

**Rand Water**  
**Quarterly Water Quality Status of the Blesbokspruit Catchment**

01 Jan 2011 - 31 Dec 2011



Sample Points	Sample Point Description	Aluminium	Ammonia	Chemical Oxygen Demand	Chloride	Conductivity	Daphnia Toxicity	Dissolved Oxygen	E.coli	Fluoride	Iron	Magnesium	Manganese	Nitrate	pH	Phosphate	Sodium	Sulphate	Suspended Solids
B1	Outflow from New Kleinfontein Dam S26.183 E28.334	0.03	0.12		15	28		9.7		0.50	0.01	11	0.11	0.14	8.2	0.06	24	47	
		0.01	0.26		22	35		8.7		0.31	0.04	8.2	0.24	0.55	7.6	<0.04	17	69	
		0.04	0.45		33	45		6.6		0.26	0.06	12	0.16	1.21	7.4	0.22	21	91	
		0.02	0.12		41	42		9.1		0.33	0.03	9.2	0.21	0.61	8.2	0.14	24	99	
B2	Outflow from Van Ryn Dam S26.165 E28.371	<0.01	3.80	26	56	52	100	5.6	540	0.28	0.09	10	0.81	0.19	7.4	0.21	43	40	
		<0.01	4.90	25	58	55	100	3.8	52	0.30	0.07	10	0.10	1.03	7.5	0.48	46	46	
		<0.01	2.40	43	83	86	100	3.5	335	0.29	0.03	29	1.08	1.88	7.3	0.61	57	270	
		0.04	3.40	48	82	59	100	6.2	1,560	0.32	0.12	8.2	0.07	0.39	7.9	0.56	44	79	
B3	Stream from Brakpan Lake S26.209 E28.385	<0.01	0.31		60	58		5.3		0.20	0.01	13	0.36	1.90	7.4	0.12	46	98	
		<0.01	2.41		74	67		5.6		0.21	0.01	17	0.09	2.90	7.3	0.15	52	128	
		<0.01	43.14		143	135		5.3		0.19	0.18	36	1.10	3.22	7.6	0.42	115	148	
		0.00	3.10		89	67		3.5		0.22	0.02	14	0.35	2.40	7.4	0.16	53	83	
B4	Causeway @ Alexander Dam S26.211 E28.415	<0.01	0.12		32	44		5.1		0.35	0.01	12	0.45	0.31	7.0	<0.04	27	96	
		0.10	0.83		47	51		8.0		0.34	0.02	14	0.07	0.98	7.4	0.04	33	119	
		0.04	0.39		60	59		8.9		0.24	0.20	16	0.06	1.45	8.1	0.39	38	125	
		0.00	0.22		51	57		8.0		0.28	<0.01	13	0.26	0.23	7.4	0.09	41	100	
B9	Outflow from Cowles Dam S26.209 E28.467	0.01	2.90	32	57	66	100	5.3	49,720	0.28	0.04	14	0.43	0.44	7.5	0.57	56	120	
		0.03	0.28	30	87	74	100	6.2	17	0.33	0.03	13	0.10	0.41	7.5	<0.04	71	119	
		0.01	4.04	54	92	87	100	2.7	108,150	0.20	0.11	18	0.53	3.67	7.3	1.57	73	115	
		0.02	0.23	36	115	94	100	3.2	125	0.28	0.03	18	0.18	0.46	7.6	<0.05	82	135	
B13	Stream from Daveyton below Welgedacht WWTW S26.199 E28.480	0.02	4.40	38	59	64	99	6.3	414,520	0.30	0.05	14	0.31	0.96	7.5	0.84	61	78	
		0.01	3.12	105	49	61	100	2.8	15,777	0.25	0.09	13	0.24	0.75	7.3	0.76	47	55	
		0.03	1.38	107	86	78	100	2.5	6,946	0.21	0.08	15	0.24	0.45	7.3	0.58	79	93	
		0.00	3.30	71	54	61	100	1.7	19,330	0.22	0.06	10	0.23	0.68	7.2	0.50	66	110	
B5	Blesbokspruit @ Welgedacht S26.215 E28.480	<0.01	1.60		56	63		1.7		0.32	0.02	14	0.21	0.47	7.2	0.29	53	125	
		0.09	1.41		73	68		2.5		0.32	0.04	15	0.17	0.62	7.3	0.45	63	95	
		<0.01	3.33		87	81		2.0		0.19	0.06	17	0.26	0.29	7.3	0.71	76	80	
