

## TR3-190-191 R. 330 &amp; R. 331

**Samples.**

Two samples of Pig Flat Ore (Mt. Bischoff) were received from D. Kenworthy on the 21st January, 1958, as follows:—

R.330 (No. 1 Sample)—101 lbs. nett damp weight containing 0.33% tin.

R.331 (No. 2 Sample)—88 lbs. nett damp weight containing 0.32% tin.

**Investigation.**

An investigation was requested of the recovery by tabling of these samples to a grade of about 5% tin after grinding through a 12 mesh screen.

Additional recovery after a secondary grind was also desired.

No responsibility is accepted for the results shown in this report except in so far as they apply to the samples tested.

**Summary.**

R.330—After jaw and roll crushing through a 12 mesh screen followed by classification, a combined primary table concentrate was obtained which contained 4.92% tin and showed a recovery of 68%.

Secondary grinding of the tails through a 60 mesh B.S. screen followed by classification gave a combined secondary table concentrate assaying 4.62% tin and showing an additional recovery of 15.6%.

R.331—Treated similarly this sample gave a combined primary table concentrate assaying 7.31% tin and showed a recovery of 41.6%, while the combined secondary table concentrate assayed 4.03% tin and gave additional recovery of 21.6%.

**Test Results.**

R.330—This sample was jaw crushed to minus 4 mesh and then roll crushed through a 12 mesh battery screen (ex Mt. Bischoff). The sample was then classified at 20 m.m. per second, and sand and slime separately tabled to give a combined *Primary Table Concentrate* of approximately 5% tin grade.

The sand tails were then stage ball mill ground through a 60 mesh B.S. screen, classified at 20 m.m. per second and sand and slime separately tabled to give a combined *Secondary Table Concentrate*.

The secondary sand tailings were small in amount, and as they showed a vanning assay of only 0.07% tin on further grinding, no additional treatment was undertaken. They contained only a trace of pyrite.

R.331—This sample was given identical treatment as in R.330. Again the secondary sand tails contained only a trace of sulphides, and showed a vanning assay of 0.07% tin.

**R. 330.**

	Weight	PERCENT	
		Tin	Distribution
Primary Table Concentrate ....	4.5	4.92	68.0
Secondary Table Concentrate	1.1	4.62	15.6
Primary Slime Tails .....	59.3	0.05	9.1
Secondary Slime Tails .....	22.8	0.05	3.5
Secondary Spigot Tails .....	12.3	0.10	3.8
Composite Feed .....	100.0	0.33	100.0

**R. 331.**

Primary Table Concentrate ....	1.8	7.31	41.6
Secondary Table Concentrate	1.7	4.03	21.6
Primary Slime Tails .....	47.1	0.11	16.4
Secondary Slime Tails .....	38.1	0.12	14.4
Secondary Spigot Tails .....	11.3	0.17	6.0
Composite Feed .....	100.0	0.32	100.0