TABLE I

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Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity "S"	Test Machine - Mesh	Work Index "Wi"
Aguilar, L. G. & Co., Habana, Cuba	Manganese ore	1028	3.11	BM-200	8.02
Airox, Orcutt, Calif.	Silica opaline amorphous	1135	2.65	BM-200	22.3
Al-Ke-Me Fertilizer Co., Brazil	Phosphate fertilizer	252	2.80	BM-48 BM-100	13.6 15.3
Alan Wood Steel Co., Scrub Oaks, Dover, N. Y.	Iron, high grade magnetite	2674	5.20	BM-200	14.5
Alan Wood Steel Co., Scrub Oaks Div., Dover, N.Y.	Iron, magnetite	931	3.63	BM-35 BM-48 BM-65	8.3 8.3 9.9
Alan Wood Steel Co., Mozan, Japan	Iron, non-magnetic Iron, magnetic	914	3.40 3.42	BM-65 RM-20	7.25 19.7
Algoma Ore Prop., Ltd., Ontario, Canada	Iron ore	2756	3.87 3.66 3.32	RM-20 RM-20 RM-20	11.1 11.6 12.0
Algoma Ore Prop., Helen Mines, Ontario	Iron ore, hematite	1849	3.55	IC	13.4
Allegheny-Ludlum Corp., Waterville, N.Y.	Emery grinding wheel chips	1089	2.92	BM-48	109.6
Allis-Chalmers Mfg. Co., Birmingham, Ala.	Coke breeze	2496	2.20	RM-14	13.8
Allis-Chalmers Mfg. Co., Milwaukee, Wis.	Coke	28R	1.0	IC	4.46
Allis-Chalmers Mfg. Co., Milwaukee, Wis.	Coal, Bit. (Ill.)	2802	1.4	VBM	13.2
Allis-Chalmers Mfg.Co., Buenos Aires, Argentina	Fuller's earth	1742	2.0	IC	0.13
Alpha Portland Cement Co., Manheim, W. Va.	Limestone	2655	2.7	BM-200	11.25
Aluminum Company, East St. Louis, Ill.	Oyster shells	1160	2.42	RM-48	15.5
Aluminum Ore Co., East St. Louis, Ill.	Aluminum laterite	1858	2.68	RM-10 RM-14	9.6 8.6
Aluminum Ore Co., East St. Louis, Ill.	Fluorspar ore	619	2.98	BM-65	5.6
Aluminum Co. of America, Alcoa, Tenn.	Graphite, artif.	937	1.67	BM-35	110.
Aluminum Co. of America, Alcoa, Tenn.	Coke, petroleum	700	1.78	BM-48 BM-100	73.0 76.
Aluminum Co. of Canada, Arvida, Quebec	Scrap pot lining	2149	2.87	IC	11.5
Aluminum Co. of Canada, Arvida, Quebec	Sinter, aluminum	1080	1.38	BM-48 BM-65 RM-48 RM-65	6.6 7.1 7.4 7.7
American Aggregates Corp., Brighton, Mich.	Gravel, pea	1649	2.7	RM-35	15.1
American Cyanamid Co., Brewster, Fla.	Phosphate rock	1221	2.76	BM-200	13.2
American Cyanamid Corp., Stamford, Conn.	Iron, magnetite	1511	3.06	BM-200	16.1
American Cyanamid Co., Linden. N. J.	Gold ore	524	2.61	BM-100	16.0
American Emery Wheel Works, Richmond Square, Providence, R. I.	Emery	410	3.89	RM-65	39.6
American Metals Co., Cartaret, N. J.	Gold	808	2.90	BM-100 BM-200	12.9 16.2
American Nepheline, Ltd., Lakefield, Ontario	Nepheline syenite	2365	2.67	RM-20	8.6
American Rutile, Roseland, Va.	Rutile ore, feldspar	1885	2.69	BM-28 RM-28	13.3 12.2
	Rutile ore, serpentine		2.69	BM-28	15.2

Company and Deposit Location	Material (Ore of)	Test G	pecific ravity 'S''	Test Machine – Mesh	Work Index ''Wi''
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American Rutile Corp., Arlington, Va.	Rutile Silica rock	971 1891	3.02 2.57	RM-20 IC	10.3 7.95
American Silica Co., Ottawa, Ill. American Smelting & Refining Co., El Paso, Texas	Lead-zinc ore, Nigeria	2788	3.58	BM-65	8.8
	Lead-zinc ore, Nigeria	2700	3.30	BW-03	0.0
American Smelting & Refining Co., Buchans, Newfoundland	Copper-lead-zinc ore	2733	3.70	BM-100 BM-200 RM-14	9.80 9.70 9.8
American Smelting & Refining Co., Silver Bell Project, Tucson, Ariz.	Copper ore, Silver Bell	2687F	2.65	IC	5.82
American Smelting & Refining Co., Silver Bell Project, Tucson, Ariz.	Copper ore, Silver Bell	2687D	2.61	BM-65 BM-200	12.4 12.2
American Smelting & Refining Co., Silver Bell Project, Tucson, Ariz.	Copper ore, Silver Bell	2687C	2.70	BM-65 BM-200	15.5 13.5
American Smelting & Refining Co., Silver Bell Project, Tucson, Ariz.	Copper ore, Silver Bell	2687B	2.64	BM-65 BM-100 BM-200 RM-14	12.8 12.7 12.3 12.6
American Smelting & Refining Co., Van Stone Mine, Northport, Wash.	Lead-zinc ore	2641	2.94	BM-48 BM-100 BM-200	9.0 9.4 10.5
American Smelting & Refining Co., Corpus Christi, Texas	Zinc fume	2605	5.25	BM-100	7.3
American Smelting & Refining Co., Vanadium, N. M.	Lead-zinc ore	2151	3.72	BM-65	12.3
American Smerting & Remaing Cos, vanadum, 11. m.	Beau-zine ore	2101	0.72	BM-200	13.4
American Smelting & Refining Co., Tacoma, Wash.	Limestone	1552	2.74	IC	11.54
American Smelting & Refining Co., Tucson, Ariz.	Copper ore	1050	2.81	BM-48 BM-65 BM-100 BM-200	9.4 10.0 11.2 11.6
American Zinc Company of Tenn., Mascot, Tenn.	Zinc, sphalerite	1100 4	2 00	DM 14	6.6
American Zinc Company of Tenn., Mascot, Tenn.	concentrate Lead and zinc ore	1102A 2820	3.88	RM-14 RM-10 RM-14 BM-35 BM-65	6.6 12.7 11.4 11.8 11.9
Anaconda Copper Mining Co., Soda Springs, Idaho	Calcium phos.	1226A	3.03	BM-100	12.0
Anaconda Copper Mining Co., Anaconda, Mont.	Copper ore, pyritic	910A	3.23	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200	11.6 12.3 12.2 11.3 11.9 12.8 13.9

Company and Deposit Location	Material (ore of)		Specific Gravity ''S''	Test Machine — Mesh	Work Index ''Wi''
Anaconda Copper Co., Anaconda, Mont.	Copper ore	1477A	3.22	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200	12.2 12.0 10.9 11.0 11.0 12.5 12.4
Arcade Smelting & Refining Co., Squantum, Mass.	Lead slag	360	7.56	BM-200	3.62
Arizona Sand & Rock Co., Phoenix, Ariz.	Water worn pebbles	1406	2.65	IC	10.9
Arizona Sand & Stone Co., Phoenix, Ariz.	Gravel	1767	2.65	RM-3	39.2
Arketex Ceramic Corp., Brazil, Ind.	Tile	766A	2.66	RM-14	15.4
Altantic Gulf & Pacific Co., Ipo Mine, Manila, P. I.	Gold	329	2.80	BM-65 BM-100	10.7 11.1
Axerio, Monteponi, Italy	Lead-zinc ore	562	4.43	BM-200	10.6
Axerio, Minerali Metallice, Atenda, Italy	Gold ore	629	2.56	BM-150	7.00
Bagdad Copper Corp., Bagdad, Ariz.	Copper, granite chalcopyrite	2623	2.63	BM-35 BM-48 BM-65 BM-200	11.3 11.8 11.3 12.6
Baguio Gold Mining Co., Baguio, P. I.	Gold ore	402	2.63	BM-200	12.3
G. E. Baker Co., Marietta, Pa.	Serpentine rock	1015	2.83	BM-65	12.1
Band Mfg Co., St. Louis, Mo.	Glass, broken bulbs	1713	2.6	RM-35	11.5
Barium Mining Corp., Gretna, W. Va.	Barite	1007	5.24	RM-20	3.8
Barnsdale Tripoli Co., Kansas City, Mo.	Pumice	749	1.07	RM-35	13.3
Barton Mines Corp., North Creek, N. Y.	Garnet ore	1510	3.25	RM-48	10.4
Basic Dolomite	Calcined mats.	583D	1.60	RM-14	11.1
Basic Dolomite	Calcined mats.	583C	2.70	RM-14	11.3
Basic Dolomite	Calcined mats.	583A	3.15	RM-14	10.1
Allis-Chalmers Mfg. Co., Milwaukee, Wis.	Ferro-silicon 84.6% Fe	1612	6.64	BM-200 IC	40.8 9.95
Basic Refractories, Maple Grove, Ohio	Magnesite basic	2643	2.91	RM-14	15.3
Basic Refractories, Maple Grove, Ohio	Ferro-magnesium mineral	1033	2.93	BM-48 BM-65 BM-100 BM-150 BM-200	6.9 7.1 6.2 7.0 9.0
A. C. Bateman (for) National Roads Board, Cape Province, South Africa	Dolerite	2016	2.93	IC	29.9
A. C. Bateman, Johannesburg, South Africa	Limestone	1513	2.6	IC	3.55
Batesville White Lime Co., Batesville, Ark.	Limestone	1367	2.6	IC	16.6
Beaufort West Ballast Quarry, Johannesburg, South Africa	Basalt	2094	2.96	IC	19.8
Walter Behn, Cooke, Mont.	Gold ore	733	2.80	RM-6	28.6
Belencito Crushing Plant, Columbia	Limestone	2322	2.6	IC	7.1

Company and Deposit Location	Material (Ore of)		Specific Gravity ''S''	Test Machine – Mesh	Work Index ''Wi''
Benquet Consolidated Gold Mines, Baguio, P. I.	Gold ore	550	2.66	BM-28 BM-35 BM-65 BM-48	15.3 16.2 14.7 14.6
Berens River Mines, Ltd., Winnipeg, Manitoba, Can.	Gold ore sulfides	705	3.25	BM-200	13.5
Bernheim, Southern Rhodesia, South Africa	Gold ore basic	477	1.77	BM-28 BM-48 BM-100 BM-200	32.0 30.9 23.8 22.1
Bertelsen Co., Bridgeville, Pa.	Coke	1595	1.34	BM-150	29.0
Walter C. Best Co., Chardon, Ohio	Silica sand	1305	2.68	RM-20	12.3
Bethlehem Steel Corp., Bethlehem, Pa.	Iron, taconite mag. conc.	2739	3.80	BM-65 BM-100 BM-200	11.4 12.0 11.3
Bethlehem Steel Co., Lebanon, Pa.	Iron ore Cornwall No. 4, caved	2720B	3.62	BM-100 RM-14	8.9 12.1
Bethlehem Steel Co., Lebanon, Pa.	Iron ore, Morgantown, Grace Mine	2720	3.68	BM-100 RM-14	10.1 9.7
Bethlehem Steel Co., Lebanon, Pa.	Iron ore, Cornwall, open pit	2671G	3.63	BM-100 RM-14	7.1 8.3
Bethlehem Steel Co., Lebanon, Pa.	Iron ore, taconite, mag. conc. from Marmora Plt.	2671F	F-2 3.88	BM-65 BM-100 BM-200	12.1 12.5 13.3
Bethlehem Steel Co., Bethlehem, Pa.	Iron ore, drill core sample Marmora	, 2671F	4.13	RM-14	18.5
Bethlehem Steel Co., Sparrows Point, Baltimore, Md.	Iron magnetite Bethlehem ore	2671E	4.35	IC	7.75
Bethlehem Steel Co., Mines de L'Quenza, Algeria	Iron ore, limonite	2263	3.05	IC	10.9
Bethlehem Steel Co., Cornwall Mines, Pa.	Iron ore, magnetite, pyrite, bornite	2187	3.56	IC	5.54
Bethlehem Steel Co., Sparrows Point, Mo.	Foam slag	1119A	1.24	RM-35	9.5
Bingham, Bingham Canyon, Utah	Copper ore		4.65	BM-48 BM-100 BM-200	6.4 8.0 8.30
Birmingham Slag Co., Montgomery, Ala.	Silica sand	2242E	3 2.69	BM-48	13.8
Bolidens Gruv, Bolidens, Sweden	Copper ore, sulfide	2324	4.35	BM-200 RM-10 RM-14 IC	8.3 12.6 12.3 9.32
Bird & Sons, Inc., Boston, Mass.	Roofing granules	2213	2.63	RM-8	29.7
Bowring & Co., Belmonte, Spain	Iron	291	A 3.53	BM-35	13.3
Bowring & Co., Keradid, Morocco	Iron ore roasted	315	3.00	BM-100	8.8
Bowring & Co., Keradid, Morocco	Iron ore	288	A 3.10	BM-35 BM-65	13.5 13.6
Braden Copper, New York	Copper ore	2616	2.73	BM-100	18.7

