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Appendix I

Analytical Methods

Appendix Ia: **Sample preparation**

Appendix Ib: **X-Ray fluorescence analysis**

Appendix Ic: **Silicate mineral microprobe analysis**

Appendix Id: **PGE analysis**

Appendix Ie: **Platinum group mineral analyses**

Appendix If: **S-Isotope analyses**

Appendix Ia: Sample preparation

Quarter-core samples were crushed in a jaw crusher before being milled in a C-steel mill. The samples were milled to a particle size of <63 µm. To minimize possible cross contamination, the mill was cleaned after every sample by milling clean quartz, washing the mill pots, and drying with acetone.

Appendix Ib: X-Ray Fluorescence Analysis

APPARATUS: ARL 9400XP+ Wavelength dispersive XRF Spectrometer

SAMPLE PREPARATION: 3 grams of each sample powder were weighed and dried at 100^0C overnight before being roasted at 1000^0C overnight to determine the absorbed (H_2O^-) and the percentage loss on ignition, respectively.

Major elements were determined on fused beads, prepared following the standard method used in the XRD and XRF laboratory of the University of Pretoria, as adapted from Bennett and Oliver (1992). One gram of pre-roasted sample powder and 6 grams of flux (Lithium tetra borate) mixed in a Au crucible was fused at 1050^0C for 15 minutes in a muffle furnace with occasional swirling. The fusion mixture was poured into a pre-heated Pt/Au mould and left to cool at room temperature. The bottom surface of the glass disk was analysed by XRF.

Trace elements were determined on pressed powder briquettes prepared following the method of Watson (1996). Approximately 16-20ml of sample powder mixed with less than 1 volume % of a liquid binder (Mowiol: polyvinyl alcohol) was loaded into aluminum cups to increase the stability and strength before being pressed at ± 7 tons/in^2.

CALIBRATION: The XRF Spectrometer was calibrated with certified reference materials. The NBSGSC fundamental parameter program was used for matrix correction of major elements as well as Cl, Co, Cr, V, Sc and S. The Rh compton peak ratio method was used for the other trace elements.

Standard deviations and detection limits are listed in the Table below.

STANDARD DEVIATIONS AND LOWER LIMIT OF DETECTION OF THE XRF METHOD

	Std dev. (%)	LOD (wt. %)
SiO_2	0.4	0.02
TiO_2	0.03	0.0032
Al_2O_3	0.3	0.01
Fe_2O_3	0.3	0.0097
MnO	0.0065	0.0013
MgO	0.1	0.0118
CaO	0.07	0.01
Na_2O	0.11	0.0265
K2O	0.06	0.005
P_2O_5	0.08	0.01
Cr_2O_3	0.0053	0.0006
NiO	0.01	0.0013
V_2O_5	0.0018	0.0008
ZrO_2	0.005	0.0009
CuO	0.0037	0.0003

	Std dev. (ppm)	LOD (ppm)
Cu	3	2
Ga	2	2
Mo	1	1
Nb	3	2
Ni	6	3
Pb	3	3
Rb	4	2
Sr	4	3
Th	2	3
U	2	3
Y	4	3
Zn	4	4
Zr	6	10
Ba	14	5
Ce	14	6
Co	6	3
Cr	40	15
Sc	5	1
V	10	1

LOD = Limit of Detection, std dev = standard deviation, ppm = parts per million.

Appendix Ic: Silicate mineral microprobe analyses

Quantitative electron microprobe analyses were performed using a CAMECA SX 100 Electron Microprobe. The acceleration voltage was 20 kV and the beam current was 20 nA with a defocused beam while analyzing the plagioclases. Counting times were 20 seconds on peak position and 10 seconds on each background.

The following X-ray lines, spectrometer crystals and standards (in brackets) were used:

SiKa, TAP (Wollastonite);

CaKa, PET (Wollastonite);

AlKa, TAP (Almandine);

MgKa, TAP (Periclase);

NaKa, LTAP (Albite);

FeKa, LLIF (Almandine);

MnKa, LLIF (Rhodonite);

CrKa, PET (Cr_2O_3);

TiKa, PET (Rutile);

KKa, PET (Orthoclase).

Appendix Id. **PGE analysis**

The platinum-group elements, Re and Au were determined by instrumental neutron activation analysis (INAA) at the University of Quebec at Chicoutimi (UQAC), after pre-concentration in a Ni-sulphide bead from 50g of rock powder. Sample irradiation was carried out at the Ecole Polytechnique in Montreal in a SLOWPOKE ll reactor.

Five determinations of five different NiS beads of the CANMET standard WGB-1 (Table below) can be used to estimate the precision and accuracy of the analyses. For all the elements except Au the relative standard deviations are 9–17 %.

For Au, Pt and Pd the accuracy of the analyses may be assessed by comparing the results obtained at UQAC for standards UTM-1 and WGB-1 with the certified values. The results are in good agreement with both the high- and low-level standard. For Rh, Ru and Ir certified values are available only for UTM-1. The UQAC analysed results agree with CANMET results. For the low-level standard WGB-1 only informational values are available for Rh, Ru, Ir and Re. The results agree with these when the standard deviation on the CANMET informational value ic considered.

No noble metals were detected in the blank, except Ir and Au. These were present at 0.02 and 0.1 ppb, respectively. As both values are far lower than the levels present in the samples, no significant contamination is believed to have occurred in preparing the samples, and no blank correction was made on the samples.

Precision and accuracy of the PGE analyses

	UTM-1				WGB-1			
	UQAC*	s	CANMET	error	UQAC*	s	CANMET	error
	ppb	+/-	ppb	+/-	ppb	+/-	ppb	+/-
Os ppb	7.10	0.57	*8.00*	*2.1*	0.48	0.08	n.v.	
Ir	10.00	0.40	8.80	0.60	0.25	0.04	*0.33*	*0.27*
Ru	10.90	0.98	10.90	1.50	<1.20	0.33	*0.30*	*0.20*
Rh	10.80	0.43	9.50	1.10	0.46	0.08	*0.32*	*0.19*
Pt	131.00	7.90	129.00	5.00	5.98	0.55	6.10	1.60
Pd	110.00	4.40	106.00	3.00	13.20	1.94	13.9	2.10
Au	47.90	4.30	48.00	2.00	1.34	0.59	2.90	1.10

* = average of five NiS beads all fused, dissolved and irradiated in the same batch,

s = 1 sigma of the five values, CANMET Certificate of Analysis (1996). Note that the figures in italics are informational values only, i.e. there are as yet no certified values for these elements in these standards, the error in these cases are the standard deviation of the values submitted in the round robin tests.

n.v. = no values

Appendix Ie: Platinum-group mineral analyses

Quantitative electron microprobe analyses were performed using a CAMECA SX 100. Three programs were applied:

1) Platinum-group minerals: 20 kV acceleration voltage and 30 nA sample current (on brass). Counting times were 10 seconds on peak and 5 seconds on each background. The following X-ray lines, spectrometer crystals and standards (in brackets) were used: S Ka, PET (sphalerite), Fe Ka, LLIF (Fe); Co Ka, LLIF (Co); Ni Ka, LLIF (Ni); Cu Ka, LLIF (Cu); As La, TAP (AsGa); Se La, TAP (Se); Ru La, PET (Ru); Rh La, LPET (Rh); Pd La, LPET (Pd, merenskyite); Ag Lß, LPET (Ag); Sn La, PET (Sn); Sb La, PET (Sb); Te La, LPET (merenskyite); Os Ma, TAP (Os); Ir La, LLIF(Ir); Pt La, LLIF (Pt); Au La, LLIF (Au); Hg La, LLIF (HgS); Pb Ma, PET (PbS); Bi Ma, PET (Bi). Background positions were carefully selected to avoid interferences. All elements were measured in differential mode to minimize interference problems by overlapping lines of higher than first order. Off-line interference corrections were performed in cases where element concentrations were enhanced by first-order secondary lines by more than 0.1%.

2) Base metal sulphides: 20 kV acceleration voltage and 20 nA sample current (on brass). Counting times were 10 seconds on peak for S, Fe, Ni, Si, and 30 seconds for Co, As and Pd. The following X-ray lines, spectrometer crystals and standards (in brackets) were used: S Ka, PET (pentlandite, pyrite), Fe Ka, LLIF (pentlandite, pyrite); Co Ka, LLIF (cobaltite); Ni Ka, LLIF (pentlandite); Cu Ka, LLIF (Cu); As La, TAP (AsGa); Pd La, LPET (Pd); Si Ka, TAP (kaersutite).

3) Trace element analyses in sulphides: 35 kV acceleration voltage and 300 nA sample

current (on brass). Counting times were 600 seconds on peak and 300 seconds on each background. The following X-ray lines, spectrometer crystals and standards (in brackets) were used: Se La, TAP (Se); Pd La, LPET (Pd); Rh La, LPET (Rh); Pt La, LLIF (Pt). Background offsets were ±300 steps for each element. Detection limits thus achieved were 35 ppm (Se), 18 ppm (Pd), 19 ppm (Rh) and 34 ppm (Pt).

Appendix If: S-Isotope analyses

APPARATUS: Finnigan MAT252 isotope ratio mass spectrometer

SAMPLE PREPARATION: Sulphide powders and a small amount of V_2O_5 were loaded into tin capsules and analysed using Elemental Analyser-Continuous Flow Isotope Ratio Mass Spectrometry on a Finnigan MAT252 isotope ratio mass spectrometer.

ANALYTICAL PRECISION: better than ± 0.05 per mil.

SAMPLE REPRODUCIBILITY: ± 0.1 per mil.

Appendix II

POLISHED THIN SECTION SAMPLE LIST

Borehole 2121

Sample	Depth (m)	Rock name
MO50	38.84	Main Zone meso-gabbronorite
MO51	52.44	Main Zone meso-gabbronorite
MO52	74.02	Main Zone meso-gabbronorite
MO53	93.69	Main Zone meso-gabbronorite
MO54	116.4	Main Zone meso-gabbronorite
MO55	136.68	Main Zone meso-gabbronorite
MO56	149.11	Main Zone meso-gabbronorite
MO57A	161.06	Main Zone meso-gabbronorite
MO58	172.65	amphibolised and chloritised pyroxenite in contact with anorthosite
MO59	183.01	carbonated and altered calcsilicate
MO60	186.7	mylonitised and altered calsilicate
MO61	189.32	carbonated and chloritised calcsilicate
MO62	197.47	Platreef anorthosite
MO63	199.89	Platreef leuco-gabbronorite
MO64	207.38	Platreef anorthosite
MO65	211.82	Platreef leuco-gabbronorite
MO66	220.02	Platreef recrystallised gabbronorite (in contact with coarse gabbronorite)
MO67	221.54	Platreef clinopyroxene-bearing norite
MO68	236.25	Platreef leuco-gabbronorite
MO69	236.5	Platreef mela-gabbronorite
MO70	244.35	Platreef recrystallised gabbronorite
MO71	245.88	Platreef mela-gabbronorite
MO72	251.31	Platreef mela-gabbronorite (highly amphibolised)
MO73	255.31	Platreef anorthosite
MO74	265.33	Platreef mela-gabbronorite
MO75	271.12	Platreef biotite bearing norite
MO76	275.34	Platreef leuco-gabbronorite
MO77	284.34	Platreef mela-gabbronorite
MO78	285.46	Platreef mela-gabbronorite
MO79	288.25	Platreef fine grained mela-gabbronorite (chilled?)
MO80	289.59	Platreef fine grained norite (chilled) in contact with altered coarse gabbronorite
MO81	290.67	Platreef fine grained norite (chilled) in contact with altered coarse gabbronorite
MO82	292.3	Platreef quartz gabbro
MO83	299.04	Platreef clinopyroxene-bearing norite (hydrothermally altered)
MO84	309.11	Platreef chilled norite with coarse gabbronorite bands
MO85	316.23	hydrothermally altered norite in contact with granitic material
MO86	333.98	amphibolised and sericitised pyroxenite
MO87	342.6	granite gneiss

Borehole 2199

Sample	Depth (m)	Rock name
MO1	44.71	Main Zone meso-gabbronorite
MO2	57.97	Main Zone meso-gabbronorite
MO3	68.54	Main Zone meso-gabbronorite
MO4	107.15	Main Zone meso-gabbronorite
MO5	139.36	Main Zone meso-gabbronorite
MO6	151.6	Main Zone anorthosite
MO8	174.19	Platreef anorthosite
MO9	182.82	Platreef gabbronorite
MO10	195.26	Platreef pegmatoidal gabbro
MO11	200.81	Biotite-rich gabbronorite
MO12	203.30	Biotite-rich gabbronorite
MO13	208.80	Platreef recrystallised gabbronorite
MO15	223.72	Platreef pegmatoidal norite
MO16	241.25	Platreef anorthosite
MO17	255.78	Platreef norite in contact with gabbronorite
MO18	270.2	Platreef norite
MO19	277.48	Platreef medium grained norite in contact with coarse anorthosite
MO20A	292.42	Platreef gabbronorite
MO20B	292.22	Platreef norite
MO21	299	Platreef norite in contact with recrystallised anorthosite
MO22	301.62	Platreef norite
MO23	306.08	Platreef coarse grained, altered norite in contact with medium grained gabbro
MO24	315.45	Platreef gabbronorite
MO25	326.94	Platreef altered gabbronorite
MO26	338.85	Serpentinite peridotite
MO27	342.81	Platreef gabbronorite (partially recrystallised)
MO28	355.76	Platreef gabbronorite (partially recrystallised)
MO29	362.42	Platreef carbonated granitic gneiss
MO30	370.13	Platreef carbonated granitic gneiss

Appendix III

XRF SAMPLE LIST

Nonnenwerth Borehole 2121

Sample	Depth (m)	S-isotopes	PGE analyses	Description
MOX1	38.58		∨	Main Zone gabbronorite
MOX2	52.58		∨	Main Zone gabbronorite
MOX3	74.21		∨	Main Zone gabbronorite
MOX4	93.83		∨	Main Zone gabbronorite
MOX5	116.18		∨	Main Zone gabbronorite
MOX6	136.82		∨	Main Zone gabbronorite
MOX7	149.25		∨	Main Zone gabbronorite
MOX8	165.05		∨	Main Zone gabbronorite
MOX9	199.68	∨	∨	Platreef recrystallised gabbronorite
MOX10	219.9	∨	∨	Platreef recrystallised gabbronorite
MOX11	236.69		∨	Platreef mela-gabbronorite
MOX12	244.55		∨	Platreef recrystallised gabbronorite
MOX13	265.16		∨	Platreef mela-gabbronorite
MOX14	275.23	∨	∨	Platreef mela-gabbronorite
MOX15	284.48		∨	Platreef mela-gabbronorite
MOX16	288.37		∨	Platreef mela-gabbronorite
MOX17	300.16		∨	Platreef norite

Nonnenwerth Borehole 2199

Sample	Depth (m)	S-isotopes	PGE analyses	Description
MOX20	44.88		∨	Main Zone gabbronorite
MOX21	58.09		∨	Main Zone gabbronorite
MOX22	68.65		∨	Main Zone gabbronorite
MOX23	106.97		∨	Main Zone gabbronorite
MOX24	129.15		∨	Main Zone anorthosite
MOX25	139.51		∨	Main Zone anorthosite
MOX26	151.42		∨	Main Zone anorthosite
MOX27	173.94	∨	∨	Platreef anorthosite
MOX28	183.07		∨	Platreef gabbronorite
MOX29	195.07	∨	∨	Platreef gabbro
MOX31	208.55		∨	Platreef gabbronorite
MOX32	241.65		∨	Platreef anorthosite
MOX33	270.08	∨	∨	Platreef norite
MOX34	283.55		∨	Platreef norite
MOX35	306.05		∨	Platreef norite in contact with recrystallised gabbro
MOX36	326.95	∨	∨	Platreef altered gabbronorite
MOX37	342.56		∨	Platreef gabbronorite (partially recrystallised)
MOX38	355.65		∨	Platreef gabbronorite (partially recrystallised)
MOX39	339.00			Serpentinized peridotite

NB. The depth on polished thin section refers to bottom measurements of the core.

