

Bureau of Standards

Certificate of Analyses

OF

STANDARD SAMPLE No. 27a

"SIBLEY" IRON ORE (Dried at 100°)

CHEMIST.	LOCATION	SILICA SiO ₂ .		PHOSPHORUS.		METHOD FOR IRON.	
		HF.	FUSION.	GRAV.	VOL.	PERMAN-GANATE.	BICHR-O-MATE.
G. E. F. Lundell.....	Bureau of Standards.....	1.05	1.03		a0.037	a68.60	
F. L. Crobaugh.....	Cleveland, Ohio.....	0.98			.037	68.60	
Crowell & Murray.....	Cleveland, Ohio.....	1.03			.037	68.66	
E. E. Brewster.....	Osana Grading Association, Iron River, Mich.	1.04		b0.037			68.58
F. A. Emmerton.....	Cleveland, Ohio.....	1.02	1.02	b.037	.037		68.56
W. J. Rattle & Sons.....	Cleveland, Ohio.....		1.02		a.037	68.50	
Oscar Textor.....	Cleveland, Ohio.....	1.03		c.040		68.61	
Average, commercial chemists.....		1.02	1.02	.038	.037	68.59	68.57
H. E. Campbell.....	Carnegie Steel Co., Clairton, Pa.....		1.00	a0.039			68.68
Wm. Brady.....	Illinois Steel Co., South Chicago, Ill.....	1.00		b.037	.037	68.44	68.59
W. B. N. Hawk.....	National Tube Co., Lorain, Ohio.....	1.07			.037	68.54	
W. D. Brown.....	Carnegie Steel Co., Duquesne, Pa.....		1.00	c.040	.040	68.60	68.60
C. E. Nesbitt.....	Carnegie Steel Co., Edgar Thomson Works.		.99	c.040	.040	68.61	68.63
Average, Steel Corporation chemists.....		1.04	1.00	.039	.038	68.55	68.63
E. C. Jones.....	Ely, Minn.....	0.97			a0.039	68.50	
A. T. Gordon.....	Virginia, Minn.....		d.82		.039	68.62	
E. T. Griese.....	Hibbing, Minn.....	1.02	d.67	b0.038		68.60	
Karl Tornberg.....	Norway, Mich.....	1.03	1.07	c.039			68.55
J. H. Hitchens.....	Iron Mountain, Mich.....	1.03	1.03	c.039	.039	68.54	68.60
A. L. Johnson.....	Ishpeming, Mich.....	1.00	1.00		a.040	68.53	
Alex King.....	Coleraine, Minn.....		d.84		.039	68.58	
W. J. Phillips.....	Iron River, Wis.....	1.05	1.02	b.039	a.039	68.47	
J. M. Stearns.....	Eveleth, Minn.....		1.02		.039	68.57	
W. F. Ulrich.....	Chisholm, Minn.....	1.02			a.040	68.53	
W. L. Winn.....	Ironwood, Mich.....	1.05	1.07		.039	68.52	
Average, Oliver Mining Co. chemists.....		1.02	1.04	.039	.039	68.55	68.58
GENERAL AVERAGE.....		1.02		0.039		68.57	

a Used zinc reductor and permanganate titration.
 b Weighed as magnesium pyrophosphate.

c Weighed as ammonium phosphomolybdate.
 d Omitted from the summation.