C	W = 1 1/0 = 0	Test	Specific Gravity	Test Machine —	Work Index ''Wi''
Company and Deposit Location	Material (Ore of)	No.	"\$"	Mesh	—
Britannia Mining & Smelting Co., Ltd., Britannia Beach, British Columbia	Copper	326	2.85	BM-65	16.1
Buffalo Ankerite Gold Mines, S. Porcupine, Ontario	Gold ore	1639	3.05	BM-200 RM-14	17 . 1 19.5
Buffalo Ankerite Gold Mines, S. Porcupine, Ontario	Gold	614	3.22	BM-150	10.70
Buffonta Mines, Ltd., Timiskaming County, Ontario	Gold ore, andesite containing pyrited quartz	1817	2.86	IC	22.6
Bunge Corp., Moinho, Santista, Brazil	Apatite-phosphate	1555	2.78	BM-200 RM-14 RM-48	16.3 16.1 13.8
Bunker Hill & Sullivan, Kellogg, Idaho	Slag	2589	3.65	RM-14	12.8
Bunker Hill & Sullivan, Kellogg, Idaho	Lead sinter Limestone	2584	3.55 2.67	RM-14 RM-14	8.6 10.0
Bureau of Mines, Rolla, Mo.	Flint, Tri-State jig tailings	440	2.65	BM-48 BM-100 BM-200	30.0 29.0 24.8
W. A. Burton, Llano, Texas	Granite, biotitic	875	2.65	RM-3	15.7
Butte Highlands Mining Co., Butte, Mont.	Gold ore	861	2.70	BM-100 BM-200	7.7 8.5
Charles Butters, South America	Gold ore, quartz	338	2.65	BM-100	42.0
Calaveras Cement Co., San Francisco, Calif.	Cement clinker	1590B	3.15	BM-200	13.0
Calaveras Cement Co., San Francisco, Calif.	Limestone	1590	2.70	BM-200	9.1
California Rock & Gravel Co. San Francisco, Calif.	Gravel, trap rock	1578	2.86	IC	15.2
Callahan Zinc-Lead Co., Wallace, Idaho	Zinc-lead ore	691	3.72	BM-150	10.2
Calumet & Hecla Cons. Copper Co., Hubbell, Mich.	Copper ore sands	2710	3.02	BM-28	18.2
Calumet & Hecla Cons. Copper Co., Lake Linden, Mich.	Copper ore, Penn mine	2411	2.85 2.85	IC RM-14	15.8 17.0
	Copper ore, Centennial mine		2.80 2.80	IC RM-14	15.9 18.4
Calumet & Hecla Cons. Copper Co., Lake Linden, Mich. Calumet & Hecla Cons. Copper Co., Lake Linden,	Copper ore, amygdaloid jig tails	771B	2.91	BM-35 BM-100 BM-200	20.2 17.1 17.3
Mich.	Copper ore, conglomerate	771A	2.82	BM-35 BM-100 BM-200	26.3 22.6 20.1
Campbell Limestone Co., Pacolet, S. C.	Granite	2630	2.64	IC	7.95
Campbell Limestone Co., Spartanburg Plant, Gaffney, S. C.	Granite	2630	2.54	IC	6.67
Canadian Bureau of Mines, Toronto, Ontario	Quartzite	2290	2.65	BM-48	12.4
Canadian Gypsum Co., Nova Scotia	Gypsum rock, hard Gypsum rock, dark	2177	2.96 2.33	IC IC	4.3 4.8
Canadian Malartic Gold Mines Ltd., Toronto, Can.	Gold ore	1853B		IC	34.2

			pecific Gravity	Test Machine —	Work Index
Company and Deposit Location	Material (Ore of)	No.	"5"	Mesh	"Wi"
Canadian Malartic Gold Mines, Ltd., Malartic, Quebec, Can.	Gold ore	1853&F	3 2.71 2.73	IC IC	22.0 26.4
Canadian Malartic Mining Co., Amos, Quebec, Can.	Gold ore	586	2.71	BM-150	14.5
Canadian Nephelene Syenite, Ltd., Lake field, Ont.	Syenite	663A	2.73	BM-28 RM-28	9.6 10.8
Canadian Silica Products, Ltd., Montreal	Quartz	398	2.65	BM-28	13.8
Carborundum Co., Niagara Falls, N. Y.	Corundum	2836	3.91	IC	16.9
Carborundum Co., Niagara Falls, N. Y.	Quartz	2032	2.63	IC	12.5
Carborundum Co., Niagara Falls, N. Y.	Corundum	1948	4.0	RM-8	34.9
Carborundum Co., Niagara Falls, N. Y.	Silicon carbide	1920	3.0	IC	15.6
Carlota, Chile	Copper, silver lead	660	3.00	BM-100 BM-200	14.0 13.5
Camegie Illinois Steel, Rio Doce, Brazil	Iron ore	2060	5.05	IC	20.0
Carnegie Illinois Steel Corp., Chicago, Ill.	Firebrick clay and Firebrick	907	2.49 2.5	BM-48 BM-48	15.8 17.0
Carriers Unies de Porphyre Tessines Plant, Belgium	Syenite	2572	2.73	IC	17.8
Cebu Portland Cement Co., Manila, P. I.	Limestone, shale sandstone	2778	2.50	OCIW OCIIw	5.28 6.35
Cedar Bluff Stone Co., Princeton, Ky.	Limestone	1567	2.6	IC	12.0
	Limestone, agg. Soft agg.		2.6 2.6	IC IC	15.3 11.5 7.9
Celotex Corp., Marietta, Ohio	Slag, float	919	0.60	RM-14	2.3
Cemento Del Caribe, Baranquilla, Colombia	Cement raw materials	1529	2.7	BM-200	6.8
Cementos Del Valle, Cali, Colombia	Clay	2769	2.5	OCIW OCIIW	1.107 7.73
Cementos Del Valle, Cali, Colombia	Cement raw mix	1670	2.7	BM-200	14.4
Cementos Guadalajara, Jalisco, Mexico	Cement rock	1618C	2.7	BM-200	15.1
Chales y Cia Magnesium do Brazil, Rio de Janerio,			, . .		2 22
Brazil	Magnesite, ore	1898	3.0	IC	3.7
Champion Rivet Co., Cleveland, Ohio	Ferromanganese alloy	442	7.72	BM-65	6.8
Champion Spark Plug Co., Detroit, Mich.	Dumorticrite Andalusite	1407	3.21 3.08	IC IC	30.8 5.2
Charleston Iron Mining Co., Hibbing, Minn.	Iron ore	754	3.90	RM-4	15.3
Charleston Mining Co., Mt. Pleasant, Tenn.	Phosphate	333	1.85	BM-28	6.5
Chateau Magnetite, Teton County, Mont.	Magnetite, underground Magnetite, surface	2102	3.87 4.04	IC IC	9.3 5.5
Chelan Copper Co., Lucerne, Wash.	Copper ore	328	2.73	BM-65	12.9
Christy, W. W., Malvern, Ark.	Brookite	1104	2.75	RM-35	9.0
Chromium Mining & Smelting Co., Toronto, Can.	Ferro-chrome alloy	743	6.62	BM-100	10.1
Cleveland Cliffs Iron Co., Ishpeming, Mich.	Iron ore	2123C	3.3	RM-10	16.7
Cleveland Cliffs Iron Co., Ishpeming, Mich.	Specular hematite	2123A	3.3	IC	13.4

Company and Deposit Location	Material (Ore of)		Specific Gravity	Test Machine — Mesh	Work Index ''Wi''
Climax Molybdenum Co., Climax, Colo.	Molybdenum ore	2596	2.71	IC	14.1
	Molybdenum		2.67	IC	12.2
Climan Walada and Green Co. L.	Molybdenum		2.66	IC	14.5
Climax Molybdenum Co., Climax, Colo.	Molybdenum	1560	2.61 2.62	BM-100 IC	9.6 13.9
Cline Lake Gold Mines, Toronto, Can.	Gold ore	745	2.81	BM-65 BM-100 BM-200	12.0 11.7 11.8
Cia Aurifera Saramarca, Lima, Peru	Gold ore, sulfide	547E	3.03	BM-48	13.6
Cia Cemento Portland "Caue" Bello Horizonte, Minas Gerais, Brazil	Limestone Limestone Clay	2800	2.70 2.70 2.67	IC IC IC	14.1 11.9 6.1
	Clay Clay		2.67 2.67	IC	4.9
Cia De Cementos Portland, Colombia	Limestone, cement rock	1642	2.7	IC BM-200	4.4
Cia de Intercambio y Credito Minero, Ecuador	Limestone, clay	1839C		BM-200	13.5 12.9
Cia Fundidora de Fierro y Acero de Monterrey,	Difficatorie, cray	16050	2.7	DM-200	12.9
Mexico Mexico	Iron ore, hematite	2714	4.15	IC	17.7
Cia Mexicana de Cemento Portland, Apasco, Mexico	Cement raw material	2787	2.7	OCI	18.2
Cia Minera Ciclon, Santiago, Chile	Gold ore	719	3.07	BM-200	16.7
Cobrecite Corp., Detroit, Mich.	Cobrecite	830	1.27	BM-35 BM-65	6.6 4.8
Cold Springs Granite Co., Cold Springs, Minn. Morton, Minn.	Pink granite Granite	1412	2.65 2.65	IC IC	13.4 21.8
Colorado Fuel & Iron Co., Pueblo, Colo.	Iron ore, magnetite	2069	5.13	IC	10.4
Colquiri Co., Colquiri, Bolivia	Tin ore	1438	3.85	BM-200	11.5
Columbia Geneva Steel Co., Geneva, Utah	Iron ore	2805	3.30	HC	13.9
Combustion Engr. Co., Chattanooga, Tenn.	Iron oxide sinter	1201	3.59	BM-65	10.0
Commonwealth Fertilizers & Chemical, Ltd., Yarraville, Victoria, Australia	Phosphate rock	2738	2.93	RM-35	11.0
Commonwealth Fertilizers & Chemical, Ltd., Yarraville, Victoria, Australia	Pyrite ore	2635	3.80	BM-65 BM-200	13.3 12.5
Condon, C.A., Talladega, Ala.	Graphite	287	2.25	BM-48	4.4
Cons. Builders, Inc., Detroit Dam, Mill City, Ore.	Diorite	2625	2.70	IC	14.0
Cons. Builders, Inc., Mill City, Ore.	Granite	2298	2.64	RM-4	22.5
Consolidated Cement Corp., Cement City, Mich.	Cement clinker	1617B	3.15	BM-200	16.3
Consolidated Copper Co., Kimberley, Nev.	Copper	278	2.9	BM-65	12.7
Consolidated Copper Co., Kimberley, Nev.	Copper	276A	2.73	BM-65 BM-100	8.3 9.0
Consolidated Copper Co., Kimberley, Nev.	Copper	188/189	2.60	BM-48	11.2
Consolidated Feldspar Co., Erwin, Tenn.	Feldspar	1103B & E	2.60	BM-35 BM-28	8.9 11.5
				RM-35	9.1
Consolidated Feldspar Co., Erwin, Tenn.	Feldspar	934	2.60	RM-20	8.4

Company and Deposit Location Materi	Test al (Ore of) No.	Specific Gravity ''S''	Test Machine – Mesh	Work Index "Wi"
Cons. Mining & Smelting Co., Ltd., Kimberley, B. C. Waster of Sulphide Pyrrhotit	ock 2150 s, mixed	2.97 5.06 4.41	IC IC IC	14.4 5.6 8.0
Galena	17544 PMT 14	5.62	IC	4.8
Lead ore	mill feed	3.45	BM-100 BM-200 RM-14	9.0 8.3 10.4
Cons. Mining & Smelting Co., Ltd., Kimberley, B.C. Lead ore	1692	3.45	RM-10 RM-14	15.3 13.9
Cons. Mining & Smelting Co., New Golden Rose	064	2.50	D1/ 10	
Mines, Canada Gold ore	864	3.50	BM-48 BM-100	9.3 9.2
			BM-150	9.3
			BM-200	10.5
Copper Range Co., Painesdale, Mich. Copper of	re, white pine			
sandsto	one, shale 2735	2.88	BM-100	15.2
	,911		RM-14	16.5
Copper Range Co., Freda, Mich. Copper Co		2.69	BM-48	8.8
anterop	e, Africa 2146	2.09	BM-100	8.7
			BM-200	8.0
Copper Range Co., Painesdale, Mich. Copper of	re, white pine			
shale	2078	A 2.67	BM-14	21.5
			BM-35	17.4
			BM-65 BM-100	14.9 16.5
			BM-200	13.4
Copper Range Co., Freda, Mich. Copper Co	re 1599		BM-200	18.3
Copper Range Co., Painesdale, Mich. Copper Co	ore, white pine			
sandsto	one 5 1000	H	BM-150	11.2
wt:			BM-200 BM-150	13.3 13.7
white pi	ne sandstone 4		BM-130	15.7
Copper Range Co., Painesdale, Mich. Copper C	ore, white pine		2 200	2011
sandsto	one 3 1000	G 2.97	BM-28	15.4
			BM-35	14.7
			BM-48 BM-65	14.1 13.4
			BM-100	13.7
			BM-150	12.3
			BM-200	11.3
	ore, white pine	- 2.00	D11 00	
sandsto	one 2 1000	F 2.63	BM-28 BM-35	6.6 9.5
			BM-48	11.2
			BM-65	14.2
			BM-100	15.7
			BM-150 BM-200	18.8 17.7
			BM-200	16.3
Garage Parent Co. Paincedule Wink	no mhito sico		DW-100	10.5
Copper Range Co., Painesdale, Mich. Copper of amygda	ore, white pine loid 1000	C 2.93	RM-48	18.7
amygua			RM-48	12.8

			Specific Gravity	Test Machine	Work
Company and Deposit Location	Material (Ore of)	Test No.		– Mesh	Index "Wi"
Copper Range Co., Painesdale, Mich.	Copper ore, white pine sandstone 1	1000B	2.68	BM-28	117
	SalidStolle 1	1000B	2.00	BM-35	11.7 10.5
				BM-48	10.8
		28		BM-65	11.7
Conner Bongo Co. Beinandala Nich	C			BM-100	13.5
Copper Range Co., Painesdale, Mich.	Copper ore, white pine amygdaloid	1000A	2.93	BM-28	24.7
	76	100011	2.00	BM-35	21.6
				BM-48	21.5
				BM-65	20.2
Corhart Refractories, Inc., Louisville, Ky,	Brick, refractory	809B	3.70	RM-4	45.0
				RM-8 RM-20	44.1 34.9
				RM-20	23.8
Corning Glass Works, Corning, N. Y.	Glass	945	2.69	RM-10	13.0
Correale Construction Co., Minersville, Pa.	Shale	1396	2.66	IC	14.7
Cowles Detergent Co., Cleveland, Ohio	Sodium silicate	806	2.03	RM-20	13.5
Cradock Ballast Quarry, Johannesburg, South Africa	Granite	2094	2.86	IC	15.9
Creevy, E. W., San Jose, Costa Rica	Manganese ore	968	3.37	RM-28	11.4
Crosset Chemical Co., Crosset, Ark.	Pitch hardwood	813	2.12	RM-35	3.7
Crucible Steel Co. of America, La Belle Works,					
Pittsburgh, Pa.	Iron, chilled cast iron	426	= 0		
	cuttings	436	7.8	BM-35	49.0
Crushed Rock Products Co., Schenectady, N. Y.	Limestone, hard	906	2.70	RM-10	49.5
Cyprus Mines Corp., Skowriotissa Nicosia, Cyprus	Copper ore	432	4.48	BM-65 BM-100	12.7 12.2
				BM-200	11.3
Dahlonega Gold, Georgia	Gold ore	250	2.78	BM-100	13.5
Deloro Smelting & Refining Co., Marmora, Ontario	Speiss	2474	7.15	BM-100	14.6
			5.76	BM-100	11.7
Denver Crushed Stone Co., Denver, Colo.	Andesite	2342	2.75	IC	25.2
Diamond Alkali Co., Cincinnati, Ohio	Sodium silicate anhydrous	739	2.70	RM-28	15.3
Diamond Crystal Salt	Gypsum rock	696	3.16	RM-28	11.2
Dorr Co., Sydvaranger, Norway	Iron ore	1921B	3.52	RM-14	21.6
Dragon Cement Co., Inc., Thomaston, Maine	Cement clinker I rounded	2022	2 (0)20	611000020	325 0
	pellets	2744	3.15	OCIG	9.9
December Control of the Theoretic Maior	C			OCIId	23.8
Dragon Cement Co., Inc., Thomaston, Maine	Cement clinker II rounded pellets	2744B	3.15	OCId	8.5
	•		70 m m m m	OCIId	19.8
Dragon Cement Co., Inc., Northampton, Pa.	Cement clinker	2737	3.15	OCId	12.9
				OCIId	36.7
Dravo Corp., Neville Island, Pittsburgh, Pa.	Gravel, pea	750	2.65	RM-10	14.8
Duke Limestone Cumberland Furnace, Tenn.	Limestone	2145	2.70	IC	11.7
Du Pont Co., Terre Haute, Ind.	Pyrite in coal	1613	3.60	IC	5.4