Townlands

Sample	Depth(m)	S-isotopes	PGE analyses	Description
P1	30.4		V	U- Platreef gabbronorite
P2	32.69	v	V	U- Platreef sulphide bearing gabbronorite
P4	38.85		V	U- Platreef gabbronorite with minor disseminated sulphides
P6	55.8	v	V	fine-med grained norite sill
P7	57.7		V	U- Platreef sulphide bearing pegmatoidal gabbronorite
P11	76.99	v	V	M- Platreef sulphide bearing gabbronorite
P12	78.74		V	M- Platreef sulphide bearing gabbronorite
P13	80.75		V	M- Platreef sulphide bearing gabbronorite
P14	86.42		V	M- Platreef sulphide bearing gabbronorite
P15	89.55	v	V	M- Platreef sulphide bearing pegmatoidal gabbronorite
P19	102.35	v	V	M- Platreef sulphide bearing pegmatoidal gabbronorite
P106	106	v	V	M- Platreef sulphide bearing gabbronorite
P20	109.82		V	M- Platreef sulphide bearing pegmatoidal gabbronorite
P26	145.6	v	V	M- Platreef sulphide bearing norite

NB. The depth on polished thin section refers to bottom measurements of the core.

U- Platreef = Upper Platreef

M- Platreef = Middle Platreef

L- Platreef = Lower Platreef

Appendix IV

Analytical results on mineral chemistry, whole rock major elements, trace elements, PGE, sulphides and PGM.

An = cationic ratio of 100 * Ca/(Ca + Na + K)

Mg # = cationic ratio of 100 * Mg/(Mg + Fe^{2+})

Table 1: Whole rock major, trace element and PGE contents in Nonnenwerth rocks from borehole 2121.

Sample	MOX1	MOX2	MOX3	MOX4	MOX5	MOX6	MOX7	MOX8	MOX 9	MOX 10	MOX 11	MOX 12	MOX13	MOX14	MOX 15	MOX 16	MOX 17
Borehole	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121
Depth (m)	38.58	52.58	74.21	93.83	116.18	136.82	149.25	165.05	199.68	219.9	236.69	244.55	265.16	275.23	284.48	288.37	300.16
Rock Type	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	PR rx GN	PR rx GN	PR mela-GN	PR rx GN	PR mela-GN	PR mela-GN	PR mela-GN	PR mela-GN	PR Nor
wt. %																	
SiO_2	49.70	50.35	50.14	50.04	50.20	51.15	50.98	50.49	44.86	45.87	49.67	46.97	50.12	50.19	48.10	48.00	48.34
TiO_2	0.42	0.34	0.36	0.23	0.25	0.23	0.25	0.26	0.11	0.22	0.20	0.16	0.19	0.18	0.27	0.27	0.41
Al_2O_3	18.00	13.04	9.76	17.53	17.38	15.29	9.31	11.58	20.50	14.31	9.41	14.98	15.41	15.36	7.84	16.65	10.56
Fe_2O_3	10.20	13.63	14.75	10.20	9.83	11.53	15.84	12.63	9.74	14.28	16.77	14.19	9.84	9.28	19.28	12.83	20.56
MnO	0.17	0.23	0.26	0.17	0.18	0.21	0.26	0.22	0.17	0.23	0.30	0.24	0.19	0.18	0.38	0.23	0.35
MgO	6.59	9.56	11.47	7.68	7.54	9.35	14.89	12.34	8.40	10.98	13.72	10.87	8.70	8.70	13.97	7.08	10.48
CaO	11.50	10.12	11.07	10.51	10.38	9.75	7.24	9.47	10.54	9.46	6.16	9.34	11.75	12.62	7.50	10.21	5.93
Na_2O	2.69	1.56	0.96	2.14	2.15	1.87	0.90	1.13	1.90	1.47	1.20	1.52	1.77	1.79	0.99	3.01	1.80
K_2O	0.23	0.13	0.07	0.17	0.17	0.19	0.09	0.12	0.32	0.12	0.12	0.15	0.24	0.17	0.11	0.28	0.22
P_2O_5	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.03	0.04	0.03	0.03	0.06	0.09
Cr_2O_3	0.02	0.03	0.04	0.02	0.02	0.02	0.05	0.04	0.05	0.03	0.05	0.01	0.03	0.02	0.03	0.03	0.04
NiO	0.02	0.01	0.02	0.01	0.01	0.02	0.03	0.02	0.32	0.40	0.15	0.25	0.03	0.04	0.09	0.04	0.08
LOI	0.26	0.79	1.07	0.95	0.36	0.35	-0.03	1.38	1.36	0.01	1.06	0.10	1.41	0.67	-0.35	0.15	-0.11
TOTAL	99.82	99.84	99.99	99.69	98.51	99.99	99.84	99.73	98.31	97.43	98.86	98.81	99.70	99.23	98.58	98.83	98.86
Trace elements (ppm)																	
Cu	76	101	103	86	93	101	94	112	5275	5581	2427	3253	234	273	1066	986	789
Ga	17	13	10	15	16	14	10	12	12	11	9	12	14	13	8	16	13
Ni	102	149	183	133	128	152	271	203	2010	2523	887	1694	226	346	523	252	602
Pb	3	3	3	3	3	3	3	6	11	9	6	14	3	5	9	10	5
Rb	4	3	3	2	4	5	3	5	6	2	4	3	5	4	4	8	4
Sr	232	155	105	205	218	197	104	116	211	139	95	159	217	228	80	213	141
Y	8	10	12	6	6	7	8	8	4	6	8	5	6	6	9	8	12
Zn	26	31	48	76	45	66	73	85	68	40	60	78	36	37	88	87	121
Zr	12	12	15	11	11	12	11	16	10	10	49	10	11	10	12	17	23
Cl	139	208	184	203	166	208	194	291	231	342	1230	191	566	288	237	409	348
Co	45	65	76	51	49	59	87	65	85	132	94	104	53	60	111	66	118
Cr	119	187	252	129	143	132	282	262	241	133	184	130	156	113	206	125	190
S	168	250	282	151	198	231	554	258	8551	17018	6557	10809	387	1752	2929	2864	8723
Sc	26	41	56	29	28	31	43	41	20	38	38	35	39	40	52	38	36
Th	0.16	<0.03	<0.02	<0.02	0.06	0.07	<0.03	0.05	0.09	0.09	2.01	0.15	0.21	0.03	0.23	0.46	0.80
V	148	175	242	131	134	128	177	174	82	148	135	129	159	153	201	173	163
Ba	88	45	30	61	79	87	37	59	52	47	53	59	86	73	34	116	80
REE (ppm)																	
La	2.42	1.62	1.59	1.90	2.06	2.03	1.59	2.24	1.38	1.36	2.13	1.58	1.92	1.32	1.67	3.75	5.40
Ce	6.49	5.15	5.58	4.93	5.37	5.34	4.60	6.84	3.03	3.28	4.97	3.60	4.67	3.82	4.40	9.14	12.33
Nd	2.11	1.70	1.59	2.09	1.60	1.40	1.46	2.93	0.55	1.21	1.28	1.48	1.74	1.52	1.54	4.02	4.18
Sm	0.77	0.99	1.06	0.62	0.70	0.67	0.67	0.86	0.31	0.57	0.67	0.49	0.67	0.63	0.74	1.18	1.36
Eu	0.51	0.42	0.39	0.44	0.46	0.40	0.32	0.39	0.28	0.30	0.26	0.30	0.34	0.37	0.27	0.54	0.46
Ho	0.29	0.37	0.38	0.28	0.31	0.26	0.34	0.39	0.16	0.18	1.51	0.27	0.27	0.22	0.39	0.46	0.68
Tb	0.18	0.23	0.25	0.12	0.14	0.13	0.14	0.17	0.06	0.13	0.18	0.09	0.14	0.15	0.18	0.23	0.26
Yb	0.82	1.14	1.24	0.75	0.77	0.77	0.89	1.01	0.37	0.72	0.93	0.64	0.74	0.68	1.13	1.10	1.25
Lu	0.12	0.18	0.20	0.12	0.12	0.12	0.15	0.16	0.06	0.12	0.17	0.11	0.12	0.11	0.18	0.18	0.21
PGE (ppb)																	
Os	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	16	18	<0.5	15	<0.5	1	2	<0.5	< 1.12
Ir	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	12.5	20.2	0.7	7.4	0.2	0.4	0.2	0.2	0.2
Ru	<5	<5	<5	<5	<5	<5	<5	<5	15	15	<5	<5	<5	<5	<5	<5	< 3.17
Rh	<0.1	<0.1	1	1	<0.1	1	<0.1	<0.1	45	90	2	31	1	1	1	1	
Pt	<2	<2	1	41	3	7	2	3	3134	2480	477	1457	110	176	32	23	19
Pd	<2	<2	<2	2	<2	2	2	<2	5731	4677	597	2431	16	116	35	37	33
Au	1	1	1	3	1	1	0	1	952	347	333	363	14	20	27	24	25

< = below detection limit

MZ GN = Main Zone gabbronorite, PR mela-GN = Platreef mela-gabbronorite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 1: contd. Whole rock major, trace element and PGE contents in Townlands rocks.

sample	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21
Borehole	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03
depth (m)	30.4	32.69	34.91	38.85	44.77	44.77	57.7	62.65	63.65	68.3	76.99	78.74	80.75	86.42	89.55	94.3	96.6	100.05	102.35	109.82	110.95
Rock type	UP	UP	UP	UP	Gabbro	Norite	UP	Gabbro	hornfels	hornfels	MP	MP	MP	MP	MP	MP	skarn	MP	MP	MP	MP
wt %																					
SiO_2	52.37	43.74	52.19	46.79	52.03	52.06	43.18	52.65	28.11	50.35	49.49	42.09	39.37	45.26	45.55	51.49	39.12	47.75	43.49	47.58	48.11
TiO_2	0.15	0.25	0.16	0.18	0.30	0.30	0.23	0.16	1.75	0.34	0.29	0.17	0.22	0.30	0.19	0.37	0.32	0.45	0.19	0.18	0.33
Al_2O_3	7.43	6.73	7.20	7.40	10.38	10.38	5.56	22.57	18.98	12.23	4.40	5.04	4.43	7.24	7.88	4.92	10.10	10.31	7.52	16.08	7.97
Fe_2O_3	10.94	14.19	11.77	14.91	6.93	6.93	19.15	5.70	40.31	14.52	16.56	17.49	21.67	11.10	18.17	9.20	12.35	8.82	19.00	13.44	9.44
MnO	0.21	0.20	0.24	0.21	0.14	0.14	0.21	0.09	0.20	0.23	0.27	0.28	0.18	0.14	0.18	0.14	0.14	0.13	0.18	0.16	0.17
MgO	21.31	18.92	20.97	20.98	10.05	10.05	21.58	5.48	7.24	16.39	22.00	27.05	19.71	23.59	18.83	19.79	35.93	21.63	21.14	16.64	21.15
CaO	6.65	13.53	6.52	7.80	18.24	18.25	3.24	9.21	1.97	3.83	4.29	6.01	6.82	10.35	3.60	13.75	1.01	10.34	4.77	3.58	11.96
Na_2O	0.13	0.01	0.04	0.01	1.07	1.07	0.01	3.41	1.07	1.65	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.53	0.01
K_2O	0.27	0.33	0.29	0.48	0.68	0.68	0.34	0.47	0.18	0.15	0.37	0.13	0.14	0.35	0.49	0.22	0.07	0.47	0.43	0.35	0.35
P_2O_5	0.01	0.03	0.01	0.02	0.04	0.04	0.05	0.03	0.01	0.02	0.03	0.03	0.02	0.03	0.03	0.02	0.01	0.07	0.03	0.07	0.03
Cr_2O_3	0.42	0.04	0.46	0.33	0.04	0.03	0.30	0.07	0.15	0.23	0.21	0.11	0.20	0.04	0.10	0.05	0.03	0.01	0.07	0.06	0.04
Ni	0.06	0.37	0.06	0.16	0.03	0.03	0.73	0.01	0.03	0.03	0.48	0.38	1.42	0.28	0.76	0.02	0.15	0.01	0.43	0.23	0.08
S	0.04	1.42	0.07	0.71	0.08	0.03	4.98	0.13	0.00	0.01	1.38	1.01	5.45	1.16	3.37	0.01	0.63	0.00	2.29	0.90	0.30
Cu	0.02	0.26	0.01	0.01	0.00	0.00	0.43	0.00	0.00	0.00	0.25	0.25	0.35	0.15	0.85	0.00	0.16	0.00	0.46	0.22	0.06
TOTAL	100.00	100.02	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.02	100.04	100.00	100.00	100.00	100.01	100.03	100.00	100.00	100.01	100.00
LOI	0.43	3.20	1.13	2.60	1.58	1.54	4.27	1.44	*	*	1.18	6.19	4.78	5.60	3.35	1.95	11.53	5.70	4.88	2.21	2.80
Trace elements (ppm)																					
Cu	152.89	2543.63	134.78	143.00	14.32	14.33	4273.74	9.25	24.25	4.03	2472.73	2319.51	3533.46	1470.88	8509.66	17.66	1448.37	24.59	4647.70	2173.29	609.28
Ga	8.15	9.29	8.23	8.00	12.28	12.29	9.08	21.59	64.67	14.12	7.20	7.52	8.05	8.41	11.24	8.31	13.63	13.90	10.44	17.33	10.42
Ni	583.01	3563.98	628.63	1535.00	281.38	281.53	7346.43	120.27	286.98	301.54	4664.54	3501.29	14166.04	2817.70	7567.66	209.78	1302.96	62.01	4291.55	2230.38	774.88
Pb	6.12	47.51	13.38	24.00	17.39	17.40	31.26	16.45	11.12	9.08	19.55	16.12	37.25	33.64	27.59	4.15	13.63	3.21	10.44	16.31	21.87
Rb	12.23	17.56	12.35	26.00	31.72	31.74	19.16	16.45	11.12	3.03	21.61	7.52	10.07	16.82	26.56	13.50	5.68	24.59	24.02	24.46	15.62
Sr	148.81	160.07	105.97	214.00	169.85	169.94	174.46	649.64	482.01	354.99	59.68	75.20	74.49	107.24	230.90	117.35	15.90	248.02	155.62	209.99	201.01
Y	6.12	13.43	7.20	10.00	30.70	30.71	9.08	7.20	5.05	11.09	10.29	7.52	11.07	12.62	11.24	22.85	5.68	12.83	10.44	8.15	18.75
Zn	82.56	108.44	112.15	109.00	69.58	69.62	144.21	55.51	409.26	128.08	128.63	124.62	110.74	77.80	144.06	64.39	191.98	80.18	120.11	120.29	70.82
Zr	19.37	36.15	19.55	30.00	54.23	54.26	33.28	20.56	27.28	31.26	29.84	25.78	35.23	57.83	67.43	55.04	44.30	51.31	42.82	36.70	60.41
Co	88.67	116.70	92.60	124.00	40.93	40.95	307.57	24.67	158.65	89.76	170.82	146.11	293.95	95.68	173.69	56.08	81.79	48.11	176.51	125.38	67.70
Cr	2876.32	259.22	3116.42	2361.00	256.83	256.96	2080.40	462.56	1015.56	1576.29	1605.27	758.49	1391.24	260.74	660.01	406.07	207.88	60.94	445.97	453.62	293.70
S	377.12	14188.78	699.63	7136.20	777.64	303.03	49816.59	1295.17	16.17	80.68	13765.18	10059.09	54521.95	11554.66	33705.55	129.82	6286.49	17.10	22852.06	8966.36	3030.77
Sc	19.37	12.39	21.61	12.00	40.93	40.95	12.10	2.06	16.17	40.34	19.55	5.37	7.05	7.36	11.24	10.39	17.04	13.90	8.36	17.33	8.33
Th	0.33	0.58	0.49	1.15	2.02	0.97	1.00	0.58	0.22	0.32	0.79	0.53	0.75	1.18	1.48	1.05	na	na	2.40	1.19	2.16
Cs	0.86	2.44	1.23	1.88	2.05	1.37	1.64	1.41	1.73	0.52	1.17	1.23	1.63	1.44	2.10	1.45	na	na	3.03	5.81	1.20
V	99.89	115.67	101.86	78.00	79.81	79.85	65.55	32.89	450.69	107.91	122.45	70.91	82.55	79.90	66.41	114.24	54.53	102.63	61.62	67.28	91.65
Ba	162.71	232.93	90.18	216.92	159.73	270.02	124.50	275.43	140.42	106.76	101.80	60.64	74.41	114.33	164.44	47.05	na	na	143.18	204.30	118.61
Hf	0.18	0.84	0.30	0.59	1.64	0.64	0.69	0.29	0.56	0.86	0.44	0.45	0.62	1.56	1.51	1.44	na	na	0.94	0.70	1.48
REE (ppm)																					
La	1.84	4.20	1.87	4.67	10.20	9.34	7.43	11.86	8.41	9.27	4.24	3.16	4.24	5.55	6.94	8.87	na	na	6.25	7.10	9.47
Ce	4.41	12.45	3.98	12.43	38.65	20.43	14.17	22.06	12.28	16.78	8.51	7.85	10.04	13.87	13.30	30.93	na	na	13.66	13.26	26.01
Nd	2.72	4.58	1.59	4.14	20.11	5.69	4.57	7.09	3.66	4.62	3.41	2.95	4.02	6.51	4.46	16.08	na	na	5.55	3.12	10.96
Sm	0.49	1.29	0.50	1.20	5.27	1.10	1.09	0.99	0.50	0.84	0.93	0.76	1.18	1.44	0.99	3.31	na	na	1.17	0.93	2.48
Eu	0.20	0.46	0.20	0.38	0.99	0.70	0.50	0.89	0.49	0.56	0.39	0.30	0.60	0.47	0.55	0.85	na	na	0.45	0.58	0.63
Tb	0.06	0.22	0.09	0.17	0.92	0.17	0.09	0.11	0.05	0.14	0.12	0.14	0.11	0.24	0.17	0.54	na	na	0.18	0.10	0.44
Yb	0.48	0.66	0.54	0.64	2.32	0.71	0.67	0.40	0.16	1.26	0.75	0.46	0.66	0.73	0.90	1.64	na	na	0.73	0.83	1.27
Lu	0.09	0.12	0.08	0.11	0.33	0.13	0.11	0.06	0.03	0.23	0.13	0.07	0.11	0.12	0.15	0.25	na	na	0.13	0.17	0.21
PGE (ppb)																					
Os	8.35	4.64	1.45	3.17	<1.1	1.41	20.09	<1.5	1.10	0.87	7.28	4.73	21.60	2.52	6.31	1.30	na	na	4.41	3.09	1.01
Ir	7.49	4.43	2.01	3.00	0.14	1.44	21.85	0.14	0.31	0.58	8.66	5.28	24.75	1.07	10.22	0.05	na	na	6.21	3.35	0.24
Ru	57.98	23.12	11.86	11.68	<4	3.59	106.14	<5.9	7.60	2.36	33.62	24.81	35.22	<7.3	<9.3	3.90	na	na	18.02	14.27	<4.6
Rh	21.56	23.20	4.24	12.26	0.30	7.91	86.43	0.43	0.47	1.39	37.35	20.63	107.69	7.11	34.94	0.53	na	na	28.63	14.31	1.82
Pt	319.10	361.56	64.31	227.34	8.07	95.77	1592.47	7.89	6.23	20.53	427.74	244.74	726.53	633.35	310.85	9.50	na	na	253.05	237.85	125.17
Pd	111.79	770.84	44.01	347.55	3.91	277.29	1664.87	<6	4.85	<6	962.29	422.89	3409.14	1141.88	953.31	8.30	na	na	723.68	491.38	307.06
Au	6.95	65.26	7.73	35.88	0.52	161.00	190.98	0.47	0.36	0.64	143.78	60.96	142.60	79.14	185.96	0.41	na	na	99.36	64.41	21.72
Re	0.26	3.82	<0.3	0.17	<0.1	0.37	13.34	<0.4	0.26	<0.4	8.79	2.60	28.22	4.18	<0.6	0.20	na	na	4.95	0.38	<0.3

