

Final Water Quality Report

Report Number: 69817

Physical Address

Amatola Water Scientific Services Nahoon Dam Complex

Postal Address

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Samples Submitted By: Ntombi Tshicilela

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Reported Date: 21/01/2016

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Note: The results pertain to samples as taken and in the condition submitted to the laboratory. All results marked <1 for E.coli indicate that the results is equal to 0 or less than 1.





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Test List: EFFLUENT Scheme: Mayfield Effluent Received Date: 10/12/2015

Sample Number			131986
Sample Description			Mayfield Effluen
Sample Received Date			10/12/2015
Sample Commencement Date			10/12/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
Ammonia as N	mg/l	C32	19.69
E coli waste water(colilert)	MPN/100ML	MO1	6
EC @ 25°C	mS/m		43.2
litrate as N	mg/l	C53	0.47
Nitrite as N	mg/l	C39	1.08
Millite do 14			
Ortho phosphate - Aquakem as P	mg/l	C37	3.7





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Test List: FINAL_MK

Scheme: Alicedale Community Tap WTW

Sample Number			131768
Sample Description	Alicedale Communi		
Sample Received Date	01/12/2015		
Sample Commencement Date	01/12/2015		
Sample Completed Date	T		
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	124.8
Aluminium as Al	h0\lambda	C09	126.8
Ammonia as N	mg/i	C32	0
admium as Cd	Λριμ	C03	0
Calcium as Ca	mg/l	C01	19.16
Chloride as Cl	mg/l	C34	48.39
Chlorine	mg/l	†	0.54
Chromium as Cr	μgΛ	C03	0.07
Cobalt as Co	hav	C03	0
Copper as Cu	μg/I	C02	0.49
EC - Autotitrator @ 25°C	mS/m	C29	87.45
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/l	C35	0.05
Hardness (calcium)	mg/l		47.44
Hardness (magnesium)	mg/l		57.65
Hardness (total)	mg/l		105
Heterotrophic plate count @35°C	CFU/1ml	M03	2
Iron (total) as Fe	µg/l	C02	62.77
Lead as Pb	h8/l	C02	0
Magnesium as Mg	mg/l	C01	14.05
Manganese as Mn	hg/l	C02	4.5
Nickel as Ni	рд/(C03	0
pH - Autotitrator @ 25°C		C30	7.86
@ Water Treatment Works (Plants)		1	7.97
tassium as K	mg/l	C01	3.6
Sodium as Na	mg/l	C01	102.72
Sulphate as SO4	mg/l	C33	10.24
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1
Turbidity	NTU	C16	1.7
Turbidity @ WTW	NTU	1	1.96
Zinc as Zn	μα/Ι	C02	6.38





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Test List: FINAL_MK

Scheme: Alicedale Community Tap WTW

Sample Number			131983
Sample Description			Alicedale Community
Sample Received Date	10/12/2015		
Sample Commencement Date	10/12/2015		
Sample Completed Date			1
Comment			
Test	† Units	Method No	-
Alkalinity - Autotitrator	mg/l	C28	160.6
Aluminium as Al	l/g/l	C09	112.34
Ammonia as N	mg/l	C32	0
fmium as Cd	hg/l	C03	0
salcium as Ca	mg/l	C01	19.27
Chloride as Cl	mg/l	C34	167.85
Chlorine	mg/l		1.91
Chromium as Cr	μg/Ι	C03	0.25
Cobalt as Co	μg/Ι	C03	0.04
Copper as Cu	µg/l	C02	2.63
EC - Autotitrator @ 25°C	mS/m	C29	74.68
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/l	C35	0.12
Hardness (calcium)	mg/l		47.44
Hardness (magnesium)	mg/l		57.65
Hardness (total)	mg/l		105
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Iron (total) as Fe	μg/Ι	C02	61.24
Lead as Pb	μg/l	C02	0
Magnesium as Mg	mg/t	C01	14.29
Manganese as Mn	μg/Ι	C02	11.25
Nicket as Ni	hØvl	C03	0.41
pH - Autotitrator @ 25°C	•	C30	7.83
g Water Treatment Works (Plants)			7.86
ssium as K	mg/l	C01	3.8
Sodium as Na	mg/l	C01	107.2
Sulphate as SO4	mg/l	C33	17.64
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1
Turbidity	NTU	C16	1.31
Turbidity @ WTW	NTU		1.45
Zinc as Zn	µg/1	C02	9.66