6 15 11 11		Test	Specific Gravity "S"	Test Machine –	
Company and Deposit Location	Material (Ore of)			Mesh	"Wi"
E. I. du Pont de Nemours & Co., East Chicago, Ind.	Sodium silicate	954	1.57	RM-10	11.7
Du Pont de Nemours & Co., Niagara Falls, N. Y.	Rock salt	939	2.4	BM-100	7.1
Du Pont de Nemours & Co., Wilmington, Del.	Iron, cast iron borings	325	7.8	BM-35	150.
Du Pont de Nemours & Co., Pa.	Magnetite	251	4.55	BM-200	15.1
Dyer, John T., Harrisburg, Pa.	Trap rock	1565	3.00	IC	13.9
Eagle Picher Smelting Co., Joplin, Mo.	Galena conc.	462	7.68	BM-48	3.2
Eagle Picher Smelting Co., Hillsboro, Ill.	Lead, sinter	341	3.75	BM-28	12.6
Eastern Mabellite Corp., New York, N.Y.	Iron ore	419	2.90	BM-200	18.0
East Malartic Mines Ltd., Amos, Quebec	Gold ore	779	2.80	BM-28 BM-48 BM-65 BM-150 BM-200	9.8 9.5 9.1 8.9 9.4
East Sullivan Mines, Ltd., Bal D' Or, Quebec	Copper ore, Cu Au Ag				
	Massive	1923	3.58	RM-14	10.6
	Copper ore, mill feed	0700	2.77	BM-200	14.1
Eldorado Mining & Refining Ltd., Port Hope, Ontario	Slag	2729	3.22	BM-65 BM-150	16.5 18.7
Eldorado Mining & Refining Ltd., Port Hope, Ontario	Limestone	2653B	2.70	BM-100 BM-200	19.6 21.5
Eldorado Mining & Refining Ltd., Port Hope, Ontario	Chart and Limestone	2653	2.68	BM-100 BM-200	23.5 20.6
Eldorado Gold Mines, Ltd., Port Radium, N.W.					
Territory, Canada	Pitchblende ore	1063A	2.77	RM-14 RM-14	15.8 18.8
Electro Manganese Corp., Knoxville, Tenn.	Manganese ore	2614B	3.95	BM-48 BM-100	14.6 14.5
	Manganese dioxide, electrolytic		3.57	BM-200	14.4 13.9
Electro Manganese Corp., Knoxville, Tenn.	Manganese ore from Belgian Congo Manganese ore from	1882	4.00	IC	6.5
	Atacama, Cuba		4.30	IC	8.9
Electro Metallurgical Co., Div. of Union Carbide & Carbon Corp., Niagara Falls, N.Y.	Manganese ore Balck African Ferro-manganese slag,	2782	4.16	BM-100	17.6
	shotted		3.16	BM-100	16.8
Electro Metallurgical Co., Niagara Falls, N. Y.	Ferro-chrome, HC hard	2517	7.02	IC	16.5
	Ferro-chrome, HC reg.		7.03	IC	3.2
Electro Metallurgical Co., Niagara Falls, N. Y.	Chromium Metal	1008	6.52	BM-65 BM-100 RM-28	60.0 69.0 27.0
Electro Metallurgical Co., Niagara Falls, N.Y.	Ferro-silicon 50%	947A	5.14	RM-65	8.7
Electro Refractories & Alloys Co., Buffalo, N. Y.	Silicon carbide, soft Silicon carbide, hard	1047B 1047A		BM-200 BM-200	20.5 41.5
Empire Star Mines Co., Lie Bright Mines, Emigrant Gap, Calif.	Gold ore	505	3.32	BM-100	12.4

Company and Deposit Location	Material (Ore of)	Test	Specific Gravity "S"	Test Machine –	Work Index ''Wi''
Empresa Siderugica Nacional, Bogota, Colombia	Iron ore	2666	2.97	Mesh IC	7.1
Emsco Refractories, Lehi, Utah	Quartzite	1178	2.60	BM-48 BM-65	7.6 9.8
Emsco Refractories Co., Lehi, Utah	Granite	1255	2.78	BM-48	10.7
Erie Mining Co., Hibbing, Minn.	Taconite, oxidized	28R2	2.98	IC	9.3
Erie Mining Co., Aurora, Minn.	Iron ore, taconite	2843	3.45	IC	16.9
Everist, Sioux Falls, S. Dak.	Quartz	1412	2.60	IC	22.1
Exolon Co., Blaisdell, N. Y.	Alum oxide Silicon carbide	1052	4.00 2.66	RM-20 RM-8 RM-20	17.2 8.5 13.7
Fabrica de Mieres, Quiros, Spain	Oolitic iron ore, low grade	1814	3.49	IC	9.7
Fabrica Nacional De Vidrio, Caracas, Venezuela	Quartz stone, white	1736	2.65	IC	7.6
Falconbridge Nickel Mines, Sudbury, Ontario	Nickel ore	2103	2.83	RM-14	16.6
Falconbridge Nickel Mines, Sudbury, Ontario	Nickel ore	1909	3.89	IC	16.5
Falconbridge Nickel Mines, Ltd., Carson, Ontario	Nickel ore, heavy sulfides	371	3.65	BM-100	9.6
Farrey Mining & Milling Co., Moline, Ill.	Zinc ore	184	2.90	BM-48	5.8
Federal Chemical Co., Mt. Pleasant, Tenn.	Phosphate rock	814	3.00	RM-8	7.9
Federal Chemical Co., Mt. Pleasant, Tenn.	Phosphate rock	814	3.00	RM-8 RM-28	7.0 8.6
Federal Chemical Co., Mt. Pleasant, Tenn.	Phosphate rock	533	2.30	RM-35	11.3
Federated Metals Div. A. S. & R. Co.	Cast zinc slab	1783	71.4	IC	35.7
Felder, K. T., Atlanta, Ga.	Garnet	269	2.96	BM-48	13.6
Firestone Rubber Co., Memphis, Tenn.	Rubber, hard broken storage cases	790	1.34	RM-48	74.7
Fiske Brick & Granule, Boston, Mass.	Silica clay	525	2.66	RM-10	9.6
Fletcher, H. E. Co., W. Chelmsford, Mass.	Granite	2850	2.61	IC	17.9
Flintcote Co., Thetford Mines, Quebec	Flint roofing granules	1604	2.60	BM	16.0
Fontana T. V. A., via Tennessee Copper Co., Copperhill, Tenn.	Fontana rock	1750	2.81	BM-48 RM-14 IC	9.5 9.1 5.9
Fontana Dam, T.V.A., Knoxville, Tenn.	Limestone	1372	2.60	IC	15.8
Fontana T. V. A., Fontana Dam, Tenn.	Fontana quartzite	1055	2.80	BM-100	9.3
Foote Mineral Co., Berwyn, Pa.	Zircon sand	2790	4.70	VBM	129.0
Foote Mineral Co., Kings Mt., N. Car.	Spodumene	2780	2.70	RM-20 RM-48	8.1 12.1
Foote Mineral Co., Paoli, Pa.	Sinter, roasted quenched	2762	2.6	OCIIw	29.5
Foote Mineral Co., Paoli, Pa.	Limestone and spodumene	274 6D	2.7	OCIW OCIIW	20.6 10.4
Foote Mineral Co., Paoli, Pa.	Limestone	27460	2.65	IC	16.7
Foote Mineral Co., Paoli, Pa.	Limestone and spodumene	2746	2.7	OCIW OCIIW	23.3 8.3
Ford Motor Co., Dearborn, Mich.	Iron, mill scale	1035 <i>A</i>	5.80	BM-100 BM-200	16.0 19.2

	· N-1	Test	Specific Gravity "S"	Test Machine —	Work Index
Company and Deposit Location	Material (Ore of)	4.000000		Mesh	"Wi"
Francoeur Gold Mines, Ltd., Arntfield, Quebec	Gold ore	1627	2.64	BM-200	14.9
Franklin Limestone Co., Nashville, Tenn.	Limestone	953	2.60	RM-10	14.0
Fresnillo Co., Zacatecas, Mexico	Gold ore	2675	3.00	BM-48 RM-14	16.5 15.8
Galigher Co., Salt Lake City, Utah	Fluorspar ore	2244	2.76	BM-200	10.9
Galigher Co., Salt Lake City, Utah	Gold ore	1977	2.6	RM-20	13.2
Galigher Co., Salt Lake City, Utah	Gold ore	889	2.75	BM-200	14.5
Garco Products Co., Ford City, Pa.	Sand, Garco	1181	2.09	RM-28	5.2
Gaudin, San Jose, Bolivia	Tin ore, pyritic	1254	3.84	BM-200	11.9
General Cement Co., Athens, Greece	Cement raw materials	2283	2.7	BM-200	10.3
General Chemical Div. of Allied Chemicals, Boulder, Colo.	Sulfide conc.	2581C	4.05	BM-200	10.7
General Chemical Div. of Allied Chemicals, Boulder, Colo.	Pyrrhotite	2581B	3.97	BM-48	8.0
General Chemical Div. of Allied Chemicals,	Pyrrhotite ore	2581	3.75	BM-200	12.7
General Chemical Co., Brooklyn, N. Y.	Clay, calcined	768	2.0	RM-10 RM-35	5.5 6.5
General Crushed Stone Co., Le Roy, N. Y.	Limestone	2689	2.69	IC	22.2
General Crushed Stone Co., Quakertown, Pa.	Trap Rock	1621	3.04	IC	13.1
General Crushed Stone Co., Auburn Plant, N. Y.	Limestone	1533	2.60	IC	10.7
General Manganese Co., Chamberlain, S. Dak.	Manganese ore	734	2.70	BM-100	12.7
Geneva Steel Co., Keighley Quarry, Utah	Limestone Dolomite	2588	2.60 2.70	IC IC	11.7 15.7
Getchell Mines, Inc., Red Horse, Nevada	Gold ore arsenical	1241	2.69	BM-28 BM-35 BM-65 BM-100 BM-200	9.6 11.9 11.8 11.7 11.7
Getchell Mines, Inc., Golconda, Nev.	Gold ore	714	2.60	BM-100	13.9
Glens Falls Portland Cement, Glens Falls, N. Y.	Limestone	1661	2.70	IC	6.6
Globe Iron Co., Duluth, Minn.	Hematite, specular	1571	2.90	IC	15.2
Giffels and Vallet, Detroit, Mich.	Ferro-silicon, 75% Si	1067	3.23	BM-65 BM-100 BM-200	7.2 8.1 13.0
Golding-Keene Co., Keene, N. H.	Feldspar	1553	2.58	BM-200	11.6
Golding Keene Co., Keene, N. H.	Feldspar	784E	3 2.58	RM-14 RM-20	10.6 9.6
Graham Bros., Inc., El Monte, Calif.	Granite pebbles	1516	2.60	IC	8.3
Granby Consolidated, Princeton, British Columbia	Copper ore, Chile	2682 B & C	2.84	BM-65 BM-100 BM-200 RM-14	14.5 15.3 13.4 14.4
Granby Consolidated, Princeton, B. C., Canada	Copper ore	1566E	3 2.83	BM-200	21.2
Granby Consolidated, Princeton, B. C., Canada	Copper ore	1566	2.83	RM-14	19.4
Granite Rock Co., Watsonville, Calif.	Granite	1772	2.70	IC	12.2

Company and Donasia Location	Material (Ore of)		Specific Gravity ''S''	Test Machine —	Work Index
Great Notch Granules Co., Great Notch, N. J.	Trap rock			Mesh	"Wi"
Great Notch Granules Co., Great Notch, N. J.	4836 - 100 -	1440	2.68	RM-14	17.6
Great Western Sugar Co., Horse Creek, Wyo.	Trap rock	1363	2.68	IC	20.6
Gregg, John D., Roscoe, Calif.	Limestone	1487	2.57	IC	12.7
Grootvlei Properties, Ltd., Transvaal, SouthAfrica	Granite pebbles	1516	2.60	IC	7.2
Glocivier Fioperties, Lita, Transvaar, SouthAfrica	Gold ore, quartzite	2054	2.63	BM-48 BM-100	13.5 15.9
				BM-200	16.6
	Gold ore, banket Gold ore, mill feed		2.65 2.65	BM-100 BM-200	14.5 15.3
Halliburton Portland Cement Co., Corpus Christi, Texas	Limestone crystalline	2703	2.71	BM-200	7.8
Halliburton Portland Cement Co., Corpus Christi,					
Texas	Cement raw material	2160B	2.70	BM-48 BM-200	10.2 13.0
Halliburton, E. P., Caracas, Venezuela	Limestone, coral	1605	2.65	BM-200	11.3
Hamilton-Beauchamp & Woodworth Co.,					
San Francisco, Calif.	Quartz	725	2.65	BM-200	12.0
Hanna, M. A., Co., Groveland Pilot Plant	Iron ore, hematite	2815	3.50	IC	17.4
Hanna, M.A. Co., Hibbing, Minn.	Iron ore, taconite	2240B	3.46	RM-20 RM-35	10.2 8.5
Hanna Ore Co., Newton Falls, N.Y.	Iron ore, magnetite	1397	4.24	IC	9.6
Hanna, M. A. Co., Clifton Mines, N. Y.	Iron ore, magnetite	1022A	4.60	RM-28 RM-28	11.3 10.1
Harbison Walker Co., Pittsburgh, Pa.	Gravel	2755	2.70	BM-48 BM-150 RM-6	10.7 15.2 7.6
Harbison Walker Co., Freedom, Wis.	Quartzite	2432	2.65	IC	7.8
Harbison-Walker Refractories, Freedom, Wis.	Granite, red	1908	2.60	IC	14.2
Harbison-Walker Refractories, Freedom, Wis.	Granite, coarse grained Granite, fine grained	1793	2.71 2.71	IC IC	22.6 16.0
Harbison-Walker Refractories, Ind.	Magnesite	1768	3.10	BM-200	19.5
Harnischfeger Corp., Milwaukee, Wis.	Ferro-molybdenum	2775	8.0	IC	174.0
Harris Engineering Co., Bath, Maine	Trap rock quarry stone	2006	2.80	IC	24.5
Hasaga Gold Mines, Ltd., Red Lake, Ontario	Gold ore	2131	2.80	BM-200 RM-14	17.4 18.0
Helena Sand & Gravel Co., Helena, Mont.	Trap rock	1469	2.81	IC	13.5
Highland Sand & Gravel Co., Dedham, Mass.	Gravel	2019	2.82	IC	10.9
Holderbank-Wildegg, Ltd., Quebec	Limestone with shale	2791	2.61	OCId OCIId BM-200	10.5 9.8 10.5
Homestake Mining Co., Lead, S. Dak.	Gold ore	1965	3.47 3.15	BM-200 IC	13.8 9.45
Homestake Mining Co., Lead, S. Dak.	Gold ore	1965C		RM-10	13.8
			3.12	RM-28 BM-48	10.6 11.4
			J	BM-65	10.9
				BM-100 BM-200	11.5 11.5