Notes: All data are normalised to 100% LOI free
* = not detected, < = below detection limit and na = not analysed, Merensky Reef estimates from Barnes and Maier, 2002.

Table 1: contd. Whole rock major, trace element and PGE contents in Townlands rocks.

sample	P22	P23	P24	P25	P26	P28	P29	P30	P31	P32	P33
Borehole	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03
depth (m)	112.75	118.95	126.9	138.38	145.6	170.4	174.95	189.95	197.37	205.18	213
Rock type	hornfels	hornfels	LP	LP	LP	hornfels	hornfels	dolomite	hornfels	hornfels	hornfels
wt %											
SiO_2	38.01	56.16	50.97	48.73	50.97	63.09	55.58	35.55	39.90	53.40	20.02
TiO_2	1.04	0.30	0.19	0.45	0.38	1.01	0.22	0.18	1.81	0.26	0.21
Al_2O_3	24.67	11.92	14.16	8.58	9.76	13.59	10.52	7.96	16.74	3.67	3.75
Fe_2O_3	23.41	11.36	10.28	11.66	14.17	12.72	11.78	4.55	27.74	17.46	2.12
MnO	0.16	0.20	0.18	0.23	0.21	0.09	0.20	0.17	0.13	0.29	0.07
MgO	6.52	12.59	14.05	17.11	15.81	2.97	15.45	42.66	5.45	16.11	28.43
CaO	3.85	5.99	8.15	12.55	6.19	3.26	5.01	7.88	3.80	3.94	45.31
Na_2O	1.55	0.07	1.06	0.03	0.01	2.36	0.53	0.01	3.27	0.69	0.00
K_2O	0.34	1.15	0.58	0.32	0.78	0.31	0.37	0.02	0.62	2.03	0.01
P_2O_5	0.03	0.05	0.20	0.08	0.06	0.05	0.05	0.01	0.03	1.56	0.08
Cr_2O_3	0.07	0.18	0.10	0.10	0.36	0.03	0.24	0.01	0.10	0.05	0.00
Ni	0.01	0.02	0.03	0.04	0.20	0.01	0.04	0.00	0.02	0.02	0.00
S	0.33	0.01	0.02	0.09	0.72	0.50	0.00	0.98	0.37	0.49	0.00
Cu	0.00	0.00	0.00	0.02	0.36	0.00	0.00	0.00	0.01	0.03	0.00
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
LOI	1.31	1.07	1.16	1.52	1.83	1.69	0.28	13.85	*	*	37.41
Trace elements (ppm)											
Cu	39.10	5.14	46.97	202.53	3608.95	6.14	5.07	4.54	125.20	342.71	2.77
Ga	43.22	11.30	14.30	12.34	12.31	22.50	10.14	11.34	40.39	7.04	6.92
Ni	122.45	237.34	343.09	436.93	2038.82	63.41	407.67	27.23	241.32	177.89	15.22
Pb	16.46	5.14	36.76	22.62	11.28	9.20	5.07	3.40	13.13	12.06	5.53
Rb	19.55	42.13	22.46	17.48	34.87	11.25	21.30	5.67	21.20	93.47	4.15
Sr	755.25	344.20	308.37	283.75	417.40	438.75	110.54	14.75	640.15	112.56	157.71
Y	7.20	11.30	13.27	19.53	14.36	21.48	10.14	6.81	8.08	50.25	13.83
Zn	186.24	196.25	87.81	85.33	83.07	73.64	103.44	74.87	199.92	180.90	26.29
Zr	55.56	35.96	36.76	77.10	42.05	211.70	41.58	21.55	39.38	70.35	80.24
Co	95.69	71.92	67.39	82.25	114.86	53.18	79.10	19.28	112.08	91.46	2.77
Cr	453.77	1210.36	697.41	734.04	2469.55	238.29	1745.26	71.47	700.74	392.96	17.98
S	3251.49	113.02	163.38	867.69	7230.21	4990.85	16.23	9778.34	3746.01	4895.48	0.00
Sc	7.20	32.88	16.34	13.36	21.54	11.25	33.47	2.27	18.17	17.09	1.38
Th	0.56	0.95	1.62	3.07	1.14	4.34	na	na	11.08	0.26	na
Cs	3.03	1.16	1.61	1.57	1.04	2.38	na	na	10.66	2.33	na
V	212.99	147.96	70.46	135.70	115.89	151.36	153.13	6.81	376.62	49.25	16.60
Ba	166.42	306.90	233.52	170.61	369.20	350.91	na	na	2.11	0.81	na
Hf	1.38	0.65	0.68	1.73	0.83	5.59	na	na	0.67	0.07	na
REE (ppm)											
La	18.44	7.82	8.66	12.68	7.22	40.21	na	na	232.08	38.04	na
Ce	33.97	17.22	19.55	31.97	17.65	86.86	na	na	97.94	11.94	na
Nd	11.99	6.61	6.95	14.22	6.22	33.56	na	na	17.17	1.36	na
Sm	1.71	1.21	1.57	2.79	1.39	5.39	na	na	2.09	1.55	na
Eu	1.11	0.50	0.64	0.77	0.48	1.68	na	na	1.99	0.08	na
Tb	0.14	0.19	0.26	0.46	0.22	0.65	na	na	4.62	0.57	na
Yb	0.24	0.83	1.04	1.44	0.86	1.28	na	na	0.71	0.10	na
Lu	0.04	0.14	0.18	0.24	0.14	0.21	na	na	4.45	< 0,36	na
PGE (ppb)											
Os	<1.1	0.72	1.86	0.80	1.87	<1.0	na	na	<0.9	1.01	na
Ir	0.48	0.60	2.05	0.32	2.11	0.15	na	na	0.17	0.12	na
Ru	<4.0	4.26	8.42	3.35	6.84	<3.2	na	na	2.78	4.51	na
Rh	0.86	1.61	5.34	1.86	8.57	<0.6	na	na	0.68	0.44	na
Pt	4.64	22.71	72.42	29.60	176.56	2.54	na	na	6.14	5.75	na
Pd	4.08	5.16	34.18	16.59	246.89	<6.8	na	na	4.96	2.30	na
Au	1.33	0.97	3.01	4.72	49.06	0.42	na	na	1.02	6.12	na
Re	0.12	0.07	0.31	0.34	0.77	<0.23	na	na	<0.2	0.40	na

Notes: All data are normalised to 100% LOI free
* = not detected, < = below detection limit and na = not analysed, Merensky Reef estimates from Barnes and Maier, 2002.

Table 1: contd. Whole rock major, trace element and PGE contents in Nonnenwerth rocks from borehole 2199.

Sample	MOX20	MOX21	MOX22	MOX23	MOX24	MOX25	MOX26	MOX27	MOX28	MOX29	MOX31	MOX32	MOX33	MOX34	MOX35	MOX36	MOX37	MOX38	MOX39
Borehole	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
Depth (m)	44.88	58.09	68.65	106.97	129.15	139.51	151.42	173.94	183.07	195.07	208.55	241.65	270.08	283.55	306.05	326.95	342.56	355.65	339.00
Rock Type	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	MZ Anor	MZ Anor	PR Anor	PR Gabbro	PR Gabbro	PR rx GN	PR Anor	PR Nor	PR rx GN	PR Nor	PR mela-GN	PR mela-GN	PR mela-GN	Serp peridotite
wt. %																			
SiO_2	50.57	51.15	50.99	51.31	48.56	48.88	49.61	45.16	50.65	45.30	51.20	46.32	45.74	48.27	47.21	54.05	53.14	53.17	32.22
TiO_2	0.32	0.24	0.30	0.27	0.10	0.12	0.14	0.15	0.21	0.69	0.10	0.15	0.31	0.24	0.69	0.21	0.32	0.33	0.43
Al_2O_3	20.31	17.61	16.86	16.00	27.77	24.45	25.00	23.77	14.98	12.18	17.52	22.47	8.26	14.14	17.90	9.33	8.06	9.56	1.72
Fe_2O_3	8.05	10.10	10.75	11.14	2.96	5.06	4.79	7.22	9.33	14.04	9.34	8.60	23.45	15.19	12.59	11.93	10.44	11.18	22.63
MnO	0.14	0.18	0.18	0.20	0.05	0.09	0.08	0.10	0.17	0.22	0.18	0.15	0.37	0.24	0.20	0.13	0.14	0.14	0.12
MgO	5.34	7.46	7.70	8.43	1.69	4.17	3.59	4.82	9.56	9.60	9.26	6.38	12.69	12.11	6.38	13.37	18.52	14.81	26.12
CaO	11.57	10.80	10.66	10.28	14.43	13.23	13.89	13.47	12.35	14.61	9.68	11.43	6.37	6.87	10.07	8.44	6.55	6.80	1.64
Na_2O	2.65	2.17	2.13	2.01	2.50	2.16	2.23	2.61	1.60	1.27	1.90	2.29	0.92	1.71	2.61	1.56	1.14	1.75	1.06
K_2O	0.22	0.18	0.15	0.12	0.21	0.39	0.13	0.19	0.11	0.19	0.09	0.23	0.14	0.14	0.21	0.26	0.41	0.20	0.19
P_2O_5	0.05	0.04	0.05	0.04	0.05	0.04	0.04	0.04	0.05	0.10	0.03	0.03	0.03	0.01	0.02	0.05	0.05	0.23	0.03
Cr_2O_3	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.02	0.03	0.03	0.02	0.03	0.12	0.02	0.19	0.29	0.21	0.78
NiO	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.22	0.04	0.38	0.03	0.08	0.16	0.06	0.04	0.08	0.10	0.07	0.46
LOI	0.26	-0.03	0.00	0.07	0.63	1.12	0.47	0.99	0.71	0.33	0.40	0.59	-0.39	-0.06	0.90	0.28	0.48	1.53	9.02
TOTAL	99.50	99.95	99.81	99.90	98.95	99.73	99.98	98.75	99.78	98.94	99.74	98.74	98.08	99.04	98.84	99.87	99.64	99.98	98.21
Trace elements (ppm)																			
Cu	31	94	91	121	57	73	59	3119	478	2476	160	808	3280	526	366	171	45	56	2089
Ga	17	15	15	14	18	16	16	15	13	11	13	15	9	13	17	12	10	12	6
Ni	68	118	123	143	40	88	69	1593	314	2488	211	467	1052	452	300	605	734	588	2463
Pb	3	3	3	3	3	3	3	3	3	3	3	6	14	4	8	9	3	3	9
Rb	3	3	4	2	5	11	2	4	3	9	2	5	3	2	4	5	9	4	6
Sr	245	218	202	192	302	365	243	231	168	109	204	270	105	197	340	137	186	271	38
Y	7	7	9	6	4	4	5	4	9	13	4	4	8	4	12	8	9	15	8
Zn	42	63	72	74	24	36	38	51	61	61	69	60	173	129	88	66	62	88	101
Zr	15	15	14	15	11	13	10	11	16	20	10	10	16	10	19	18	24	30	19
Cl	130	113	117	132	136	241	137	172	206	260	179	209	297	165	255	308	236	431	
Co	35	47	52	54	10	22	23	70	56	124	57	50	147	92	67	68	67	60	82
Cr	74	108	122	126	50	110	67	86	140	165	182	151	192	825	195	1251	1813	1372	3605
S	52	221	333	195	16	82	16	8713	585	8046	132	3012	14978	2643	1369	413	277	120	2629
Sc	23	27	31	32	8	15	17	27	42	66	24	24	44	32	37	36	23	25	7
Th	0.33	0.20	0.17	0.15	0.50	0.32	0.25	0.19	0.40	0.51		0.12	0.36	0.07	0.18	0.19	0.53	0.32	3
V	130	122	143	158	40	67	71	98	157	336	82	99	183	144	452	130	113	113	125
Ba	100	73	69	59	75	122	55	68	38	37	27	82	55	55	129	199	280	152	39
REE (ppm)																			
La	3.20	2.60	2.53	2.21	3.37	2.51	2.19	2.35	2.25	4.76	0.82	1.52	2.14	1.34	3.79	3.83	3.98	5.68	9.69
Ce	7.97	6.38	7.00	5.81	6.87	5.52	5.97	6.10	6.08	13.03	1.65	3.88	5.71	2.83	11.61	13.51	13.05	20.99	4.88
Nd	3.22	2.27	2.53	2.38	2.22	2.03	1.88	2.21	2.01	5.19	0.36	1.19	1.87	1.00	3.93	5.05	5.03	8.28	
Sm	0.93	0.76	0.86	0.68	0.54	0.55	0.51	0.62	0.75	1.50	0.16	0.42	0.75	0.37	1.34	1.51	1.59	2.44	
Eu	0.54	0.45	0.48	0.41	0.41	0.36	0.40	0.43	0.33	0.38	0.21	0.36	0.30	0.29	0.58	0.47	0.55	0.68	
Ho	0.18	0.23	0.32	0.24	0.15	0.18	0.14	0.45	0.25	0.00	0.07	0.18	0.44	0.21	0.38	0.28	0.28	0.48	
Tb	0.21	0.18	0.19	0.16	0.11	0.12	0.10	0.18	0.21	0.40	0.06	0.03	0.17	0.10	0.28	0.29	0.26	0.47	
Yb	0.79	0.75	0.87	0.80	0.32	0.46	0.46	0.61	0.78	1.24	0.35	0.45	1.12	0.63	1.09	0.83	0.81	1.30	
Lu	0.12	0.12	0.15	0.13	0.06	0.08	0.07	0.10	0.12	0.19	0.06	0.07	0.19	0.11	0.17	0.12	0.12	0.21	
PGE (ppb)																			
Os	<0.5	<0.5	<0.5	<0.5	1	<0.5	1	7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	
Ir	0.0	0.0	0.1	0.1	0.2	0.1	0.4	4.2	0.1	0.2	0.1	0.6	0.7	0.3	0.1	0.9	1.1	0.7	
Ru	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Rh	<0.1	<0.1	<0.1	<0.1	1	<0.1	1	11	<0.1	3	1	2	2	1	<0.1	2	2	1	
Pt	2	2	<2	<2	79	17	59	1049	39	623	16	115	89	34	2	37	12	12	
Pd	<2	<2	<2	<2	36	9	34	1284	51	3201	14	194	112	65	<2	36	10	10	
Au	1	1	2	1	21	5	6	346	33	3232	1	30	89	14	3	5	3	3	