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Test List: FINAL_MK

Scheme: Beaufort Str Police Station

Sample Number			131980
Sample Description	Beaufort Str Police Station		
Sample Received Date	10/12/2015		
Sample Commencement Date	10/12/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	31.89
Aluminium as Al	μдΛ	C09	9.25
Ammonia as N	mg/l	C32	0
admium as Cd	hg/l	C03	0
Calcium as Ca	mg/l	C01	5.62
Chlonde as Cl	mg/l	C34	46.63
Chlorine	mg/l		0.01
Chromium as Cr	hgл	C03	0.44
Cobalt as Co	μg/l	C03	0.11
Copper as Cu	μgΛ	C02	35.22
EC - Autotitrator @ 25°C	mS/m	C29	21.03
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/t	C35	0.02
Hardness (calcium)	mg/l		13.98
Hardness (magnesium)	mg/l		15.65
Hardness (total)	mg/l		30
Heterotrophic plate count @35°C	CFU/1ml	M03	12
Iron (total) as Fe	μg/Ι	C02	67
Lead as Pb	ha/l	C02	1.1
Magnesium as Mg	mg/t	C01	3.84
Manganese as Mn	µg/l	C02	7.2
Nickel as Ni	µg/l	C03	0
pH - Autotitrator @ 25°C		C30	7.32
Water Treatment Works (Plants)	*		7.34
otassium as K	mg/l	C01	0.54
Sodium as Na	mg/l	C01	27.03
Sulphate as SO4	mg/l	C33	6.68
Total coliform bacteria Membrane Filtration	CFU/100ml	MO4	<1
Turbidity	NTU		0.36
Turbidity & WTW	NTU	-	0.74
Zinc as Zn	l/Q/I	C02	16.37





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Scheme: Riebeeck Communal Tap Received Date: 10/12/2015

Sample Number			131979
Sample Description	Riebeeck Communa Tap		
Sample Received Date			10/12/2015
Sample Commencement Date	10/12/2015		
Sample Completed Date			
Comment			
Test	Units	j Method No	
Alkalinity - Autotitrator	mg/l	C28	140.5
Aluminium as Al	hôy	C09	0.47
Ammonia as N	mg/l	C32	0
admium as Cd	μg/l	C03	0
Calcium as Ca	mg/t	C01	8.48
Chloride as Cl	mg/i	C34	121.37
Chlorine	mg/i		0.59
Chromium as Cr	hg/l	C03	0.02
Cobalt as Co	hg/l	C03	0.44
Copper as Cu	hØ\I	C02	3.7
EC - Autotitrator @ 25°C	mS/m	C29	56.43
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/i	C35	0.2
Hardness (calcium)	mg/l		21.22
Hardness (magnesium)	mg/l		57.65
Hardness (total)	mg/l		79
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Lead as Pb	hây	C02	0
Magnesium as Mg	mg/l	C01	14.13
Manganese as Mn	h8\J	C02	40.13
Nickel as Ni	ha\J	C03	2.04
pH - Autotitrator @ 25°C		C30	7.05
pH @ Water Treatment Works (Plants)			7.03
rssium as K	mg/l	C01	1.34
um as Na	mg/l	C01	81.33
Sulphate as SO4	mg/l	C33	14.26
Total coliform bacteria Membrane Filtration	CFU/100ml	MO4	<1
Turbidity	NTU		2.16
Turbidity @ WTW	NTU		2.4
Zinc as Zn	µg/l	C02	12.17





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Scheme: Environmental Health Office