		Test		Test Machine –	Work Index
Company and Deposit Location	Material (Ore of)	No.	"S"	Mesh	"Wi"
Honolulu Construction and Drying Co., Honolulu, Hawaii	Basalt, volcanic	2777	3.01	IC	20.1
Howe Sound Exploration, Snow Lake, Manitoba	Andesite	2389	2.81	IC	14.3
	Quartzite Schist		2.69 2.84	IC IC	12.2 12.7
30%	Andesite		2.76	IC	15.0
Hwa-Hsin Cement Co., Shanghai, China	Limestone stratified	1715	2.70	IC	5.5
	Cement raw materials		2.70	BM-200	10.8
Iafolla, John, Construction Co., Portsmouth, N. H.	Trap rock, hard	1933	2.80	IC	56.0
Icaxa & Co., Panama City, Panama	Sandstone Limestone	1398	2.60 2.60	IC IC	14.8 11.6
Idan, E. C., Albuquerque, N. Mex.	Gypsum	1769	2.30	IC	6.1
Illinois Zinc Co., Chicago, Ill.	Coal	376		BM-65	15.8
Industrial Silica Corp., Youngstown, Ohio	Gravel	12 04	2.65	RM-10 RM-20	10.8 13.5
and the same of the same with	Limestone	2159	2.65	IC	5.4
Inland Lime & Stone Co., Manistique, Mich.	Limestone	30R		IC	6.6
Inland Lime & Stone Co., Manistique, Mich.		837	3.52	BM-48	6.3
Inland Steel Corp., Chicago, Ill.	Iron ore, magnetite	657	3.32	BM-150	9.1
International Agriculture Corp., Mulberry, Fla.	Phosphate fertilizer	394	2.50	BM-100	10.2
International Mining & Chemical Corp., Mulberry, Fla.	Phosphate pebble	2126	2.74	RM-35	10.0
International Nickel Co., Huntington, W. Va.	Nickel matte	1009	A 6.35	RM-14	8.6
International Nickel Co., Sudbury, Ontario	Nickel-copper ore	2128	3.41	BM-200	14.2
8	NI-lat as		2.92	RM-14 IC	18.5 19.0
	Nickel ore	2357		IC	13.8
Interstate Iron Co., Calumet, Minn.	Iron ore	1931		IC	15.6
Interstate Iron Co., Virginia, Minn.	Iron ore, taconite			BM-200	11.2
Italcementi, Milan, Italy	Cement clinker Clinker and slag	2853	2.6	BM-200	13.8
Iraq Cement Co., Bagdad, Iraq	Cement raw material	1652		BM-200	5.0
Jackson County Iron Co., (Inland Steel)					
Black Falls, Wis.	Iron ore, magnetite	1023	A 3.98	BM-100 BM-150	10.3 9.5
John Douglas Co., Cincinnati, Ohio	Pottery	1472	2.52	BM-150	14.3
Jointa Lime Co., Inc., Glens Falls, N. Y.	Dolomite, hard	2715	2.72	IC	18.6
Jones & Laughlin Steel Co., Negaunee, Mich.	Iron ore, Tracy Shaft	2721	C 3.44	BM-65	11.3
Jones & Daugham Steet Cor, Magaman, mann	TENNESS (CONT. CONTRACTOR OF THE SECOND STATE			BM-100	9.8
				BM-200 BM-325	9.0 9.5
				RM-8	14.0
10				RM-14	12.6
				RM-20	11.6
				IC	7.5

Company and Deposit Location	Material (Ore of)		Specific Gravity ''S''	Test Machine —	Work Index
Jones & Laughlin Steel Co., Negaunee, Mich.				Mesh	"Wi"
Jones & Laugmin Steel Co., Negaunee, Mich.	Iron ore, Tracy open pit	2721B	3.24	BM-65 BM-100 BM-200 BM-325 RM-8 RM-14 RM-20 IC	13.7 12.5 10.8 10.8 15.9 14.7 13.8 7.2
Jones & Laughlin Ore Co., Star Lake, N.Y.	Iron ore, magnetite	2525	3.47	RM-14	4.5
Jones & Laughlin Ore Co., Star Lake, N. Y.	Iron ore, magnetite	2317B	3.28 3.60	RM-14 IC RM-14 IC	8.7 7.6 8.1 7.1
Jones & Laughlin Ore Co., Star Lake, N. Y.	Iron ore, magnetite Benson			ıc	7.1
35	West	2317	3.36	RM-14 IC	6.3 9.8
*	Iron ore, magnetite Benson East Iron ore, magnetite		3.55 3.50	RM-14 RM-14	5.6 4.5
Jones & Laughlin, Newton Falls, N. Y.	Iron ore, magnetite	1905	3.06	IC	13.2
Jones & Laughlin, Star Lake, N.Y.	Iron ore, magnetite	1644B	3.31 3.23	RM-14 RM-14	8.0 7.0
Jones & Laughlin Steel Corp., Aliquippa Works, Pa.	Slag, blast furnace	1499	2.00	RM-14	5.4
Jordan Co., Chicago, Ill.	Zinc slag	1085	3.66	RM-28	18.0
Juliocapua - White Cement Plant, Rio de Janeiro, Brazil	Cement raw material	2673	2.72	BM-200	8.5
Kalguri, Ltd., (North) Kalguorie, Australia	Gold ore Gold ore	2524	3.34 3.23	RM-14 RM-14	15.4 15.7
Kaiser Co., (Iron Steel Div.) Fontana, Calif.	Coke	1143	0.95	RM-10	12.0
Kaiser, Henry J., Mt. View, Calif.	Clay	877	2.27	BM-65 BM-200	7.1 9.5
a e	Limestone		2.72	BM-65 BM-200	9.1 11.5
Kelowna Exploration Co., Ltd., Headly, B. C.	Gold ore, basic with pyrite	676	3.22	BM-48 BM-65 BM-100 BM-150	21.4 19.8 19.5 18.5
1 2 2 2 3				BM-200	17.4
Keir & Cawder, Glasgow, Scotland	Porphyry	2057	2.69	IC	38.7
Kennecott Copper Corp., Ray, Ariz.	Copper ore	1752	2.65	RM-14	10.8
Kerr-Addison Mines, Ltd., Virginiatown, Ontario	Gold ore	1765	2.00	RM-14	14.7
Kerr-Addison Gold Mines, Ltd., Larder Lake, Ontario	Gold ore	799D	3.01	BM-28 BM-35 BM-150 BM-200	20.5 17.5 13.3 12.4
Kerr-Addison Gold Mines, Ltd., Larder Lake, Ontario	Gold ore	799A	3.05	BM-28 BM-35 BM-150 BM-200	14.5 13.5 11.5 12.2
Kershaw & Lambert, Cartersville, Ga.	Limestone, hard	1929	2.70	RM-4	33.3

Commence of Describit continu	Material (Ore of)		Specific Gravity "S"	Test Machine — Mesh	Work Index "Wi"
Company and Deposit Location		763	3.20	RM-14	12.8
Kinetic Chemicals, Inc., Arrey, N. Mex.	Fluorspar	703	3.20	RM-48	10.2
Knight, Wm., Lakefield, Fla.	Limestone rock	1709	2.58	IC	9.0
Knight, Wm., N. Car.	Iron ore, magnetite	1379	4.77	IC	3.1
Koppers Co., Kubuta, Pa.	Alum-nickel pigs	1505	3.70	IC	13.4
Korite Corp., Milwaukee, Wis.	Shale, iron stained	677	2.65	BM-200	21.2
Krebs Pigment & Color Corp., Baltimore, Md.	Ilmenite sand, pigment	392	4.65	BM-200	14.8
LaClede Christy Clay Products Co., St. Louis, Mo.	Kyanite ore, calcined	1416	2.89	IC	5.9
LaClede Christy Clay Products Co., East St. Louis,		2		45	
Ill.	Flint, calcined	941	2.70	BM-48	31.0
Lake Shore Mines, Ltd., Kirkland Lake, Ontario	Gold ore	1831	2.65	BM-200 RM-6 RM-14	19.5 22.8 18.7
Lake Shore Mines, Kirkland Lake, Ontario	Gold ore	1644	2.70	BM-200 RM-6 RM-10 RM-14 RM-8	16.7 19.3 16.8 16.5 17.7
La Luz Mines, Ltd., Sivna, Nicaragua	Gold ore, Olivene	932	2.98	BM-28 BM-35 BM-48 BM-65 BM-100 BM-65	18.6 18.0 17.7 16.3 15.9 11.02
Lawrence Portland Cement Co., Rockland, Me.	Cement clinker	1519	3.15	IC	2.5
Lawrence Portland Cement Co., Northampton, Pa.	Cement clinker	972	3.15	BM-150 BM-200	9.9 9.1
LeRoy Lime & Crushed Stone Corp., LeRoy, N.Y.	Limestone	2690	2.68	IC	15.2
Liberia Mining Co., Ltd., Monrovia, Liberia	Iron ore, hematite	2509	4.85	IC	9.0
Liberia Mining Co., Ltd., Monrovia, Liberia	Iron ore, hematite	2093	4.72	IC	6.8
Liddell, W. A., Co., El Paso, Texas	Gold ore	632	2.71	BM-100	15.5
Limestone Products Corp. of America, Newton, N. J.	Limestone	1700	2.70	RM-14 RM-35	10.1 8.5
Limestone Products Corp. of America, Newton, N. J.	Limestone	1395	2.70	RM-35	8.8
Little Long Lac Gold Mines, Geraldton, Ontario	Gold	570	2.64	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200	17.2 16.4 17.0 16.8 17.6 15.8
Lone Star Cement Co., Nazareth, Pa.	Limestone, shale	2226E	3 2.75	BM-200 IC	12.7 3.3
Lone Star Cement Co., Nazareth, Pa.	Cement raw material Limestone	2226A	2.71 2.71	BM-200 IC	10.9 6.9
Lone Star Cement Co., Birmingham, Ala.	Limestone	1942	2.71	IC	8.4

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity "S"	Test Machine — Mesh	Work Index ''Wi''
Lone Star Cement Co., Dallas, Texas	Limestone	1910	2.65	IC	5.9
Lone Star Cement Co., Synden, Texas	Limestone	1844	2.60	IC	9.6
Long Valley Ore Co., Morristown, N. Y.	Graphite	860	1.60	BM-150 BM-200	42.8 46.0
Loomis Talc Co., Syracuse, N.Y.	Talc	1384	2.83	IC	7.8
Louisville Cement Co., Senersburg, Ind.	Limestone	2002	2.66	BM-200	10.6
Louisville Cement Co., Milltown, Ind.	Lime rejects	1090	1.19	RM-20	5.0
Lutz Stone Co., Oshkosh, Wis.	Limestone	1961	2.72	IC	14.2
Lyman Rickey, Columbus, Nebr.	Gravel	1916	2.70	RM-10	15.3
Lynn Sand & Stone Co., Lynn, Mass.	Gabbro Rhyolite olivene	1502	2.85 2.65	IC IC	18.2 15.8
MacDonald Mines, Ltd., Noranda, Quebec	Arsenopyrite with quartz	2020	4.55	BM-100 BM-200 IC	7.8 11.7 7.1
Madsen Red Lake Gold Mines, Red Lake, Ontario	Gold ore	626	2.65	BM-65	15.0
Magma Copper Co., Superior, Ariz.	Copper ore, granite	2563 EFG	2.63	BM-48 BM-65 BM-200 RM-14 IC	13.7 13.3 11.5 12.9 10.7
Magma Copper Co., Superior, Ariz.	Copper ore, granite	2563D	2.68	BM-48 BM-65 BM-100 RM-14 IC	13.8 13.6 14.3 14.9 10.7
Magma Copper Co., Superior, Ariz.	Copper ore, granite	2563	2.63	BM-100 BM-200 IC	12.4 12.8 10.7
Magma Copper Co., Phoenix, Ariz.	Copper ore	2419	2.53	IC	7.8
Magnesium do Brazil, Ltd., Rio de Janeiro, Brazil	Magnesite "oro" Magnesite "neg"	1698	3.50 2.68	BM-200 BM-200	8.8 9.3
Magnet Core Barium Co., Malvern, Ark.	Barite, soft Barite, medium Barite, hard	2330	4.03 3.83 3.56	BM-200 BM-200 BM-200	3.8 5.2 8.9
Maine Development Commission, Augusta, Me.	Slate	1679	2.37	BM-100 RM-20	13.4 13.9
Malartic Gold Fields Co., Halet, Quebec	Gold ore	1592	2.90	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200 RM-10	16.5 16.5 14.3 12.8 13.0 12.8 13.5 16.4
Marievale Consolidated Mines, Ltd., Transvaal, South Africa	Gold ore, quartzite	2054	2.65	RM-14	14.6