< = below detection limit

MZ GN = Main Zone gabbronorite, PR mela-GN = Platreef mela-gabbronorite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 2a. Selected Plagioclase Analyses from Nonnenwerth

Sample	MO50	MO52	MO55	MO57	MO62	MO63	MO65	MO66	MO67	MO68	MO69	MO70	MO71	MO73	MO74	MO78	MO79	MO80	MO83	MO84
Borehole	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121
depth (m)	38.84	74.02	136.68	161.06	197.47	199.89	211.82	220.02	221.54	236.25	236.5	244.35	245.88	255.31	265.33	285.46	288.25	289.59	299.04	309.11
Rock Type	MZ GN	MZ GN	MZ GN	MZ GN	PR anor	PR leuco-GN	PR leuco-GN	PR rx GN	PR Nor	PR leuco-GN	PR mela-GN	PR rx GN	PR mela-GN	PR anor	PR mela-GN	PR mela-GN	PR mela-GN	PR nor	PR nor	PR nor
wt. %																				
Na_2O	3.74	3.87	4.15	3.71	3.35	3.09	2.91	4.38	3.34	3.46	3.51	4.26	4.49	4.36	4.30	2.85	4.93	3.31	5.37	4.82
SiO_2	51.66	51.78	52.43	51.10	50.54	49.89	48.89	52.93	50.50	50.63	51.12	52.57	53.05	53.15	52.77	49.45	54.17	50.37	54.78	53.43
Al_2O_3	29.64	29.45	29.24	29.49	30.15	30.54	30.71	28.92	30.14	30.00	30.41	28.79	28.45	28.76	28.66	31.21	27.82	30.75	26.95	28.19
CaO	13.58	13.28	12.82	13.54	14.21	14.64	15.01	12.44	14.23	14.05	14.00	12.50	12.02	12.40	12.37	15.21	11.27	14.53	10.54	11.79
K_2O	0.29	0.28	0.22	0.26	0.22	0.20	0.16	0.29	0.21	0.21	0.24	0.27	0.36	0.34	0.33	0.12	0.34	0.17	0.43	0.25
FeO	0.29	0.29	0.28	0.32	0.40	0.38	0.28	0.34	0.36	0.38	0.34	0.32	0.37	0.40	0.31	0.30	0.27	0.27	0.31	0.26
Total	99.34	99.03	99.26	98.55	99.02	98.85	98.08	99.40	98.92	98.87	99.73	98.82	98.83	99.53	98.84	99.27	98.93	99.50	98.52	98.90
Cations (based on 32 oxygens)																				
Na	1.33	1.38	1.47	1.33	1.20	1.11	1.05	1.55	1.19	1.24	1.25	1.52	1.60	1.54	1.53	1.02	1.75	1.18	1.91	1.71
Si	9.48	9.52	9.60	9.45	9.32	9.23	9.13	9.67	9.32	9.35	9.35	9.66	9.74	9.70	9.69	9.12	9.91	9.25	10.05	9.80
Al	6.41	6.38	6.31	6.43	6.56	6.66	6.76	6.23	6.56	6.53	6.56	6.24	6.16	6.19	6.21	6.78	6.00	6.65	5.83	6.09
Ca	2.67	2.62	2.51	2.68	2.81	2.90	3.00	2.43	2.82	2.78	2.74	2.46	2.36	2.42	2.44	3.01	2.21	2.86	2.07	2.32
K	0.07	0.07	0.05	0.06	0.05	0.05	0.04	0.07	0.05	0.05	0.06	0.06	0.08	0.08	0.08	0.03	0.08	0.04	0.10	0.06
Fe	0.04	0.04	0.04	0.05	0.06	0.06	0.04	0.05	0.06	0.06	0.05	0.05	0.06	0.06	0.05	0.05	0.04	0.04	0.05	0.04
Total	20.01	20.01	20.00	20.02	20.02	20.01	20.04	20.02	20.01	20.02	20.02	20.00	20.02	20.01	20.00	20.01	20.00	20.03	20.03	20.04
An	65.61	64.40	62.24	65.84	69.15	71.55	73.35	60.06	69.37	68.32	67.83	60.88	58.44	59.92	60.23	74.13	54.72	70.10	50.79	56.67
Ab	32.72	33.97	36.45	32.64	29.53	27.29	25.74	38.29	29.42	30.43	30.80	37.57	39.48	38.16	37.89	25.15	43.31	28.90	46.78	41.90
Or	1.67	1.63	1.30	1.52	1.31	1.15	0.91	1.65	1.21	1.25	1.37	1.55	2.07	1.92	1.89	0.72	1.97	1.01	2.44	1.43

MZ GN = Main Zone gabbronorite, PR mela-GN = Platreef mela-gabbronorite, PR anor = Platreef anorthosite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 2a. Contd:Selected Plagioclase Analyses from Nonnenwerth

Sample	MO1	MO2	MO3	MO4	MO5	MO6	MO8	MO9	MO10	MO13	MO15	MO17	MO19	MO20	MO20#	MO21	MO22	MO22#	MO23	MO24	MO25	MO27
Borehole	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
depth (m)	44.71	57.97	68.54	107.15	139.36	151.6	174.19	182.82	195.26	208.8	223.72	255.78	277.48	292.42	292.42	299	301.62	301.62	306.08	315.45	326.94	342.81
Rock Type	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	PR anor	PR Gabbro	PR Gabbro	PR rx GN	PR Nor	PR Nor	PR Nor	PR mela-GN	PR mela-GN	PR Nor	PR Nor	PR mela-GN	PR Nor	PR mela-GN	PR mela-GN	PR mela-GN
wt. %																						
Na_2O	3.63	3.84	4.12	4.04	2.71	2.67	3.12	3.37	3.78	3.81	4.56	4.00	4.42	4.12	3.36	4.47	4.13	3.46	5.00	5.28	4.95	5.55
SiO_2	51.82	52.17	52.63	52.90	49.05	47.10	50.25	51.01	51.90	51.88	53.48	52.27	52.76	52.51	50.77	53.39	53.06	51.27	54.85	55.19	54.28	56.65
Al_2O_3	30.47	30.02	29.49	29.60	31.70	30.91	30.89	30.77	29.76	30.36	28.83	30.20	29.25	29.83	30.98	29.44	29.76	30.91	28.53	28.28	29.11	27.43
CaO	13.51	13.15	12.60	12.70	15.35	15.28	14.38	14.04	13.21	13.17	11.84	13.03	12.27	12.41	13.57	11.87	12.14	13.37	10.88	10.52	11.36	9.20
K_2O	0.24	0.27	0.32	0.32	0.15	0.15	0.21	0.23	0.26	0.21	0.34	0.24	0.29	0.28	0.19	0.26	0.25	0.20	0.34	0.33	0.25	0.40
FeO	0.37	0.31	0.34	0.32	0.38	0.35	0.38	0.31	0.46	0.29	0.43	0.29	0.31	0.38	0.59	0.27	0.29	0.33	0.27	0.25	0.25	0.16
Total	100.19	99.90	99.61	99.96	99.44	96.55	99.39	99.82	99.54	99.82	99.65	100.15	99.41	99.65	99.73	99.85	99.78	99.65	100.02	99.94	100.28	99.47
Cations (based on 32 oxygens)																						
Na	1.28	1.35	1.46	1.42	0.97	0.99	1.11	1.19	1.34	1.35	1.61	1.41	1.57	1.45	1.19	1.57	1.45	1.22	1.75	1.85	1.73	1.94
Si	9.41	9.50	9.60	9.61	9.03	8.96	9.23	9.32	9.49	9.45	9.73	9.49	9.64	9.57	9.28	9.69	9.63	9.35	9.91	9.96	9.79	10.21
Al	6.53	6.44	6.34	6.34	6.88	6.93	6.69	6.62	6.41	6.52	6.18	6.46	6.30	6.40	6.67	6.29	6.37	6.65	6.07	6.02	6.19	5.83
Ca	2.63	2.57	2.46	2.47	3.03	3.11	2.83	2.75	2.59	2.57	2.31	2.53	2.40	2.42	2.66	2.31	2.36	2.62	2.11	2.03	2.19	1.78
K	0.06	0.06	0.07	0.07	0.04	0.04	0.05	0.05	0.06	0.05	0.08	0.05	0.07	0.07	0.05	0.06	0.06	0.05	0.08	0.08	0.06	0.09
Fe	0.06	0.05	0.05	0.05	0.06	0.06	0.06	0.05	0.07	0.04	0.07	0.04	0.05	0.06	0.09	0.04	0.04	0.05	0.04	0.04	0.04	0.02
Total	19.98	19.99	19.99	19.97	20.02	20.09	20.00	19.99	19.99	19.99	20.01	20.01	20.03	19.99	20.00	19.98	19.93	19.95	19.97	19.99	20.01	19.88
An	66.36	64.40	61.63	62.28	75.13	75.31	70.93	68.79	64.91	64.80	57.74	63.37	59.51	61.44	68.29	58.58	60.98	67.30	53.52	51.41	55.13	46.76
Ab	32.22	34.01	36.50	35.85	23.99	23.84	27.83	29.88	33.57	33.95	40.26	35.26	38.82	36.90	30.54	39.92	37.53	31.50	44.50	46.66	43.45	50.83
Or	1.42	1.60	1.87	1.87	0.87	0.85	1.23	1.33	1.53	1.25	1.99	1.37	1.66	1.66	1.16	1.50	1.50	1.20	1.98	1.93	1.43	2.41

refers to plagioclase enclosed in orthopyroxene

MZ GN = Main Zone gabbronorite, PR mela-GN = Platreef mela-gabbronorite, PR anor = Platreef anorthosite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 2b. Selected Orthopyroxene Analyses from Nonnenwerth

sample	MO50	MO52	MO55	MO57	MO62	MO63	MO66	MO67	MO68	MO69	MO70	MO71	MO73	MO74	MO79	MO80	MO83	MO84
Borehole	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121
Depth (m)	38.84	74.02	136.68	161.06	197.47	199.89	220.02	221.54	236.25	236.5	244.35	245.88	255.31	265.33	288.25	289.59	299.04	309.11
Rock Type	MZ GN	MZ GN	MZ GN	MZ GN	PR anor	PR leuco-GN	PR rx GN	PR Nor	PR leuco-GN	PR mela-GN	PR rx GN	PR mela-GN	PR anor	PR mela-GN	PR mela-GN	PR Nor	PR Nor	PR Nor
wt. %																		
Na_2O	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.03	0.01	0.03	0.02	0.01	0.03	0.04	0.02	0.01
SiO_2	52.50	52.54	52.21	52.63	52.91	52.80	52.21	53.20	53.16	53.14	52.44	51.47	52.23	52.89	51.42	52.44	52.11	53.68
Al_2O_3	1.14	1.15	1.18	1.08	1.36	1.18	1.22	1.15	1.18	1.35	0.88	1.14	1.26	1.17	0.70	1.15	0.60	1.03
MgO	20.30	20.57	21.11	21.80	23.03	23.62	21.66	22.45	23.75	23.51	21.87	20.51	20.56	22.59	19.14	22.30	19.70	24.10
Cr_2O_3	0.01	0.04	0.05	0.03	0.04	0.12	0.02	0.05	0.03	0.06	0.01	0.01	0.00	0.05	0.00	0.12	0.03	0.11
TiO_2	0.23	0.28	0.25	0.20	0.14	0.17	0.20	0.22	0.17	0.14	0.19	0.19	0.22	0.13	0.20	0.21	0.22	0.25
CaO	1.29	1.65	1.78	1.59	1.85	1.71	1.11	1.84	1.54	2.04	0.77	1.24	2.11	1.34	0.93	1.63	1.40	0.88
NiO	0.03	0.04	0.05	0.04	0.09	0.12	0.09	0.09	0.08	0.08	0.05	0.08	0.10	0.06	0.03	0.05	0.03	0.08
FeO	23.87	23.13	22.08	21.40	19.57	18.52	21.99	20.27	18.86	18.60	22.17	23.33	22.50	20.58	25.34	20.64	24.41	19.35
MnO	0.50	0.49	0.48	0.45	0.41	0.36	0.50	0.42	0.39	0.39	0.52	0.49	0.50	0.43	0.56	0.41	0.58	0.40
Total	99.74	99.98	99.27	99.30	99.41	98.68	99.27	99.80	99.20	99.40	98.97	98.54	99.49	99.31	98.42	99.06	99.12	99.97
Cations (based on 6 oxygens)																		
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Si	1.98	1.97	1.97	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.97	1.97	1.98	1.97	1.99	1.97
Al	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.04	0.05	0.06	0.05	0.03	0.05	0.03	0.04
Mg	1.14	1.15	1.19	1.22	1.27	1.31	1.22	1.24	1.31	1.30	1.23	1.17	1.16	1.26	1.10	1.25	1.12	1.32
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01
Ca	0.05	0.07	0.07	0.06	0.07	0.07	0.04	0.07	0.06	0.08	0.03	0.05	0.09	0.05	0.04	0.07	0.06	0.03
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.75	0.73	0.70	0.67	0.61	0.58	0.69	0.63	0.58	0.58	0.70	0.75	0.71	0.64	0.82	0.65	0.78	0.60
Mn	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.02	0.01
Total	4.00	4.00	4.01	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.00	4.01	4.00	4.00	4.00	4.01	4.00	4.00
Mg#	60.26	61.32	63.02	64.50	67.71	69.45	63.71	66.38	69.17	69.26	63.74	61.04	61.96	66.18	57.39	65.83	58.99	68.94

MZ GN = Unit 2 gabbronorite, PR mela-GN = Platreef mela-gabbronorite, PR anor = Platreef anorthosite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 2b. Contd: Selected Orthopyroxene Analyses from Nonnenwerth

sample	MO1	MO2	MO3	MO4	MO6	MO8	MO9	MO10	MO13	MO15	MO17	MO19	MO20	MO21	MO22	MO23	MO24	MO25
Borehole	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
Depth (m)	44.71	57.97	68.54	107.15	151.6	174.19	182.82	195.26	208.8	223.72	255.78	277.48	292.42	299	301.62	306.08	315.45	326.94
Rock type	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	PR anor	PR gabbro	PR gabbro	PR rx-GN	PR Nor	PR Nor	PR Nor	PR mela-GN	PR Nor	PR Nor	PR Nor	PR mela-GN	PR mela-GN
wt. %																		
Na_2O	0.02	0.03	0.02	0.03	0.02	0.01	0.02	0.03	0.02	0.02	0.02	0.01	0.03	0.01	0.02	0.02	0.02	0.02
SiO_2	52.60	52.57	52.11	52.58	52.20	53.96	52.94	52.32	53.31	52.28	53.77	52.13	53.12	53.73	53.91	52.70	52.80	54.30
Al_2O_3	1.03	1.09	0.67	1.06	1.39	1.46	1.54	1.18	1.15	0.70	1.33	0.87	0.96	1.02	0.99	0.94	0.77	0.71
MgO	20.63	21.04	19.60	21.51	21.06	24.87	21.89	20.95	22.83	19.83	24.25	20.11	21.78	23.94	24.16	20.81	21.38	24.09
Cr_2O_3	0.02	0.04	0.02	0.04	0.03	0.08	0.02	0.02	0.07	0.02	0.18	0.04	0.08	0.10	0.06	0.02	0.04	0.14
TiO_2	0.24	0.24	0.17	0.18	0.17	0.16	0.15	0.32	0.16	0.23	0.17	0.23	0.19	0.24	0.19	0.21	0.20	0.22
CaO	1.02	1.13	0.73	0.96	0.65	1.34	1.63	1.13	1.17	1.26	1.07	0.96	1.55	0.93	0.99	1.27	1.18	1.24
NiO	0.03	0.03	0.05	0.04	0.03	0.14	0.08	0.07	0.05	0.08	0.08	0.06	0.07	0.07	0.07	0.04	0.03	0.11
FeO	23.70	23.09	24.90	22.54	23.36	17.35	20.64	22.86	20.17	24.08	18.61	24.16	21.32	19.30	18.87	22.92	22.75	19.31
MnO	0.52	0.52	0.56	0.49	0.49	0.40	0.47	0.53	0.45	0.58	0.40	0.55	0.46	0.38	0.38	0.48	0.49	0.23
Total	99.89	99.81	98.91	99.52	99.48	99.80	99.43	99.94	99.43	99.10	99.90	99.15	99.59	99.80	99.73	99.49	99.70	100.43
Cations (based on 6 oxygens)																		
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Si	1.98	1.97	1.99	1.98	1.97	1.97	1.97	1.97	1.98	1.99	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.99
Al	0.05	0.05	0.03	0.05	0.06	0.06	0.07	0.05	0.05	0.03	0.06	0.04	0.04	0.04	0.04	0.04	0.03	0.03
Mg	1.16	1.18	1.12	1.21	1.18	1.35	1.21	1.18	1.26	1.12	1.33	1.14	1.21	1.31	1.32	1.17	1.20	1.31
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ca	0.04	0.05	0.03	0.04	0.03	0.05	0.07	0.05	0.05	0.05	0.04	0.04	0.06	0.04	0.04	0.05	0.05	0.05
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.75	0.72	0.80	0.71	0.74	0.53	0.64	0.72	0.63	0.77	0.57	0.77	0.67	0.59	0.58	0.72	0.71	0.59
Mn	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.01
Total	4.00	4.00	4.00	4.01	4.01	4.00	3.99	3.99	4.00	3.99	4.00	4.00	3.99	4.00	4.00	4.00	4.00	4.00
Mg#	60.83	61.90	58.39	62.98	61.64	71.87	65.35	62.64	66.86	59.49	69.90	59.75	64.56	68.85	69.54	61.80	62.62	68.97

