

DEPARTMENT OF COMMERCE

Bureau of Standards

Certificate of Analyses

OF

STANDARD SAMPLE No. 25b

MANGANESE ORE

All results are based on a sample dried for one hour at 120° C.

ANALYST*	Total manganese	Available oxygen	Calculated MnO ₂
1.....	58.40 ^a	{ 16.69 ^b 16.72 ^c	90.68 ^b 90.84 ^c
2.....	{ 58.28 ^a 58.27 ^d	16.64 ^e	90.42 ^e
3.....	{ 58.41 ^a 58.41 ^d	16.64 ^e	90.40 ^e
Averages.....	58.35	16.67	90.59

^a Bismuthate method.
^b Ferrous sulphate method.
^c Sodium oxalate method.

^d Chlorate method.
^e Average of very closely agreeing results obtained by the ferrous sulphate and sodium oxalate methods.

The following atomic weights were used in the calculation of results: Manganese, 54.93; oxygen, 16.000; iron, 55.84; sulphur, 32.064; carbon, 12.000; and sodium, 22.997.

Determinations on 5.00 g samples showed the presence of 0.02 per cent of V₂O₅ and 0.05 per cent of Cr₂O₃. No cobalt was found.

* LIST OF ANALYSTS

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3. H. N. Fry, Electro Metallurgical Co., Niagara Falls, N. Y.

George K. Burgess
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