

BA18: Chromium Content of Magnetite - Appendix E.

A composite sample of magnetite separated from Samples 664324 to 664335 (OWAC RE 489 to 500) inclusive were further magnetically separated into four fractions by differing magnetic strengths. In all 64.6g was so treated.

The samples used for this test were chosen at random. The amount of magnetic material derived from the original samples was very small, generally less than 0.1% by mass.

Three magnetic products were assayed for Ti & Cr. The fourth product appeared to be mainly garnet and was not further treated.

The results obtained were:-

<u>Product</u>	<u>Mass</u> (g)	<u>Assay (g)</u>		<u>Remarks</u>
		<u>TiO₂</u>	<u>Cr.</u>	
N/A 1	2.9	30.8	0.36	
N/A 2	26.0	33.2	0.12	
N/A 3	4.5	40.3	0.09	
N/A 4	55.1			Garnet
<u>N</u>	<u>11.5</u>			
<u>N</u>	<u>100</u>			

Pure ilmenite contains 52.7% TiO₂, hence pure ilmenite does not appear to be present. The chromium content would preclude use of this material in titanium dioxide production.