MZ GN = Unit 2 gabbronorite, PR mela-GN = Platreef mela-gabbronorite, PR anor = Platreef anorthosite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 2c. Selected Clinopyroxene Analyses from Nonnenwerth

sample	MO50	MO52	MO55	MO57	MO62	MO63	MO65	MO66	MO67	MO68	MO69	MO70	MO71	MO72	MO74	MO79	MO80	MO83	MO84
Borehole	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121
Depth (m)	38.84	74.02	136.68	161.06	197.47	199.89	211.82	220.02	221.54	236.25	236.5	244.35	245.88	251.31	265.33	288.25	289.59	299.04	309.11
Rock Type	MZ GN	MZ GN	MZ GN	MZ GN	PR anor	PR leuco-GN	PR leuco-GN	PR rx GN	PR Nor	PR leuco-GN	PR mela-GN	PR rx GN	PR mela-GN	PR mela-GN	PR mela-GN	PR mela-GN	PR nor	PR nor	PR nor
wt. %																			
Na_2O	0.29	0.30	0.30	0.35	0.30	0.27	0.26	0.24	0.29	0.26	0.61	0.33	0.35	0.27	0.29	0.31	0.37	0.42	0.36
SiO_2	51.35	51.17	51.80	51.38	51.48	51.03	52.76	52.73	51.41	52.06	52.91	51.64	51.59	52.21	51.49	51.51	51.77	51.11	51.25
Al_2O_3	2.20	2.62	1.96	2.26	2.21	2.23	1.82	1.07	2.45	2.13	3.82	1.90	1.86	1.63	2.03	1.51	2.18	1.87	2.50
MgO	13.00	13.49	13.65	13.28	12.72	13.95	15.49	14.20	14.15	15.02	17.22	13.92	12.70	13.91	13.61	12.94	14.13	12.87	14.26
Cr_2O_3	0.04	0.08	0.05	0.11	0.01	0.07	0.09	0.04	0.08	0.06	0.04	0.04	0.03	0.02	0.08	0.05	0.31	0.04	0.16
TiO_2	0.55	0.49	0.49	0.48	0.46	0.62	0.31	0.18	0.42	0.22	0.27	0.44	0.41	0.35	0.39	0.32	0.47	0.43	0.51
CaO	21.70	19.93	21.96	21.91	21.84	21.68	21.64	22.47	21.73	20.88	12.14	20.74	21.37	20.55	21.71	21.31	21.11	20.00	21.39
NiO	0.01	0.02	0.02	0.02	0.06	0.08	0.04	0.05	0.05	0.05	0.12	0.03	0.06	0.06	0.03	0.02	0.04	0.02	0.04
FeO	10.39	11.33	9.28	9.27	10.50	8.85	7.44	8.65	8.73	8.54	10.17	10.10	10.87	10.54	9.58	10.89	9.08	12.25	8.55
MnO	0.27	0.28	0.21	0.23	0.31	0.22	0.20	0.26	0.22	0.23	0.14	0.28	0.27	0.29	0.25	0.28	0.23	0.31	0.20
Total	99.84	99.79	99.76	99.31	99.94	99.04	100.13	99.98	99.58	99.50	98.04	99.48	99.54	99.83	99.52	99.18	99.71	99.36	99.28
Cations (based on 6 oxygens)																			
Na	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.03
Si	1.93	1.93	1.94	1.94	1.94	1.93	1.95	1.97	1.93	1.94	1.97	1.95	1.95	1.96	1.94	1.96	1.94	1.94	1.92
Al	0.10	0.12	0.09	0.10	0.10	0.10	0.08	0.05	0.11	0.09	0.17	0.08	0.08	0.07	0.09	0.07	0.10	0.08	0.11
Mg	0.73	0.76	0.76	0.75	0.71	0.79	0.85	0.79	0.79	0.84	0.96	0.78	0.72	0.78	0.76	0.73	0.79	0.73	0.80
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Ti	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ca	0.88	0.81	0.88	0.89	0.88	0.88	0.86	0.90	0.87	0.84	0.49	0.84	0.87	0.83	0.88	0.87	0.85	0.81	0.86
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.33	0.36	0.29	0.29	0.33	0.28	0.23	0.27	0.27	0.27	0.32	0.32	0.34	0.33	0.30	0.35	0.28	0.39	0.27
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	4.02	4.02	4.02	4.01	4.01	4.02	4.02	4.03	4.02	4.02	4.00	4.02	4.01	4.01	4.02	4.02	4.01	4.02	4.02
Mg#	69.06	68.05	72.38	71.85	68.34	73.76	78.78	74.54	74.30	75.88	75.11	71.13	67.57	70.19	71.70	67.94	73.51	65.33	74.86

MZ GN = Main Zone gabbronorite, PR mela-GN = Platreef mala-gabbronorite, PR anor = Platreef anorthosite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 2c.contd: Selected Clinopyroxene Analyses from Nonnenwerth

sample	MO1	MO2	MO3	MO4	MO5	MO6	MO8	MO9	MO10	MO13	MO15	MO17	MO19	MO20	MO22	MO23	MO24	MO25
Borehole	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
Depth (m)	44.71	57.97	68.54	107.15	139.36	151.6	174.19	182.82	195.26	208.8	223.72	255.78	277.48	292.42	301.62	306.08	315.45	326.94
Rock Type	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	MZ GN	PR anor	PR Gabbro	PR Gabbro	PR rx GN	PR Nor	PR rx GN	PR Nor	PR mela-GN	PR Nor	PR Nor	PR mela-GN	PR mela-GN
wt. %																		
Na_2O	0.17	0.31	0.31	0.27	0.23	0.25	0.20	0.27	0.28	0.29	0.38	0.38	0.31	0.45	0.27	0.29	0.31	0.40
SiO_2	53.10	51.66	51.51	51.68	51.33	50.54	50.13	51.72	51.72	52.29	52.15	52.23	51.52	51.84	52.86	52.23	52.01	53.41
Al_2O_3	0.64	2.15	1.92	1.67	1.57	1.98	1.55	2.28	2.23	1.86	1.41	2.15	1.88	2.20	1.68	1.47	1.69	1.93
MgO	13.48	13.22	13.34	13.55	12.48	12.40	13.80	14.01	14.04	14.29	12.96	14.72	13.21	13.21	14.92	13.40	14.02	15.98
Cr_2O_3	0.01	0.07	0.08	0.03	0.00	0.02	-0.01	0.06	0.04	0.13	0.03	0.50	0.09	0.06	0.09	0.01	0.08	0.27
TiO_2	0.09	0.47	0.42	0.43	0.38	0.44	0.35	0.43	0.34	0.33	0.33	0.36	0.44	0.40	0.32	0.27	0.35	0.31
CaO	22.67	21.43	21.34	22.10	21.80	20.28	17.49	21.06	21.40	21.58	21.67	21.87	21.72	20.82	21.26	21.53	19.34	18.00
NiO	0.01	0.02	0.02	0.05	0.04	0.03	0.08	0.05	0.04	0.05	0.04	0.04	0.03	0.05	0.05	0.03	0.02	0.08
FeO	9.48	10.09	10.29	9.49	11.29	12.56	13.66	9.31	9.14	8.23	10.11	7.14	9.74	9.67	7.01	9.70	10.93	8.67
MnO	0.27	0.29	0.26	0.24	0.30	0.34	0.34	0.26	0.25	0.21	0.28	0.19	0.22	0.26	0.17	0.27	0.26	0.12
Total	99.94	99.82	99.52	99.59	99.49	98.88	97.64	99.48	99.52	99.29	99.41	99.62	99.21	99.01	98.67	99.27	99.08	99.33
Cations (based on 6 oxygens)																		
Na	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.03
Si	1.99	1.94	1.94	1.95	1.95	1.94	1.94	1.94	1.94	1.96	1.97	1.94	1.95	1.96	1.98	1.97	1.96	1.98
Al	0.03	0.10	0.09	0.07	0.07	0.09	0.07	0.10	0.10	0.08	0.06	0.09	0.08	0.10	0.07	0.07	0.08	0.08
Mg	0.75	0.74	0.75	0.76	0.71	0.71	0.80	0.78	0.79	0.80	0.73	0.82	0.74	0.74	0.83	0.75	0.79	0.88
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
Ti	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ca	0.91	0.86	0.86	0.89	0.89	0.83	0.73	0.85	0.86	0.87	0.88	0.87	0.88	0.84	0.85	0.87	0.78	0.72
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.30	0.32	0.32	0.30	0.36	0.40	0.44	0.29	0.29	0.26	0.32	0.22	0.31	0.31	0.22	0.31	0.35	0.27
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Total	4.00	4.02	4.02	4.02	4.02	4.02	4.03	4.01	4.01	4.01	4.01	4.01	4.01	4.01	3.99	4.01	4.01	4.00
Mg#	71.71	70.06	69.81	71.77	66.34	63.75	64.33	72.90	73.32	75.61	69.56	78.63	70.73	70.88	79.15	71.15	70.03	76.64

MZ GN = Main Zone gabbronorite, PR mela-GN = Platreef mala-gabbronorite, PR anor = Platreef anorthosite, PR Nor = Platreef norite, PR rx GN = Platreef recrystallised gabbronorite.

Table 3a: Selected electron microprobe analyses of pentlandite on Nonnenwerth and Townlands

Table 3a cc

Sample	M0X9	M0X9	M0X9	M0X10	M0X10	M0X10	M0X10	M0X12	M0X12	M0X12	M0X12	M0X27	M0X27	M0X27	M0X27	M0X27	M0X27	M0X27	Sample
Analyses	10_F4	11_F4	12_F4	1_BSE2a	2_BSE2a	3_BSE2a	4_BSE2a	1_BSE2a	2_BSE2a	3_BSE2a	10_BSE2a	7_BSE1c	8_BSE1c	10_BSE1c	11_BSE2a	12_BSE2a	17_BSE2a	13_BSE2a	Analyses
Borehole	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2121	2199	2199	2199	2199	2199	2199	2199	Borehole
Depth (m)	199.68	199.68	199.68	219.9	219.9	219.9	219.9	244.55	244.55	244.55	244.55	173.94	173.94	173.94	173.94	173.94	173.94	173.94	Depth (m)
Rock Type	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR Anor	PR Anor	PR Anor	PR Anor	PR Anor	PR Anor	PR Anor	Rock Type
	Weight per cent																		
S	32.73	32.73	32.59	32.93	32.81	32.62	32.56	32.59	32.76	32.64	33.00	33.29	32.94	33.01	33.00	32.83	53.52	32.97	**S**
Ni	36.68	36.49	36.45	34.88	34.75	34.75	34.79	34.42	34.58	34.61	35.00	34.13	34.48	34.57	35.17	34.99	0.24	34.87	**Ni**
Fe	29.78	29.99	29.60	30.54	30.80	30.77	30.66	30.56	30.77	30.69	30.50	31.76	31.21	31.45	31.40	31.30	43.46	31.25	**Fe**
Co	0.91	0.92	0.94	1.20	1.16	1.16	1.13	1.76	1.73	1.75	1.00	1.13	1.13	1.16	0.55	0.61	2.71	0.57	**Co**
Cu	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.286	0.221	0.110	<0.04	<0.04	<0.04	<0.04	**Cu**
As	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**As**
Se	0.030	0.029	0.029	0.019	0.021	0.022	0.022	0.022	0.024	0.021	0.020	0.047	0.028	0.020	0.025	0.022	0.056	0.027	**Se**
Rh	<0.002	<0.002	<0.002	<0.002	0.0038	<0.002	<0.002	<0.002	<0.002	0.0034	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	**Rh**
Pd	0.051	0.050	0.047	0.067	0.070	0.058	0.066	0.021	0.024	0.022	0.014	0.012	0.019	0.017	0.013	0.013	<0.002	0.012	**Pd**
Pt	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	**Pt**
Ag	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**Ag**
Total	100.18	100.18	99.68	99.59	99.70	99.48	99.29	99.44	99.95	99.75	99.53	100.66	99.95	100.44	100.44	100.44	100.46	100.44	**Total**
	Atomic concentration																		
S	46.525	46.508	46.549	46.911	46.791	46.671	46.645	46.624	46.646	46.556	47.0	46.942	46.771	46.730	46.807	46.744	66.844	46.920	**S**
Ni	28.468	28.312	28.430	27.139	27.063	27.146	27.216	26.889	26.890	26.958	27.2	26.282	26.728	26.720	27.239	27.205	0.166	27.098	**Ni**
Fe	24.297	24.463	24.271	24.980	25.216	25.273	25.217	25.098	25.149	25.133	24.9	25.712	25.436	25.557	25.569	25.578	31.159	25.527	**Fe**
Co	0.703	0.709	0.732	0.932	0.900	0.899	0.879	1.372	1.337	1.358	0.8	0.866	0.876	0.895	0.427	0.471	1.843	0.439	**Co**
Cu	0.023	0.004	0.002	-0.003	0.014	0.004	-0.002	0.013	-0.010	-0.004		0.203	0.158	0.078	-0.003	-0.004	-0.004	-0.005	**Cu**
Se	0.018	0.017	0.017	0.011	0.012	0.013	0.013	0.013	0.014	0.012	0.011	0.027	0.016	0.012	0.014	0.013	0.032	0.015	**Se**
Pd	0.022	0.021	0.020	0.029	0.030	0.025	0.028	0.009	0.010	0.009	0.006	0.005	0.008	0.007	0.005	0.006	0.000	0.005	**Pd**

Detection limits : 20 ppm (Rh, Pd), 35 ppm (Se, Pt), 45 ppm (Ag), 300 ppm (S), 330 ppm (Co), 370 ppm (Cu), 510 ppm (As), 640 ppm (Ni), 900 ppm (Fe)

Detection lir

MOX = Nonnenwerth samples and P = Townlands samples, MP GN = Middle Platreef gabbronorite, PR Anor = Platreef anorthosite, PR rx GN = Platreef recrystallised gabbronorite

MOX = Nor

ontd: Selected electron microprobe analyses of pentlandite on Nonnenwerth and Townlands

