

# SAVAGE RIVER IRON ORE EXTRACTION: A NEW DIMENSION IN TASMANIA'S ECONOMIC DIVERSITY

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Tasmania, Australia's small island state, is currently a focal point in the continuing pattern of world industrial material procurement.<sup>1</sup> Even with the preparation of production facilities well under way, it is difficult for observers to realize that Tasmania, long isolated from the mainstream of world economic affairs, is to become a significant raw material supplier for the production of one of the world's most important industrial commodities—steel.

The decision of the Picklands Mather Co. and Mitsubishi of Australia, Ltd., to pursue the extraction of iron ore from the Savage River area of northwest Tasmania raises some important points. Two considerations appear to be especially noteworthy: first the extraction of Savage River ore for export will associate the island with one of the world's dynamic industrial communities for the first time—a step of immediate economic significance; and second, that the geographic isolation historically associated with Tasmania has been effectively reduced—an important long term consideration.

The Savage River, as may be noted on Figure 1, is centered toward the northwest part of the island. The ore sites, located primarily on the eastern side of the river, are in a ruggedly unfamiliar and isolated area. Port Latta, located near the town of Stanley on the coast is approximately 60 miles north from the ore bodies, and 280 nautical miles from Melbourne, on the Australian mainland.

Isolation has characterized much of western Tasmania. The present ore sites are approximately halfway between Waratah, a withered ghost town of perhaps a hundred inhabitants, and Corinna, a village numbering thirty or so people near the confluence point of the Savage and Pieman rivers.<sup>2</sup> A graded gravel road winds tortuously up to Waratah, while the existing road from Waratah to Corinna has been a little more than two well-developed tire tracks.

Topographically the area is not high, but the relief is irregular. The ore bodies are distributed on the hill areas adjacent to the river approximately 1300 to 1500+ feet above sea level.<sup>3</sup> The valley is surrounded by hills and low mountains with Mt. Cleveland dominating at 2800 feet. Vegetatively the area is classified by Jackson as lowland rainforest; an excess of eighty inches of rain and an annual temperature average between 52 to 55° F. produces an extremely dense cover of wet sclerophylls dominated by eucalypts. Yellow podzolics are characteristically gradational and are underlain by Precambian metamorphics.<sup>4</sup> This combination of soil and vegetation

<sup>1</sup> "West Coast Pins Its Hopes On Iron," *Examiner*, August 10, 1965, p. 99.

<sup>2</sup> *Pocket Yearbook of Tasmania*, R.M. Archer, Hobart, Tasmania, 1964, p. 61.

<sup>3</sup> *Tasmania's Industrial Index*, Industrial Development Branch of the Premier's and the Chief Secretary's Department, Hobart, Tasmania, pp. 33-34.

<sup>4</sup> *Atlas of Tasmania*, J. L. Davies (ed.), Lands and Surveys Department, Hobart, Tasmania, 1965, p. 5.

has been a strong deterrent to settlement; the whole western part of the island has been only intermittently inhabited since the early 1880's.

Present interest is focused in the ore concentrations in the more northern part of the valley but south of the Long Plains area. Occurring as lenses in a belt of amphibolite that stretches southward for approximately twelve miles, drilling samples from the northern area have yielded magnetite samples of 44% iron content. It is estimated that 165,000,000 tons of this ore can be mined by open cut methods after the overburden and unusable ore are cleared. The ground level will eventually be taken down to 800' which is the approximate level of the Savage River in the area. An additional 30,000,000 tons of lower grade ore is available, and larger deposits of higher ore content can be extracted by underground methods. Two miles south a second large deposit has been identified, and a substantial ore body has been located near the junction of the Savage River and Rocky Creek.<sup>5</sup>

