

Sample Point	Quarter	ELEMENT							E.coli
		pH	Conductivity	COD	NH3	NOX	P	SS	
Ancor Up Stream S26°16'8.01" E28°28'26.05"	1	7.1	64	36	2.7	1.3	0.3	25	23340
	2	7.2	48	37	0.9	0.2	0.2	11	3311
	3	7.4	50	26	0.7	0.7	0.3	29	253
	4	7.2	46	35	0.3	0.1	0.1	11	217
Ancor S26°16'0.62" E28°28'56.73"	1	7.2	103	143	5.6	2.4	0.6	31	19943
	2	7.2	87	111	4.5	1.2	0.6	26	33910
	3	7.2	93	101	7.0	5.3	0.6	26	3867
	4	7.1	109	162	7.7	0.3	0.6	35	2961
Ancor Down Stream S26°15'47.55" E28°29'03.45"	1	7.1	82	79	4.1	0.5	0.5	32	6048
	2	7.2	64	86	1.9	0.4	0.4	39	154441
	3	7.1	74	64	5.7	2.5	0.6	21	36920
	4	7.1	104	146	7.0	0.8	0.6	40	15700
Benoni S26°12.655' E28°18.906'	1	7.1	82	24	0.5	3.6	0.1	10	43
	2	7.2	74	28	0.5	1.6	0.2	10	56
	3	7.3	55	29	0.6	1.1	0.2	10	131
	4	7.2	79	22	0.5	2.5	0.1	11	0
Benoni Down Stream S26°12'13.7" E28°18'51.13"	1	7.2	70	30	0.1	0.7	0.1	12	818
	2	7.1	55	37	1.2	0.5	0.2	15	2466
	3	7.2	59	19	0.5	1.1	0.1	12	3698
	4	7.0	70	12	0.5	2.0	4.6	19	3697
Carl Grundlingh - Nigel UP Stream S26°23'06.0" E28°28'12.0"	1	7.0	107	40	0.9	0.4	0.1	14	262
	2	7.2	56	29	0.5	0.1	0.1	12	521
	3	7.0	94	22	1.1	0.3	0.15	15	789
	4	7.2	74	21	0.2	0.2	0.1	10	7
Carl Grundlingh - Nigel S26°23.183' E28°28.201'	1	7.4	70	40	1.3	0.3	0.1	10	142
	2	7.4	65	37	3.4	0.6	0.1	10	30
	3	7.3	63	24	1.1	1.9	0.1	10	83
	4	7.0	70	25	1.2	0.5	0.1	10	28
Carl Grundlingh - Nigel Down Stream S26°23'06.82" E28°28'12.86"	1	7.4	76	47	0.6	0.2	0.8	14	299
	2	7.2	55	40	0.9	0.2	0.3	20	1095
	3	7.2	66	23	1.2	0.3	0.4	20	32
	4	7.3	77	21	0.3	0.2	0.1	10	26
Daveyton Up Stream S26°08.0' E28°27.0'	1	7.9	49	72	0.5	0.1	0.4	30	985
	2	7.6	46	56	2.6	0.3	0.1	31	11422
	3	7.5	43	54	0.8	0.3	0.1	41	1999
	4	8.0	44	52	1.3	0.1	0.1	36	3252
Daveyton S26°08.275' E28°27.737'	1	7.2	43	32	0.9	0.9	0.4	11	154
	2	7.2	42	29	0.6	2.8	0.4	10	42
	3	7.1	50	25	1.8	1.8	0.4	12	279
	4	7.0	52	29	2.8	2.5	0.5	11	82
Daveyton Down Stream S26°08.163' E28°27.888'	1	7.7	47	23	0.3	0.1	0.6	10	334
	2	7.4	43	25	0.9	0.3	0.9	10	1523
	3	7.3357	45	15	0.2	0.1	0.5	12	339
	4	7.6	55	16.5	0.2	0.1	0.4	10	199
H.Bickley - Nigel US Stream S26°28'44.0" E28°25'40.0"	1	7.6	159	29	1.0	0.7	0.8	13	687
	2	7.6	110	52	0.4	0.2	0.7	30	7296
	3	7.9	124	15	0.3	0.1	0.4	14	4950
	4	7.5	159	16	0.3	1.8	0.3	28	753
H.Bickley - Nigel S26°26.709' E28°26.905'	1	7.3	51	49	1.9	3.9	0.7	18	318
	2	7.3	55	43	1.0	3.7	0.4	17	73
	3	7.2	56	50	2.5	4.2	0.2	23	2749
	4	6.9	58	65	5.0	2.9	0.2	26	823
H.Bickley - Nigel Down Stream S26°28'44.72" E28°25'40.09"	1	7.6	136	24	1.9	1.4	1.1	13	448
	2	7.7	108	39	0.4	0.5	0.7	24	3840
	3	7.8	121	12	0.4	0.6	0.4	20	5181
	4	7.4	151	16	1.0	1.3	0.4	24	91
Heidelberg Up Stream S26°32'0" E28°19'0"	1	7.4	69	33	3.9	3.8	0.2	10	34
	2	7.7	101	44	0.5	1.1	0.6	46	8207
	3	8.1	109	12	0.4	1.2	0.4	21	589
	4	7.5	137	12	0.44	2.26	0.46	13	95
Heidelberg S26°32.398' E28°19.694'	1	7.4	111	26	0.8	2.6	1.0	11	33
	2	7.4	67	32	3.8	4.4	0.4	10	197
	3	7.4	67	23	3.8	6.2	0.3	11	82
	4	7.2	70	30	4.68	4.77	0.3	14	139
Heidelberg Down Stream S26°32'17.72" E28°19'25.26"	1	7.4	108	37	1.8	2.6	1.1	14	142157
	2	7.7	101	31	0.6	1.4	0.6	55	61257
	3	8.1	108	13.2	0.6	1.3	0.4	24	100450
	4	7.6	135	16	0.95	2.49	0.5	13.59	46076