M0X27 14_BSE2a 2199 173.94 PR Anor	M0X27 15_BSE2a 2199 173.94 PR Anor	M0X27 18_BSE2a 2199 173.94 PR Anor	M0X27 19_BSE3a 2199 173.94 PR Anor	M0X27 20_BSE3a 2199 173.94 PR Anor	M0X27 23_BSE3a 2199 173.94 PR Anor	M0X27 24_BSE3a 2199 173.94 PR Anor	M0X27 25_BSE3a 2199 173.94 PR Anor	M0X27 26_F4 2199 173.94 PR Anor	P13 8_BSE1b TL1-03 80.75 MP GN	P13 9_BSE4b TL1-03 80.75 MP GN	P13 10_BSE4b TL1-03 80.75 MP GN	P13 11_BSE4b TL1-03 80.75 MP GN
Weight per cent												
32.95	38.89	53.59	39.19	39.07	33.07	33.09	33.04	33.10	32.89	32.79	32.88	32.74
35.01	0.49	0.09	0.34	0.38	34.88	34.85	35.35	35.20	36.52	36.60	36.67	36.68
31.11	60.90	46.00	61.10	60.96	31.40	31.58	31.56	31.46	29.95	29.78	29.70	29.63
0.56	-0.01	0.10	-0.01	-0.01	0.45	0.43	0.46	0.52	1.07	1.28	1.06	1.10
<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.156	<0.04	0.138	0.086
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
0.020	0.031	0.054	0.030	0.029	0.018	0.018	0.022	0.018	0.007	0.008	0.009	0.007
<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
0.007	<0.002	<0.002	<0.002	<0.002	0.018	0.021	0.022	0.009	<0.002	<0.002	<0.002	<0.002
<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
100.43	100.43	100.46	100.43	100.43	100.44	100.44	100.45	100.43	100.71	100.51	100.51	100.21
Atomic concentration												
46.909	52.469	66.889	52.631	52.590	46.966	46.926	46.719	46.837	46.518	46.475	46.570	46.482
27.219	0.361	0.058	0.247	0.279	27.049	26.981	27.292	27.196	28.204	28.329	28.358	28.435
25.422	47.166	32.963	47.106	47.106	25.606	25.709	25.615	25.556	24.319	24.226	24.147	24.150
0.434	-0.008	0.065	-0.008	-0.007	0.348	0.333	0.351	0.400	0.821	0.984	0.819	0.849
-0.004	0.003	0.005	0.012	0.005	0.018	0.022	0.001	0.007	0.111	0.005	0.099	0.061
0.012	0.018	0.031	0.017	0.017	0.010	0.011	0.013	0.010	0.004	0.005	0.005	0.004
0.003	0.000	0.000	0.000	0.000	0.008	0.009	0.010	0.004	0.000	0.000	0.000	0.000

nits : 20 ppm (Rh, Pd), 35 ppm (Se, Pt), 45 ppm (Ag), 300 ppm (S), 330 ppm (Co), 370 ppm (Cu), 510 ppm (As), 640 ppm (Ni), 900 ppm (Fe)
nnenwerth samples and P = Townlands samples, MP GN = Middle Platreef gabbronorite, PR Anor = Platreef anorthosite, PR rx GN = Platreef recrystallised gabbronorite

Table 3b: Selected electron microprobe analyses of pyrrhotite on Nonnenwerth and Townlands

Sample	M0X10	M0X10	M0X10	M0X12	M0X12	M0X12	M0X27	M0X27	M0X29	M0X29	M0X29	P13	P13	P13	P13	P15
Analysis	5_BSE2a	6_BSE2a	7_BSE2a	4_BSE2a	5_BSE2a	6_BSE2a	16_BSE2a	27_F4	11_F1	12_BSE3b	13_F3	6_BSE1b	7_BSE1b	12_BSE4b	13_BSE4b	28_BSE3e
Borehole	2121	2121	2121	2121	2121	2121	2199	2199	2199	2199	2199	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03
Depth (m)	219.9	219.9	219.9	244.55	244.55	244.55	173.94	173.94	195.07	195.07	195.07	80.75	80.75	80.75	80.75	89.55
Rock Type	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR Anor	PR Anor	PR Gabbro	PR Gabbro	PR Gabbro	MP GN	MP GN	MP GN	MP GN	MP GN
	Weight per cent															
S	38.45	38.45	38.49	38.51	38.79	38.75	38.88	39.04	37.89	37.50	37.61	38.66	38.71	38.71	38.67	38.35
Ni	0.46	0.49	0.52	0.49	0.48	0.42	0.49	0.41	0.12	0.35	0.18	0.93	0.87	0.91	0.91	0.13
Fe	61.10	60.75	60.81	61.26	61.26	61.11	60.98	60.75	61.57	61.87	62.04	60.52	60.55	60.66	60.62	61.98
Co	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.033
Cu	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.246	<0.04	<0.04	<0.04	<0.04	0.122
As	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Se	0.025	0.027	0.026	0.024	0.022	0.022	0.027	0.023	0.030	0.031	0.036	0.013	0.013	0.011	0.009	0.004
Rh	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Pd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Pt	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Ag	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Total	100.13	99.83	99.83	100.33	100.62	100.32	99.93	99.82	99.93	99.83	100.14	100.11	100.21	100.31	99.81	100.41
	Atomic concentration															
S	52.118	52.238	52.229	52.085	52.267	52.299	52.417	52.660	51.575	51.225	51.197	52.315	52.332	52.273	52.269	51.759
Ni	0.340	0.362	0.387	0.359	0.353	0.310	0.362	0.304	0.089	0.264	0.133	0.688	0.644	0.673	0.674	0.095
Fe	47.548	47.384	47.367	47.562	47.384	47.349	47.204	47.050	48.110	48.516	48.476	47.017	46.993	47.030	47.042	48.024
Cu											0.169					0.083
Se	0.014	0.015	0.014	0.013	0.012	0.012	0.015	0.013	0.016	0.017	0.020	0.007	0.007	0.006	0.005	0.002

Detection limits : 20 ppm (Rh, Pd), 35 ppm (Se, Pt), 45 ppm (Ag), 300 ppm (S), 330 ppm (Co), 370 ppm (Cu), 510 ppm (As), 640 ppm (Ni), 900 ppm (Fe)
MOX = Nonnenwerth samples and P = Townlands samples, MP GN = Middle Platreef gabbronorite, PR Anor = Platreef anorthosite, PR rx GN = Platreef recrystallised gabbronorite

Table 3c: Selected electron microprobe analyses of pyrite on Nonnenwerth and Townlands

Sample	M0X9	M0X9	M0X9	M0X10	M0X10	M0X10	M0X10	M0X27	M0X27	M0X27	M0X27	M0X29	M0X29	M0X29
Analysis	13_BSE6a	14_BSE6a	15_BSE6a	16_Camera3a	17_Camera3a	18_Camera3a	19_Camera4a	5_BSE1c	21_BSE3a	22_BSE3a	28_F4	8_BSE2a	9_BSE2a	10_BSE2a
Borehole	2121	2121	2121	2121	2121	2121	2121	2199	2199	2199	2199	2199	2199	2199
Depth (m)	199.68	199.68	199.68	219.9	219.9	219.9	219.9	173.94	173.94	173.94	173.94	195.07	195.07	195.07
Rock Type	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR rx GN	PR Anor	PR Anor	PR Anor	PR Anor	PR Gabbro	PR Gabbro	PR Gabbro
	Weight per cent													
S	52.80	52.81	53.21	53.40	53.40	53.40	53.40	53.47	53.64	53.63	53.66	52.74	53.22	53.27
Ni	<0.06	<0.06	0.03	<0.06	<0.06	<0.06	<0.06	0.06	1.06	<0.06	0.11	<0.06	0.08	<0.06
Fe	46.20	46.39	46.65	46.60	46.60	46.60	46.60	46.22	45.06	46.38	45.92	46.14	46.87	46.64
Co	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	<0.03
Cu	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.220	<0.04	<0.04	<0.04	0.084	0.061	0.091
As	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Se	0.021	0.038	0.017	0.024	0.034	0.014	0.010	0.031	0.033	0.014	0.029	0.005	<0.004	0.008
Rh	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0023	<0.002
Pd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Pt	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Ag	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Total	99.02	99.24	99.92	100.03	100.04	100.02	100.01	100.03	99.64	99.92	99.63	98.91	100.31	100.01
	Atomic concentration													
S	66.565	66.466	66.509	66.6	66.6	66.6	66.6	66.723	66.968	66.811	66.982	66.490	66.345	66.501
Ni	0.011	-0.001	0.021	0.0	0.0	0.0	0.0	0.041	0.725	0.021	0.073	0.022	0.053	0.027
Fe	33.436	33.515	33.476	33.4	33.4	33.4	33.4	33.110	32.292	33.171	32.906	33.396	33.539	33.424
Cu								0.138				0.053	0.039	0.057
Se	0.011	0.019	0.009	0.012	0.017	0.007	0.005	0.015	0.017	0.007	0.015	0.003		0.004

Detection limits : 20 ppm (Rh, Pd), 35 ppm (Se, Pt), 45 ppm (Ag), 300 ppm (S), 330 ppm (Co), 370 ppm (Cu), 510 ppm (As), 640 ppm (Ni), 900 ppm (Fe)

MOX = Nonnenwerth samples and P = Townlands samples, MP GN = Middle Platreef gabbronorite, PR Anor = Platreef anorthosite, PR rx GN = Platreef recrystallised gabbronorite

Table 3c contd: Selected electron microprobe analyses of pyrite on Nonnenwerth and Townlands

Sample	M0X29	P7	P7	P7	P15	P15	P15	P15	P15	P15	P15	P106	P106	P106
Analysis	14_BSE6a	2_BSE1d	5_BSE1f	6_BSE1f	21_BSE1b	22_BSE2b	23_BSE2d	24_BSE3b	25_BSE4a	26_BSE4a	27_BSE5a	3_BSE1b	5_BSE1b	7_BSE2b
Borehole	2199	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03	TL1-03
Depth (m)	195.07	57.7	57.7	57.7	89.55	89.55	89.55	89.55	89.55	89.55	89.55	106	106	106
Rock Type	PR Gabbro	UP GN	UP GN	UP GN	MP GN	MP GN	MP GN	MP GN	MP GN	MP GN	MP GN	MP GN	MP GN	MP GN
	Weight per cent													
S	51.79	53.91	53.80	53.78	53.82	53.70	53.80	54.09	53.67	53.51	53.82	52.59	53.45	53.44
Ni	0.34	0.30	0.53	0.30	0.07	0.17	0.11	0.09	0.14	0.17	0.15	1.02	<0.06	0.35
Fe	48.32	46.56	45.91	46.18	44.74	44.76	44.92	45.28	44.83	44.41	44.94	43.35	46.59	46.53
Co	<0.03	0.04	0.26	0.26	1.45	1.38	1.36	0.89	1.39	1.76	1.22	1.67	<0.03	0.07
Cu	<0.04	0.160	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	2.225	<0.04	<0.04
As	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Se	0.072	0.034	0.009	<0.004	0.024	0.045	0.022	0.008	0.015	0.010	0.023	0.006	0.010	0.025
Rh	<0.002	<0.002	<0.002	0.0024	<0.002	<0.002	<0.002	<0.002	0.0155	<0.002	<0.002	<0.002	<0.002	<0.002
Pd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0031	<0.002	<0.002	<0.002	<0.002	<0.002
Pt	<0.003	<0.003	0.0036	<0.003	<0.003	0.0035	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Ag	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Total	100.47	101.04	100.51	100.61	100.43	100.45	100.42	100.41	100.03	99.91	100.13	100.81	100.11	100.43
	Atomic concentration													
S	64.948	66.624	66.755	66.725	66.992	66.929	66.922	67.079	66.884	66.846	66.977	65.669	66.644	66.479
Ni	0.232	0.204	0.361	0.206	0.045	0.114	0.076	0.059	0.095	0.113	0.099	0.697	0.008	0.239
Fe	34.782	33.035	32.698	32.892	31.968	32.023	32.075	32.238	32.074	31.845	32.106	31.075	33.346	33.225
Cu		0.100										1.402		
Se		0.017	0.005		0.014	0.026	0.013	0.004	0.008	0.005	0.012	0.003	0.005	0.012

Detection limits : 20 ppm (Rh, Pd), 35 ppm (Se, Pt), 45 ppm (Ag), 300 ppm (S), 330 ppm (Co), 370 ppm (Cu), 510 ppm (As), 640 ppm (Ni), 900 ppm (Fe)

MOX = Nonnenwerth samples and P = Townlands samples, MP GN = Middle Platreef gabbronorite, PR Anor = Platreef anorthosite, PR rx GN = Platreef recrystallised gabbronorite

Table 3d: Electron microprobe analyses of chalcopyrite on Nonnenwerth

Sample	**M0X10**	**M0X10**
Analysis	**14_BSE2a**	**15_BSE2a**
Borehole	**2121**	**2121**
Depth (m)	**219.9**	**219.9**
Rock Type	**PR rx GN**	**PR rx GN**
	Weight per cent	
S	34.90	34.90
Ni	<0.06	<0.06
Fe	30.40	30.40
Co	<0.03	<0.03
Cu	34.60	34.60
As	<0.05	<0.05
Se	0.018	0.017
Rh	<0.002	<0.002
Pd	<0.002	<0.002
Pt	<0.003	<0.003
Total	99.92	99.92
	Atomic concentration	
S	49.997	49.996
Fe	25.001	25.001
Cu	25.007	25.007
Se	0.0106	0.0101

Detection limits : 20 ppm (Rh, Pd), 35 ppm (Se, Pt), 45 ppm (Ag), 300 ppm (S), 330 ppm (Co), 370 ppm (Cu), 510 ppm (As), 640 ppm (Ni), 900 ppm (Fe)
MOX = Nonnenwerth samples, PR rx GN = Platreef recrystallised gabbronorite

Table 4: Cr-bearing magnetites Analyses on samples from Nonnenwerth

Sample	MO26						MO27	
Analysis	1	2	3	4	5	6	1	2
Borehole	2199	2199	2199	2199	2199	2199	2199	2199
depth (m)	338.85	338.85	338.85	338.85	338.85	338.85	342.81	342.81
Rock Type	Peridotite	Peridotite	Peridotite	Peridotite	Peridotite	Peridotite	PR mela-GN	PR mela-GN
wt. %								
MgO	1.24	1.49	1.34	1.26	2.91	1.80	1.89	1.26
Al2O3	5.84	5.87	5.12	4.81	6.49	5.94	5.60	4.29
SiO2	0.04	0.02	0.03	0.03	0.04	0.02	0.02	0.03
TiO2	6.37	2.11	2.18	2.89	5.19	6.12	1.88	0.22
Cr2O3	12.43	12.15	11.53	11.44	13.61	11.78	26.30	18.69
MnO	1.09	0.26	0.20	0.26	0.40	0.51	0.26	0.23
Fe2O3	36.58	45.65	46.83	45.87	38.41	38.43	31.90	43.88
FeO	34.74	31.35	31.62	32.30	32.28	34.42	30.52	29.72
ZnO	0.16	0.10	0.07	0.05	0.06	0.05	0.08	0.12
Total	98.47	98.99	98.90	98.89	99.37	99.07	98.45	98.43
Cations (based on 32 oxygens)								
Si	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ti	1.42	0.47	0.49	0.65	1.13	1.35	0.42	0.05
Al	2.04	2.04	1.79	1.69	2.21	2.05	1.94	1.51
Cr	2.91	2.84	2.71	2.69	3.11	2.73	6.13	4.43
Fe3+	8.19	10.17	10.50	10.31	8.39	8.50	7.08	9.94
Fe2+	8.58	7.73	7.84	8.02	7.78	8.43	7.51	7.41
Mn	0.27	0.07	0.05	0.07	0.10	0.13	0.06	0.06
Mg	0.55	0.66	0.59	0.56	1.25	0.79	0.83	0.56
Zn	0.03	0.02	0.01	0.01	0.01	0.01	0.02	0.03
Al#	41.2	41.9	39.8	38.5	41.6	42.9	24.1	25.5
Mg#	6.0	7.8	7.0	6.5	13.9	8.6	9.9	7.0

PR mela-GN = Platreef mela-gabbronorite, peridotite = serpentinized peridotite.
Al# = 100*Al/(Cr+Al); Mg-no. = 100Mg/(Mg+Fe^{2+})

