

7R6-178

R. 373

STANHOPE COAL COMPANY

Sample

A grab sample of approximately 20 lbs. of reject from the cleaning plant at Stanhope Colliery was obtained on the 22nd December, 1960, from the waste heap.

The sample was separated into several products by heavy liquids, and the various products were sized.

Size Fraction	Total Sample	Percent Weight		
		Float 1.60	Float 1.80 Sink 1.60	Sink 1.80
+ 1 inch	12.3	0.5	1.0	10.8
$\frac{3}{4}$ inch	24.5	0.6	0.9	23.0
$\frac{1}{2}$ inch	14.2	0.4	0.5	13.3
$\frac{1}{4}$ inch	13.1	0.2	0.4	12.5
$\frac{1}{8}$ inch	5.8	0.2	0.3	5.3
1 m.m.	16.7	1.0	1.9	13.8
- 1 m.m.	13.4	0.7	0.6	12.1
	100.0	3.6	5.6	90.8

Several sizing fractions were combined, and the ash content of the composite fraction determined.

Size Fraction	Float 1.60	Ash Percent	
		Float 1.80 Sink 1.60	Sink 1.80
+ $\frac{3}{4}$ inch	22.5	46.2	75.5
- $\frac{3}{4}$ inch + $\frac{1}{4}$ inch	21.5	47.8	76.2
- $\frac{1}{4}$ inch	22.3	45.7	72.4

The reject content of seam coal, as determined in investigations R.342 and R.343, is about 15 to 20%. It is probable that the reject content of mined coal is 25-30%.

Examination of the grab sample of table reject indicates that the reject contains 3.6% of useful coal, with an ash content of approximately 22%. Assuming that the reject amounts to about 25-30% of mined coal, loss of useful coal in the reject amounts to about 1% overall.

If the grab sample is representative of plant performance, and if the washed coal is good quality, plant operation can be considered to be most satisfactory.