Company and Deposit Location	Material (Ore of)		Specific Gravity "S"	Test Machine — Mesh	Work Index "Wi"
Mario Panduff Co., Sterling, Mass.	Dolomite	2386	2.75	IC	8.0
Marquette Carbonate Co., Milwaukee, Wis.	Iron ore, hematite	342	3.62	BM-100	9.3
Martin Bros., Butte, Mont.	Gold ore, pyritic dark color	1675	2.72	IC	5.7
Martin Bros., Butte, Mont.	Gold ore, pyritic light color	1675A	2.47	IC	3.7
Material Service Corp., Lockport, Ill.	Gravel, pea	765	2.65	RM-6	13.8
McBroom-Bradley, Northern Minn.	Iron ore, magnetite with ilmenite	1254	4.68	BM-100 RM-14 IC	14.1 11.5 5.9
McIntyre Porcupine Mines, Ltd., Porcupine, Ontario	Gold ore	2036	3.13	BM-65 BM-200 RM-6 RM-14	12.2 13.4 16.2 13.2
Mepham, Geo. S., East St. Louis, Ill.	Barite	1265	4.66	RM-20	4.4
Merrill Co., San Francisco, Calif.	Gold ore	1722	2.64	BM-65	11.7
Merritt, E. T., Duluth, Minn.	Gold ore	301	2.72	BM-100	14.5
Metals Refining Co., Hammond, Ind.	Iron ore, hematite	2554	5.22	BM-35	7.5
Miami Copper Co., Miami, Ariz.	Copper ore, Castle Dome	1042 B&C	2.75	BM-28 BM-35 BM-150 BM-200	13.7 13.4 12.6 13.5
Miami Copper Co., Miami, Ariz.	Copper ore, Miami	1042A	2.69	BM-28 BM-48 BM-65 BM-100	14.5 12.7 13.2 12.3
Miami Copper Co., Miami, Ariz.	Iron, cast shot	372	7.07	BM-65	198.0
Mignatti Construction Co., Glenside, Pa.	Granite, hard	2649	2.84	IC	26.5
Milwaukee Steel Co., Milwaukee, Wis.	Emery scrap grinding wheels	989	3.22	BM-48	57.0
Mineralite Corp., Bethlehem, Pa.	Mineral wool	399	2.00	BM-200	19.0
Mineral Mining Corp., Kershaw, S. Car.	Gold ore Mica schist	782	2.40 2.38	BM-35 RM-35	6.0 11.0
Minerals Separation of North America, Hibbing, Minn.	Iron ore, hematite, red	1193	2.78	BM-150	12.5
Mines de Bong, Min Camky, Annam, Indo China	Gold ore, sulfides	339	3.07	BM-150	13.3
Mines de Bor, Yugoslavia	Copper ore	249	3.18	BM-200	8.4
Mines Domainales De Potasse D'Alsace, Mulhouse, France	Potash salt	1716	2.15	RM-35 IC	8.0 3.4
Mines Domainales De Potasse D'Alsace, Mulhouse, France	Potash salt, sylvite and halite	726	2.20	RM-65	10.3
Mines Experiment Station, Minn.	Iron ore, magnetite	1995	4.61	RM-200	13.5

Company and Deposit Location		Test No.	Specific Gravity ''S''	Test Machine —	Work Index ''Wi''
Mines & Usines de Salsigne, France	Material (Ore of) Copper matte	2407	4.27	Mesh IC	
Mining & Smelting Co. of Canada, Kimberley, B. C.	Copper ore	1692	3.80	RM-10	6.8 15.3
Minnesota Mines Corp., Idaho Springs, Colo.	Gold ore	637	2.81	BM-65	11.4
manager manager control	dora of	037	2.01	BM-150	12.8
Minnesota Mining Mfg. Co., St. Paul, Minn.	Iron ore	2010	2.60	BM-200	16.7
Minnesota Mining & Mfg. Co., Wausau, Wis.	Shale	1217	2.55	BM-100 BM-200 RM-10	15.5 15.6 23.8
Mississippi Lime Co., St. Genevieve, Mo.	Limestone, white gray	1324	2.60 2.65	IC IC	6.3 12.9
Missouri Portland Cement Co., St. Louis, Mo.	Cement raw material	1656	2.60	BM-200	7.7
Missouri Portland Cement Co., St. Louis, Mo.	Cement raw material	1345	2.62	BM-200 IC	6.0 7.1
Missouri Portland Cement Co., St. Louis, Mo.	Cement raw material, Batesville, Ark.	1318	2.60 2.66 2.6	BM-200 IC IC	10.7 17.5 17.8
	Limestone from Memphis		2.63	IC	17.6
Moinho Santista (Bunge Corp.), Brazil	Phos. apatite ore	1732	3.38	BM-48	6.9
Molybdenum Corp. of America, Denver, Colo.	Molybdenum ore	1140	2.93	RM-65	12.4
Montecatini Co., Italy	Lead-zinc ore	469	3.87	BM-48	12.3
Monsanto Chemical Co., Anniston, Ala.	Alumina, fused	1776	4.51	RM-8	23.3
Monsanto Chemical Co., Columbia, Tenn.	Ferro-phosphorus	1267	7.08	BM-100 BM-200	1.2 4.8
Monsanto Chemical Co., Anniston, Ala.	Slag, black granulated	1045	3.16	BM-65 BM-100	7.8 10.5
Monsanto Chemical Co., Anniston, Ala.	Emery, abrasive	656	3.91	BM-100	22.1
Montello Granite Co., Montello, Wis.	Granite, red	1674	2.65	IC	10.2
Moose Mountain Co., Sellwood, Ontario	Iron ore, magnetite	756	3.42	BM-65 BM-150 BM-200 RM-6	11.7 10.8 11.7 25.3
Morrison-Kiewit Macco Co., Lowell, Ore.	Gabbro	2650	2.81 2.81	IC IC	21.1 19.0
Morrison-Kiewit Macco Co., Lookout Point, Ore.	Gabbro	2626	2.81	IC	16.8
Morrison-Knudsen Co., Eugene, Ore.	Diorite	2473	2.83	RM-4	17.3
Morrissey, J. D., Philadelphia, Pa.	Shale	2726	2.68	IC	19.0
National Lead Co., MacIntyre Div., Tahawus, N. Y.	Titanium ore, magnetite tailings	1941	3.82	BM-48 BM-65	7.4 9.8
National Lead Co., MacIntyre Div., Tahawus, N.Y.	Titanium ore with magnetite	1800B	4.40	BM-35 BM-48 BM-65 BM-100 BM-150 BM-200	9.1 10.5 10.1 12.0 14.0 17.0

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Company and Deposit Location	Material (Ore of)	110.		Mesii	
National Lead Co., MacIntyre Div., Tahawus, N. Y.	Titanium ore with magnetite	1757	4.46	RM-14 RM-65 IC	12.0 13.7 14.1
National Lead Co., Titanium Div., St. Louis, Mo.	Titanium ore	1017	4.40	RM-20 RM-28	10.5 10.2
National Lead Co., New York, N. Y.	Iron ore, red hematite Iron ore, mag. conc.	2851	2.7 2.9	RM-6 BM-100	13.4 8.9
National Mortar & Supply Co., Pittsburgh, Pa.	Glass raw material	2111	2.43	RM-14	9.8
National Tube Co., Lorain Works, Ohio	Ferro-manganese	1865	7.20	IC	4.7
National Zinc Co., Bartlesville, Okla.	Zinc residue	161	1.62	BM-48	42.5
Nemegos Uranium Corp., Buffalo, N.Y.	Phosphate ore, apatite, mag.	2765	4.85	BM-65	11.6
Nevada Consolidated Copper Co., Chino Mines, Hurley, N. Mex.	Copper ore, Chino	1060	3.05	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200	8.4 10.4 9.6 10.2 10.5 11.0
Nevada Massachusetts Co., Mill City, Nev.	Tungsten ore	942	2.86	BM-65	10.5
New Broken Hill Consolidated, Ltd., Australia	Lead ore, lead lode Zinc ore, zinc lode	2422	3.74	BM-150	12.0 12.0 12.5 14.1 6.5
New Cornelia Copper Co., Ajo, Ariz.	Copper ore	2081	2.69	IC	21.3
New Cornelia Copper Co., Ajo, Ariz.	Copper ore	684	В 2.68	BM-28 BM-35	18.5 16.6
New England Lime Co., Adams, Mass.	Calcite, white	1066	в 2.71	RM-6	4.5
New England Lime Co., Canaan, Conn.	Dolomite, white	1066	A 2.70	RM-6	2.5
New Jersey Zinc Co., Franklin, N. J.	Zinc ore	1951	2.89	BM-48 RM-14	15.7 22.0
New Jersey Zinc Co., Ogdensburg, N. J.	Zinc ore	930	3.98	RM-35	11.4
New Jersey Zinc Co., Palmerton, Pa.	Zinc conc.	849	4.18	BM-200	11.2
New Jersey Zinc Co., Palmerton, Pa.	Willemite ore	503	4.26	BM-200	10.2
New York Trap Rock Co., Clinton Point, N.Y.	Trap rock	2685	В 2.91	IC	11.0
New York Trap Rock Co., Tompkins Cove, N. Y.	Trap rock B Trap rock A	2685	2.80 2.80		9.2 6.0
Nicaro Nickel Co., Cuba	Nickel ore	1075	2.16	BM-150	4.0
B. C. Nickel Mines, Choate, British Columbia	Nickel ore, sulfides	716	4.12	BM-150	11.3
Niles Fire Brick Co., Niles, Ohio	Silica pebbles	2658	2.67	RM-14	11.5
Noranda Mines, Inc., Noranda, Quebec	Gold ore		2.85	BM-48 BM-100 BM-200	20.3 18.5 16.0

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity ''S''	Test Machine — Mesh	Work Index ''Wi''
North American Portland Cement Corp., Security, Md.	Cement clinker No. 1 Cement clinker No. 2	1114	3.15 3.15	BM-200 BM-200	14.7 12.4
Northwest Magnesite Co., Chewelah, Wash.	Magnesite	1911	3.00	IC	9.2
Northwest Magnesite Co., Chewelah, Wash.	Magnesite	1031	3.09	BM-65 BM-100	8.6 9.5
O'Brien Gold Mines, Cadillac, N. W. Quebec	Gold ore	2449	2.77	BM-100	14.1
O'Connell, Daniel & Sons, Holyoke, Mass.	Trap rock	2784	2.94	IC	26.7
Oglebay Norton Co., Ashland, Ky.	Iron ore, magnetite conc.	2705	4.72	BM-200	12.8
Oglebay Norton Co., Babbitt, Minn.	Iron ore, taconite	1167E	3.87	BM-100	7.7
Oglebay Norton Co., Babbitt, Minn.	Iron ore, taconite	1167	4.00	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200	10.5 10.7 10.2 10.7 10.7 11.8 12.3
Ohio Ferro-Alloys Corp., Tacoma, Wash.	Ferro-Chrome, Cr 68%, C 5 Ferro-Chrome, Cr 68%, C 7		6.80 6.95	IC IC	6.7 8.4
Ohio Ferro-Alloys Corp., Akron, Ohio	Slag, ferro-chrome	933	3.32	RM-20	12.8
Ohio Ferro-Alloy Corp., Janesville, Ohio	Chrome alloy	788	2.73	BM-150 RM-8	9.5 9.8
Old Colony Crushed Stone Co., West Quincy, Mass.	Limestone, gray	1390	2.60	IC	16.5
Oliver Iron Mining Co., Hibbing, Minn.	Iron ore, hematite, vir.	1931	3.26	IC	10.5
Oliver Iron Mining Co., Souden Mine, Tower, Minn.	Iron ore, hematite	1515	4.85	IC	13.5
Oliver Iron Mining Co., Soudan Mine, Tower, Minn.	Iron ore, hematite Iron ore, hematite, jasper	1427	4.93 3.42	IC IC	16.5 11.0
Orinoco Iron Ore Co., Cerro Bolivar, Venezuela	Iron ore, ferruginous quartzite	2684	3,53	IC	12.0
Ottawa Silica Co., Ottawa, Ill.	Silica sand	1727	2.65	BM-35	19.6
Oxford Mining & Milling Co., Bates, Me.	Feldspar	805	2.60	RM-14	16.4
Oy Mercantile, Helsinki, Finland	Iron ore, magnetite, Otanmaki	2065	4.32	IC	10.0
Ozark Ore Co., Iron Mountain, Mich.	Iron ore, hematite	2355	3.40	IC	17.6
Ozark Ore Co., Iron Mountain, Mich.	Iron ore, hematite	1889	2.88	IC	18.5
Ozark Ore Co., Iron Mountain, Mich.	Iron ore, hematite tailing	1979	3.47	RM-8 RM-10 RM-14	19.3 17.6 16.5
Pacific Coast Aggregates, Pleasanton, Calif.	Gravel	324	1.53	BM-28 BM-35	27.0 27.0
Palmetto Quarries, Columbia, S. Car.	Granite	1710	2.63	IC	17.5
Pan-American Engr. Co., Santa Maria, Del Ore, Mex.	Gold ore	574	3.10	BM-65 BM-100 BM-200	11.8 13.5 14.0
Pardners Mine Corp., N. Y., Cuba	Iron ore, limonite	869	2.0	BM-150	6.0
Peel Construction Co., Niagara Falls, N.Y.	Trap rock	1868	2.64	IC	18.7

	W 1 / O D	Test No.	Specific Gravity ''S''	Test Machine — Mesh	Work In dex "Wi"
Company and Deposit Location	Material (Ore of)	110.		Mesii	- " 1
Pend Oreille Mines & Metals Co., Metaline Falls, Wash.	Limestone	2552	2.70	IC	14.1
Pend Oreille Mines & Metals Co., Metaline Falls, Wash.	Limestone	2402	2.78	IC	13.2
Penn Cobalt Mines, Lachine (CAC), Quebec	Silver ore	2749		BM-65 BM-200	22.4 18.3
Penn. Dixie Cement Co., Kingsport, Tenn.	Limestone, high silica Limestone, high calcium	2825	2.68 2.68	IC IC	14.1 13.4
Pennsylvania Salt Mfg. Co., Natrona, Pa.	Iron ore, siderite Iron ore, granite Iron ore, fluorspar	1536	3.80 2.70 3.10	IC IC	2.4 13.1 4.4
Pennsylvania Salt Mfg. Co., Natrona, Pa.	Cryolite ore	958	3.20	RM-48 IC	5.5 3.3
Pennsylvania Sand Glass Corp., Lewiston, Pa.	Sand, jasper	1688	2.65	BM-200	180.
Petosky, P. C. Co., Petosky, Mich.	Limestone, fine grained Limestone, coarse grained	1402	2.58 2.63	IC IC	6.1 14.6
Phelps-Dodge Corp., Morenci, Ariz.	Copper ore, hard monzonite porphyry	1937B	2.64	BM-65 BM-200 IC	10.3 12.0 8.4
Phelps-Dodge Corp., Morenci, Ariz.	Copper ore, granite porphyry Copper ore, soft	1937	2.66	IC	13.8
	monzonite porphyry		2.70	IC	8.9
Phelps-Dodge Corp., Morenci, Ariz.	Copper ore	913	2.63	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200 RM-20 RM-28 RM-35 RM-48	8.6 9.5 10.3 11.0 11.7 12.5 13.0 9.0 8.6 10.6
Phelps-Dodge Corp., Ajo, Ariz.	Copper	684	2.68	BM-48 BM-65 BM-100 BM-200	15.0 14.3 13.7 14.5
Phosphate Recovery Corp., Cullen, Va.	Kyanite with quartz	760	2.82	RM-48	11.0
Picacho Mining Co., Yuma, Ariz.	Gold ore, oxidized quartz	880	2.55	BM-48 BM-65	11.3 12.0
Picacho Mining Co., Yuma, Ariz.	Gold ore, decomposed granite	517E	3 2.64	BM-65	14.0
Picacho Mining Co., Yuma, Ariz.	Gold ore, granite	517A	2.64	RM-8	8.6
Pickands Mather Co. (Erie Mining), Hibbing, Minn.	Iron ore, taconite(Hibbing		2 12/24		00.5
	pit 11E	1803	3.25	RM-10 RM-14 RM-20	22.2 19.0 17.5
				IC	26.9

