

Sample Points	Sample Point Description	Ammonia	Chloride	Fluoride	M-Alkalinity	Nitrate	Phosphate	Sulphate	Chemical Oxygen Demand	Conductivity	pH	E. coli
VE	Vaal River @ Ermelo 26°21'46.17"S 30° 6'31.15"E	0.12	<10	0.15	46	0.11	<0.036	14.00	17	14	7	
		0.12	9.60	0.20	48	0.33	0.17	17.50	16	18	7.2	
		0.12	12.00	0.13	65	<0.10	<0.05	21.00	19	23	7.1	
		0.12	<10	0.14	87	0.15	<0.05	14.00	15	22	7.2	
ZD	Zaaihoek Dam 27°09'47.0"S 29°52'42.8"E	0.12	<10	0.33	135	<0.10	<0.036	20.00	20	32	7.7	98
		0.12	11.00	0.34	155	<0.10	<0.036	32.00	20	38	7.8	
		0.12	11.00	0.23	170	<0.10	<0.05	30.00	17	39	8.3	
		0.12	<10	0.25	41	<0.10	<0.05	18.00	<10	17	7.4	
VKV	Klein Vaal River @ Goedeheop 26°49'12.19"S 30° 8'12.00"E	0.12	<10	0.10	52	<0.10	<0.036	<5	12	13	7.2	
		0.12	5.90	0.06	64	0.15	<0.036	<5	11	16	7.41	
		0.12	<10	0.06	64	0.10	<0.05	7.60	11	17	7.2	
		0.12	<10	0.14	61	<0.10	0.06	11.00	<10	21	7.2	
VRA	Rietspruit below Amersfoort 26°54'47.20"S 29°52'19.22"E	0.12	<10	0.23	135	<0.10	0.11	21.00	18	32	7.9	
		0.12	12.45	0.14	200	<0.10	<0.036	27.00	12	46	8.23	
		0.12	22.00	0.20	215	0.15	<0.05	49.00	24	54	8.7	
		0.12	19.00	0.25	89	0.23	0.07	46.00	20	44	7.8	
VKK	Brummerspruit below Ermelo 26°30'49.51"S 29°54'27.37"E	11.00	22.00	0.24	155	0.11	1.30	115.00	45	60	7.4	
		8.80	35.50	0.16	170	0.47	2.08	91.50	41	62	7.52	
		18.00	37.00	0.21	170	0.74	2.10	120.00	72	69	7.2	
		10.00	41.00	0.29	155	<0.10	2.00	120.00	56	84	7.4	
VKR	Tweefontein @ Riverside 26°37'21.17"S 29°50'16.24"E	0.34	18.00	0.33	165	1.20	0.14	68.00	32	52	7.6	
		0.55	20.50	0.15	155	1.45	0.46	44.00	28	50	7.7	
		8.60	30.00	0.17	180	1.20	1.60	92.00	44	64	7.4	
		14.00	26.00	0.32	120	<0.10	2.60	60.00	35	60	6.9	
VK	Brummerspruit before Vaal River 26°46'51.26"S 29°48'23.51"E	0.12	16.00	0.30	180	0.79	0.06	48.00	25	48	7.7	
		0.12	19.50	0.16	150	1.14	0.19	43.00	25	50	7.94	
		0.12	25.00	0.22	165	3.60	0.58	69.00	22	55	8.2	
		9.20	25.00	0.28	110	1.10	2.50	57.00	34	52	7.5	
VAS	Vaal River above Standerton 26°51'18.56"S 29°41'51.61"E	0.12	<10	0.18	95	<0.10	<0.036	20.00	16	26	7.2	
		0.12	12.00	0.13	125	0.23	<0.05	27.00	17	40	8.1	
		0.12	23.00	0.19	155	0.65	<0.05	72.00	19	50	8.9	
		0.12	17.00	0.21	85	0.25	0.05	27.00	22	38	7.4	
V GK	Geelkipspruit below Amersfoort 26°57'53.51"S 29°40'19.12"E	0.12	<10	0.34	185	<0.10	<0.036	38.00	20	44	8.1	
		0.12	15.00	0.16	225	<0.10	<0.036	44.50	13	56	8.2	
		0.12	25.00	0.21	250	<0.10	<0.05	75.00	20	64	8.5	
		0.12	23.00	0.28	140	<0.10	0.26	65.00	23	62	8.4	
VBB	Blesbokspruit below Bethal 26°34'2.11"S 29°26'41.21"E	0.12	24.00	0.45	140	0.35	0.84	34.00	31	45	7.3	
		7.50	29.60	0.26	175	0.80	1.51	32.00	38	58	7.47	
		6.00	58.00	0.36	220	5.10	1.80	54.00	47	74	7.9	
		6.60	44.00	0.46	210	4.10	2.80	54.00	55	70	7.6	
VBS	Blesbokspruit @ Skaapkraal 26°38'17.35"S 29°27'6.24"E	0.32	31.30	0.27		1.71	0.45	41.00	38		8.6	
		0.12	58.00	0.43	225	2.00	0.87	68.00	42	72	9	
		1.60	65.00	0.61	215	0.60	2.00	35.00	59	74	7.8	
		0.33	<10	0.31	115	0.17	0.20	30.00	30	33	7.6	
VB	Blesbokspruit @ Vaal River Confluence 26°49'57.05"S 29°30'32.95"E	0.12	25.00	0.27	200	2.00	0.27	46.00	32	54	8	
		0.12	44.00	0.37	235	0.24	<0.05	86.00	33	70	8.4	
		0.12	66.00	0.82	170	<0.10	1.00	45.00	30	63	7.5	
		0.12	<10	0.32	67	<0.10	0.04	20.00	43	18	8	
ND-LEEU	Leesuspruit @ New Denmark Colliery 26°51'16.79"S 29°19'31.56"E	0.12	17.50	0.19		0.22		34.50	30		8.02	
		0.12	33.00	0.34	230	0.14	<0.05	84.00	24	65	8.5	
		0.12	<10	0.23	66	0.15	<0.036	20.00	18	21	6.8	
		0.12	7.20	0.36	72	0.26	0.08	16.00	21	22	7.37	
VS	Vaal River @ Standerton 26°56'51.37"S 29°15'32.09"E	0.12	<10	0.19	74	0.12	<0.05	22.00	19	23	7.9	
		0.23	11.00	0.24	80	0.16	0.07	27.00	21	28	7.1	
		2.40	54.00	0.69	160	3.40	6.90	59.00	52	68	6.8	222610
		7.46	22.35	0.26	210	0.72	6.63	16.45	30	68	7.5	6420
S-BETHAL	Bethal Sewage Works 26°29'8.05"S 29°27'15.88"E	13.00	52.00	0.37	180	1.00	3.30	46.00	70	62	7.6	28880
		5.40	38.00	0.28	195	1.90	0.87	20.00	38	64	7.3	4
		28.00	42.00	0.32	245	<0.10	3.90	56.00	210	75	7.1	1295070
		25.00	53.00	0.19	195	6.80	2.95	67.00	90	77	7.75	363512
S-ESW	Ermelo Sewage Works 26°30'42.84"S 29°57'51.11"E	23.00	51.00	0.16	195	1.90	3.70	140.00	210	84	7.2	1673000
		29.00	70.00	0.34	210	0.31	3.40	86.00	72	100	7.1	263770
		17.00	70.00	0.29	135	<0.10	2.10	50.00	33	51	7.2	26
		0.81	95.00	0.18	130	17.00	0.33	41.00	22	56	7.22	153
S-TUTU	Tutukani Sewage Works 26°47'36.70"S 29°17'30.43"E	2.20	100.00	0.18	93	1.80	0.31	60.00	28	52	7.2	95
		2.30	71.00	0.22	120	1.30	1.50	60.00	31	61	7.4	26
		2.37	73.00	0.18	98	7.03	0.94	56.00	41	71	7.94	163
		2.37		0.18		7.03	0.94	56.00	41		7.9	163
S-MAJUBA	Majuba Power Station Sewage Works 27° 5'23.45"S 29°46'11.44"E	3.50	28.00	0.12	97	4.00	0.51	120.00	67	54	7.9	210
		0.86	23.00	0.21	54	13.00	0.59	41.00	40	46	7.1	3
		2.70	86.00	0.28	92	7.40	2.50	46.00	53	66	7.6	1
		2.53	81.00	0.22	110	6.17	1.53	40.00	33	58	7.77	236
S-ND-SOUTH	New Denmark Colliery - South Shaft 26°44'41.51"S 29°18'31.70"E	1.70	48.00	0.15	125	<0.10	1.20	47.00	41	68	7.6	125
		1.50	100.00	0.27	120	9.10	1.60	43.00	30	72	7.8	6

