

yoke carrying frame for side-tipping purposes and ran on two small diameter double-flanged pulley wheels, mounted one at each end of the yoke in the upper-most position and free to travel over the top surface of the carrier cable, the bucket dangling beneath. It has been said that the carrier cable was almost rectangular in shape insofar as its wire weaving was concerned, a circumstance which with a twisting of the cable may have caused a binding flange resistance to be set up by the pulley wheels of the bucket units, particularly when a high velocity wind was blowing. It is assumed that each bucket unit, at suitable intervals, was attached to the circulating rope by means of a short length of chain with clamp fastenings.

The southern terminal tower, placed at the Ruined Castle, held the outer ends of the carrier cables and possibly a tension pulley device of the weighted variety, designed to maintain a degree of tautness in the circulating endless cable in use for providing movement, in both directions of the bucket units. It is surmised that the incoming empty buckets were manually detached from the circulating rope at the approach to the terminal and then pushed, via crossover connection, to a central loading point placed beneath a shale storage bin, and then made ready for the outwards journey. No doubt a system of horse operated skip tramways brought shale to the terminal of the ropeway from the various adits driven into the out-crops nearby.

Unfortunately for the company the overhead ropeway installation had a very short active life, one that was full of excitement to the personnel at its end. Through some misadventure, or miscalculation, possibly caused by a jammed bucket unit, the southern terminal was wrenched from its foundations and hauled by the circulating rope into the valley far beneath, where the wreckage and cables remain, intermixed with the trees and undergrowth. This disaster marked the end of shale mining for the Katoomba Coal and Shale Company as they were in no position financially to repair the damaged overhead rope-way they continued with their coal mining activities for a time but eventually closed down their business.

THE AUSTRALIAN KEROSENE OIL AND MINERAL COMPANY, WEST KATOOMBA.

The Glen Shale Mine property sited in the Megalong Valley at the western side of Narrow Neck Peninsula was taken over by the Australian Kerosene Oil and Mineral Company, a Scottish

concern which operated the shale oil industry in the Joadja Valley west of Mittagong, during 1890. In the following year the shale mines formerly established at the Ruined Castle by the Katoomba Coal and Shale Company Limited, were acquired, together with the latter company's double-tracked haulage-tramway between the coal mines under Malaita Point and the Engine Bank, and the double tracked surface tramway onwards to North's Siding.

An examination of the shale deposits at West Katoomba resulted in the Australian Kerosene Oil and Mineral Company concentrating the major part of their exploitation efforts at the Glen Shale Mine, and to this end they brought a considerable quantity of machinery and rail transport equipment to Katoomba from their undertaking at Joadja. It was decided to lay a double-tracked surface skipway, commencing from the eastern side of the coal tunnel beneath Malaita Point, and running westwards to pass through a second tunnel, known locally as Daylight Tunnel, which had an approximate height of 10 feet and a width of 9 feet, driven through the Causeway portion of Narrow Neck at the 2350 feet contour level, and emerge into the Megalong Cleft on a steep falling gradient. About three-quarters of a mile from the end-on junction with the coal lines at the eastern side of Malaita Point a pair of seven foot diameter pulley wheels, horizontally laid, were arranged to change the direction of the inbye and outbye cables of the circulating haulage system to the south-west. With an arrangement such as this it may be concluded that a short length of chain was in use to attach each skip to the circulating cable, as the railed track curvature would at least need a radius of six feet.

Clear of the pulleys the double-tracked skipway followed a straight south-westerly course along the steep western talus slope of Narrow Neck Peninsula for a distance of about one and a half miles. The route had a decided downward gradient of about 1 in 100 but fell and rose to follow the undulations of the shallow water-worn gullies, each with its wet weather runnel trickling through a loosely packed stone embankment arranged in culvert fashion. One major stream that had to be crossed is known as Diamond Falls Creek and descended from the western slopes of Mount Megalong, an eminence rising from the Narrow Neck Peninsula, and another streamlet came down from the heights after draining the overflow released from the Corral Swamp. This latter soggy mass, a veritable vegetable sponge, is contained in a cliff-top depression at the south-western side of Mount Megalong. The talus slopes on the western