

TR9-153-155

R. 458

**22. CORNWALL COAL COMPANY—CRUSHED WASHERY FEED
FROM DUNCAN COLLIERY: SINK FLOAT BENEFICATION**

The sample of crushed coal being fed to the Cornwall Company's washery was obtained on the 13th February, 1964, from noon in four half-hourly samples.

The sample was obtained at the request of the Cornwall Coal Co. for sink-float analysis, with the object of comparing results with those obtained from a bulk sample of coal obtained in 1958.

ORE DRESSING INVESTIGATIONS.

	Weight	Per Cent	Ash
Float at 1.3			
+ 4"
+ 2"	0.1		13.7
+ 1"	0.4		10.6
+ 3/4"	0.2		7.8
+ 3/8"	1.2		8.0
+ 1/4"	0.2		7.0
+ 1/8"	0.6		6.0
+ 30 mesh	1.3		6.0

Comp. Float at 1.3	4.0		7.4
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Float at 1.4			
+ 4"	1.2		13.1
+ 2"	7.3		13.3
+ 1"	9.0		12.3
+ 3/4"	3.2		12.2
+ 3/8"	9.5		12.6
+ 1/4"	2.5		12.3
+ 1/8"	3.5		12.0
+ 30 mesh	4.2		12.6

Comp. Float at 1.4	40.4		12.6
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Float at 1.5			
+ 4"
+ 2"	4.3		21.8
+ 1"	8.7		20.4
+ 3/4"	2.3		19.8
+ 3/8"	6.9		20.2
+ 1/4"	1.5		20.4
+ 1/8"	2.3		20.2
+ 30 mesh	3.0		19.6

Comp. Float at 1.5	29.0		20.4
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Float at 1.6			
+ 4"
+ 2"	1.0		29.4
+ 1"	2.3		27.5
+ 3/4"	1.0		27.8
+ 3/8"	2.4		30.1
+ 1/4"	0.6		29.7
+ 1/8"	1.0		30.8
+ 30 mesh	2.0		26.7

Comp. Float at 1.6	10.3		28.6
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Sink at 1.6	Weight	Per Cent	Ash
+ 4"
+ 2"	1.1		92.3
+ 1"	2.5		67.0
+ 3/4"	1.4		60.6
+ 3/8"	2.7		57.9
+ 1/4"	1.0		59.3
+ 1/8"	1.1		63.1
+ 30 mesh	2.6		58.9
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Comp. Sink at 1.6	12.4		63.9

Summation

Product	Individual Per Cent		Cum. Per Cent	
	Weight	Ash	Weight	Ash
Float 1.3	4.0	7.4	4.0	7.4
Float 1.4	40.4	12.6	44.4	12.1
Float 1.5	29.0	20.4	73.4	15.4
Float 1.6	10.3	28.6	83.7	17.0
Sink 1.6	12.4	63.9	96.1	23.1
Minus 30 mesh	3.9	27.0	100.0	23.2
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Comp. 1.6 Float plus minus 30 mesh untreated			87.6	17.5