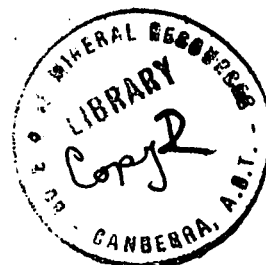


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SUMMARY OF ACTIVITIES IN CARNARVON DISTRICT

W.A. FOR FIELD SEASON - 1948.

by

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1st March, 1949.

SUMMARY OF ACTIVITIES IN CARNARVON DISTRICT, W.A.

FOR FIELD SEASON - 1948.

Report No. 1949/31

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A geological field party was engaged in this area from 9th May to 30th September, 1948.

The personnel were G.A. Thomas and D. Johnstone, geologists for the whole of the period and Dr. C. Teichert, University of Melbourne, was with the party for the periods 9th May to 1st June and 21st August to 10th September.

R.L. Neville of Carnarvon was engaged as cook/driver from 1st June to end of season.

During Dr. Teichert's first visit, the Permian areas previously studied by him at Wandagee station, were examined and collections made. Some days were spent collecting and reconnoitring in the Barrabiddy Creek area at Wandagee Station. Short collecting trips were made to points in the Kennedy range and the section at South end of Moogooloo Range on Middalya Station was measured.

The jeep which was the only vehicle gave considerable trouble and a truck and driver were hired in Carnarvon for the latter half of Dr. Teichert's visit. A chevrolet 1 ton utility was then obtained from Perth transport pool and gave good service for the rest of the season. The jeep required considerable servicing.

After Dr. Teichert's departure operations were continued at Middalya Station - Paddy's outcamp was the base for some weeks. The area immediately west of the outcamp (approx. $\frac{1}{2} \times \frac{3}{4}$ mile) was plane tabled and collections made. A good east dipping section is exposed and the fossils which include a specimen of *Helicoprion* enable fairly detailed correlation with part of the "Wandagee series" at Wandagee. An unconformable overlying series about 25½' thick, probably of Tertiary age, covers a considerable area to the west of Paddy's outcamp.

A plane table traverse was then made from Paddy's outcamp S.S.E. to Muderong Bore at the north end of the Middalya Fault, a distance of approximately 5 miles. A sequence of less than 100' is exposed with gently undulating dips. Faulting is probable near Paddy's outcamp.

The N end of the Kennedy Range was then studied. Some attention was given to the Middalya Fault and structures in the vicinity. Cretaceous sediments showing a low angular unconformity over-lie the Permian on both sides of the fault. Approximately 700' of sandstones with fossiliferous horizons were measured at "Big Hill" near Muderong Bore on the E side of the Fault. Sections measured at intervals along the N face of the range as far as Baker's Bore appear to be included in this 700' of sandstone, fossil horizons are fairly readily traced. Two considerable faults trending S.E. and S.W. were observed near the head of the Barrabiddy Creek. An anticlinal structure occurs west of these faults. The general dip is easterly. Fossils collected suggest a correlation with part of the Wandagee series. A thin unconformable series occurs at intervals above the permian of the Range.

Heavy rains twice halted field work in June and July.

Dr. Teichert rejoined the party on 21st August and several days were spent revisiting the areas already studied. A brief reconnaissance was made round the range to Moogooree Station. A week was then spent at Moogooree station particular attention being given to the post Permian beds at Merlinleigh and Moogooree. Extensive thinly lateritised areas were noted. The faulted contact between Permian and Pre Cambrian near Mt. Sandman was visited.

A good continuous section above the Callythara was noted on the old road between Donnelly's well and Moogooree Homestead. This was later measured and some collections made. Mooka Station was visited via Winnemia pool. The general relationship of the Middalya Fault (seen near Muderong) seemed to be continued. Dr. Teichert left Carnarvon on 10th September.

On returning to Middalya a plane table traverse was made at Big Hill near Muderong Bore and the traversing of the Kennedys as far as Baker's Bore completed.

The party then moved to Donnelly's well on Williambury Station. The continuous section mentioned above was examined for fossiliferous outcrops and collections made in the neighbouring hills. Tertiary sponge bearing beds were noted above the Permian. The party returned to Carnarvon on 30th September, the jeep needing considerable repair. Perth was reached on 7th October.

Extensive rock and fossil collections were made throughout the season; the fossils are now being examined by Dr. Teichert.

Maps are being prepared from aerial photographs taken in June and field measurements are being included.

1st March, 1949.