Standard Exempt/ License	pH	Conductivity	COD	NH3	NOX	P	SS	E.coli
Ancor	8.5	150	75	7	9	0.9	30	126

License

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Benoni	8.5	150	75	7	9	0.9	30	126

License

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Grundlingh	8.5	150	75	7	9	0.9	30	126

license

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Daveyton	8.5	75	75	7	9	0.9	30	126

License

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Bickley	8.5	150	75	7	9	0.9	30	126

license

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Heidelberg	8.5	150	75	7	9	0.9	30	126

license

		pH	EC	COD	NH3	Nox	P	SS	E.coli
Jan Smuts - Brakpan Up Stream S26°13'27.0" E28°22'39.0"	1	7.3	41	39	3.1	1.4	0.7	10	252378
	2	7.3	48	68	4.7	2.0	0.4	28	775343
	3	7.2	40	17	2.4	1.9	0.2	17	134944
	4	7.2	38	75	2.7	1.9	0.5	17	26396
Jan Smuts - Brakpan S26°13.351' E28°22.431'	1	7.0	63	70	6.7	11.0	0.8	25	38
	2	7.0	57	55	3.0	11.9	0.4	21	54
	3	7.0	64	83	11.0	6.0	0.6	24	243
	4	7.0	67	123	16.0	1.5	0.6	32	699
Jan Smuts - Brakpan Down Stream S26°13'27.53" E28°22'39.49"	1	6.3	62	48	1.8	0.3	2.4	24	4490
	2	6.8	43	24	0.3	0.2	0.1	11	207
	3	6.5	52	16	2.9	0.8	0.1	10	3725
	4	6.9	68	31	13.0	0.1	2.4	14	4078
JP Marais - Benoni UP Stream S26°10'07.0" E28°23'31.0"	1	7.4	39	87	8.3	1	0.8	35	835553
	2	7.3	36	37	5.6	1	0.5	21	410814
	3	7.2	32	18	2.4	2	0.2	24	37238
	4	7.1	36	16	2.0	0	0.1	40	12175
JP Marais - Benoni S26°10.115' E28°23.495'	1	7.2	55	36	1.7	2.7	0.3	10	30
	2	7.2	52	28	0.7	1.5	0.1	10	5
	3	7.1	54	24	1.1	3.4	0.2	10	1
	4	7.2	58	29	3.3	0.3	0.6	10	10
JP Marais - Benoni Down Stream S26°10'07.51" E28°23'31.52"	1	7.3	54	45	3.5	1.5	0.3	17	143056
	2	7.3	45	30	0.9	1.6	0.2	11	8316
	3	7.0	47	31	0.7	3.4	0.2	63	3043
	4	7.2	69	167	12.7	0.5	1.4	13	4605043
Rynfield - Benoni Up Stream S26°09'36.0" E28°21'58.0"	1	7.8	25	50	0.5	0.1	0.1	29	34
	2	7.98	26	52	1.3	0.2	0.3	33	816
	3	7.8	22	26	0.37	0.1	0.1	18	621
	4	7.5	29	40	1.6	0.4	0.2	27	37
Rynfield - Benoni S26°09.510' E28°21.578'	1	7.2	55	34	6.9	2.2	0.6	11	218
	2	7.2	53	31	6.5	6.3	0.4	10	3109
	3	7.1	54	24	9.1	4.87	0.5	10	854
	4	7.1	70	56	18.5	6.8	1.2	17	31548
Rynfield - Benoni Down Stream S26°09'36.56" E28°21'58.47"	1	7.6	64	103	13.0	1.3	3	43	461
	2	7.45	48	68	9.2	0.7	2.1	25	1231
	3	7.3	57	42	12.9	1.2	1.7	16	19709
	4	7.3	74	89	20.6	0.9	3.1	50	2819
Ratanda - Heidelberg Up Stream S26°35'0" E28°17'0"	1	7.5	108	24	0.5	2.6	1.1	10	279
