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OPEN FILE

LONG PLAINS
IRON ORE DEPOSITS
Tasmania & Reserves

INDUSTRIAL & MINING
(R. HUDSON) 12/24/69
RESERVES - LONG P

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LONG PLAINS
IRON ORE DEPOSIT

TASMANIA

Amended tonnage based on bore hole I. M. I. No. 46 north of RTAE No. 1

A limited amount of drilling has been carried out on the discontinuous outcrops of iron ore that make up this deposit.

The first diamond drillhole (RTAE 1) was put down by Rio Tinto Australia Exploration following a magnetometer survey carried out by the Geophysical Branch of the Bureau of Mineral Resources under the supervision of Mr. E. Eadie. Later Industrial & Mining Investigations Pty. Ltd. drilled seven holes Nos. 28, 29, 30, 33, 34, 35 and 46.

The drillholes were widely spaced but were sited to intersect the more important anomalies revealed in the magnetometer survey.

More drilling would be necessary to obtain the complete picture.

DRILLING RESULTS

<u>IMI No. 46</u>	<u>Value % Fe</u>	<u>Width Intersection</u>	<u>True Width</u>
13'6" - 220'	32.7	207'	170'
322' - 415'	39	93'	70'
<u>RTAE No. 1</u>			
79' - 116'	56.6	37'	35'
315' - 498'	49.1	183'	150'
<u>IMI No. 28</u>			
58' - 105'	15.4	47')	90'
156' - 169'6"	49.4	13.5)	
270' - 349'	20	79'	60'
483' - 489'	54.9	6'	
<u>IMI No. 29</u>			
54' - 126'	30	72'	60'
257' - 378'	11	121'	100'

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	<u>Value % Fe</u>	<u>Width Intersection</u>	<u>True Width</u>
<u>IMI No. 30</u>			
194' - 256'	27	62'	50'
480'6 - 521'	38	40.5'	35'
553'6 - 558'	33.9	4.5'	
<u>IMI No. 33</u>			
140' - 296'	22	156'	100'
<u>IMI No. 34</u>			
94' - 98'	34.8	4'	
161' - 306'	25	145'	

TONNAGE ESTIMATE

The following tentative figures of outlined and possible tonnage are based on magnetic anomalies and widely spaced skeleton drilling using a factor of 10 cubic feet to 1 ton.

$$= 3.58813 \text{ tonnes/m}^3$$

L 08950N to L 11330N

<u>Lode Intersections</u>	<u>True Width (feet)</u>	<u>Values % Fe</u>
IMI No. 46	170	32.7
RTAE No. 1	35	56.6
IMI No. 29	60	30.0
IMI No. 28	90	17.0
Average Width 75 feet	Average Value 32%	
Length 2,400 feet		
<u>Quantity:</u> 2,400 x 75	= 180,000 sq. feet	
	18,000 tons per vertical foot	
To depth outlined 100 feet	1,800,000 tons	

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L 0900N - L 05320

<u>Lode Intersection</u>	<u>True Width (feet)</u>	<u>Value % Fe</u>
IMI 30	35	38
Width 35'	Length 430'	
<u>Quantity:</u> 430' x 35'	= 15,000 square feet	
	= 1,500 tons per vertical ft.	
Tonnage to 300 feet	= 450,000 tons	

L 03360 - L 03960

Magnetic Anomaly 40,000 gammas length 600' width 40'

<u>Quantity:</u> 600' x 40'	= 24,000 square feet
	= 2,400 tons per vertical foot

L 10000N - L 02125N

<u>Lode Intersection</u>	<u>True Width (feet)</u>	<u>Values % Fe</u>
IMI 33	100	25
IMI 34	100	25
Length 1,000 feet - Average Width 100'; Average Value 23%		
<u>Quantity:</u> 1000' x 100'	= 100,000 square feet	
	= 10,000 tons per vertical foot	
Tonnage to 200'	= 2,000,000 tons	

SUMMARY:

The total outlined and partly outlined tonnage to depth of drillholes amounts to approximately 11,600,000 tons. Average value based on drillhole intersections 31% Fe.

Tons per vertical foot of all the major anomalies including those drilled amounts to 64,800 tons per vertical foot.

In view of deep drilling on the Savage River end of this deposit it seems safe to assume that this ore will extend to a depth of at least 500 feet. To that depth the deposit could be expected to yield some 32,000,000 tons of ore of an average value of approximately 30% Fe.

On our present knowledge it appears that the major portion would have to be recovered by underground mining operations owing to the narrow widths of the individual lenses.

J. E. Ridgway

(J. E. RIDGWAY)
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13th May, 1970.