

TABLE No. 1

Analyses of Laterites at Various Depths from Surface

(Note Content of Silica and Magnesia in New Caledonia Ores, Table No. 2.)

	Depth Feet	SiO ₂	TiO ₂	MgO	H ₂ O	Cr ₂ O ₃	Al ₂ O ₃	Fe	Ni+Co
<i>1st Layer.</i>									
Kataviti, N. Caledonia	0-1½	4.2	.....	0.25	11.20	2.10	5.8	51.1	1.95
Dumbéa, N. Caledonia	0-4	5.8	.....	0.30	.....	.....	6.1	50.0	1.69
Mayari, Cuba, 1	0-4	2.49	.....	.....	9.87	1.42	17.04	46.4	0.37
Mayari, Cuba, 2	.....	2.26	.....	.....	11.15	1.89	14.9	48.65	0.59
India, 1	.....	0.70	0.40	.....	25.00	.....	50.5	16.38	.....
India, 2	.....	0.90	1.59	0.20	14.39	.....	26.27	56.01	.....
F. Guinea	.....	2.80	.....	.....	11.40	trace	8.7	54.04	.....
Borneo	0-6	2.75	.....	.....	.....	3.36	.....	53.09	0.39
Philippine Ids.	surface	1.04	.....	.....	6.60	1.15	10.56	54.29	.....
<i>2nd Layer.</i>									
Kataviti	1½-3	26.4	.....	15.60	12.60	1.30	2.4	18.3	6.66
Dumbéa	4-8	8.2	.....	1.70	11.20	.....	4.0	47.5	1.47
Mayari, 1	4-8	2.33	.....	.....	11.00	2.66	7.97	50.32	0.92
Mayari, 2	.....	2.70	.....	.....	12.90	3.17	7.13	51.32	1.20
Borneo	6-9	2.35	.....	.....	.....	3.22	.....	50.01	0.41
<i>3rd Layer.</i>									
Kataviti	3-4½	32.2	trace	.....	.....	0.55	1.5	11.7	7.49
Dumbéa	8-12	23.6	trace	4.8	8.70	1.50	2.8	35.5	2.05
Mayari, 1	8-12	2.72	.....	.....	12.31	3.11	6.88	50.04	1.25
Mayari, 2	.....	7.54	.....	1.5	12.75	3.66	4.97	46.52	2.10
Borneo	9-15	2.30	.....	.....	.....	2.99	.....	51.69	0.45
<i>4th Layer.</i>									
Dumbéa	12-16	45.0	.....	15.80	6.70	.....	0.9	16.8	2.49
Mayari, 1	12-16	2.6	.....	.....	12.85	2.75	6.52	47.18	1.36
<i>5th Layer.</i>									
Dumbéa	16-20	42.8	.....	.....	.....	.....	4.8	16.3	3.64
Mayari, 1	16-20	4.17	.....	.....	12.25	3.33	6.74	47.72	1.36
<i>6th Layer.</i>									
Mayari, 1	20-24	10.71	.....	.....	12.74	3.08	5.80	43.79	1.58
<i>7th Layer.</i>									
Mayari, 1	24-29	35.99	.....	21.56	14.57	2.12	4.11	29.50	1.74

Nickel Ores

New Caledonia has been a producer of nickel ores of lateritic origin since 1875¹. Similar ores in another French island, Madagascar, have attracted attention during recent years but little mining has been done there². Garnierite ores, like those of the two countries just mentioned, have also been shipped from Greece.³

New Caledonia, between latitude 20° 5' and 22° 16' S. and between longitude 164° and 167° 50' E., has a length of about 250 miles and an average breadth of less than 30 miles, the maximum being about 40. Serpentine, derived from peridotites and other basic rocks, occupies about one-third of the surface of the island. Resting in situ over much of the surface of the serpentine are loose products of weathering of varying thicknesses, at least the upper parts of

¹ Report Roy. Ont. Ni. Com., pp. 234-264.² Ibid., pp. 276, 277.³ Ibid., pp. 272-275.