

THE COAL RESOURCES OF THE WORLD

SAMPLES FROM MBALLA, OKPANAM.

	Average	Best
Volatile matter..	40.26%	43.33%
Fixed carbon...	29.25	36.06
Water...	10.00	10.61
Ash...	20.49	10.00
Sulphur...	2.35	2.22
Calorific value, small calories...	5,050	5,811
Evaporative power.....	9.40%	10.85%

Subsequently further borings were made in the neighbourhood of the Atakpo river and in that of Asaba in the Okpanam district; these showed the thickness of the main seam to vary from 17 feet 10 inches to 23 feet. The following are the results of the analyses in the Scientific and Technical Department of the Imperial Institute of the samples obtained:

LOCALITY	Iyunku Stream, East Branch, Atakpo River	Iyokwa Stream, Middle Branch, Atakpo River	'Mbwuliba Source, Ogwashi, Asaba	Tributary of 'Mbwuliba, Ogwashi, Asaba
Thickness of seam.	23 ft.	19 ft.	17 ft. 10 in.	18 ft. 9 in.
Volatile matter...	50.82%	52.71%	50.50%	53.38%
Fixed carbon...	31.61	31.90	32.23	33.25
Moisture...	9.14	7.88	7.55	8.25
Ash.....	8.43	7.51	9.72	5.13
Sulphur.....	1.17	1.28	1.85	1.15
Calorific value, small calories...	6,021	6,129	5,993	6,439
Evaporative power....	11.24	11.44	11.19	12.02

The lignite appears to be of good and uniform quality and at the point where the seam shows the greatest thickness there is little overburden, and open-face working could be carried on to a considerable extent.

A specimen from a small seam, half a mile north-east of Okpanam, gave, on destructive distillation, gas at the rate of 7.780 cubic feet, measured at 15°C. and 760 mm. barometric pressure, to the ton of lignite. If manufactured