Sample Number			131978
Sample Description	Environmental Health Office		
Sample Received Date	10/12/2015		
Sample Commencement Date	10/12/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	22.21
Aluminium as Al	μgΛ	C09	9.39
Ammonia as N	mg/l	C32	0
admium as Cd	Ngų	C03	0
calcium as Ca	mg/l	C01	3.34
Chloride as Cl	mg/l	C34	46.56
Chlorine	mg/l		01
Chromium as Cr	րց/۱	C03	0.21
Cobalt as Co	hâ\l	C03	0.17
Copper as Cu	h8\J	C02	48.38
EC - Autotitrator @ 25°C	mS/m	C29	20.25
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/l	C35	0.02
Hardness (calcium)	mg/l		8.24
Hardness (magnesium)	mg/l		16.88
Hardness (total)	mg/l		25.2
Heterotrophic plate count @35°C	CFU/tml	M03	<1
Iron (total) as Fe	Nguj	C02	3.74
Lead as Pb	μολ	C02	0.78
Magnesium as Mg	mg/l	C01	4.05
Manganese as Mn	Nguj	C02	4.25
Nickel as Nı	μg/l	C03	0
pH - Autotitrator @ 25°C		C30	6.71
pレ 冬 Water Treatment Works (Plants)	-		8.08
sium as K	mg/l	C01	0.51
Sodium as Na	mg/i	C01	26.74
Sulphate as SO4	mg/l	C33	71
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1
Turbidity	NTU		0.28
Turbidity @ WTW	NTU		0.73
Zinc as Zn	µg/i	C02	34.4





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Test List: FINAL_MK
Scheme: Extension 7 Clinic
Received Date: 10/12/2015

Sample Number			131977
Sample Description	Extension 7 Clinic		
Sample Received Date	10/12/2015		
Sample Commencement Date	10/12/2015		
Sample Completed Date			10.000
Comment		-	
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	453
Aluminium as Al	h8\J	C09	75.48
Ammonia as N	mg/l	C32	0
Jadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	31.39
Chlonde as Cl	mg/l	C34	104.78
Chlorine	mg/l		0.06
Chromium as Cr	hgvi	C03	0.38
Cobalt as Co	μg/l	C03	0
Copper as Cu	μgΛ	C02	3.68
EC - Autotitrator @ 25°C	mS/m	C29	90.66
Faecal coliforms count Member Filtration	CFU/100ml		2
Fluoride as F	mg/l	C35	0.66
Hardness (calcium)	mg/l		77.41
Hardness (magnesium)	mg/l		98.83
Hardness (total)	mg/l		176
Heterotrophic plate count @35°C	CFU/1mi	M03	44
Iron (total) as Fe	hā\l	C02	31.25
Lead as Pb	µg/l	C02	0.05
Magnesium as Mg	mg/l	C01	24.17
Manganese as Mn	hðy	C02	1.63
Nickel as Ni	μg/l	C03	0
pH - Autotitrator @ 25°C	•	C30	8.57
Water Treatment Works (Plants)			8.14
Potassium as K	mg/l	C01	3.19
Sodium as Na	mg/l	C01	133.14
Sulphate as SO4	mg/l	C33	58.81
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	9
Turbidity	NTU		1.59
Turbidity @ WTW	NTU		1.97
Zinc as Zn	μg/l	C02	0.32







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Scheme: Indoor Sports Centre Received Date: 10/12/2015

Sample Number			131976
Sample Description			Indoor Sports Centre
Sample Received Date			10/12/2015
Sample Commencement Date	10/12/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	467.1
Aluminium as Al	μg/l	C09	32.82
Ammonia as N	mg/l	C32	0
Sadmium as Cd	hay	C03	0
Calcium as Ca	mg/l	C01	31.59
Chloride as Cl	mg/l	C34	105.25
Chlorine	mg/l		0.05
Chromium as Cr	h8/l	C03	0.13
Cobalt as Co	hg/l	C03	0.04
Copper as Cu	h0\l	C02	2.82
EC - Autotitrator @ 25°C	mS/m	C29	91.72
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/l	C35	0.67
Hardness (calcium)	mg/l		79.9
Hardness (magnesium)	mg/l		98.83
Hardness (total)	mg/l		179
Heterotrophic plate count @35°C	CFU/1ml	M03	102
Iron (total) as Fe	μgΛ	C02	8.37
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	24.31
Manganese as Mn	µg∕l	C02	0.8
Nickel as Ni	ինչ	C03	0
pH - Autotitrator @ 25°C		C30	8.54
@ Water Treatment Works (Plants)	•		8.12
r∕otassium as K	mg/l	C01	3.19
Sodium as Na	mg/l	C01	133.96
Sulphate as SO4	mg/l	C33	58.88
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1
Turbidity	NTU		0.93
Turbidity @ WTW	NTU		1.29
Zinc as Zn	μgΛ	C02	0.05







