blake, F., 1938: The Geology and Mineral Deposits of Tasmania. **Geol. Surv. Tas. Bull.** 44. Dept. of Mines. Tas.