		0.00	1.60		97	89		2.8		0.29	0.02	17	0.25	0.36	7.5	0.33	88	125	
B16	Train Bridge @ Grootvlei Mine S26.256 E28.498	<0.01	2.50		55	68		2.0		0.32	0.03	17	1.40	<0.10	7.3	0.87	53	135	
		<0.01	0.88		71	71		3.0		0.32	0.07	18	0.17	0.66	7.5	0.53	59	116	
		<0.01	2.22		91	88		2.8		0.22	0.02	21	0.59	0.73	7.5	0.96	76	139	
		0.00	3.60		105	97		2.0		0.34	0.02	20	0.67	0.33	7.7	1.60	84	155	
B6	Klein Blesbokspruit @ Selection Park S26.283 E28.444	0.14	0.12		47	52		5.1		0.36	0.01	17	0.58	0.65	7.4	<0.04	37	115	
		0.22	0.24		36	56		7.3		0.41	0.07	15	1.46	0.35	7.0	<0.04	22	187	
		0.05	1.21		39	44		6.0		0.30	0.01	15	0.65	0.62	7.2	0.18	19	104	
		0.02	0.12		20	42		5.7		0.32	0.03	12	0.08	0.14	7.3	<0.05	20	82	
B15	Blesbokspruit on N17 Toll Road @ Springs S26.271 E28.504	<0.01	2.30		54	68		2.7		0.34	0.03	17	1.30	<0.10	7.3	1.10	51	125	
		<0.01	0.61		74	70		2.7		0.34	0.02	19	0.28	0.72	7.5	0.52	58	123	
		<0.01	2.33		88	84		3.2		0.24	0.03	21	0.46	0.76	7.5	1.46	66	123	
		0.00	3.10		98	96		2.6		0.32	0.03	20	1.10	0.48	7.6	2.10	82	120	
B17	Blesbokspruit @ Marievale Bird Sanctuary S26.359 E28.508	<0.01	0.12		60	75		4.6		0.38	<0.01	22	1.20	<0.10	7.7	1.10	60	150	
		<0.01	0.24		70	77		3.9		0.36	0.01	23	0.15	0.16	7.7	0.61	57	151	
		<0.01	2.37		97	94		4.1		0.29	0.01	26	0.59	<0.10	7.7	0.34	69	180	
		0.00	0.12		105	105		2.5		0.46	<0.01	24	0.32	0.11	7.9	1.30	87	175	
B11	Blesbokspruit on R42 bridge @ Nigel S26.391 E28.497	0.03	0.12		52	71		4.9		0.41	0.01	20	0.52	<0.10	7.6	0.74	50	145	
		<0.01	0.24		70	77		4.8		0.37	0.01	22	0.11	<0.10	7.7	0.55	56	159	
		0.02	0.60		96	95		3.7		0.30	0.02	26	0.20	0.11	7.7	0.64	72	183	
		0.01	0.12		110	110		5.2		0.48	0.02	27	0.20	0.45	8.0	0.90	86	170	
B7	Stormwater drain from Nigel Dam S26.415 E28.466	0.04	0.12		24	55		5.2		0.40	0.01	16	2.40	0.34	6.7	<0.04	27	215	
		0.04	0.24		33	58		4.1		0.44	0.02	13	0.72	0.19	7.0	<0.04	30	171	
		0.01	0.42		40	65		6.1		0.34	0.05	20	0.80	0.29	7.0	<0.04	38	198	
		0.01	0.12		43	77		5.1		0.31	0.04	21	1.50	0.13	7.2	<0.05	52	235	
B8	Blesbokspruit @ Nigel S26.439 E28.456	0.02	0.12		45	62		6.3	20,030	0.39	0.02	18	0.24	0.14	7.6	0.52	43	130	
		0.02	0.27		66	71		6.1	25,697	0.37	0.02	17	0.05	0.20	8.0	0.40	42	140	
		<0.01	0.29		88	88		6.8	3,794	0.28	0.02	25	0.22	0.24	8.0	0.27	61	163	
		0.01	0.12		98	98		6.0	1,790	0.37	0.01	24	0.16	0.20	8.2	0.64	82	170	
B14	Bridge @ Jameson Park S26.479 E28.426	0.01	0.26		44	64		6.4		0.37	0.02	18	0.40	0.44	7.8	0.46	46	125	
		0.01	0.28		65	70		5.9		0.34	0.02	20	0.09	0.68	7.7	0.37	54	134	
		<0.01	1.39		95	86		4.9		0.28	0.01	24	0.35	0.89	7.7	0.63	64	147	
		0.01	0.57		93	96		3.2		0.32	0.03	23	0.19	0.83	7.9	0.65	77	150	