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Test List: FINAL_MK

Scheme: J / Kleinshans Final WTW

Sample Number			131889
Sample Description			J / Kleinshans Fina WTW
Sample Received Date	02/12/2015		
Sample Commencement Date	02/12/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	-
Alkalinity - Autotitrator	mg/l	C28	491.2
Aluminium as Al	hg/l	C09	54.45
Ammonia as N	mg/l	C32	0
dmium as Cd	hgvi	C03	0
Calcium as Ca	mg/l	C01	28.39
Chloride as Cl	mg/l	C34	103.23
Chlorine	mg/l		0.1
Chromium as Cr	hg/l	C03	0.22
Cobalt as Co	hg/l	C03	0
Copper as Cu	hð\J	C02	8.59
EC - Autotitrator @ 25°C	mS/m	C29	100.31
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/l	C35	0.67
Hardness (calcium)	mg/i		69.92
Hardness (magnesium)	mg/l		94.71
Hardness (total)	mg/l		165
Heterotrophic plate count @35°C	CFU/1ml	M03	116
Iron (total) as Fe	hg/l	C02	37.55
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	22.67
Manganese as Mn	hg/l	C02	1.71
Nickel as Ni	Ngq	C03	0
pH - Autotitrator @ 25°C		C30	8.67
pi Mater Treatment Works (Plants)	-		7.81
A sium as K	mg/l	C01	2.9
Sodium as Na	mg/l	C01	127.59
Sulphate as SO4	mg/l	C33	63.68
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1
Total Solids - dissolved	mg/l		501.55
Turbidity	NTU	C16	1.13
Turbidity @ WTW	NTU		1.26
Zinc as Zn	μg/l	C02	0.15





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Test List: FINAL_MK

Scheme: J / Kleinshans Final WTW

Sample Number			131984
Sample Description			J / Kleinshans Fina WTW
Sample Received Date	10/12/2015		
Sample Commencement Date	10/12/2015		
Sample Completed Date			and the same to say on sugar so develor to
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	534
Aluminium as Al	l lg/l	C09	107.25
Ammonia as N	mg/l	C32	0
Jadmium as Cd	μg/Ι	C03	0
Calcium as Ca	mg/l	C01	31.11
Chloride as Cl	mg/l	C34	106.22
Chlorine	mg/l		0.4
Chromium as Cr	µg/l	C03	0.3
Cobalt as Co	l/g/l	C03	0.02
Copper as Cu	hg/l	C02	5.31
EC - Autotitrator @ 25°C	mS/m	C29	91
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/l	C35	0.38
Hardness (calcium)	mg/l		77.41
Hardness (magnesium)	mg/l		98.83
Hardness (total)	mg/l	†	176
Heterotrophic plate count @35°C	CFU/1ml	MO3	>1000
Iron (total) as Fe	hg/l	C02	51.3
Lead as Pb	lуgų	C02	0
Magnesium as Mg	mg/l	C01	24.25
Manganese as Mn	ha\/l	C02	1.98
Nickel as Ni	hg/l	C03	0
pH - Autotitrator @ 25°C		C30	8.55
@ Water Treatment Works (Plants)			10.52
rotassium as K	mg/l	C01	3.21
Sodium as Na	mg/l	C01	134.4
Sulphate as SO4	mg/l	C33	58.56
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1
Turbidity	NTU	C16	1.85
Turbidity @ WTW	NTU		3.4
Zinc as Zn	µg/l	C02	0





