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Amatola Water Amanzi - *Water is life*
Scientific Services Department
Preliminary Water Quality Report

Report Number: 69479

Physical Address

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Report Number: 69479

Test List: EFFLUENT
 Scheme: Alicedale WWTW
 Received Date: 19/06/2015

Sample Number			128265
Sample Description			Alicedale WWTW
Analysis Start Date			19/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Ammonia as N	mg/l	C32	15.76
Chemical Oxygen Demand - DR2800	mg/l	C50	266
Chlorine	mg/l		0.05
E coli waste water(colilert)	CFU/100ml	M01	>2420
EC @ 25°C	mS/m	C15	125.7
Nitrite as N	mg/l	C39	3.71
Ortho phosphate - Aquakem	mg/l	C37	3.02
PH @ 25°C	-	C14	7.35
Solids - Total suspended	mg/l	C46	240

Test List: EFFLUENT
 Scheme: Mayfield Effluent
 Received Date: 02/06/2015

Sample Number			128075
Sample Description			Mayfield Effluent
Analysis Start Date			03/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Ammonia as N	mg/l	C32	43.7
Chemical Oxygen Demand - DR2800	mg/l	C50	138
E coli waste water(colilert)	CFU/100ml	M01	>2420
EC @ 25°C	mS/m	C15	133.6
Nitrite as N	mg/l	C39	0.64
Ortho phosphate - Aquakem	mg/l	C37	4.5
PH @ 25°C	-	C14	7.94
Solids - Total suspended	mg/l	C46	52

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Test List: EFFLUENT

Scheme: Mayfield Effluent

Received Date: 19/06/2015

Sample Number	128264		
Sample Description	Mayfield Effluent		
Analysis Start Date	19/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
	Ammonia as N	mg/l	C32
	26.33		
	Chemical Oxygen Demand - DR2800	mg/l	C50
	109		
	E coli waste water (colilert)	CFU/100ml	M01
	>2420		
	EC @ 25°C	mS/m	C15
	129.3		
	Nitrite as N	mg/l	C39
	0.3		
	Ortho phosphate - Aquakem	mg/l	C37
	4.39		
	PH @ 25°C	-	C14
	7.64		
	Solids - Total suspended	mg/l	C46
	50		



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Test List: FINAL_MK
 Scheme: Alicedale Community Tap WTW
 Received Date: 03/06/2015

Sample Number			128104
Sample Description			Alicedale Community Tap WTW
Analysis Start Date			03/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	186.1
Aluminium as Al	µg/l	C09	0
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	23.13
Chloride as Cl	mg/l	C34	160.48
Chlorine	mg/l		0.68
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.06
Copper as Cu	µg/l	C02	0.07
EC - Autotitrator	mS/m	C15	68.9
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.16
Hardness (calcium)	mg/l		57.43
Hardness (magnesium)	mg/l		57.65
Hardness (total)	mg/l		115
Heterotrophic plate count @35°C	CFU/1ml	M03	2
Iron (total) as Fe	µg/l	C02	5.64
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	14.41
Manganese as Mn	µg/l	C02	19.75
Nickel as Ni	µg/l	C03	2.33
pH - Autotitrator	-	C14	7.66
pH @ Water Treatment Works (Plants)	-		9.33
Potassium as K	mg/l	C01	5.02
Sodium as Na	mg/l	C01	90.33
Sulphate as SO4	mg/l	C33	18.46
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		345
Turbidity	NTU	C16	1.83
Turbidity @ WTW	NTU		2.04
Zinc as Zn	µg/l	C02	16.29