Company and Deposit Location	Material (Ore of)	Test	Specific Gravity "S"	Test Machine — Mesh	Work Index "Wi"
Pickands Mather Co. (Eric Mining), Hibbing, Minn.		110.	-	Mesn	WI
r revailed wather co. (Effe whiling), Hibbing, with.	Iron ore, taconite pit 5D (Aurora)	1803	3.28	RM-10 RM-14 RM-20 IC	23.7 20.3 19.3 14.5
Pittsburgh Coal Co., Olaf Moklebust, Norway	Coke, disco	1861	0.94	BM-14 RM-20	8.3 7.5
Pittsburgh Limestone Corp., Pittsburgh, Pa.	Limestone	723B	2.70	RM-10	16.2
Pittsburgh Limestone Corp., Pittsburgh, Pa.	Limestone, concrete aggregate	723A	2.65	RM-8	15.3
Pittsburgh Metallurgical Co., Niagara Falls, N. Y.	Ferro-silicon	839	4.61	RM-28 RM-35	6.0 6.6
Pittsburgh Plate Glass Co., Barberton, Ohio	Lime grits	2049	2.47	IC	3.6
Pittsburgh Plate Glass Co., Pittsburgh, Pa.	Tin ore, cassiterite, Mexico	1018A	2.92	BM-100 BM-150	10.3 10.8
Pittsburgh Plate Glass Co., Pittsburgh, Pa.	Tin ore, cassiterite, Bolivia		3.04	BM-100 BM-150	9.7 10.3
Pittsburgh Plate Glass Co., Pittsburgh, Pa.	Glass, window glass cullets	746	2.60	RM-28	14.8
Porocel Corp. (via Attapulgus Clay Co.), Little Rock, Ark.	Bauxite, white	844	2.08	RM-20	7.1
Portage Manly Sand Co., Portage, Wis.	Quartzite	1341	2.60	IC	5.2
Potash Co. of America, Carlsbad, N. Mex.	Potash ore	2761	2.32	RM-28	7.0
Powell-Rouyn Gold Mines, Ltd., Rouyn, Quebec	Gold ore	949	2.97	BM-150 BM-200	14.0 14.3
Premier Portland Cement Co., Ltd., Bulawayo, Southern Rhodesia, South Africa	Cement raw material	2633	2.70	OCIId	8.9 4.3
Preston East Dome Mines, Ltd., Porcupine, Toronto,	Gold ore	694	2.97	ВМ-200	9.0
Proc. Machy. Dept. (A-C), Milwaukee, Wis.	Sand, foundry cores	2662	2.65	IC	1.4
Quarry Co., Birdsboro, Pa.	Trap rock	2011	3.00	IC	31.0
Quebec Iron & Ti. Corp., Montreal, Canada	Iron ore, hematite, High Ti.	2789		HC322 HC122	9.5 10.0
Queenstown Gold Mines, Ltd., E. Kirkland Lake, Ontario	Gold ore	2082	2.85	BM-65 BM-200 RM-6	15.3 12.9 20.7
Quemont Mining Co., Noranda, Quebec	Zinc ore	1847	4.26	BM-150 BM-200	9.8 13.7
Quinn Robbins Co., Inc., Boise, Idaho	Silica sand	1235		RM-10	10.8

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity ''S''	Test Machine – Mesh	Work Index ''Wi''
Quincy Mining Co., Hancock, Mich.	Copper ore	1036	3.30	BM-28 BM-35 BM-48 BM-65 BM-100	15.5 17.5 16.0 16.2 14.9
Real Del Monte Co., Pachuaca, Mexico	Silver ore	881	2.72	BM-48 BM-65 BM-100 BM-200	15.7 16.5 16.5 18.0
Red Cross Mining Co., Marvsville, Calif.	Gold ore, soft	331	2.60	BM-28	3.0
Reed, H.B., Inc., Hammond, Ind.	Slag, black roofing granules	1026	2.72	RM-8	0.5
Republic Steel Co., Spaulding Mine, Birmingham, Ala.	Iron ore, hematite, coarse Iron ore, hematite, fine	1377	3.29 3.30	IC IC	5.2 4.5
Republic Mining & Mfg. Co., Bauxite, Ark.	Bauxite, raw	1053	2.52	RM-4	12.0
Republic Steel Co., Mineville, N.Y.	Iron ore, mag.	868B	2.98	BM-28 BM-35 RM-10	8.7 9.2 9.6
Republic Steel Co., Mineville, N. Y.	Iron ore, magnetite, Harmony	822	3.65	RM-20 RM-35	9.5 10.3
	Iron ore, mag. new bed		4.51	RM-20 RM-35	8.3 12.1
-	Iron ore, mag. old bed		4.48	RM-20 RM-35	8.7 11.9
Reserve Mining Co., Babbitt, Minn.	Iron ore, taconite ave. of 8	2475	3.50	RM-14 IC	16.0 15.0
	20 Septaria B		3.37	RM-14 IC	23.0 19.0
	14 Argo		4.00	RM-14 IC	15.0 12.8
	12 Argo West		3.60	RM-14 IC	15.7 16.1
	11 Argo East		3.06	RM-14 IC	12.5 14.1
	7 Argo North		3.56	RM-14 IC	16.7 12.4
	4 Sulphur		3.41	RM-14 IC	15.9 19.2
	3 Sulphur		3.39	RM-14 IC	16.9 15.0
9	1 Sulphur		3.61	RM-14 IC	16.7 13.6
Reserve Mining Co., Babbit, Minn.	Iron ore,taconite	2159	3.50	IC	11.1
Reserve Mining Co., Bly, Minn.	Iron ore, taconite	18770	3.73	IC	19.3
Reserve Mining Co., Babbitt, Minn.	Iron ore, taconite (Perp. to bands) (Par. to bands)	1877	3.75 3.75	IC IC	15.0 14.9
Reserve Mining Co., Montreal, Wis.	Iron ore, taconite, babbitt	1748	3.07	RM-14 IC	14.6 15.6

Company and Deposit Location	Material (Ore of)	Test	Specific Gravity ''S''	Test Machine — Mesh	Work Index ''Wi''
Reserve Mining Co., Babbitt, Minn.	Iron ore, taconite conc.			Mesn	WI
and the second s	48.6% Fe	1456C	3.90	BM-200	11.2
	Taconite tails, 16.9% Fe		3.33	BM-200	14.0
	Taconite heads, 31% Fe Iron ore, taconite low grad		3.58 3.16	BM-200 IC	12.0 16.3
Reserve Mining Co., Babbitt, Minn.	Iron ore, taconite	39R		IC	12.1
Reynolds Metals Co., Bauxite, Ark.	Alum. hydrate precipitator		3.40	ic	14.1
CONTRACTOR TO THE STATE OF THE	scale	2806	1.87	BM-100	14.0
Reynolds Metals Co. (Societe D'Ugine), Hurricane, Ark.					
	Bauxite	2500B	2.40	BM-14	14.9
Rochester-Plymouth Mines Co., Nevada	Gold ore, quartz	518	2.75	BM-100	11.9
Rhodesia Cement, Ltd., Colleen Bawn, Southern				BM-200	12.5
Rhodesia, South Africa	Cement raw material	2757	2.70	OCId	12.2
			-11.7	OCIId	9.4
Riverside Cement Co., Oro Grande, Calif.	Cement raw material	1636	2.70	BM-200	9.6
Rowe Contracting Co., Malden, Mass.	Granite, red	2190	2.67	IC	15.1
San Fernando Co., Anexas, Mexico	Gold ore	255	2.73	BM-48	14.1
San Luis Mining Co., Mazatlan, Mexico	Gold ore, quartz	739	2.78	BM-28	16.3
				BM-35	15.7
ž - ,				BM-48 BM-100	14.9 14.9
				BM-200	18.7
St. Claire Lime Co., Oklahoma City, Okla.	Limestone	1394	2.60	IC	5.0
St. Joseph Lead Co., Bonne Terre, Mo.	Galena in dolomite	2632	2.87	BM-65	11.8
				BM-100	11.4
				BM-200	9.6
				RM-14 IC	14.0 15.0
St. Joseph Lead Co., Bonne Terre, Mo.	Lead ore	2534	3.15	RM-14	12.1
St. Joseph Lead Co., Balmat, N. Y.	Pyrite conc.	2384	4.75	BM-100	10.2
St. Joseph Lead Co., Emeryville, N. Y.	Lead zinc ore	1657	3.46	BM-48	6.8
,,,				BM-200	12.5
at a second and a second a second and a second a second and a second a second and a second a second and a second and a second and a second and a second a second and a second a second and a second a second and a second and a second and a second and a se				RM-14	8.1
St. Joseph Lead Co., St. Lawrence County, N. Y.	Pyrite conc.	847	5.00	BM-65	1.8
St. Lawrence Brick Co., La Prairie, Quebec	Shale	279	2.64	BM-48	10.0
Saticoy R∞k Co., Saticoy, Calif.	Granite pebbles	1516	2.60	IC	4.7
Satmar Co., Ltd., Ermclo, South Africa	Shale, oil	1794	1.42	IC	13.2
Schundler, F. E., Co., Joliet, Ill.	Perlite, crude ore	2838	2.14	BM-100	9.7
Seal Harbor Gold Mines, Can. Laboratories, Ltd., Windsor, Cntario, Can., Nova Scotia	Gold ore	602A	2.76	RM-48	11.2
Seeley Products Co., Chicago, Ill.	Quartz	854	2.65	BM-150	13.6
Sheppard, Ray, Oshkosh, Wis.	Limestone	1912	2.73	IC	15.3
Sherritt Gordon Mines, Sherriton, Manitoba	Gold ore	1970B	3.01	BM-65 BM-200	12.3 11.4
Sherritt Gordon Mines, Sherriton, Manitoba	Gold ore, sulphides	209	3.09	BM-48	11.4

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity "S"	Test Machine — Mesh	Work Index ''Wi''
Sherritt Gordon Mines, Sherriton, Manitoba	Gold ore	206	3.10	BM-100	13.1
Sloss-Sheffield Steel & Iron Co., Birmingham, Ala.	Sinter, iron ore	1158A		BM-48 BM-65 BM-100	3.8 6.3 8.6
Sierra Leone Development Co., Freetown, W. Africa	Iron ore, hematite	2752	3.57	IC	13.6
Simeone, A. B., Inc., Medford, Mass.	Trap rock	2252	2.87	IC	23.0
Simonds Abrasive Co., Montreal, Quebec	Corundum	2592	3.9	HC	13.5
Sindicato Mineria Santa Maria, de Hualgagoc, Pacasmayo, Peru	Gold-silver ore	346	4.08	BM-28	12.0
Sindicato Minero de Parcoy, Lima, Peru	Gold ore, pyritic	567	3.76	BM-65 BM-150	11.7 11.9
Smith, A. O. Corp., Milwaukee, Wis.	Gold ore	646	2.68	BM-48	16.0
Smith, A. O. Corp., Milwaukee Wis.,				P-0100000100000000000000000000000000000	144 3/19/4/2011 421
King Solomon Mine, Yreka, Calif.	Gold ore	587	2.66	BM-65	16.0
Smith, Geo. B., Myrtle Point, Coos County, Ore.	Gold ore	321	2.66	BM-65	14.2
Smith, M. A., Eastern Cuba	Gold ore	710	3.10	BM-150 BM-200	10.7 13.6
Smith, E. A. & M. B. Koelliker, Cleveland, Ohio	Quartzite	744	2.70	ВМ-20	12.0
Sociedad De Abonos Calizos, Chile	Gravel with sea shells	967	2.53	BM-65	15.6
Societe D'Ugine, La Barasse, Marseille, France	Bauxite	2500	2.97	RM-14	8.3
Societe Francaise d'Etude Enterprize, Paris, France	Copper ore	2678	2.77	BM-200	13.5
Societe Miniere Et Met. De Penarroya, St. Sebastian, France	Lead ore	2807	2.94	RM-14 BM-100	12.1 13.0
Sociedade Technica e Commercial Ltd., Ipanama Phosphate Plant, Sao Paulo, Brazil	Apatite with magnetite	352	3.93	BM-65 BM-100	12.1 14.4
Societe Pour L'Etude du Chargement, Mecanique, France	Iron ore, black Iron ore, red	2311	3.45 3.69	IC IC	12.8 13.4
Solvay Process Div. Allied Chemical, N. Y.	Limestone	2538	2.71	IC	11.7
Solvay Process Co., Ilmo, Mo.	Limestone	1900	2.60	IC	17.5
Solvay Process Co., Syracuse, N.Y.	Spodumene ore	1073	2.88	BM-48	10.9
South American Development Co., Cotopaxi, Northern Ecuador	Gold ore, quartz with	750	2.01	DW 48	0.7
	pyrite	752	3.81	BM-48 BM-65 BM-100 BM-200	8.7 9.4 9.4 11.1
Southern Ferro Alloys Co., Chattanooga, Tenn.	Ferro-silicon 60% Si	1574	3.60	RM-20	3.6
Southern Ferro Alloys Co., Chattanooga, Tenn.	Ferro-silicon	1334	6.00	IC	5.0
Southwestern Engineering Co., Ergani Fresh Ore, Turkey	Copper ore	1717	4.45	ВМ-200	10.5
Southwest Portland Cement Co., El Paso, Texas	Limestone	2337	2.70	BM-200	9.1