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Test List: FINAL_MK

Scheme: Nonzwakazi Community Tap in Alicedale

Sample Number			131974
Sample Description			Nonzwakazi Community Tap in
Sample Received Date	10/12/2015		
Sample Commencement Date	10/12/2015		
Sample Completed Date		-	
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	144.8
Aluminium as Al	μg/Ι	C09	5.02
Ammonia as N	mg/l	C32	0
dmium as Cd	hgr	C03	0
Calcium as Ca	mg/l	C01	19.74
Chloride as CI	mg/l	C34	161.7
Chlorine	mg/i		0.25
Chromium as Cr	hQ/l	C03	0.16
Cobalt as Co	μg/l	C03	0.08
Copper as Cu	μgΛ	C02	5.08
EC - Autotitrator @ 25°C	mS/m	C29	72.93
Faecal coliforms count Member Filtration	CFU/100ml		<1
Fluoride as F	mg/l	C35	0.13
Hardness (calcium)	mg/l		49.94
Hardness (magnesium)	mg/l		57.65
Hardness (total)	mg/l		108
Heterotrophic plate count @35°C	CFU/1ml	M03	144
Iron (total) as Fe	hBy	C02	0
Lead as Pb	µд∕1	C02	0.82
Magnesium as Mg	mg/l	C01	14.25
Manganese as Mn	Ngu	C02	6.63
Nickel as Ni	hay.	C03	0.13
pH - Autotitrator @ 25°C		C30	7.88
" " Water Treatment Works (Plants)	•		8.39
sium as K	mg/l	C01	3.72
Sodium as Na	mg/l	C01	103.99
Sulphate as SO4	mg/l	C33	17.56
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	1
Turbidity	NTU		13.6
Turbidity @ WTW	NTU		19.7
Zinc as Zn	µg/l	C02	30.33



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Test List: FINAL_MK

Scheme: Waainek WTW Final Received Date: 01/12/2015

Sample Number			131766
Sample Description			Waainek WTW Fina
Sample Received Date			01/12/2015
Sample Commencement Date	01/12/2015		
Sample Completed Date	* Charleston and the second and appropriate		1
Comment			
Test	j Units	Method No	-
Alkalinity - Autotitrator	mg/l	C28	24.67
Aluminium as Al	µg/l	C09	37.53
Ammonia as N	mg/l	C32	0
1mium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	3.42
Chloride as Cl	mg/l	C34	4.26
Chlorine	mg/l		0.7
Chromium as Cr	hāy	C03	0.15
Cobatt as Co	hg/l	C03	0
Copper as Cu	µg/l	C02	0
EC - Autotitrator @ 25°C	mS/m	C29	16.56
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1
Fluoride as F	mg/l	C35	0.01
Hardness (calcium)	mg/i		8.49
Hardness (magnesium)	mg/i		15.65
Hardness (total)	mg/l		24.5
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Iron (total) as Fe	h0\/l	C02	9.76
Lead as Pb	hg/l	C02	0
Magnesium as Mg	mg/l	C01	3.84
Manganese as Mn	hg/l	C02	16.2
Nickel as Ni	hay	C03	0
pH - Autotitrator @ 25°C		C30	6.92
r' Water Treatment Works (Plants)	•		6.7
sium as K	mg/l	C01	0.53
Sodium as Na	mg/l	C01	26.22
Sulphate as SO4	mg/l	C33	2.95
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1
Turbidity	NTU	C16	0.28
Turbidity @ WTW	NTU		0.33
Zinc as Zn	μg/l	C02	1.51





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Scheme: Waainek WTW Final Received Date: 10/12/2015

Sample Number Sample Description Sample Received Date Sample Commencement Date			131981 Waainek WTW Fina 10/12/2015 10/12/2015				
				Sample Completed Date			
				Comment			
				Test	Units	Method No	-
Alkalinity - Autotitrator	mg/l	C28	16.18				
Aluminium as Al	μgΛ	C09	13.23				
Ammonia as N	mg/l	C32	0				
admium as Cd	µд/1	C03	0				
Calcium as Ca	mg/l	C01	3.07				
Chloride as Cl	mg/l	C34	48.15				
Chlorine	mg/l		1.59				
Chromium as Cr	hgvl	C03	0.16				
Cobalt as Co	hg/l	C03	0.54				
Copper as Cu	hgvl	C02	2.66				
EC - Autotitrator @ 25°C	mS/m	C29	20.19				
Faecal coliforms count Member Filtration	CFU/100ml	M05	<1				
Fluoride as F	mg/l	C35	0				
Hardness (calcium)	mg/l		7.74				
Hardness (magnesium)	mg/l		16.47				
Hardness (total)	mg/l		23.7				
Heterotrophic plate count @35°C	CFU/1ml	M03	<1				
Iron (total) as Fe	hg/l	C02	4.89				
Lead as Pb	μgΛ	C02	0.51				
Magnesium as Mg	mg/l	C01	4.04				
Manganese as Mn	Ngu	C02	16.26				
Nickel as Ni	μg/l	C03	0.17				
pH - Autotitrator @ 25°C		C30	6.4				
@ Water Treatment Works (Plants)	115.1		6.14				
- otassium as K	mg/l	C01	0.51				
Sodium as Na	mg/l	C01	26.65				
Sulphate as SO4	mg/l	C33	6.85				
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	<1				
Turbidity	NTU	C16	0.34				
Turbidity @ WTW	NTU		0.4				
Zinc as Zn	μg/l	C02	22.31				