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Report Number: 69479

Test List: FINAL_MK

Scheme: Alicedale Community Tap WTW

Received Date: 09/06/2015

Sample Number	128184		
Sample Description	Alicedale Community Tap WTW		
Analysis Start Date	09/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	180.8
Aluminium as Al	µg/l	C09	0
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	30.45
Chloride as Cl	mg/l	C34	159.24
Chlorine	mg/l		0.05
Chromium as Cr	µg/l	C03	0.06
Cobalt as Co	µg/l	C03	0
Copper as Cu	µg/l	C02	0
EC - Autotitrator	mS/m	C15	68.1
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.16
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		70.01
Hardness (total)	mg/l		145
Heterotrophic plate count @35°C	CFU/1ml	M03	23
Iron (total) as Fe	µg/l	C02	0
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	16.82
Manganese as Mn	µg/l	C02	0
Nickel as Ni	µg/l	C03	0
pH - Autotitrator	-	C14	7.5
pH @ Water Treatment Works (Plants)	-		9.14
Potassium as K	mg/l	C01	2.34
Sodium as Na	mg/l	C01	61.62
Sulphate as SO4	mg/l	C33	17.62
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	5
Total Solids - dissolved	mg/l		341
Turbidity	NTU	C16	1.67
Turbidity @ WTW	NTU		2.01
Zinc as Zn	µg/l	C02	0

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Report Number: 69479

Test List: FINAL_MK

Scheme: Alicedale Community Tap WTW

Received Date: 23/06/2015

Sample Number	128308		
Sample Description	Alicedale Community Tap WTW		
Analysis Start Date	23/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
Alkalinity - Autotitrator	mg/l	C28	115.5
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	10
Chloride as Cl	mg/l	C34	160.54
Chlorine	mg/l		0.25
EC - Autotitrator	mS/m	C29	70.86
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.19
Hardness (calcium)	mg/l		24.97
Hardness (magnesium)	mg/l		28
Hardness (total)	mg/l		53
Heterotrophic plate count @35°C	CFU/1ml	M03	160
Magnesium as Mg	mg/l	C01	6.83
pH - Autotitrator	-	C30	7.96
pH @ Water Treatment Works (Plants)	-		9.28
Potassium as K	mg/l	C01	3.45
Sodium as Na	mg/l	C01	37.47
Sulphate as SO4	mg/l	C33	21.96
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		354.29
Turbidity	NTU	C16	5.5
Turbidity @ WTW	NTU		5.36

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Report Number: 69479

Test List: FINAL_MK

Scheme: Beaufort Str Police Station

Received Date: 03/06/2015

Sample Number			128094
Sample Description			Beaufort Str Police Station
Analysis Start Date			03/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	19.71
Aluminium as Al	µg/l	C09	0
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	3.82
Chloride as Cl	mg/l	C34	57.73
Chlorine	mg/l		0.07
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.1
Copper as Cu	µg/l	C02	0.55
EC - Autotitrator	mS/m	C15	20
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.05
Hardness (calcium)	mg/l		9.49
Hardness (magnesium)	mg/l		16.88
Hardness (total)	mg/l		26.5
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Iron (total) as Fe	µg/l	C02	0
Lead as Pb	µg/l	C02	0.17
Magnesium as Mg	mg/l	C01	4.07
Manganese as Mn	µg/l	C02	5.75
Nickel as Ni	µg/l	C03	0.05
pH - Autotitrator	-	C14	7.71
pH @ Water Treatment Works (Plants)	-		7.59
Potassium as K	mg/l	C01	0.8
Sodium as Na	mg/l	C01	29.69
Sulphate as SO4	mg/l	C33	6.71
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		100.1
Turbidity	NTU	C16	1.28
Turbidity @ WTW	NTU		1.38
Zinc as Zn	µg/l	C02	3.53

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Test List: FINAL_MK
Scheme: Beaufort Str Police Station
Received Date: 19/06/2015

Sample Number	128274		
Sample Description	Beaufort Str Police Station		
Analysis Start Date	19/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
	Alkalinity - Autotitrator	mg/l	C28
	Ammonia as N	mg/l	C32
	Calcium as Ca	mg/l	C01
	Chloride as Cl	mg/l	C34
	Chlorine	mg/l	
	EC - Autotitrator	mS/m	C29
	Faecal coliforms count Member Filtration	CFU/100ml	M05
	Fluoride as F	mg/l	C35
	Hardness (calcium)	mg/l	
	Hardness (magnesium)	mg/l	
	Hardness (total)	mg/l	
	Heterotrophic plate count @35°C	CFU/1ml	M03
	Magnesium as Mg	mg/l	C01
	pH - Autotitrator	-	C30
	pH @ Water Treatment Works (Plants)	-	
	Potassium as K	mg/l	C01
	Sodium as Na	mg/l	C01
	Sulphate as SO4	mg/l	C33
	Total coliform bacteria Membrane Filtration	CFU/100ml	M04
	Total Solids - dissolved	mg/l	
	Turbidity	NTU	C16
	Turbidity @ WTW	NTU	

