Base of the UG1 chromitite at Rustenburg Platinum Mines, showing cross-bedding as a result of magmatic sedimentation
(photograph by the author)

Table 2.3

Average available percentage distributions of the individual PGE in the Merensky reef for the various sectors of the Bushveld Complex

Sector	Pt	Pd	Ru	Rh	Ir	Os
Middellaagte	58,36	27,63	7,35	4,15	1,53	0,98
Northam	61,15	26,42	7,09	3,20	1,25	0,89
Swartklip	59,86	24,22	8,02	5,01	1,81	1,08
Rooderand	59,60	25,03	7,62	4,81	1,76	1,18
Boshoek	58,98	26,93	6,62	4,36	1,70	1,41
Kroondal	59,30	26,56	7,86	3,97	1,33	0,98
Middelkraal	62,32	27,65	5,73	3,01	1,03	0,26
Hartebeespoort	49,77	40,15	6,70	1,95	1,14	0,29
Western BC*	**57,64**	**29,69**	**6,99**	**3,51**	**1,37**	**0,80**
Dwarsrivier	52,79	35,99	7,06	2,64	1,12	0,40
Maandagshoek	57,05	29,55	8,09	3,66	1,08	0,57
Klipfontein	61,28	25,09	7,61	3,54	1,35	1,13
Naboom	43,64	48,23	4,92	0,65	1,75	0,81
Eastern BC*	**53,94**	**34,40**	**6,98**	**2,67**	**1,31**	**0,71**
Main BC*	**55,74**	**32,11**	**6,98**	**3,08**	**1,34**	**0,75**

*Averages weighted according to strike length

Table 2.4

Average available percentage distributions of the individual PGE in the UG2 chromitite layer for various sectors of the Bushveld Complex

Sector	Pt	Pd	Ru	Rh	Ir	Os
Middellaagte	46,70	26,15	16,23	9,82	0,75	0,35
Northam	48,18	25,08	15,10	9,65	1,47	0,52
Swartklip	54,12	20,82	10,56	8,95	4,34	1,21
Rooderand	54,02	21,83	10,46	8,44	4,06	1,19
Boshoek	53,28	28,88	9,76	4,88	2,18	1,02
Kroondal	51,33	22,69	14,99	8,80	1,50	0,69
Middelkraal	49,17	24,48	15,52	8,66	1,50	0,67
Hartebeespoort	55,56	21,19	13,55	7,32	1,65	0,73
Western BC*	**52,09**	**23,84**	**13,43**	**7,93**	**1,93**	**0,78**
Dwarsrivier	42,14	36,35	11,25	7,07	2,07	1,12
Maandagshoek	40,24	38,51	10,92	7,03	2,13	1,17
Klipfontein	40,18	33,80	11,44	7,49	4,86	2,23
Naboom	41,11	32,71	12,13	7,82	4,27	1,96
Eastern BC*	**40,99**	**35,40**	**11,41**	**7,33**	**3,27**	**1,60**
Main BC*	**46,40**	**29,77**	**12,39**	**7,62**	**2,62**	**1,20**

*Averages weighted according to strike length

thickness (1600 m) to the lower zone of the rest of the Complex. Northwards, the lower zone was concordantly emplaced into the floor sediments as a series of sheetlike satellite (the Uitloop, Rietfontein, Biltongfontein, and Zwartfontein) bodies, which are divorced from the main Bushveld limb of the area. On the northern part of the Potgietersrus townlands, Gain (1991) has described ultrabasic rocks of the lower zone, occurring between the Transvaal sediments and the main Bushveld rocks, with which they have a faulted contact.

The critical zone has a thickness of 125 m in the south, where it is either in unmineralized contact with the Magaliesberg quartzite or as a mineralized contact with the lower zone. Both these contacts are unconformable, indicating a considerable transgression