Final Water Quality Report

Report Number: 69817

Test List: FINAL_MK

Scheme: Waainek WTW Final Received Date: 17/12/2015

Sample Number			132075
Sample Description			Waainek WTW Fina
Sample Received Date			17/12/2015
Sample Commencement Date			17/12/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	451.1
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	32.19
chloride as Cl	mg/l	C34	111.49
Chlorine	mg/l		0.16
EC - Autotitrator @ 25°C	mS/m	C29	94.53
Fluoride as F	mg/l	C35	0.68
Magnesium as Mg	mg/l	C01	25.1
pH - Autotitrator @ 25°C	-	C30	8.57
pH @ Water Treatment Works (Plants)	1.0		9.35
Potassium as K	mg/l	C01	3.32
Sodium as Na	mg/l	C01	135.55
Sulphate as SO4	mg/l	C33	68.11
Turbidity @ WTW	NTU		1.5





Final Water Quality Report

Report Number: 69817

Test List: RAW_AUD_MK

Scheme: J / Kleinshans Raw WTW

Sample Number Sample Description			J / Kleinshans Raw WTW
Sample Commencement Date		•	
Sample Completed Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	504.8
Ammonia as N	mg/l	C32	0.01
Cadmium as Cd	μдΛ	C03	0
alcium as Ca	mg/l	C01	29.69
Chloride as Cl	mg/l	C34	121.56
Chromium as Cr	µд∕1	C03	0.21
Cobalt as Co	µд∕1	C03	0
Copper as Cu	hθy	C02	4.37
Fluoride as F	mg/l	C35	0.74
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		90.6
Hardness (total)	mg/l		166
Iron (total) as Fe	μg/l	C02	0
Lead as Pb	hg/l	C02	0
Magnesium as Mg	mg/l	C01	22.49
Manganese as Mn	μgΛ	C02	0.36
Nickel as Ni	h8\J	C03	0
Potassium as K	mg/l	C01	3.04
Sodium as Na	mg/l	C01	128.57
Sulphate as SO4	mg/l	C33	63.91
Turbidity	NTU	C16	55
Zinc as Zn	µg/l	C02	0.13





Final Water Quality Report

Report Number: 69817

Test List: RAW_AUD_MK

Scheme: J / Kleinshans Raw WTW

Sample Number Sample Description Sample Received Date			131985 J / Kleinshans Raw WTW 10/12/2015				
				Sample Commencement Date			10/12/2015
				Sample Completed Date			
Comment		A					
Test Units Method No							
Alkalinity - Autotitrator	mg/i		486				
Ammonia as N	mg/l	C32	0				
Cadmium as Cd	µg/l	C03	0				
icium as Ca	mg/l	C01	32.22				
cnloride as Cl	mg/l	C34	103.55				
Chromium as Cr	h8\lambda	C03	3.29				
Cobalt as Co	h8y	C03	0.59				
Copper as Cu	hg/l	C02	5.58				
E coll waste water(colitert)	MPN/100ML	M01	27				
Fluoride as F	mg/l	C35	0.17				
Hardness (calcium)	mg/l		79.9				
Hardness (magnesium)	mg/l		102.95				
Hardness (total)	mg/l		183				
Lead as Pb	hðy	C02	1.29				
Magnesium as Mg	mg/l	C01	24.74				
Manganese as Mn	ha\J	C02	25.7				
Nickel as Ni	h8\J	C03	0.75				
pH @ Water Treatment Works (Plants)			10.76				
Potassium as K	mg/l	C01	4.07				
Sodium as Na	mg/l	C01	134.62				
Sulphate as SO4	mg/l	C33	59.31				
Turbidity	NTU	C16	45.6				
Turbidity @ WTW	NTU		69.6				
Zirnas Zn	h8/l	C02	4.12				