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Test List: FINAL_MK

Scheme: Riebeeck Communal Tap

Received Date: 09/06/2015

Sample Number	128180		
Sample Description	Riebeeck Communal Tap		
Analysis Start Date	09/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	131.2
Aluminium as Al	µg/l	C09	0
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	19.1
Chloride as Cl	mg/l	C34	107.01
Chlorine	mg/l		0.78
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0
Copper as Cu	µg/l	C02	1.82
EC - Autotitrator	mS/m	C15	48.2
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.18
Hardness (calcium)	mg/l		47.44
Hardness (magnesium)	mg/l		45.3
Hardness (total)	mg/l		92
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Iron (total) as Fe	µg/l	C02	0
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	10.91
Manganese as Mn	µg/l	C02	1.57
Nickel as Ni	µg/l	C03	0.81
pH - Autotitrator	-	C14	7.48
pH @ Water Treatment Works (Plants)	-		6.89
Potassium as K	mg/l	C01	2.24
Sodium as Na	mg/l	C01	44.04
Sulphate as SO4	mg/l	C33	15.42
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		241
Turbidity	NTU	C16	1.73
Turbidity @ WTW	NTU		2.37
Zinc as Zn	µg/l	C02	12.91

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Report Number: 69479

Test List: FINAL_MK

Scheme: Riebeeck Communal Tap

Received Date: 23/06/2015

Sample Number	128314		
Sample Description	Riebeeck Communal Tap		
Analysis Start Date	23/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
Alkalinity - Autotitrator	mg/l	C28	80.55
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	5.58
Chloride as Cl	mg/l	C34	117.87
Chlorine	mg/l		0.64
EC - Autotitrator	mS/m	C29	52.25
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.23
Hardness (calcium)	mg/l		13.98
Hardness (magnesium)	mg/l		17.71
Hardness (total)	mg/l		32
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Magnesium as Mg	mg/l	C01	4.34
pH - Autotitrator	-	C30	7.34
pH @ Water Treatment Works (Plants)	-		6.6
Potassium as K	mg/l	C01	1.78
Sodium as Na	mg/l	C01	22.07
Sulphate as SO4	mg/l	C33	21.13
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		261.23
Turbidity	NTU	C16	1.63
Turbidity @ WTW	NTU		2.29

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Report Number: 69479

Test List: FINAL_MK

Scheme: Environmental Health Office

Received Date: 03/06/2015

Sample Number	129089		
Sample Description	Environmental Health Office		
Analysis Start Date	03/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	15.51
Aluminium as Al	µg/l	C09	0
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0.08
Calcium as Ca	mg/l	C01	2.82
Chloride as Cl	mg/l	C34	54.13
Chlorine	mg/l		0.61
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.06
Copper as Cu	µg/l	C02	2.76
EC - Autotitrator	mS/m	C15	19.68
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.03
Hardness (calcium)	mg/l		6.99
Hardness (magnesium)	mg/l		16.88
Hardness (total)	mg/l		24
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Iron (total) as Fe	µg/l	C02	0
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	4.1
Manganese as Mn	µg/l	C02	0.64
Nickel as Ni	µg/l	C03	0
pH - Autotitrator	-	C14	8.19
pH @ Water Treatment Works (Plants)	-		7.2
Potassium as K	mg/l	C01	0.77
Sodium as Na	mg/l	C01	29.07
Sulphate as SO4	mg/l	C33	7.13
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		98.4
Turbidity	NTU	C16	0.86
Turbidity @ WTW	NTU		1.04
Zinc as Zn	µg/l	C02	7.56

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Test List: FINAL_MK
 Scheme: Environmental Health Office
 Received Date: 19/06/2015