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Sewage Works Compliance (where applicable) to General Standard (GN 1191 Oct 1999)												
S-BETHAL	Bethal Sewage Works 26°29'8.05"S 29°27'15.88"E	2.40		0.69		3.40	6.90		52	68	6.80	222610
		7.46		0.26		0.72	6.63		30	68	7.50	6420
		13.00		0.37		1.00	3.30		70	62	7.60	28880
		5.40		0.28		1.90	0.87		38	64	7.30	4
S-ESW	Ermelo Sewage Works 26°30'42.84"S 29°57'51.11"E	28.00		0.32		<0.10	3.90		210	75	7.10	1295070
		25.00		0.19		6.80	2.95		90	77	7.75	363512
		23.00		0.16		1.90	3.70		210	84	7.20	1673000
		29.00		0.34		0.31	3.40		72	100	7.10	263770
S-TUTU	Tutukani Sewage Works 26°47'36.70"S 29°17'30.43"E	17.00		0.29		<0.10	2.10		33	51	7.20	26
		0.81		0.18		17.00	0.33		22	56	7.22	153
		2.20		0.18		1.80	0.31		28	52	7.20	95
		2.30		0.22		1.30	1.50		31	61	7.40	26
S-MAJUBA	Majuba Power Station Sewage Works 27° 5'23.45"S 29°46'11.44"E	2.37		0.18		7.03	0.94		41	71	7.94	163
		2.37		0.18		7.03	0.94		41		7.90	163
		3.50		0.12		4.00	0.51		67	54	7.90	210
		0.86		0.21		13.00	0.59		40	46	7.10	3
S-ND-SOUTH	New Denmark Colliery - South Shaft 26°44'41.51"S 29°18'31.70"E	2.70		0.28		7.40	2.50		53	66	7.60	1
		2.53		0.22		6.17	1.53		33	58	7.77	236
		1.70		0.15		<0.10	1.20		41	68	7.60	125
		1.50		0.27		9.10	1.60		30	72	7.80	6

Key

VAS	Vaal River above Standerton	0.12	-	1 Jan 11 - 31 Mar 11
		0.12	-	1 Apr 11 - 30 Jun 11
		0.12	-	1 July 11 - 30 Sept 11
		0.12	-	1 Oct 11 - 31 Dec 31

Water Quality Guidelines

	-	Ideal
	-	Acceptable
	-	Tolerable
	-	Unacceptable