Rand Water

Quarterly Water Quality Status of the Barrage Reservoir Catchment **01 Jan 2011 - 31 Dec 2011**

RAND WATER

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
B10	Blesbokspruit Weir @ Heidelburg	0.01	0.12	21	44	63	100	5.8	9,310	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	35,790	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
	S26.511 E28.351	0.03	0.14	28	76	89	100	6.2	1,490	0.32	0.01	22	0.14	1.60	8.0	0.53	79	120	32
K19	Klip River Weir @ Redan Train Bridge	<0.01	0.33	24	48	68	100	6.8	5,010	0.29	0.02	18	0.19	3.10	7.2	0.50	42	130	36
		0.01	0.80	27	52	67	100	6.9	4,426	0.27	0.04	19	0.25	3.91	7.5	0.28	45	139	39
		0.02	0.61	30	56	71	100	5.6	1,449	0.17	0.02	19	0.40	4.99	7.5	0.30	45	124	30
	S26.620 E27.981	0.01	0.46	29	55	69	100	5.6	1,690	0.25	0.02	16	0.25	4.20	7.4	0.35	51	130	72
LS1	Leeuspruit @ Sasolburg	<0.01	0.23	23	39	60		7.7	19,070	0.42	0.03	11	0.15	0.42	6.7	0.19	39	83	<10
		0.03	0.24	40	86	95		3.4	518,369	0.67	0.08	17	0.29	0.98	7.8	0.25	89	252	14
		0.01	2.80	36	72	88		4.5	80,948	0.49	0.03	21	0.71	0.29	7.9	0.58	72	115	19
	S26.802 E27.799	0.02	0.17	27	55	84		2.7	590	0.70	0.05	13	0.46	0.15	7.1	0.38	65	105	15
RV2	Rietspruit Weir @ Loch Vaal	0.06	0.36	23	41	64	100	4.5	8,100	0.60	0.05	17	0.06	3.30	7.3	0.69	39	130	64
		0.01	0.48	25	47	66	100	6.6	5,624	0.48	0.01	20	0.13	4.26	7.4	0.93	41	139	64
		0.01	0.94	26	49	69	100	6.0	3,731	0.48	0.02	19	0.16	4.57	7.4	1.53	41	141	24
	S26.729 E27.718	0.10	0.35	26	41	63	100	4.7	6,820	0.44	0.02	17	0.13	5.10	7.3	1.10	40	135	64
S2	Suikerbosrant River Weir @ Three Rivers	0.09	0.12	25	31	47	100	6.4	1,900	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
	S26.671 E28.030	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
TW2	Stream from Webb's Farm	<0.01	0.31		210	120		8.3	6,720	0.93	0.02	25	0.18	2.80	7.2	1.50	91	145	
		<0.01	0.24		166	99		6.6	884	0.84	0.02	24	0.12	2.52	8.0	1.44	91	124	
		0.01	<0.24		143	99		8.2	1,848	0.66	0.01	24	0.21	2.33	8.2	1.22	82	142	
	S26.804 E27.910	0.04	0.23		145	105		5.8	4,210	0.77	0.03	23	0.45	0.75	7.7	1.70	96	150	
V17	Vaal River @ Barrage Outlet	0.69	0.16	19	17	31	100	5.9	445	0.29	0.37	9.9	0.02	1.40	7.1	0.22	18	49	19
		0.06	0.26	18	44	59	100	7.2	60	0.21	0.06	20	0.03	1.97	8.0	0.36	39	116	79
		0.01	0.31	22	53	67	100	8.9	766	0.26	0.03	20.0	0.01	3.28	8.2	0.24	38	128	25
	S26.764 E27.684	0.02	0.15	23	55	72	100	6.8	130	5.00	0.01	18.0	0.04	2.20	7.8	0.24	52	115	18
V2	Vaal River @ Engelbrecht's Drift Weir	1.20	0.24	22	<10	18	100	6.0	760	0.20	0.77	7.7	0.42	0.35	7.2	0.04	12	26	110
		1.01	0.74	13	20	17	100	7.9	62	0.36	0.77	9.0	0.03	1.75	7.9	0.81	12	56	76
		2.09	<0.24	18	5	18	100	7.7	50	0.17	1.28	6.0	0.02	0.34	7.4	0.06	7	13	97
	S26.854 E28.121	1.20	0.12	16	<10	19	100	6.6	200	0.18	0.71	6.6	0.02	0.23	7.0	0.06	7.9	15	92
VRB24	Vaal River @ 24 km Beacon	0.39	0.12	19	23	38		5.4		0.24	0.25	10	0.02	1.50	0.2	23.00	53	7.5	58
		0.01	0.38	17	47	62				0.33	0.02	17	0.07	2.56	7.6	0.28	38	132	11
		0.01	0.39	24	56	68				0.19	0.01	20	0.10	4.13	8.3	0.20	45	121	15
	S26.751 E27.833	0.02	0.12	26	55	70				0.26	0.02	16	0.06	3.10	7.8	0.23	51	115	<10
VRB37	Vaal River @ 37 km Beacon	0.37	0.18	15	22	39		5.3	1,000	0.26	0.23	10	0.04	1.40	7.4	0.20	22	55	67
		0.01	0.45	18	47	63			1,557	0.30	0.02	18	0.21	2.98	7.5	0.24	39	148	14
		0.01	0.37	22	55	69			521	0.19	0.06	19	0.30	4.50	7.7	0.26	50	119	12
	S26.695 E27.934	0.03	0.27	24	54	71			465	0.25	0.02	17	0.21	3.10	7.5	0.24	50	135	12

Key

K19	Klip River Weir @ Redan Train Bridge	<0.01	0.33	- 1 Jan to 31 Mar 2011
		0.01	0.80	- 1 Apr to 30 Jun 2011
		0.02	0.61	- 1 Jul to 30 Sep 2011
		0.01	0.46	- 1 Oct to 31 Dec 2011

Water Quality Guidelines

- Ideal
- Acceptable
- Tolerable
- Unacceptable