Sample Number			128272
Sample Description			Environmental Health Office
Analysis Start Date			19/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	13.95
Ammonia as N	mg/l	C32	0.01
Calcium as Ca	mg/l	C01	8.07
Chloride as Cl	mg/l	C34	39.97
Chlorine	mg/l		0.01
EC - Autotitrator	mS/m	C29	17.31
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.01
Hardness (calcium)	mg/l		20.23
Hardness (magnesium)	mg/l		29.65
Hardness (total)	mg/l		50
Heterotrophic plate count @35°C	CFU/1ml	M03	2
Magnesium as Mg	mg/l	C01	7.18
pH - Autotitrator	-	C30	6.55
pH @ Water Treatment Works (Plants)	-		8
Potassium as K	mg/l	C01	0.77
Sodium as Na	mg/l	C01	43.56
Sulphate as SO4	mg/l	C33	11.24
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		86.55
Turbidity	NTU	C16	2.15
Turbidity @ WTW	NTU		3.08

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Report Number: 69479

Test List: FINAL_MK
 Scheme: Extension 7 Clinic
 Received Date: 03/06/2015

Sample Number			128088
Sample Description			Extension 7 Clinic
Analysis Start Date			03/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	440.8
Aluminium as Al	µg/l	C09	18.83
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	29.5
Chloride as Cl	mg/l	C34	91.17
Chlorine	mg/l		0.14
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.08
Copper as Cu	µg/l	C02	1.19
EC - Autotitrator	mS/m	C15	75.3
Faecal coliforms count Member Filtration	CFU/100ml	M05	1
Fluoride as F	mg/l	C35	0.47
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		86.48
Hardness (total)	mg/l		161
Heterotrophic plate count @35°C	CFU/1ml	M03	1001
Iron (total) as Fe	µg/l	C02	13.12
Lead as Pb	µg/l	C02	0.06
Magnesium as Mg	mg/l	C01	21.26
Manganese as Mn	µg/l	C02	30.48
Nickel as Ni	µg/l	C03	0.49
pH - Autotitrator	-	C14	8.42
pH @ Water Treatment Works (Plants)	-		8.34
Potassium as K	mg/l	C01	3.01
Sodium as Na	mg/l	C01	106.23
Sulphate as SO4	mg/l	C33	56.19
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	3
Total Solids - dissolved	mg/l		377
Turbidity	NTU	C16	5.57
Turbidity @ WTW	NTU		6.22

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Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated





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Test List: FINAL_MK

Scheme: Extension 7 Clinic

Received Date: 19/06/2015

Sample Number	128271		
Sample Description	Extension 7 Clinic		
Analysis Start Date	19/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	270.6
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	17.79
Chloride as Cl	mg/l	C34	85.34
Chlorine	mg/l		0.41
EC - Autotitrator	mS/m	C29	77.98
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.64
Hardness (calcium)	mg/l		44.95
Hardness (magnesium)	mg/l		39.12
Hardness (total)	mg/l		84
Heterotrophic plate count @35°C	CFU/1ml	M03	30
Magnesium as Mg	mg/l	C01	9.48
pH - Autotitrator	-	C30	8.37
pH @ Water Treatment Works (Plants)	-		7.66
Potassium as K	mg/l	C01	0.3
Sodium as Na	mg/l	C01	29.78
Sulphate as SO4	mg/l	C33	61.96
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		388.93
Turbidity	NTU	C16	6.17
Turbidity @ WTW	NTU		5.51

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated

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Report Number: 69479

Test List: FINAL_MK
 Scheme: Indoor Sports Centre
 Received Date: 03/06/2015

Sample Number			128087
Sample Description			Indoor Sports Centre
Analysis Start Date			03/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	447.9
Aluminium as Al	µg/l	C09	21.52
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	29.77
Chloride as Cl	mg/l	C34	93.29
Chlorine	mg/l		0.07
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.11
Copper as Cu	µg/l	C02	1.27
EC - Autotitrator	mS/m	C15	75.3
Faecal coliforms count Member Filtration	CFU/100ml	M05	1
Fluoride as F	mg/l	C35	0.47
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		86.48
Hardness (total)	mg/l		161
Heterotrophic plate count @35°C	CFU/1ml	M03	233
Iron (total) as Fe	µg/l	C02	32.48
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	21.24
Manganese as Mn	µg/l	C02	0.66
Nickel as Ni	µg/l	C03	1.47
pH - Autotitrator	-	C14	8.41
pH @ Water Treatment Works (Plants)	-		8.33
Potassium as K	mg/l	C01	3.2
Sodium as Na	mg/l	C01	108.25
Sulphate as SO4	mg/l	C33	56.35
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	2
Total Solids - dissolved	mg/l		376
Turbidity	NTU	C16	1.62
Turbidity @ WTW	NTU		1.99
Zinc as Zn	µg/l	C02	7.4