Table 6a. Composition (wt. %) of PGE-bismuthotellurides, Bi- and Te-phases, Au and trace minerals in samples from Nonnenwerth

	kotulskite										moncheite							
Sample	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX10**	**MOX29**	**MOX29**	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX9**	**MOX9**
Analysis	**1_BSE1a**	**3_BSE1a**	**4_BSE2a**	**16_BSE7a**	**22_BSE9c**	**23_BSE10b**	**26_BSE14a**	**10_BSE1c**	**1_BSE1a**	**1b_BSE1a**	**5_BSE2b**	**6_BSE2b**	**7_BSE3b**	**8_BSE3b**	**9_BSE3b**	**21_BSE9b**	**25_BSE14a**	**27_BSE15b**
Borehole	**2121**	**2121**	**2121**	**2121**	**2121**	**2121**	**2121**	**2121**	**2199**	**2199**	**2121**	**2121**	**2121**	**2121**	**2121**	**2121**	**2121**	**2121**
Depth (m)	**199.68**	**199.68**	**199.68**	**199.68**	**199.68**	**199.68**	**199.68**	**219.9**	**195.07**	**195.07**	**199.68**	**199.68**	**199.68**	**199.68**	**199.68**	**199.68**	**199.68**	**199.68**
Lithology	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Anor**	**Anor**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**	**Rx Gn**
	Weight per cent																	
S	0.01	0.02	0.01	-	-	-	0.01	-	0.14	0.17	0.04	0.03	0.02	0.03	0.03	0.04	0.03	0.05
Fe	0.44	0.47	0.57	0.48	0.67	0.17	0.26	0.31	1.92	1.95	0.24	0.25	0.36	0.40	0.37	0.56	0.34	1.64
Co	0.01	-	0.01	0.03	0.01	-	-	0.03	0.02	0.01	0.01	0.01	-	-	0.01	-	-	0.02
Ni	-	0.01	0.02	0.03	-	0.02	0.04	0.03	0.02	-	0.03	0.04	0.07	0.07	0.06	0.02	0.11	0.05
Cu	0.65	0.69	0.08	0.19	0.04	0.02	0.12	0.07	2.39	2.47	0.05	0.01	0.09	0.25	0.56	0.14	0.08	0.20
As	-	-	-	-	-	-	0.03	-	-	-	0.03	-	-	-	-	-	-	-
Se	0.01	0.01	-	-0.02	0.01	0.05	-	-	0.03	-	-	-	-	0.02	0.02	0.06	0.03	0.02
Ru	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rh	-	-	-	-	-	-	-	-	-	-	0.15	0.08	0.06	0.05	0.10	0.12	0.04	0.10
Pd	44.57	44.41	43.23	43.98	43.70	44.02	44.45	43.25	42.95	42.81	2.14	2.19	11.44	11.56	10.98	2.05	12.32	2.69
Ag	0.19	0.21	0.26	0.17	0.17	0.13	0.20	0.28	0.24	0.30	0.03	0.05	0.05	0.04	-	0.12	0.07	0.07
Sn	0.01	0.01	-	-	-	0.02	-	-	0.01	-	0.02	-	0.01	-	-	0.02	0.01	-
Sb	0.16	0.18	0.17	0.21	0.21	0.28	0.32	0.17	0.15	0.13	0.45	0.51	0.54	0.44	0.50	0.51	0.48	0.46
Te	51.08	50.73	45.92	47.31	50.54	50.59	52.67	44.55	41.87	41.84	58.10	56.60	61.48	62.07	62.58	57.52	63.10	56.49
Os	0.13	0.16	0.20	0.17	0.04	0.06	0.06	0.23	0.25	0.24	0.18	0.23	0.19	0.10	0.09	0.21	0.21	0.29
Ir	0.30	0.35	0.29	0.42	0.19	0.34	0.37	0.33	0.33	0.40	0.40	0.36	0.29	0.43	0.52	0.42	0.23	0.38
Pt	-	-	0.30	0.03	0.21	0.22	0.10	0.48	0.30	0.31	38.93	38.96	25.22	25.70	26.22	37.33	23.78	36.18
Au	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bi	6.01	6.25	12.62	8.05	4.47	6.30	3.88	14.14	17.14	17.32	1.91	3.51	1.91	1.86	1.27	1.75	0.99	3.06
Total	103.61	103.53	103.71	101.25	100.83	102.35	102.62	103.91	107.79	107.96	102.71	102.84	101.74	103.03	103.34	100.99	101.85	101.87
	Atomic concentration																	
S	0.05	0.07	0.03	-	-	-	0.03	-	0.49	0.58	0.19	0.13	0.08	0.11	0.10	0.17	0.13	0.21
Fe	0.91	0.97	1.21	1.02	1.40	0.36	0.54	0.67	3.85	3.90	0.63	0.64	0.86	0.94	0.88	1.43	0.80	4.11
Co	0.02	-	0.02	0.05	0.02	-	-	0.07	0.04	0.02	0.02	0.01	-	-	0.02	-	0.01	0.06
Ni	-	0.02	0.05	0.07	-	0.03	0.09	0.06	0.04	-	0.07	0.09	0.15	0.15	0.13	0.05	0.25	0.11
Cu	1.18	1.25	0.16	0.36	0.08	0.04	0.21	0.14	4.21	4.35	0.10	0.03	0.19	0.52	1.16	0.31	0.16	0.44
As	-	-	-	-	-	-	0.05	-	-	-	0.06	-	-	-	-	-	-	-
Se	0.02	-	-	-	0.02	0.07	-	-	0.04	-	-	0.01	-	0.03	0.03	0.11	0.06	0.03
Ru	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rh	-	-	-	-	-	-	-	-	-	-	0.21	0.11	0.08	0.07	0.13	0.17	0.05	0.13
Pd	48.19	48.12	48.20	48.98	47.58	48.54	48.32	48.66	45.18	44.99	2.89	2.97	14.45	14.41	13.61	2.77	15.37	3.54
Ag	0.21	0.22	0.28	0.19	0.18	0.14	0.22	0.31	0.25	0.31	0.04	0.06	0.06	0.04	-	0.16	0.08	0.09
Sn	0.01	0.01	-	-	-	0.02	-	-	0.01	-	0.02	-	0.01	-	-	0.03	0.01	-
Sb	0.15	0.17	0.16	0.20	0.20	0.27	0.30	0.17	0.14	0.12	0.53	0.60	0.60	0.48	0.54	0.60	0.53	0.53
Te	46.06	45.83	42.68	43.93	45.88	46.52	47.75	41.79	36.73	36.66	65.27	63.99	64.76	64.54	64.65	64.83	65.64	61.92
Os	0.08	0.10	0.13	0.10	0.03	0.04	0.03	0.14	0.15	0.14	0.13	0.17	0.13	0.07	0.06	0.16	0.14	0.21
Ir	0.18	0.21	0.18	0.26	0.12	0.21	0.22	0.21	0.19	0.23	0.30	0.27	0.21	0.30	0.36	0.31	0.16	0.28
Pt	-	-	0.18	0.02	0.12	0.13	0.06	0.29	0.17	0.18	28.60	28.81	17.38	17.48	17.72	27.52	16.18	25.94
Au	0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bi	3.31	3.45	7.16	4.56	2.48	3.54	2.15	8.10	9.18	9.27	1.31	2.42	1.23	1.18	0.80	1.20	0.63	2.05
Total	100.42	100.52	100.55	100.47	100.40	100.46	100.40	100.78	100.71	100.76	100.42	100.41	100.25	100.46	100.28	100.47	100.39	100.52

Rx GN = recystallised gabbronorite, Anor = anorthosite
- = below detection limit

Table 6a. Contd: Composition (wt. %) of PGE-bismuthotellurides, Bi- and Te-complexes, Au and trace minerals in samples from Nonnenwerth

				merenskyite		merenskyite								gold				
MOX10 8_BSE1c 2121 219.9 Rx Gn	MOX10 9_BSE1c 2121 219.9 Rx Gn	Sample Analysis Borehole Depth (m) Lithology	MOX27 1_BSE1b 2199 173.94 Anor	MOX27 2_BSE1b 2199 173.94 Anor	MOX27 4_BSE2a 2199 173.94 Anor	MOX29 2_BSE2c 2199 195.07 Anor	MOX29 3_BSE2d 2199 195.07 Anor	MOX29 4_BSE2d 2199 195.07 Anor	MOX29 5_BSE2d 2199 195.07 Anor	MOX29 6_BSE3c 2199 195.07 Anor	MOX29 7_BSE4b 2199 195.07 Anor	MOX29 17_BSE8a 2199 195.07 Anor	MOX29 18_BSE9a 2199 195.07 Anor	MOX29 19_BSE10a 2199 195.07 Anor	MOX9 18_BSE8a 2121 199.68 Rx Gn	MOX9 19_BSE11a 2121 199.68 Rx Gn	MOX9 20_BSE13b 2121 199.68 Rx Gn	MOX12 7_BSE3b 2121 244.55 Rx Gn	MOX12 8_BSE3b 2121 244.55 Rx Gn
						Weight per cent													
0.06	0.04	**S**	0.03	0.04	0.21	0.06	0.02	0.02	0.03	2.14	0.02	0.85	7.35	5.60	5.88	0.02	0.03	0.01	0.02
0.36	0.52	**Fe**	0.93	1.04	1.59	1.05	0.68	0.30	0.45	4.60	0.37	2.36	10.80	6.24	9.09	0.18	0.86	1.48	1.68
0.02	-	**Co**	-	-	0.04	0.03	-	-	-	-	0.03	0.02	-	-	0.01	0.32	0.28	-	0.01
0.01	0.01	**Ni**	0.37	0.11	1.97	0.06	0.08	0.19	0.10	0.03	0.03	0.03	0.10	0.02	0.03	-	-	0.01	-
-	0.02	**Cu**	0.35	0.46	0.01	1.13	0.67	0.34	0.41	0.95	0.56	2.92	10.78	5.49	6.59	-	1.12	0.06	0.01
0.03	-	**As**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-
0.04	0.01	**Se**	-	-	0.01	-	-	-	-	0.03	0.01	-	-	0.06	0.01	0.04	0.03	-	0.02
0.02	0.01	**Ru**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.13	0.18	**Rh**	0.06	0.11	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-	-
1.38	1.36	**Pd**	6.12	18.62	28.28	19.17	28.48	26.03	28.59	16.14	20.90	18.34	9.80	14.56	-	-	-	0.51	0.45
0.05	0.10	**Ag**	0.18	0.09	0.15	0.10	0.26	0.28	0.23	0.10	0.19	0.14	0.15	0.09	24.29	0.78	1.54	12.95	13.26
-	-	**Sn**	0.03	0.01	-	0.02	-	-	0.03	0.01	-	0.01	-	-	-	-	-	0.01	0.02
0.46	0.51	**Sb**	0.77	0.38	0.35	0.56	0.26	0.31	0.36	0.43	0.44	0.36	0.18	0.45	-	0.08	0.08	-	-
58.77	58.25	**Te**	53.85	60.56	63.32	59.43	58.42	58.60	58.98	57.92	60.09	59.77	34.73	51.34	0.04	-	-	0.02	0.02
0.25	0.21	**Os**	0.32	0.21	0.13	0.23	0.31	0.21	0.25	0.21	0.22	0.15	0.09	0.23	0.09	-	0.04	0.02	0.04
0.44	0.27	**Ir**	0.48	0.43	0.34	0.19	0.42	0.13	0.42	0.38	0.28	0.38	0.35	0.40	0.29	0.35	0.36	0.31	0.43
40.22	40.27	**Pt**	31.51	14.04	0.49	14.19	0.36	3.30	0.39	16.56	11.47	14.51	10.99	16.09	-	-	-	-	-
-	-	**Au**	-	-	-	-	-	-	-	-	-	-	-	-	50.79	89.98	92.11	84.67	82.11
-	-	**Hg**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	**Pb**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.64	0.94	**Bi**	8.81	7.31	8.85	9.12	14.99	13.89	14.52	6.47	9.14	7.13	2.20	5.76	0.06	-	-	0.13	0.12
102.85	102.68	**Total**	103.81	103.44	105.75	105.35	104.97	103.63	104.81	105.98	103.84	106.99	88.28	106.37	98.97	92.32	96.61	100.24	98.23
						Atomic concentration													
0.26	0.16	**S**	0.14	0.14	0.76	0.23	0.07	0.09	0.12	7.48	0.08	3.06	21.75	17.00	18.43	0.12	0.20	0.06	0.11
0.91	1.33	**Fe**	2.31	2.35	3.24	2.32	1.48	0.67	0.98	9.25	0.83	4.86	18.34	10.86	16.35	0.67	2.96	4.55	5.21
0.04	-	**Co**	-	-	0.08	0.06	0.01	0.01	0.01	-	0.07	0.03	-	-	0.02	1.09	0.91	-	0.02
0.01	0.03	**Ni**	0.88	0.23	3.81	0.13	0.16	0.41	0.20	0.06	0.06	0.05	0.16	0.04	0.05	-	0.01	0.03	-
-	0.05	**Cu**	0.77	0.91	0.01	2.21	1.27	0.66	0.79	1.69	1.11	5.29	16.09	8.40	10.41	-	3.38	0.16	0.04
0.06	-	**As**	-	-	-	-	-	-	-	-	0.12	-	-	-	-	-	-	0.07	-
0.07	0.01	**Se**	-	-	0.01	-	-	-	-	0.05	0.01	-	-	0.08	0.01	0.09	0.08	-	0.04
0.02	0.01	**Ru**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.18	0.24	**Rh**	0.08	0.14	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-	-
1.85	1.83	**Pd**	7.98	22.10	30.24	22.35	32.38	30.39	32.60	17.03	24.77	19.85	8.73	13.31	-	-	-	0.82	0.74
0.07	0.13	**Ag**	0.23	0.10	0.16	0.11	0.29	0.32	0.26	0.11	0.22	0.15	0.13	0.08	22.61	1.47	2.73	20.55	21.33
-	-	**Sn**	0.03	0.01	-	0.02	-	-	0.03	0.01	-	0.01	-	-	-	-	-	0.01	0.03
0.54	0.60	**Sb**	0.87	0.40	0.33	0.57	0.25	0.31	0.35	0.39	0.46	0.35	0.14	0.36	-	0.13	0.13	-	-
65.87	65.39	**Te**	58.56	59.93	56.46	57.76	55.38	57.05	56.08	50.96	59.37	53.95	25.81	39.12	0.03	-	-	0.02	0.03
0.19	0.16	**Os**	0.23	0.14	0.08	0.15	0.20	0.14	0.16	0.13	0.15	0.09	0.04	0.12	0.05	-	0.04	0.01	0.03
0.32	0.20	**Ir**	0.35	0.28	0.20	0.12	0.26	0.09	0.26	0.22	0.19	0.23	0.17	0.20	0.15	0.38	0.36	0.28	0.38
29.48	29.57	**Pt**	22.41	9.09	0.29	9.02	0.22	2.10	0.24	9.53	7.41	8.57	5.34	8.02	-	-	-	-	-
-	-	**Au**	-	-	-	-	-	-	-	-	-	-	-	-	25.90	93.16	89.64	73.61	72.29
-	-	**Hg**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	**Pb**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.44	0.64	**Bi**	5.85	4.42	4.82	5.41	8.68	8.25	8.43	3.47	5.52	3.93	1.00	2.68	0.03	-	-	0.10	0.10
100.32	100.40	**Total**	100.76	100.43	100.51	100.53	100.77	100.57	100.67	100.43	100.41	100.52	100.26	100.31	100.46	101.30	101.41	100.53	100.64

Rx GN = recystallised gabbronorite, Anor = anorthosite
- = below detection limit

Table 6a. Contd: Composition (wt. %) of PGE-bismuthotellurides, Bi- and Te-complexes, Au and trace minerals in samples from Nonnenwerth

	braggite				sperrylite	hessite	Ag-pentla-ite	bismuth?
MOX12	MOX10	MOX10	Sample	MOX10	MOX9	MOX9	MOX27	MOX9
9_BSE3c	11_BSE2b	12_BSE2b	Analysis	13_BSE2b	17_BSE7a	2_BSE1a	3_BSE1c	24_BSE12a
2121	2121	2121	Borehole	2121	2121	2121	2199	2121
244.55	219.9	219.9	Depth (m)	219.9	199.68	199.68	173.94	199.68
Rx Gn	Rx Gn	Rx Gn	Lithology	Rx Gn	Rx Gn	Rx Gn	Anor	Rx Gn
0.01	18.25	21.57	**S**	19.23	1.17	0.10	31.31	0.02
1.73	2.64	1.49	**Fe**	1.71	0.76	0.51	36.23	0.12
0.01	0.02	0.03	**Co**	0.03	0.02	-	-	0.03
0.05	7.09	7.36	**Ni**	6.88	0.06	0.02	20.56	-
0.16	0.01	0.01	**Cu**	0.07	0.23	0.74	1.25	-
-	0.01	-	**As**	-	39.45	-	0.02	-
-	0.01	0.06	**Se**	0.04	0.53	0.03	-	0.01
-	-	-	**Ru**	-	-	-	-	-
-	0.25	0.01	**Rh**	0.18	0.29	-	-	-
0.87	13.39	46.04	**Pd**	25.43	1.44	4.19	-	-
15.20	0.03	0.12	**Ag**	0.11	0.07	56.68	12.55	0.93
-	-	0.03	**Sn**	-	0.54	-	0.02	-
-	-	-	**Sb**	-	0.13	0.22	-	0.02
0.03	-	-	**Te**	-	2.93	43.85	-	-
-	0.20	0.14	**Os**	0.22	0.23	0.08	-	1.11
0.38	0.47	0.35	**Ir**	0.37	0.29	0.20	0.17	0.22
-	60.94	25.08	**Pt**	46.94	52.03	0.10	-	1.49
81.56	-	-	**Au**	-	-	-	-	-
-	-	-	**Hg**	-	-	-	-	-
-	-	-	**Pb**	-	-	-	-	-
0.04	0.04	0.10	**Bi**	0.08	0.37	0.48	0.09	84.85
100.11	103.35	102.40	**Total**	101.28	100.69	107.24	102.28	91.94
0.07	48.31	48.50	**S**	48.71	4.02	0.34	46.17	0.09
5.18	4.02	1.92	**Fe**	2.48	1.50	0.98	30.67	0.40
0.01	0.02	0.04	**Co**	0.04	0.03	-	-	0.11
0.15	10.25	9.03	**Ni**	9.52	0.11	0.04	16.56	-
0.42	0.01	0.01	**Cu**	0.09	0.40	1.24	0.93	-
-	0.01	-	**As**	-	57.94	-	0.01	-
-	0.02	0.05	**Se**	0.04	0.74	0.04	-	0.02
-	-	-	**Ru**	-	-	-	-	-
-	0.21	0.01	**Rh**	0.14	0.31	-	-	-
1.37	10.68	31.18	**Pd**	19.41	1.48	4.19	-	-
23.52	0.02	0.08	**Ag**	0.08	0.07	55.94	5.50	1.65
-	-	0.02	**Sn**	-	0.50	-	0.01	-
-	-	-	**Sb**	-	0.12	0.19	-	0.04
0.04	-	-	**Te**	-	2.53	36.58	-	-
-	0.09	0.05	**Os**	0.09	0.13	0.04	-	1.12
0.33	0.21	0.13	**Ir**	0.15	0.17	0.11	0.04	0.22
-	26.52	9.26	**Pt**	19.54	29.34	0.05	-	1.46
69.09	-	-	**Au**	-	-	-	-	-
-	-	-	**Hg**	-	-	-	-	-
-	-	-	**Pb**	-	-	-	-	-
0.03	0.02	0.04	**Bi**	0.03	0.20	0.25	0.02	77.49
100.60	100.38	100.34	**Total**	100.36	100.18	100.19	100.03	103.93