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01 Jan 2011 - 31 Dec 2011



Sample Points	Sample Point Description	Aluminium	Ammonia	Chemical Oxygen Demand	Chloride	Conductivity	Daphnia Toxicity	Dissolved Oxygen	E.coli	Fluoride	Iron	Magnesium	Manganese	Nitrate	pH	Phosphate	Sodium	Sulphate	Suspended Solids
B12	Stream from Kaydale Station S26.477 E28.404	0.01	0.18		26	42		5.2		0.29	0.01	12	0.80	2.20	7.5	0.34	29	40	
		0.02	0.75		31	44		6.2		0.27	0.03	11	0.10	3.30	7.4	0.58	30	45	
		0.05	1.94		44	47		4.0		0.23	0.05	12	0.77	4.75	7.3	0.64	30	37	
		0.04	0.26		25	46		4.3		0.30	0.08	11	0.24	3.80	7.3	1.10	35	56	
B10	Blesbokspruit Weir @ Heidelberg S26.511 E28.351	0.01	0.12	21	44	63	100	5.8	9310	0.42	0.02	17	0.13	0.69	7.6	0.42	42	120	24
		0.01	0.35	20	60	68	100	6.2	35790	0.34	0.01	19	0.08	1.05	7.8	0.38	52	113	13
		0.03	0.48	24	76	81	100	5.8	336	0.26	0.01	22	0.17	1.89	7.7	0.41	60	149	14
		0.03	0.14	28	76	89	100	6.2	1490	0.32	0.01	22	0.14	1.60	8.0	0.53	79	120	32
S1	Suikerbosrant River @ Heidelberg S26.630 E28.297	0.63	0.12		<10	23		5.5	490	0.23	0.78	9.4	0.04	0.24	7.2	0.06	10	12	
		0.08	0.24		16	30		5.6	249	0.24	0.15	11	0.04	0.60	7.4	0.11	16	14	
		0.02	0.29		22	36		9.1	37	0.17	0.12	15	0.05	0.87	8.8	0.05	18	21	
		0.18	0.15		40	54		4.4	180	0.23	0.04	24	0.20	<0.10	7.7	<0.05	42	16	
S2	Suikerbosrant River Weir @ Three Rivers S26.671 E28.030	0.09	0.12	25	31	47	100	6.4	1900	0.30	0.13	14	0.04	0.63	7.5	0.18	28	78	41
		0.01	0.24	20	51	60	100	6.0	989	0.31	0.01	18	0.04	0.99	8.0	0.22	41	93	25
		0.01	0.24	22	69	74	100	6.9	50	0.24	0.01	21	0.03	1.85	8.1	0.16	48	123	18
		0.04	0.12	26	75	82	100	6.4	310	0.31	0.01	22	0.02	0.90	8.1	0.28	72	115	16

**Key**

B12	Stream from Kaydale Station	0.01	0.18	- 1 Jan to 31 Mar 2011
		0.02	0.75	- 1 Apr to 30 Jun 2011
		0.05	1.94	- 1 Jul to 30 Sep 2011
		0.04	0.26	- 1 Oct to 31 Dec 2011

**Water Quality Guidelines**

	- Ideal
	- Acceptable
	- Tolerable
	- Unacceptable