	2	7.5	100	52	0.6	1.2	0.6	75	2516
	3	7.9	109	16	0.4	1.23	0.41	34	4118
	4	7.4	134	12	0.4	2.7	0.5	11	384
Ratanda - Heidelberg S26°34.883' E28°18.137'	1	7.2	60	36	1.6	4.4	0.1	10	32
	2	7.3	57	32	1.1	4.8	0.1	10	165
	3	7.1	60	26	1.07	5.55	0.1	10	8
	4	7.03	65	35	1.8	6.5	0.1	11	36
Ratanda - Heidelberg Down Stream S26°35'01.26" E28°17'51.93"	1	7.6	108	27	0.5	2.6	1.1	15	553
	2	7.6	100	31	0.4	1.2	0.5	48	2747
	3	7.9	109	12	0.35	1.32	0.42	18	24201
	4	7.4	133	13	0.4	2.6	0.4	10	601
Tsakane Up Stream S26°22'0" E28°21'0"	1	7.2	49	302	9.9	0.1	0.9	115	5325384.62
	2	7.1	50	187	9.6	0.3	0.8	93	8111765
	3	7.3	56	264	13.9	0.3	1.1	13	7609167
	4	7.2	54	378	12.7	0.3	0.9	106	3985000
Tsakane S26°22.659' E28°22.018'	1	7.1	46	95	1.6	3.4	0.5	59	2731
	2	7.2	47	63	1.4	2.1	0.5	35	3041
	3	7.0	46	27	0.7	4.6	0.3	12	3104
	4	7.0	49	38	4.7	3.5	0.3	31	57
Tsakane Down Stream S26°22'46.69" E28°21'51.06"	1	7.2	45	158	4.2	2.6	0.9	87	58469
	2	7.2	46	79	2.9	2.9	0.6	36	1264290
	3	7.2	44	40	1.5	4.2	0.4	24	19290
	4	7.1	49	115	6.0	3.0	0.5	80	38903
Welgedacht - Springs Up stream S26°11'56.4" E28°28'46,8"	1	7.5	51	19	0.7	0.4	0.8	10	153
	2	7.6	42	25	0.3	0.2	1.1	11	658
	3	7.4	39	14	0.3	0.3	0.5	10	40
	4	7.3	49	13	0.3	0.2	0.6	11	241
Welgedacht - Springs S26°13'59,4" E28°26'15,4"	1	7.2	58	39	2.1	2.5	1.6	11	49
	2	7.3	51	31	0.6	2.5	0.7	10	158
	3	7.5	57	26	3.2	2.5	0.7	10	0
	4	7.29	69	34	3.1	2.4	1.4	13	56
Welgedacht - Springs Down stream S26°11'35,1" E28°28'38,2"	1	7.4	57	43	2.4	1.9	1.8	23	104
	2	7.4	53	41	2.6	1.9	1.0	19	2308
	3	7.1	57	24	1.4	3.2	0.6	10	60
	4	7.1	73	17	1.5	2.2	1.0	10	254

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Jan Smuts	8.5	150	75	7	9	0.9	30	126

license

	pH	EC	COD	NH3	NO3	P	SS	E.coli
JP	8.5	150	75	7	9	0.9	30	126

license

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Rynfield	8.5	150	75	7	9	0.9	30	126

license

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Ratanda	8.5	150	75	7	9	0.9	30	126

License

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Tsakane	8.5	150	75	7	9	0.9	30	126

license

	pH	EC	COD	NH3	NO3	P	SS	E.coli
Welgedacht	9.5	70	75	6	15	10	25	0

License

Note: Above is based on quarterly averages

1: 2018/10/01 - 2018/12/31
2: 2019/01/01 - 2019/03/31

3: 2019/04/01 - 2019/06/30
4: 2019/07/01 - 2019/10/30

WWCW effluent

Comply
Non Comply

River

Ideal
Acceptable
Tolerable
Unacceptable