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity ''S''	Test Machine — Mesh	Work Index ''Wi''
Southwest Stone Co., Knippa, Texas	Trap rock	1708	3.10	IC	20.0
Southwest Stone Co., Strington, Okla.	Limestone	1497	2.60	IC	10.4
Southwest Stone Co., Chica, Texas	Limestone, soft white	1484	2.60	IC	6.3
Southwest Stone Co., Knippa, Texas	Trap rock, black	1480	3.12	IC	9.1
Spencer Quarries Co., Spencer, S. Dak.	Granite, red	1412	2.60	IC	31.9
Spicky Polish Corp., San Francisco, Calif.	Quartz, pure crystallized		2.65	BM-28	11.4
w	(, -, -			BM-48 BM-100 BM-200	12.2 14.0 15.3
Spring Hill Gold Mines, Grass Valley, Calif.	Gold ore	538	2.83	BM-65	13.8
Springs Mine, Rand, Johannesburg, South Africa	Gold ore, Springs Mine	504	2.71	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150 BM-200	15.0 16.0 15.7 15.0 15.6 15.1
Stadacona Rouyn Mines, Ltd., Rouyn, Quebec	Copper ore	561	3.16	BM-65	12.5
Standard Oil Co., Baton Rouge, La.	Sinter, iron black porous	1672	4.91	IC	0.3
Standard Fuel Engr. Co., S. Detroit, Mich.	Fire clay	835	2.05	BM-100 BM-100	15.3 20.1
Stanley Mining Co., Biwabik, Minn.	Iron ore, taconite low grade Banded jasper	2196	2.80 4.48	IC IC	22.6 10.7
Stanolind Gas & Oil Co., Tulsa, Okla.	Iron oxide, catalyst	1883	3.57	BM-100	10.5
St. Joseph Lead Co., Bonne Terre, Mo.	Lead ore	2534	3.15	RM-14	12.1
Stripa Gruvaktiebolag, Guldsmedshyttan, Sweden	Iron ore, specular hematite	2753	3.65	RM-10	14.4
Stoughton Crushed Stone Co., Stoughton, Mass.	Granite Diorite Andesite	2560	2.68 2.92 3.07	IC IC IC	16.9 23.0 13.5
Sullivan Mining Co., Kellogg, Idaho	Calcines, roaster	740	3.22	BM-28 BM-35	4.2 5.9
Sun Oil Co Morous Book Bo	Clay attanulana salainad	641	2.60 1.10	BM-28	3.3
Sun Oil Co., Marcus Rock, Pa. Superior Stone Co., Monroe, N. Car.	Clay, attapulgus calcined Slate, blue	641 2359	2.66	BM-200 IC	16.7 15.2
Superior Stone Co., Monroe, N. Car. Superior Stone Co., Raleigh, N. Car.	Granite, coarse grained	2323	2.68	IC IC	21.5
Superior Stolle Co., Kaleigh, N. Car.	Diorite, fine grained Gneiss	2323	2.81 2.68	IC IC	28.5 20.9
Superior Stone Co., Richmond, Va.	Gneiss	2040	2.80	IC	23.4
Superior Stone Co., Red Hill, Va.	Granite	1611	2.82	IC	10.3
Sutton, Steele & Steele (via. A. D.Stephens), Ariz.	Gold ore	530	2.98	RM-20 RM-35	9.6 10.5
Swann and Co., Birmingham, Ala.	Bauxite, soft yellow	738	1.80	BM-65	0.9
Sydvaranger Co., Kirkenes, Norway	Iron ore, hematite	1921	3.36	IC	20.7
Tainton Products, Ltd., Baltimore, Md.	Tin ore, sulfides	905	4.03	BM-100	12.2

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity "S"	Test Machine — Mesh	Work Index ''Wi''
Taylor, Chas. & Sons, Cincinnati, Chio	Kyanite, gray Kyanite, red	2529	3.62 3.59	IC IC	31.5 25.9
Teer, Nello L. Co., Durham, N. Car.	Basalt	2455	2.77	IC	11.4
Tekirova Madenleri Co., Ltd., Turkey	Chrome ore	843A	3.42	RM-10	7.0
Tenn. Coal & Iron Co., Fairfield, Ala.	Iron ore, Concord mine	2751	2.65	IC	18.8
Tenn. Coal, Iron & R.R. Co., Birmingham, Ala.	Iron ore, Oolitic, Ishkooda No. 14	1987	3.49	IC	9.1
Tennessee Copper Co., Copperhill, Tenn.	Copper ore, London	2779	3.73	HC IC	8.5 8.83
Tennessee Copper Co., Copperhill, Tenn.	Copper ore, London mill ore	2613	3.80	BM-100 RM-35	8.6 6.7
Tennessee Copper Co., Copperhill, Tenn.	Copper ore, Isabella mill ore	2287	4.57	RM-14	9.5
Tennessee Copper Co., Copperhill, Tenn.	Copper ore, Isabella mill ore	1750	4.52	BM-48 RM-14	7.8 9.8
	London mill ore		2.74 4.54	IC BM-48 RM-14	8.8 4.9 6.7
	London rock London	263	2.81 3.47	IC BM-48 BM-65	12.0 8.0 9.2
Titanium Corp., Malvern, Ark.	Titanium, rutile	559	3.93	BM-200	20.3
Titanium Metals Corp. of America, Henderson, Nev.	Titanium metal sponge	2774	4.50	VBM	19.5
Tonapah Mining Co., Tonapah, Nev.	Gold ore	802	2.95	BM-100	13.8
Trenton Pottery Co., Trenton, N. J.	Tile scrap	1314	2.07	RM-10	16.5
Union Carbide & Carbon Corp., Niagara Falls, N. Y.	Ferro-chrome	2503	7.05	BM-200	11.90
Union Potash & Chemical Co., Carlsbad, N. Mex.	Potash ore, langbeinite	1006	2.91	BM-150	11.2
Union Potash & Chemical Co., Carlsbad, N. Mex.	Potash ore, sylvite	842E	3 2.17	RM-35 RM-48	8.4 10.1
Union Potash & Chemical Co., Carlsbad, N. Mex.	Potash ore, langbeinite	842A	2.65	RM-14	5.7
Union Steel Castings Co., Pittsburgh, Pa.	Silicon-manganese alloy Ferro-manganese high	1358	6.63	IC	11.6
	carbon		7.21 7.29	IC IC	4.2 9.0
U.S. Bureau of Mines, Rifle, Colo.	Ferro-manganese Oil shale, lean with grain Oil shale, lean against	2429	2.08	IC	8.7
	grain Oil shale, med, against		2.08	IC	14.2
	grain		2.04	IC	15.0
	Oil shale, med with grain Oil shale, rich against		2.04	IC	10.4
	grain Oil shale, rich with grain		1.62 1.62	IC IC	23.2 15.2
2	Oil shale, rich against grain		1.618		28.1
	Oil shale, rich with grain		1.61	IC	13.3

Company and Deposit Location	Material (Ore of)	Test	Specific Gravity "S"	Test Machine —	Work Index
U.S. Bureau of Mines, Rifle, Colo.	Oil shale, rich	1513C	- 7	Mesh RM-35	"Wi"
United Color & Pigment Co., via. Mr. Brackett,	ou share, then	13130	1.76	KW-35	27.0
Dover Boiler Wks., Newark, N. J.	Barite (Tenn.) Barite (Meggen)	848	5.15 4.97	RM-35 RM-35	2.4 5.1
U.S. Engrs., Pine Flats Project, Fresno, Calif. Zebe Creek Project, Calif.	Gabbro, narrows quarry Quartz-diorite	2186	2.85 2.70	IC IC	17.7 20.6
U.S. Engrs., Pine Flats Project, Fresno, Calif.	Granite Amphibolite Granite	2159	2.72 3.22 2.73	IC IC IC	20.3 16.1 16.4
U.S. Engrs., Bull Shoals Project, Mountain Home, Ark.	Limestone Copper ore, Penn mine	2044	2.60 2.85	IC IC	11.6 10.6
U.S. Engrs., Pugs Island Dam, Norfolk, Va.	Granite	1926	2.65	IC	16.8
U.S. Engrs., Marietta, Ga.	Granite	1886	2.65	IC	13.1
U.S. Engrs., Jacksonville, Fla.	Granite	1689	2.63	IC	11.6
U. S. Engrs., Marietta, Ga.	Gneiss	186	2.64	IC	16.1
U.S. Graphite Co., Saginaw, Mich.	Graphite	728B	1.62	RM-20	28.8
U. S. Graphite Co., Saginaw, Mich.	Graphite	728A	1.62	RM-20	31.5
U.S. Steel Co., Michigan Limestone Div., Millville,	G.Sp.into	, 2011	1.02	KM-20	31.3
Jefferson County, W. Va.	Dolomite	2760	2.85	IC	12.4
U.S. Phosphoric Co., East Tampa, Fla.	Phosphate rock	2472B	2.83	BM-28 BM-35 RM-14 RM-28 RM-35	9.5 10.4 7.8 9.5 10.2
Universal Atlas Cement Co., Pittsburgh, Pa.	Limestone Limestone Limestone Slag, blast furnace	2814	2.67 2.67 2.67 2.20 2.20	BM-200 OCId OCIId BM-100 BM-200	9.8 16.9 23.8 12.3 18.5
Universal Atlas Cement Co., Hudson, N.Y.	Limestone Cement raw material No. 2	2339	2.71 2.68 2.67	BM-200 BM-200 BM-200	11.5 11.5 11.9
Universal Atlas Cement Co., Northampton, Pa.	Cement raw materials	1545	2.70	BM-200	8.9
Upper Canada Mines, Ltd., E. Kirkland Lake,			12122		
Ontario	Gold ore	821	3.13	BM-200	13.0
Utah Copper Co., Arthur, Utah	Copper ore	1763	2.57 2.70	IC RM-14	12.6 12.2
Utah Copper Co., Arthur, Utah	Copper ore	938B	2.86	RM-20 RM-28 RM-35 RM-48	11.4 11.1 10.5 10.1
Utah Copper Co., Arthur, Utah	Copper	938A	2.86	BM-28 BM-35 BM-48 BM-65 BM-100 BM-150	12.8 10.8 10.5 10.6 10.6 11.2
ts				BM-200	11.7

		Test	Specific	Test Machine —	Work
Company and Deposit Location	Material (Ore of)	No.	"S"	Machine - Mesh	Index "Wi"
Utah Sand & Gravel Co., Salt Lake City, Utah	Gravel, pea	1895	2.65	RM-4	21.9
Vanadium Corp. of America, Bridgeville, Pa.	Ferro-titanium, LC 18% FE, 3.4% Si	2754B	6.0	нс	152.
Vanadium Corp. of America, Bridgeville, Pa.	Ferro-titanium	2754C	6.00	HC	315.
Vanadium Corp. of America, Bridgeville, Pa.	Ferro-titanium, L C 25% Ti		6.0	IC	31.0
	Ferro-vanadium Primos 75% Ferro-vanadium, Crucible 52%		8.0 8.0	IC IC	23.1 13.9
Canadium Corp. of America, Niagara Falls, N. Y.	Ferro-silicon van coram 50% Si	2611	4.51	IC	4.0
	Ferro-silicon vancoram 75% Si		3.02	IC	11.4
	Ferro-silicon vancoram 92% Si		2.35	IC	7.3
Vanadium Corp. of America, Niagara Falls, N.Y.	Ferro-chrome graphidex	2043	5.2	IC	4.5
Additional relationship could be seen as the second	Ferro-chrome silicide		5.5 7.9	IC IC	3.0 4.5
V. C. of Associate Missess Fello, N. V.	Ferro-chrome vancoram Chromium metal	1493	7.36	IC	19.2
Vanadium Corp. of America, Niagara Falls, N. Y.	Titanium ore, ilmenite	281	4.07	BM-200	13.0
Vanadium Corp. of America, Bridgeville, Pa.	Gold ore, basic hard	498	2.78	BM-100	22.6
Veraguas Mines, Ltd., Colon, Republic of Panama	Quartz for glass	1720	2.65	BM-35	14.4
Verries Nationales d'Egypt, Cairo, Egypt	Quartz for grass			IC	6.8
Victor Chemical Works, Nashville, Tenn.	Slag, ferrous	284	6.75	BM-100	6.1
Viles, F., Great Falls, Mont.	Gold-silver ore	564	2.86	BM-100	12.2
Volunteer Portland Cement Co., Knoxville, Tenn.	Cement clinker	828	3.15	RM-3 RM-4 RM-10	16.5 14.9 13.7
Vulcan Detinning Co., Sewaren, N.J.	Tin ore, conc.	558	6.00	BM-28	10.4
Walfred, C. L., Univ. of Minn., Minneapolis, Minn.	Manganese ore	867	2.73	BM-65 BM-100	11.8 12.0
Waite-Amulet Mines, Inc., Noranda, Quebec	Gold ore	1761	3.35	RM-14 IC	17.2 10.7
Warner Co., Philadelphia, Pa.	Limestone	1483	2.70	RM-14	13.5
Warner Co., Van Sciver Plant, Morrisville, Pa.	Gravel, pea	815	2.65	RM-4	16.5
Warren Pipe & Foundry Co., Port Hope, N. J.	Iron ore, magnetite	1065	3.47	RM-6	8.4
Waukesha Lime & Stone Co., Waukesha, Wis.	Limestone	2159	2.73	IC BM-100 BM-200	12.2 6.5 7.0
Waylite Co., E. Chicago, Ind.	Slag	2452	1.63	BM-100	9.9
Western Machinery Co., Sacramento, Calif.	Gold ore	903	2.70	BM-100	19.0
Western Minerals, Inc., Baxter Springs, Kans.	Tripoli	883A	1.89	RM-48	8.7
Western Minerals, Inc., Baxter Springs, Kans.	Tripoli	883	1.89	BM-48	3.34
West Kentucky Coal Co., Madisonville, Ky.	Pyrite, conc. from coal Refuse, high slate Refuse, high coal Coal	2648	3.13 2.40 1.60 1.5	RM-14 IC IC BJ HC	10.2 11.5 7.9 11.0 13.7
				110	10.7

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity "S"	Test Machine — Mesh	Work Index
Western Mining Corp., Melbourne, Australia	Gold ore Gold ore	2193	2.67 2.65	IC BM-100	"Wi" 10.3 10.3
	Gold ore, Yilgarn		2.91	RM-14 IC	15.9 20.1
Weston Brooker Co., Camak, Ga.	Granite	1864	2.65	RM-4 RM-6	17.5 16.1
Weston & Brooker Co., Columbia, S. Car.	Granite, light gray Granite, red Granite, dark gray Granite, gray, coarse Granite, red, Caycee Granite, gray, Caycee Granite Trap rock (camak)	1719	2.61 2.63 2.65 2.64 2.66 2.65 2.64 2.79	IC IC IC IC IC IC IC IC	11.7 11.6 21.8 15.4 15.6 13.6 15.0 14.2
Weston & Brooker Co., Columbia, S. Car.	Granite (camak)	1347	2.65	IC	11.2
West Vac. Chlorine Prods. Co., Newark, Calif.	Magnesite, dead burned	786	3.22	RM-20	15.1
Wheeler, A. E., Belgian Congo, Africa	Copper ore, chrysocolla	316	2.20	BM-100	14.2
Wheeling Steel Corp., Wheeling, W. Va.	Coke, breeze	2829		RM-8	14.8
Wheeling Steel Corp., Follansbee, W. Va.	Coke	1280	1.41	RM-8	23.4
White Pigment Corp., Florence, Vt.	Wollastonite with garnet	2089	2.90	IC	10.1
Wigton-Abbot Corp., Plainfield, N. J.	Shale, brown	1832	2.58	IC	8.8
Winans, H.C., New York-Brazil	Gold ore, quartz	474	2.72	BM-150	15.1
Wisconsin Steel Co., Nashwauk, Mich.	Iron ore	1366	4.20	IC	6.3
Wright-Hargreaves, Ltd., Kirkland Lake, Ontario	Gold ore	406	2.68	BM-28 BM-48 BM-100 BM-200	31.0 23.2 20.0 17.0
Yungli Chemical Industry, Shanghai, China	Limestone	1855	2.66	IC	13.8

