

ABERFOYLE TIN N. L.STOREYS CREEK MINE ORE RESERVE ESTIMATE AS AT 27.11.1974

The measurement and classification of the ore reserve has been carried out according to the same principles as last year. Quartz tonnage was calculated using the actual vein width in each block and a dilution factor of 100/73 (See Table 1). The result derived from quartz tonnage multiplied by the dilution factor is defined as Ore Tonnes in Tables 2 and 3.

The ore reserve estimate for this year is 240,800 ore tonnes compared to 244,500 ore tonnes last year, a decrease of 3,700 tonnes. There was little movement in the ore reserve due to a decrease in mining activity for the first 6 months of the year. During the latter part of the year stope development and rehabilitation on 1, 3 and 9 levels have to a large extent kept pace with extraction.

The ore reserve plans used in 1973 were updated and the methods used in calculations and drafting were the same as in previous years i.e.

- (a) A plan of each vein system at a scale of 1" = 40' showing areas previously mined and areas of indicated and inferred ore.
- (b) Tonnages were calculated using a density factor of 13.6 cu.ft. per ton and a width equal to vein width. The tonnage produced from this was multiplied by a factor of 1.016 to give quartz tonnes. A dilution factor of 100/73 was then applied to the total quartz tonnes to give ore tonnes.

The classification of the ore reserve is as follows :-

TABLE 1 : This classifies the ore reserve under five categories - A, B, C, D and E and a description of each category is listed above this table.

TABLE 2 : This gives a level by level comparison of the categorised ore reserve in ore tonnes as at 28.11.73 and 27.11.74.

TABLE 3 : This gives a level by level comparison of the ore reserve in ore tonnes as at 28.11.73 and 27.11.74.

Ore tonnes are classified as indicated tonnes or inferred tonnes. This classification is used because the ore grade in operating and new blocks is based on visual grade estimations.

The definition of indicated ore is that ore which has been outlined by -

TABLE 1

- (i) a development or stope opening on three or more sides
- (ii) making a projection beyond an isolated development or stope opening 30' (approximately 9 metres) along the strike and 20' (approximately 6 metres) up and down dip of a vein.

An exception to this is ore below 11 level on Footwall vein (i.e. 12 level blocks) which has been projected to diamond drill hole intersections. This ore has been included in Category C and amounts to 15,400 ore tonnes.

Inferred ore is defined as that ore which extends 30' (approximately 9 metres) along the strike of and 20' (approximately 6 metres) up and down the dip of a vein beyond the limits of indicated ore.

E. Inferred Ore.

LEVEL	A	B	C	D	E	QUARTZ TONNES TOTAL	QUARTZ TONNES X 100 / 73	DILUTION TONNES
Adits	2780	1050	950	400	200	4380	5900	1600
1	4550	1050	-	-	900	6500	8900	2400
1A	800	600	1300	-	-	2700	3700	1000
2	2730	3100	2150	-	400	6480	11300	3100
3	5550	1850	1100	550	1850	10900	14950	4050
4	600	950	1250	800	200	3800	5200	1400
5	-	-	1650	150	-	1800	2450	650
6	1300	6000	3000	-	1000	11500	15750	4250
6A	-	-	500	-	-	500	700	200
7	7700	400	1600	2100	900	12700	17400	4700
7A	650	-	2300	-	-	3150	4300	1150
7B	850	1050	650	-	-	2550	3500	950
8	7500	1250	2200	150	1350	12450	17050	4600
8A	2250	-	-	-	-	2250	3100	850
9	20200	1300	1200	-	1200	23900	32750	8800
10A	2600	-	-	-	-	2600	3550	950
11	19100	12500	4800	-	5700	42100	57350	15550
12	-	-	17000	-	5750	22750	31000	8250
TOTAL	78500	31100	42600	4150	19450	175800		
	107500	42600	58400	5650	28650		24300	
	78500	11500	15800	1500	1200		16000	

TABLE 1

Categorised Ore Reserve Estimate in Quartz Tonnes as at 27.11.74

(Categories A, B, C and D represent Indicated Ore; Category E represents Inferred Ore). Categories are defined as follows :

- A. Ore which is economically accessible at present costs.
- B. Ore which is economically accessible at moderately increased costs (sandfill, development and rehabilitation).
- C. Ore which is of marginal profitability at current prices or accessible with high costs (shaft sinking, sandfill, development and rehabilitation).
- D. Ore blocks considered to be uneconomical at present prices due to low grade or excessive costs.
- E. Inferred Ore.

