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GROOTE EYLANDT MINING COMPANY

PROPRIETARY LIMITED

DEVELOPMENT PROGRESS REPORT

JANUARY 1972

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DEVELOPMENT PROGRESS REPORT

INTRODUCTION

Under an Agreement dated 9th September, 1969, with the Commonwealth relating to the granting of additional Special Mineral Leases on Groote Eylandt, the Company agreed to carry out further development on the island, namely:

- (1) To commence construction before 31st December 1969, of a beneficiation plant for the treatment of manganese ore and to commission the plant with a capacity of 0.7 million tons per annum of products before 30th June, 1971. The plant was to include facilities to enable chemical grades to be produced.
- (2) To increase the capacity of the plant to at least 1.0 million tons per annum of product by 30th June, 1974.

Due to industrial unrest on Groote Eylandt and in the Southern States, which directly and indirectly disrupted the supply and erection schedules, the Minister approved an extension of time until 31st October, 1971 for the commissioning of the beneficiation plant.

The Company is required to furnish to the Minister for the interior, half-yearly reports on the progress being made on the construction and installation of the beneficiation plant, the report to be submitted on or before 31st January and 31st July in each year until the beneficiation plant is fully commissioned.

The report that follows is the sixth and final Progress Report and covers the half yearly period to end of December, 1971.

SUMMARY

Development of the manganese ore deposits on Groote Eylandt prior to the Agreement dated 9th September, 1969, was carried out in two stages, namely:

Stage 1 Development:

Facilities were established to enable a production rate of 200,000 tons per annum of lump manganese of metallurgical grade to be achieved. This involved the provision of plant and equipment for quarrying, crushing, wet screening, transportation, power generation and shiploading, and the construction of port facilities, the township of Alyangula, roads, bridges and all the required services.

The crushing and screening plant for Stage 1 Development was commissioned in July, 1966.

Stage 2 Development:

Certain facilities were duplicated to enable the production rate to be increased to 400,000 tons per annum. This involved additional plant and equipment for quarrying and transportation, construction of additional housing at Alyangula, improvements to the port, and certain other works essential to production and the general welfare of the mining community.

Stage 2 Development was completed by early 1968.

Current Development (Stage 3):

Experience with the crushing and screening plant installed during Stages 1 and 2, together with extensive geological and metallurgical investigations confirmed the necessity of introducing comprehensive concentration equipment to maintain the grade and quality of the manganese ore products as well as to achieve the throughput which forms the basis of the Agreement with the Commonwealth.

A concentration plant incorporating such facilities was designed to treat at least 1.75 million tons per annum of crude manganese ore to produce up to 1.0 million tons per annum of concentrates, including 700,000 tons of lump product. Additional quarrying equipment and essential services was also provided.

In order to meet the further increased commitments additional equipment has been obtained to quarry and treat approximately 2.0 million tons per annum of crude ore and to produce up to 1.25 million tons per annum of concentrates.

Facilities that have been provided include:

- (1) Additional heavy earthmoving plant and equipment for quarry operations.
- (2) Additional 35 ton quarry trucks to transport ore to the beneficiation plant.
- (3) The construction and installation of the new beneficiation plant, including plant and equipment for primary crushing, stockpiling, secondary crushing, wet screening, wet scrubbing, heavy media separation and fines treatment. New workshops, stores, laboratories and offices are being included in the plant complex, to provide the necessary maintenance and service facilities.
- (4) Additional product haulage units to transport products to the shiploading stockpile at Milner Bay.
- (5) New blending stockpiling and reclaiming facilities at Milner Bay. A storage area to hold 200,000 tons of products is being provided. Products will be recovered for shiploading by a bucket-wheel reclaimer.
- (6) Sixty-three additional houses, four singlemen's quarters to house 48 men, new staff quarters, a community hall and a bulk food store are being constructed at Alyangula together with extensions to all services, the singlemen's dining rooms and kitchen, the recreation club and laundry.
- (7) Extensions to the industrial area at Milner Bay, including workshops, stores, increased power generating capacity and increased fuel storage capacity.
- (8) Improvements to the offshore shiploading installations to enable ore-carriers up to 30,000 tons to be more easily handled and as part-provision for the handling, at some later stage, of ore-carriers up to 50/60,000 tons.
- (9) Construction of roll on roll off cargo handling facilities.

FINAL PROGRESS REPORT

Progressive commissioning of the concentrating plant was carried out during this half yearly period and at 30th December the original crushing and screening plant was shut down and all manganese ore output was being produced from the new plant. The first ore was fed to the primary crushing section on 23rd October by which time dry runs of the concentrating plant and testing of the water circuits had commenced. Ore was fed to the concentrating plant on 8th November and a changeover of production from the old plant to the new has taken place progressively as minor modifications to individual items of plant have been attended to.

The new storage and shiploading complex has also been commissioned with the first ore shipment loaded in the Darwin Trader on 17th January bound for Bell Bay.

All support facilities and amenities have been commissioned and are in use.

The production capacity of the plant installed is now in excess of 700,000 tons lump ore of marketable grade, and actual production is only limited by the market offering.

All support facilities and amenities have been commissioned and are in use.



View of concentrator plant (centre) taken in August 1971, with primary crushing station at upper, product bins at left and store at lower.



View of new stockpile area taken in August 1971. Erection of stacker and reclaimer taking place in centre. Dumping hopper in foreground.



Concentrating plant from primary crushing station.
Surge stockpile at left, product bins at right.



View of 90 ton road train with product bins in right
background.



45 ton trailer discharging into new hopper at shiploading stockpile area.



New stacker in operation. Ore from stockpile is reclaimed by bucketwheel reclaimer (not shown) for loading into ships.



View of ore stacking and loading area, industrial area,
with township at right.



New Community Hall in township.

GROOTE EYLANDT FLOWSHEET