Supplement to TABLE I

Work Indexes by Company and Deposit Tests No. 2866 to 3146, October, 1954

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity "S"	Test Machine— Mesh	Work Index ''Wi''
American Colloid Co., Chicago, Ill.	Dunite	3146	2.8	VBM	17.5
Alpha Portland Cement Co., Easton, Pa.	Cement raw mat.	2972	2.59	BM-200	11.8
Alpha Portland Cement Co., La Salle, Ill.	Cement clinker	3049	3.03	BM-200	16.7
American Materials Corp., Greenville, Ohio	Blast furnace slag	2927	2.00	RM-14	9.5
American Potash Co., Trona, Calif.	Limestone Epidolite	3140A	2.72 2.78	IC	18.9
American Potash Co., Trona, Calif.	Limestone, clinker, Lepidelite	3140B	2.72 2.55 2.78	BM-150 BM-48 BM-150	8.51 6.0 18.0
American Smelting Ref. Co. Silver Bell Unit, Silver Bell, Ariz.	Copper ore	3107	2.57	BM-200 BM-65 BM-14	12.2 11.5 8.21
Armour Research Found., Chicago 16, Ill.	Ferrochrome	2989	5.35	BM-150	14.6
Basic Refractories Inc., Maple Grove, Ohio	Magnesite clinker	2882	3.39	BM-100 BM-200	21.3 19.1
Byars, Carl, Easley, South Carolina	Granite gneiss	2926	2.70	IC	10.5
Cabot Carbon Co., Minerals Garnet Div.,	Garnet	2945	3.70	BM-48	12.0
Willsboro, N. Y.	Diamond ore	3086	4.41	BM-100	8.82
CAC Brunswick Mining & Smelting St. Joseph Lead, Bathurst, Canada	Diamond ofe	3000	4.41	BM-200	7.76
Calunite Corporation, Altadena, Calif.	Alunite ore	2879	2.67	BM-65 BM-100	5.3 5.5
Campbell Red Lakes Ltd., Balmertown, Ontario	Gold ore	3069	2.94	BM-100	16.7
Cemento Santa Rita, S.A., Sao Paulo, Brazil	Limestone	2935	2.76	BM-65 BM-200	9.1 9.7
Cemento Santa Rita, S.A., Sao Paulo, Brazil	Limestone, quartzite	2936	2.76 2.65	BM-65 BM-200 BM-200	8.0 9.1 15.8
Consider the December Columbia	Limostono	2922	2.62	BM-200	6.8
Cementos del Caribe, Barranquilla, Columbia Cleveland Cliffs Iron Co., Ishpeming, Mich.	Limestone Iron ore, roasted	2858	3.42	RM-10	14.2
Cieveland Cities from Co., Isapelling, witch.	non ore, roasted	2030	3.72	BM-200	11.8
	Iron ore, red hematite		3.40	RM-10 BM-200	19.9 14.3
Coplay Cement Mfg. Co., Coplay, Pa.	Cement clinker	2939	2.97	BM-200	21.1
Coplay Cement Mfg. Co., Coplay, Pa.	Cement clinker	2939B	3.02	BM-200	16.8
Copper Cities Mining Co., Miami, Ariz.	Copper ore	3068	2.63	BM-28 BM-48 BM-100	14.1 12.6 12.8
Corbola Chemical Co., Natural Bridge, N. Y.	Talcose marble	3044	2.76	BM-200	13.1
Corhart Refractories Co., Louisville, Ky.	Zirconium, aluminum	3018	3.92	IC	32.5
Corson Inc., G. & W. H., Plymouth Meeting, Pa.	Limestone	2873	2.83	IC	8.5
Crane Company	Titanium bearing slag	2914	3.71	BM-48	4.5
Crushing Stone Co., Schenectady, N. Y.	Gravel	3041	2.83	RM-4	19.2
C. S. Mundy Quarry, Harrisburg, Va.	Dolomite	3148	2.75	IC	6.55

Company and Deposit Location	Material (Ore of)	Test	Specific Gravity "S"	Test Machine	Work Index
80 (172) 38	Material (Ore of)	No.		Mesh	"Wi"
Dow Chemical Company, Freeport, Texas	Magnesium sludge cake	2903	2.20	BM-48 IC	15.2 14.7
Drummond Dolomite, Inc., Detour, Mich.	Dolomite	3080B	2.84	BM-28	11.51
Electric Power Devel. Co., Tokyo, Japan	Cement raw mat.	2907	2.70	BM-200	10.5
Electric Power Devel. Co., for Fuje Iron & Steel Co. Ltd., Tokyo, Japan	Slag	2876	2.42	BM-200	11.9
Electric Reduction Co. (CA-C), Montreal, Quebec, Canada	Phosphate rock	2892	2.80	BM-48	9.90
Erie Mining Co., Aurora, Minn.	Iron ore, taconite	3023	3.92	BM-200	13.2
Erie Mining Co., Duluth, Minn.	Coal #2				
	Buckwheat. Anth.	3058	1.44	RM-10	10.5
Emissa, Dakar, Africa	Sulfide copper ore	2885	3.60	HC HC RM-10 BM-100 IC BM-100	7.2 7.0 10.0 9.58 3.27 4.28
Emissa, Dakar, Africa	Oxide copper ore	2885	2.85	HC HC RM-10 BM-100 IC BM-100	9.0 8.3 14.0 13.9 6.12 3.60
Emissa, Paris, France	Cement raw mat.	2917	2.64	RM-8	13.8
Falconbridge Nickel Mines, Ltd., (CA-C),					
Falconbridge, Ontario, Canada	Nickel matte	2894	5.76	IC	6.25
Federal Portland Cement Co., Ltd., Buffalo, N. Y.	Cement clinker	2881	2.94	BM-200	13.4
Gunnar Gold Mines, Ltd., CA-C Toronto, Ontario	Gold ore	2986	2.62	BM-200	15.1
G. & W. H. Corson, Inc., Plymouth Meeting, Pa.	Stone concrete Sand concrete	3132	2.89 2.71	RM-14 RM-14	9.41 8.82
Halliburton Oil Well Cement Co., El Paso, Texas	Volcanic ash, crushed	3033	2.20	BM-150	16.2
Harbison-Walker Refr. Co., Leslie, Md.	Silico	3079	2.81	BM-65	11.2
Illinois Slag & Ballast Co., Chicago, Ill.	Blast furnace slag	2875	2.83	RM-14	13.1
Indonesia Cement Plant, Java, Surabaya	Cement raw mat.	3030	2.53	BM-200	8.6
Internation Construction Co., Burnpur, West Bengal, India	Iron ore	2915	3.46	IC	4.2
J. E. Baker Co., Loncaster, Pa.	Limestone (silicius)	3095	2.81	IC	9.35
Kobe Steel Works for Nihon Cement Co., Kobe, Japan	Cement raw mat.	2925	2.66	BM-200	9.8
Kobe Steel Works, Denki Kagaku, Kogyo Co., Kobe, Japan	Cement raw mix	3005	2.65	BM-200	11.1
L. A. Wood Mining Co., Sweetwater, Tenn.	Barium sulphate	3129	4.25	BM-200	6.38
Lehigh Portland Cement, Allentown, Pa.	Limestone Ormrod Quarry Sandts Eddy #3 Sandts Eddy #4	2918	2.69 2.70 2.68	IC IC IC	13.5 27.6 24.9
Lone Star Cement Co., Roanoke, Va.	Cement raw mat.	2895	2.68	BM-200	10.6

		Test	Specific Gravity	Test Machine—	Work Index
Company and Deposit Location	Material (Ore of)	No.	"s" [*]	Mesh	"Wi"
Luossavaara-Kiirunavaara Aktiebolag-Malmberget, Sweden	Iron ore	2896	4.65	RM-20 BM-100	9.8 9.3
	Magnetite Profile 67 & 77 Profile 48	3101 3101	4.52 2.88	BM-200 IC IC	11.3 6.8 16.6
Luossavaara-Kiirunavaara, Sweden	Iron ore magnetic Profile 67 & 77 Profile 48	3101	4.52 2.88	IC IC	6.80 16.6
Louisville Cement Corp., Sellersburry, Ind.	Cement clinker	3109	3.03	BM-200	14.73
Lynn Sand & Stone Co., Lynn, Mass.	Stone	3141	2.89	BM-100	14.2
Mallinckrodt Chem. Co., St. Louis, Mo.	Magnesium fluoride	2888	3.16	BM-48	6.6
Marmoles Y Cementos Del Nare, S.A., Medellin, Columbia	Limestone, silica, & clay mix	2869	2.68	BM-200	8.0
Marble Cliff Quarries, Columbus, Ohio	Stone (min 1") Stone (min 2")	3145	2.61 2.52	RM-4 RM-4	22.6 16.9
Marmoles Y Cementos Del Nare, S.A., Medellin, Columbia	Hi Silica Kaolin Lo Silica Kaolin Limestone	2930	2.32 2.38 2.62	BM-200 BM-200 BM-200	1.91 13.1 8.10
Mass. Broken Stone Co., Balthan, Mass.	Stone (black) Stone (grey)	3007	3.06 2.80	IC	26.4 12.8
Material Service Corp., Thorton, Ill.	Limestone	3074	2.73	BM-200	9.9
Material Service Co., Chicago, Ill.	Gravel Algonquin # Reject	3128	2.73 2.73 2.68	RM-14 RM-20 BM-48	12.39 10.41 12.64
Medusa Portland Cement, York, Pa.	Cement clinker	3118	2.93	BM-200	17.4
Monsanto Chemical Co., Anniston, Ala.	15% Ferro-silicon	2985	6.34	BM-200	51.0
Montreal Mining Co., Hurley, Wis.	Iron ore, hematite	3016	4.70	IC	9.85
Monumental Millwork, Inc., Baltimore, Md.	Limestone	2953	2.81	RM-20	6.5
Northern Peru Mining & Smelting Co. (ASARCO) Toquepala, Peru	Copper ore Diorite Porphyry	2808	2.77	RM-14 BM-65 BM-200	11.3 9.3 10.3
	May Composite	2830B 2830C 2830C	2.75	IC IC RM-14 BM-65 BM-200	9.1 8.9 10.3 10.2 12.4
	August Composite	2847	2.78	IC RM-14 BM-65 BM-200	11.0 10.8 10.8 12.5
	Dacite	2848	2.80	RM-14 BM-65 BM-200	13.5 16.0 14.0
	Quellaveco	2848B	2.80	RM-14 BM-65 BM-200	14.2 11.2 10.2
	Breccia Pebble Pipe	2854	2.80	RM-14 BM-65 BM-200	11.3 12.8 12.0

Company and Deposit Location	Material (Ore of)	Test No.	Specific Gravity "S"	Test Machine— Mesh	Work Index ''Wi''
Northern Peru Mining & Smelting Co. (ASARCO)	Breccia	2867B	2.67	IC	9.1
Toquepala, Peru	June-July	2867	2.07	RM-14 BM-65 BM-200	12.8 18.5 15.5
	August-September Composite	2872	2.81	RM-14 BM-65 BM-200	12.5 11.3 12.2
	Breccia Ore	2899	2.85	RM-14 BM-65 BM-200	10.1 11.0 11.2
North American P. C. Corp., Howes Cave, N. Y.	Cement raw mat. Cement raw mat.	3097 3097B	2.61 2.74	BM-200 BM-200	9.2 9.4
Oliver Iron Mining Co., Duluth, Minn.	Iron ore, taconite	3034	3.43	IC	24.4
Pickands Mather & Co., Hibbing, Minn.	Iron ore, taconite	3135	3.15	RM-14 BM-100	19.9 14.4
Pronto Uranium Mines, Ltd., Montreal, Quebec, Canada	Uranium ore	3056	2.90	IC RM-10 BM-100	12.75 14.08 13.70
Rizo Patron Cement, Lima, Peru	Limestone shale	3022	2.70	BM-200	8.31
Rix-Athabasca Uranium Mines, Ltd., Montreal,					
Quebec, Canada	Uranium ore	3055	2.60	BM-100 IC HC	20.4 18.5 19.5
Societe Gen. Des Minerails, CBR Mons Plant,					
Brussels, Belgium	Cement clinker	3075	2.95	BM-200	16.39
Sherriff Gordon Mines, Ltd., Canada	(Copper-zinc ore)	3104	3.57	IC	20.8
Southwestern P. C. Co., Victorville, Calif.	Cement clinker	3072	3.19	BM-200 RM-14	11.5 13.1
South Dakota Cem. Co., Rapid City, S. Dak.	Cement clinker	3106A	2.94	BM-200 BM-20	12.8 16.4
South Dakota Cement Co., Rapid City, S. Dak.	Cement clinker	3106B	2.91	BM-200 BM-20	11.2 14.8
Southern Materials Corp., Salisbury, Md.	Cement raw mix	2947	2.55	BM-200	9.60
Southwestern Portland Cem. Co., El Paso, Texas	Slag	2906	3.54	RM-20	18.5
Standard Oil & Dev. Co., Linden, N. J.	Coke (fluid)	3065	1.63	BM-200	36.3
Standard Oil Esso Div., Baton Rouge, La.	Coal-Gauley Eagle	3065C	1.67	BM-200	14.86
Summit Mining Corp., Carlisle, Pa.	Serecite Schist	3119	2.81	BM-28 BM-100	1.051 6.39
Titania, A/S, Delane, Norway	Iron ore	2971	4.34	BM-200	10.6
Valley Sand & Gravel Co., Muskego, Wis.	Quartzite	3143	2.69	IC	15.4
Victor Chemical Co., Chicago, Ill.	Electric furnace slag	2902	2.79	RM-20	11.5
Virginia Caroline Chem. Co., Nichols, Fla.	Phosphate rock	2870	2.00	RM-14	8.1
Vitro Corporation of America, Chattanooga, Tenn.	Titanium slag	3099	3.56	BM-48	5.84
Volunteer Portland Cement Co., Knoxville, Tenn.	Marl	2884	2.56	BM-200	7.3
Warner Company, Bellefonte, Pa.	Limestone	3063	2.70	RM-14	12.2
Williams Brothers Co.	Limestone	2961	2.70	IC	5.1
Wyandotte Chemical Co., Wyandotte, Mich.	Cement clinker	3085	3.15	BM-200	12.7
Yugoslav Copper Concentrator	Majdanpek copper ore	2880	2.73	IC	14.8