Final Water Quality Report

Report Number: 69817

Test List: RAW_AUD_MK Scheme: Waainek WTW Raw Received Date: 01/12/2015

Sample Number			131767				
Sample Description Sample Received Date Sample Commencement Date Sample Completed Date			Waainek WTW Raw 01/12/2015 01/12/2015				
				Comment			
				Test Units Method No			
				Alkalınity - Autolitrator	mg/l	C28	27.87
Ammonia as N	mg/l	C32	0				
Cadmium as Cd	µg/l	C03	0				
'cium as Ca	mg/l	C01	3.15				
chloride as Cl	mg/l	C34	49.51				
Chromium as Cr	μgΛ	C03	1.02				
Cobalt as Co	hou	C03	0.02				
Copper as Cu	h0\J	C02	0.51				
E coli waste water(colliert)	MPN/100ML	M01	12				
Fluoride as F	mg/l	C35	0.05				
Hardness (calcium)	mg/l		7.99				
Hardness (magnesium)	mg/l		16.08				
Hardness (total)	mg/l		24				
Lead as Pb	hg/l	C02	0				
Magnesium as Mg	/ mg/t	C01	3.9				
Manganese as Mn	μgΛ	C02	17.39				
Nickel as Ni	hðyl	C03	0.26				
pH @ Water Treatment Works (Plants)	*		7.06				
Potassium as K	mg/l	C01	0.82				
Sodium as Na	mg/l	C01	28.5				
Sulphate as SO4	mg/l	C33	8.94				
Turbidity	NTU	C16	14.6				
Turbidity @ WTW	NTU		1.66				
Zinr as Zn	Ngu	C02	38.96				



Final Water Quality Report

Report Number: 69817

Test List: RAW_AUD_MK Scheme: Waainek WTW Raw Received Date: 10/12/2015

Sample Description Sample Received Date			131982 Waainek WTW Raw 10/12/2015				
				Sample Commencement Date			10/12/2015
				Sample Completed Date			
Comment							
Test	Units	Method No	-				
Alkalinity - Autotitrator	mg/i	C28	27.51				
Ammonia as N	mg/l	C32	0				
Cadmium as Cd	h8\land	C03	0				
cium as Ca	mg/l	C01	3.48				
Chloride as Cl	mg/l	C34	44.87				
Chromium as Cr	hay	C03	0.96				
Cobait as Co	μgΛ	C03	0.04				
Copper as Cu	μg/t	C02	2.62				
Fluoride as F	mg/l	C35	0.06				
Hardness (calcium)	mg/l		8.74				
Hardness (magnesium)	mg/l		16.88				
Hardness (total)	mg/l		25.7				
Lead as Pb	μg/Ι	C02	0				
Magnesium as Mg	mg/t	C01	4.07				
Manganese as Mn	hg/i	C02	11.07				
Nickel as Ni	μдЛ	C03	0				
Potassium as K	mg/l	C01	0.75				
Sodium as Na	mg/l	C01	28.73				
Sulphate as SO4	mg/l	C33	7.43				
Turbidity	NTU	C16	25.9				
Zinc as Zn	/Qu	C02	69.74				

Test List: RAW_AUD_MK
. ne: Waainek WTW Raw
Received Date: 17/12/2015

Sample Number			132076
Sample Description			Waainek WTW Raw
Sample Received Date		a secondar and all annual design and the all their	17/12/2015
Sample Commencement Date			17/12/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l		501.6
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	33.53
Chloride as Cl	mg/l	C34	109.69
Officiac as of			
	mg/l	C35	0.76
Fluoride as F	mg/l mg/i	C35	0.76 25.14
Fluoride as F Magnesium as Mg			
Fluoride as F Magnesium as Mg Potassium as K Sodium as Na	mg/i	C01	25.14



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Report Number: 69817				
Signature: Microbiology	Name:	Date:		
Signature: Chemistry	Name:	Date:		
Scientist:	Name:	Date:		