Rx GN = recystallised gabbronorite, Anor = anorthosite
- = below detection limit

Table 6b. Composition (wt. %) of PGE-bismuthotellurides, Bi- a- Te-phases, Au a- trace minerals in samples from Townlands

	merenskyite											isomertieite	michenerite	sperrylite	altaite	kotulskite			Fe emplectite?	
Sample	**P13**	**P13**	**P15**	**P15**	**P15**	**P15**	**P15**	**P15**	**P15**	**P106**	**P106**	**P7**	**P13**	**P13**	**P13**	**P106**	**P106**	**P106**	**P15**	**P15**
Analysis	**2_BSE2b**	**3_BSE2b**	**1_BSE1b**	**2_BSE1d**	**3_BSE1a**	**4_BSE2b**	**5_BSE2b**	**6_BSE2a**	**17_BSE4b**	**9_BSE3b**	**12_BSE5a**	**1_BSE1e**	**1_BSE2b**	**4_BSE4c**	**5_BSE3c**	**14_BSE6a**	**15_BSE7a**	**1_BSE2c**	**7_BSE2g**	**8_BSE2g**
Borehole	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**
Depth (m)	**80.75**	**80.75**	**89.55**	**89.55**	**89.55**	**89.55**	**89.55**	**89.55**	**89.55**	**106**	**106**	**57.7**	**80.75**	**80.75**	**80.75**	**106**	**106**	**106**	**89.55**	**89.55**
Lithology	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**UP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**
	Weight per cent																			
S	0.18	0.09	0.62	0.12	1.04	0.29	0.27	0.21	0.05	0.05	0.09	0.14	0.03	0.62	1.08	0.08	0.27	1.26	18.54	18.31
Fe	2.35	2.24	2.59	1.87	3.44	2.17	2.51	1.84	1.62	0.11	5.10	1.46	1.52	2.36	2.79	0.09	1.90	2.92	16.65	16.35
Co	-	-	0.05	0.06	0.08	0.08	0.09	0.09	0.06	0.01	-	-	-	-	-	-	-	0.07	0.10	0.03
Ni	0.02	0.05	0.06	0.05	-	0.35	0.37	0.14	0.01	3.72	1.89	0.02	-	0.05	0.01	3.58	0.10	0.04	0.39	0.35
Cu	1.18	0.88	-	0.01	-	-	-	-	0.01	0.01	-	1.52	0.91	0.12	0.05	0.03	2.42	0.02	0.02	-
As	-	-	-	-	-	-	-	-	-	-	0.03	8.93	-	41.54	-	-	-	0.01	-	-
Se	0.01	-	0.03	0.01	0.04	0.01	0.09	0.01	0.04	0.02	0.05	0.06	0.06	0.20	0.06	0.03	-	-	0.14	0.14
Ru	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-
Rh	-	-	-	-	-	-	-	-	-	-	-	-	-	0.33	-	-	-	-	-	-
Pd	18.85	19.52	26.57	37.30	26.76	17.48	16.49	25.14	25.96	42.67	19.79	73.31	23.43	0.02	-	43.07	41.23	43.79	-	-
Ag	0.20	0.23	0.21	0.38	0.29	0.15	0.18	0.17	0.46	0.22	0.12	0.91	0.60	0.04	-	0.18	0.26	0.08	0.71	0.61
Sn	0.01	-	-	-	-	0.01	0.01	-	0.01	-	-	0.08	-	-	-	-	-	-	-	-
Sb	0.36	0.32	0.26	0.21	0.23	0.44	0.42	0.32	0.21	0.39	0.34	14.46	0.23	0.62	0.26	0.66	0.64	2.06	0.10	0.08
Te	52.96	54.03	49.15	36.16	50.36	59.02	58.64	54.63	37.14	44.88	57.11	0.83	32.55	0.59	36.80	45.70	44.96	47.07	0.01	-
Os	0.29	0.26	0.40	0.42	0.36	0.21	0.25	0.26	0.58	0.29	0.01	0.10	0.54	0.24	-	0.16	0.23	0.17	0.88	0.77
Ir	0.26	0.43	0.30	0.33	0.25	0.16	0.41	0.46	0.16	0.13	0.21	0.38	0.40	0.42	1.99	0.24	0.19	0.36	0.32	0.28
Pt	12.48	12.05	1.70	0.57	1.33	14.81	16.14	3.83	0.90	0.43	0.10	-	3.21	53.88	0.18	0.22	0.17	0.20	1.07	1.04
Au	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-
Hg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62.02	-	-	-	-	-
Bi	15.74	15.05	24.01	28.91	22.77	8.86	8.34	18.05	40.14	14.41	1.53	0.03	42.70	0.02	0.76	12.82	14.84	7.68	58.10	59.20
Total	104.90	105.19	105.98	106.40	106.95	104.04	104.21	105.16	107.36	107.39	89.01	102.26	106.23	101.08	106.02	106.88	107.23	105.83	97.02	97.16
	Atomic concentration																			
S	0.70	0.36	2.33	0.47	3.78	1.12	1.03	0.82	0.21	0.18	0.31	0.44	0.13	2.13	4.96	0.29	0.95	4.24	49.55	49.43
Fe	5.25	5.00	5.62	4.11	7.18	4.84	5.59	4.04	3.81	0.22	10.52	2.61	3.69	4.64	7.36	0.18	3.79	5.61	25.56	25.33
Co	-	0.01	0.10	0.13	0.16	0.16	0.20	0.19	0.14	0.03	-	-	-	-	0.01	-	-	0.12	0.14	0.04
Ni	0.04	0.11	0.12	0.10	-	0.73	0.78	0.29	0.03	7.08	3.70	0.04	-	0.09	0.02	6.82	0.19	0.07	0.57	0.51
Cu	2.32	1.72	0.01	0.02	-	-	0.00	0.00	0.02	0.01	-	2.40	1.95	0.21	0.12	0.05	4.23	0.03	0.02	-
As	-	-	-	-	-	-	-	-	-	-	0.04	11.94	-	60.90	-	-	-	0.02	-	-
Se	0.02	-	0.05	0.02	0.05	0.01	0.15	0.02	0.07	0.02	0.07	0.08	0.10	0.28	0.11	0.05	-	-	0.15	0.16
Ru	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-
Rh	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36	-	-	-	-	-	-
Pd	22.09	22.84	30.20	43.12	29.32	20.42	19.28	28.96	32.00	44.85	21.45	69.00	29.79	0.02	-	45.27	43.15	44.21	-	-
Ag	0.23	0.27	0.24	0.43	0.31	0.18	0.21	0.20	0.55	0.23	0.13	0.84	0.76	0.04	-	0.19	0.27	0.08	0.57	0.49
Sn	0.01	-	-	-	-	0.01	0.01	-	0.01	-	-	0.07	-	-	-	-	-	-	-	-
Sb	0.37	0.33	0.26	0.21	0.22	0.45	0.43	0.32	0.22	0.36	0.33	11.90	0.26	0.56	0.32	0.60	0.58	1.82	0.07	0.06
Te	51.78	52.72	46.58	34.85	46.01	57.50	57.16	52.47	38.17	39.34	51.61	0.65	34.51	0.50	42.55	40.05	39.24	39.63	0.01	-
Os	0.19	0.17	0.26	0.27	0.22	0.14	0.16	0.17	0.40	0.17	-	0.05	0.39	0.14	-	0.09	0.14	0.10	0.40	0.35
Ir	0.17	0.28	0.19	0.21	0.15	0.10	0.26	0.29	0.11	0.08	0.12	0.20	0.28	0.24	1.53	0.14	0.11	0.20	0.14	0.12
Pt	7.98	7.69	1.06	0.36	0.80	9.44	10.29	2.40	0.60	0.24	0.06	-	2.23	30.33	0.14	0.13	0.10	0.11	0.47	0.46
Au	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-
Hg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.15	-	-	-	-	-
Bi	9.39	8.97	13.89	17.02	12.70	5.27	4.96	10.58	25.19	7.71	0.84	0.01	27.64	0.01	0.53	6.86	7.91	3.95	23.83	24.51
Total	100.57	100.56	100.92	101.33	100.91	100.39	100.51	100.77	101.54	100.62	100.13	100.31	101.82	100.47	101.93	100.74	100.68	100.49	101.47	101.47

MP = Middle Platreef, UP = Upper Platreef
- = below detection limit

Table 6b contd: Composition (wt. %) of PGE-bismuthotellurides, Bi- a- Te-complexes, Au a- trace minerals in samples from Townlands

							tetradymite-type?		Pilsenite	UN 1133	hessite		temagamite	electrum	stibiopalladinite
Sample	**P15**	**P15**	**P15**	**P13**	**P15**	**P15**	**P15**	**P15**	**P15**	**P15**	**P15**	**P106**	**P106**	**P106**	**P106**
Analysis	**9_BSE2f**	**10_BSE2e**	**12_BSE3e**	**13_BSE3e**	**15_BSE3c**	**16_BSE3c**	**19_BSE5b**	**20_BSE5b**	**14_BSE3e**	**11_BSE3e**	**18_BSE4b**	**11_BSE5a**	**2_BSE2e**	**10_BSE4a**	**13_BSE5a**
Borehole	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**	**TL1-03**
Depth (m)	**89.55**	**89.55**	**89.55**	**80.75**	**89.55**	**89.55**	**89.55**	**89.55**	**89.55**	**89.55**	**89.55**	**106**	**106**	**106**	**106**
Lithology	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**	**MP**
	Weight per cent														
S	18.07	18.15	18.29	18.30	18.28	18.30	3.96	4.13	1.75	2.18	1.05	0.27	-	0.11	0.40
Fe	16.26	16.31	16.93	16.90	16.23	16.51	1.51	2.67	4.21	4.50	2.18	2.63	3.36	1.83	11.15
Co	0.08	0.06	0.05	0.08	0.07	0.06	0.02	0.03	0.06	0.13	0.06	0.02	-	0.06	-
Ni	0.41	0.34	0.01	0.02	0.09	0.08	-	-	-	0.01	-	0.01	0.20	-	0.01
Cu	0.02	0.02	0.01	-	-	-	0.14	0.62	1.01	0.02	0.02	0.01	0.12	0.07	0.01
As	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	2.80
Se	0.13	0.12	0.11	0.09	0.03	0.05	1.78	1.71	1.67	5.41	0.04	0.06	0.01	-	0.02
Ru	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pd	-	-	-	-	-	-	-	-	-	-	0.56	0.16	36.08	-	60.47
Ag	0.63	0.70	0.74	-	0.57	0.58	0.80	0.71	0.81	0.82	60.41	63.14	0.87	30.61	0.22
Sn	-	-	0.03	0.01	0.01	-	-	-	-	-	-	-	-	-	0.06
Sb	0.13	0.09	0.06	0.11	0.08	0.11	0.29	0.27	0.25	0.19	0.19	0.25	0.39	-	21.91
Te	0.01	-	-	0.01	-	0.01	36.64	36.53	28.36	21.81	37.89	37.37	43.62	0.04	-
Os	0.87	0.81	0.82	0.80	0.80	0.84	0.83	0.95	0.97	1.01	0.04	0.10	0.03	0.02	0.09
Ir	0.29	0.24	0.35	0.35	0.29	0.37	0.45	0.38	0.30	0.35	0.30	0.34	0.06	0.34	0.22
Pt	0.98	0.94	1.00	1.09	1.08	1.05	1.27	1.15	1.20	1.46	0.10	0.11	-	-	0.14
Au	-	0.09	-	-	-	-	-	-	-	-	-	-	-	67.06	-
Hg	-	-	-	-	-	-	-	-	-	-	-	-	18.50	-	-
Pb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bi	58.95	58.65	58.43	58.59	59.05	59.01	59.33	59.44	69.02	71.52	1.13	0.05	0.44	0.02	0.05
Total	96.83	96.52	96.84	97.04	96.61	96.96	107.02	108.60	109.63	109.42	104.07	104.62	103.68	100.20	97.60
	Atomic concentration														
S	49.04	49.28	49.31	49.30	49.77	49.58	16.40	16.47	7.54	9.24	3.46	0.88	-	0.50	1.24
Fe	25.33	25.42	26.19	26.13	25.37	25.67	3.58	6.11	10.41	10.94	4.12	4.98	7.46	4.94	19.92
Co	0.11	0.08	0.08	0.12	0.11	0.09	0.05	0.06	0.15	0.30	0.12	0.03	0.00	0.14	-
Ni	0.61	0.50	0.01	0.03	0.13	0.11	-	-	0.01	0.02	-	0.01	0.42	0.01	0.02
Cu	0.03	0.03	0.01	0.01	0.00	0.01	0.30	1.25	2.20	0.05	0.03	0.02	0.24	0.17	0.02
As	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	3.73
Se	0.14	0.14	0.12	0.10	0.04	0.06	2.99	2.77	2.93	9.31	0.06	0.07	0.01	-	0.02
Ru	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-
Rh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pd	-	-	-	-	-	-	-	-	-	-	0.55	0.16	42.04	-	56.71
Ag	0.51	0.56	0.59	0.52	0.46	0.47	0.98	0.84	1.03	1.03	59.14	62.04	1.00	42.90	0.20
Sn	-	-	0.02	0.01	0.01	-	-	-	-	-	-	-	-	-	0.05
Sb	0.09	0.07	0.04	0.08	0.06	0.08	0.32	0.29	0.28	0.21	0.17	0.22	0.40	-	17.95
Te	0.01	-	-	0.01	-	0.01	38.11	36.56	30.68	23.20	31.35	31.04	42.39	0.05	-
Os	0.40	0.37	0.37	0.36	0.37	0.38	0.58	0.64	0.71	0.72	0.02	0.06	0.02	0.02	0.05
Ir	0.13	0.11	0.16	0.16	0.13	0.17	0.31	0.25	0.22	0.25	0.16	0.19	0.04	0.26	0.11
Pt	0.44	0.42	0.44	0.48	0.48	0.47	0.86	0.75	0.85	1.01	0.05	0.06	-	-	0.07
Au	-	0.04	-	-	-	-	-	-	-	-	-	-	0.00	51.46	-
Hg	-	-	-	-	-	-	-	-	-	-	-	-	11.43	-	-
Pb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bi	24.54	24.44	24.16	24.21	24.66	24.52	37.69	36.32	45.59	46.46	0.57	0.02	0.26	0.02	0.02
Total	101.39	101.49	101.55	101.54	101.63	101.59	102.20	102.29	102.61	102.79	100.21	100.15	105.75	100.64	100.29

- = not detected, MP = Middle Platreef, UP = Upper Platreef
- = below detection limit