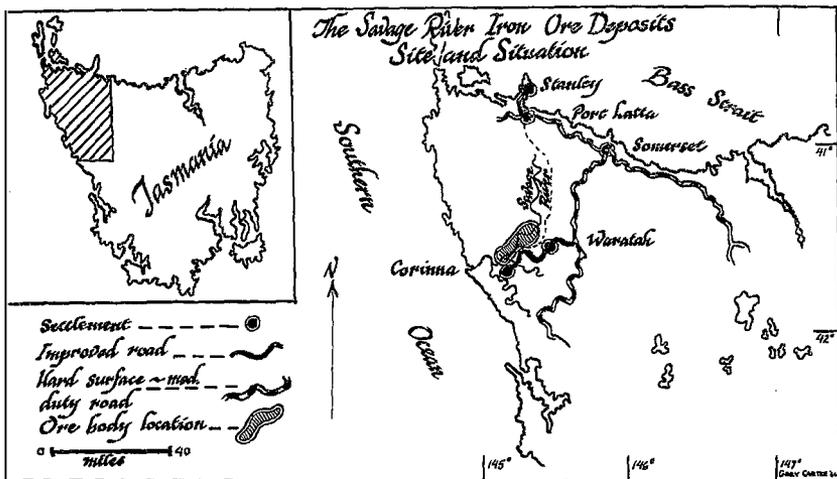


Figure 1

Deposits of iron ore have been associated with the general area of the Savage River for a number of years. Charles Whitman, a student of Tasmanian geology, wrote in 1923 that recoverable iron ore was available. But then, as now, the problem has been how to extract and ship ore economically.<sup>6</sup>

Low grade ore movement in large volume is now a matter of fact. And while Australian producers have never had to turn to Tasmanian ores, such is not the case with the Japanese. The tremendous growth of the Japanese iron and steel community has necessitated exhaustive searches for raw materials and traditional considerations have been displaced by imaginative technology.

Extracting, processing and transporting to a bulk carrier terminal or extracting, transporting and processing are organizational possibilities. Western Tasmania's pattern of high winds, turbulent seas, treacherous coastlines and shallow channel entrances ruled out the chances of bulk shipment from the existing or improved water routes available. Similarly,

overland transportation to a bulk shipping terminal would have been financially prohibitive.

Engineers from the Picklands Mather Co., faced with the imposing physical limitations of the Savage River site, concluded that it might be possible to pump the ore, once it has been crushed and concentrated, in solution to a bulk shipping terminal. Noting that the site is generally near 1500+ feet, a high pressure pipe system would not have to traverse any significant land barriers if oriented northward; hence Port Latta, near Stanley, has been designated as the ore pelletizing station and bulk shipping terminal. Incoming ore of 44% content will be upgraded to 67%, pelletized and shipped. It is expected that the annual production, to commence in early 1967, will be near 2¼ million tons of concentrates extracted and processed from 10 million tons of total material.<sup>8</sup>

Eight hundred men are expected to eventually be involved in the Savage River operation. The greatest number of these will be recruited from local sources, experienced in both open pit and underground methods. Coal, tin and copper have long extraction histories in Tasmania, but with an overall decline in mining exports, a number of experienced miners have turned to other gainful pursuits. In 1964 those employed in mining and quarrying represented 3½% of the Tasmanian labor force or about 3500 people. The proposed Savage River scheme will increase the number by over one-fourth.<sup>9</sup>

Excluding the estimated \$84,000,000 to develop the facilities, the proposed export of 2-2¼ million tons of concentrated pellets will represent an export value near \$25,000,000. The present plan includes a 45,000,000-ton export contract; if the 2-2¼ million tons per annum export is maintained, the scheme would be projected for a twenty-year span, but early indications are that this is conservative. Considering the export income of the island, which is currently dominated by raw wool, wool manufactures and agricultural goods, the Savage River exports should have a salutary effect—particularly in decreasing the dependence upon agriculture exports.

Thus the stage is set for a most significant step in Tasmania's economic future. The initiative and leadership of the Reese government in attracting diversified industrial interests appears to be successful, and Tasmania, long isolated from world affairs, will now be a small but important member of the world's industrial community.

<sup>5</sup> *Tasmanian Industrial Index*, loc. cit.

<sup>6</sup> Charles Whitman, *Western Tasmania*, David Brothers, Hobart, Tasmania, 1949, pp. 70-71.

<sup>7</sup> Robert B. Hull, *Japan: Industrial Power of Asia*, Van Nostrand, New Jersey, 1963, p. 63.

<sup>8</sup> *Examiner*, loc. cit.

<sup>9</sup> *Pocket Book of Tasmania*, op. cit., p. 161.