LEVEL	A	B	C	D	E	QUARTZ TONNES TOTAL	QUARTZ TONNES X $\frac{100}{73}$	DILUTION TONNES
Adits	1700	1050	950	400	200	4300	5900	1600
1	4550	1050	-	-	900	6500	8900	2400
1A	800	600	1300	-	-	2700	3700	1000
2	2750	3100	2150	-	400	8400	11500	3100
3	5550	1850	1100	550	1850	10900	14950	4050
4	600	950	1250	800	200	3800	5200	1400
5	-	-	1650	150	-	1800	2450	650
6	1500	6000	3000	-	1000	11500	15750	4250
6A	-	-	500	-	-	500	700	200
7	7700	400	1600	2100	900	12700	17400	4700
7A	850	-	2300	-	-	3150	4300	1150
7B	850	1050	650	-	-	2550	3500	950
8	7500	1250	2200	150	1350	12450	17050	4600
8A	2250	-	-	-	-	2250	3100	850
9	20200	1300	1200	-	1200	23900	32750	8850
10A	2600	-	-	-	-	2600	3550	950
11	19100	12500	4800	-	5700	42100	57650	15550
12	-	-	17950	-	5750	23700	32450	8750
TOTAL	78500	31100	42600	4150	19450	175800		
QUARTZ TONNES X $\frac{100}{73}$	107500	42600	58400	5650	26650		240800	
DILUT- ION	29000	11500	15800	1500	7200			<u>65000</u>

TABLE 2

Level by level comparison of the categorised ore reserve in Ore Tonnes November '73 - November '74.

CATEGORY	A		B		C		D		E		TOTALS	
	1973	1974	1973	1974	1973	1974	1973	1974	1973	1974	1973	1974
Adits	2350	2350	1450	1450	1300	1300	550	550	250	250	5900	5900
1	6500	6200	1450	450	-	-	-	-	1250	1250	9200	8900
1A	1800	1100	800	800	1800	1800	-	-	-	-	4400	3700
2	3750	3750	4250	4250	2950	2950	-	-	550	550	11500	11500
3	7950	7600	2550	2550	1500	1500	750	750	2550	2550	15300	14950
4	850	850	1300	1300	1700	1700	1100	1100	250	250	5200	5200
5	-	-	-	-	2250	2250	200	200	-	-	2450	2450
6	2050	2050	8200	8200	4100	4100	-	-	1400	1400	15750	15750
6A	-	-	-	-	700	700	-	-	-	-	700	700
7	10550	10550	550	550	2200	2200	2850	2850	1250	1250	17400	17400
7A	1150	1150	-	-	3150	3150	-	-	-	-	4300	4300
7B	1150	1150	1450	1450	900	900	-	-	-	-	3500	3500
8	10300	10300	1700	1700	3000	3000	200	200	1850	1850	17050	17050
8A	-	3100	-	-	3200	-	-	-	-	-	3200	3100
9	27650	27650	1800	1800	2100	1650	-	-	1650	1650	33200	32750
10A	3550	3550	-	-	-	-	-	-	-	-	3550	3550
11	27200	26150	17250	17100	6600	6600	-	-	8400	7800	59450	57650
12	-	-	-	-	24600	24600	-	-	7850	7850	32450	32450
TOTALS	106800	107500	42750	42600	62050	58400	5650	5650	27250	26650	244500	240800

TABLE 3

Level by level comparison of ore reserve in Ore Tonnes
as at 28.11.73 and 27.11.1974

LEVEL	28.11.73 TONNES	27.11.74 TONNES	DIFFERENCE	REMARKS
Adits	5900	5900	-	No mining activity on Adits.
1	9200	8900	- 300	Stope rehabilitation and development has kept pace with extraction.
1A	4400	3700	- 700	Due to extraction and deletion of uneconomic ore.
2	11500	11500	-	No mining activity on 2 Lev.
3	15300	14950	- 350	Stope development has to a large extent kept pace with extraction.
4	5200	5200	-	No mining activity on 4 Lev.
5	2450	2450	-	No mining activity on 5 Lev.
6	15750	15750	-	No mining activity on 6 Lev.
6A	700	700	-	No mining activity on 6A L.
7	17400	17400	-	No mining activity on 7 Lev.
7A	4300	4300	-	No mining activity on 7A L.
7B	3500	3500	-	No mining activity on 7B L.
8	17050	17050	-	No mining activity on 8 Lev.
8A	3200	3100	- 100	Due to extraction.
9	33200	32750	- 450	Stope development has to a large extent kept pace with extraction.
10A	3550	3550	-	No mining activity on 10A L.
11	59450	57650	-1800	Due to extraction.
12	32450	32450	-	No mining activity on 12 Lev
TOTALS	244500	240800	- 3700	