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated





Amatola Water Amanzi - *Water is life*

Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK
 Scheme: Indoor Sports Centre
 Received Date: 19/06/2015

Sample Number			128270
Sample Description			Indoor Sports Centre
Analysis Start Date			19/06/2015
Analysis End Date			
Comment			
	Test	Units	Method No
	Alkalinity - Autotitrator	mg/l	C28 291.2
	Ammonia as N	mg/l	C32 0.01
	Calcium as Ca	mg/l	C01 5.66
	Chloride as Cl	mg/l	C34 86.39
	Chlorine	mg/l	0.38
	EC - Autotitrator	mS/m	C29 77.97
	Faecal coliforms count Member Filtration	CFU/100ml	M05 0
	Fluoride as F	mg/l	C35 0.63
	Hardness (calcium)	mg/l	14.23
	Hardness (magnesium)	mg/l	41.18
	Hardness (total)	mg/l	55
	Heterotrophic plate count @35°C	CFU/1ml	M03 8
	Magnesium as Mg	mg/l	C01 10.05
	pH - Autotitrator	-	C30 8.35
	pH @ Water Treatment Works (Plants)	-	7.69
	Potassium as K	mg/l	C01 0.82
	Sodium as Na	mg/l	C01 60.7
	Sulphate as SO4	mg/l	C33 62.93
	Total coliform bacteria Membrane Filtration	CFU/100ml	M04 0
	Total Solids - dissolved	mg/l	389.84
	Turbidity	NTU	C16 2.84
	Turbidity @ WTW	NTU	3.85

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated





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Amatola Water Amanzi - *Water is life*

Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: J / Kleinshans Final WTW

Received Date: 02/06/2015

Sample Number	128081		
Sample Description	J / Kleinshans Final WTW		
Analysis Start Date	02/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	441.6
Aluminium as Al	µg/l	C09	130.49
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	29.83
Chloride as Cl	mg/l	C34	90.19
Chlorine	mg/l		0.11
Chromium as Cr	µg/l	C03	0.45
Cobalt as Co	µg/l	C03	0.23
Copper as Cu	µg/l	C02	2.16
EC - Autotitrator	mS/m	C15	75
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.49
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		90.6
Hardness (total)	mg/l		166
Heterotrophic plate count @35°C	CFU/1ml	M03	144
Iron (total) as Fe	µg/l	C02	89.14
Lead as Pb	µg/l	C02	0.75
Magnesium as Mg	mg/l	C01	21.51
Manganese as Mn	µg/l	C02	1.4
Nickel as Ni	µg/l	C03	0
pH - Autotitrator	-	C14	8.45
pH @ Water Treatment Works (Plants)	-		8.97
Potassium as K	mg/l	C01	3.09
Sodium as Na	mg/l	C01	108.95
Sulphate as SO4	mg/l	C33	56.56
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		375
Turbidity	NTU	C16	6.04
Turbidity @ WTW	NTU		9.11
Zinc as Zn	µg/l	C02	0.08

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



Amatola Water Amanzi - Water is life
Scientific Services Department
 Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK
 Scheme: J / Kleinshans Final WTW
 Received Date: 09/06/2015

Sample Number	128185		
Sample Description	J / Kleinshans Final WTW		
Analysis Start Date	09/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	465.6
Aluminium as Al	µg/l	C09	0
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	28.08
Chloride as Cl	mg/l	C34	86.07
Chlorine	mg/l		0.11
Chromium as Cr	µg/l	C03	0.11
Cobalt as Co	µg/l	C03	0
Copper as Cu	µg/l	C02	0
EC - Autotitrator	mS/m		75
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.51
Hardness (calcium)	mg/l		69.92
Hardness (magnesium)	mg/l		53.53
Hardness (total)	mg/l		124
Heterotrophic plate count @35°C	CFU/1ml	M03	1001
Iron (total) as Fe	µg/l	C02	0
Lead as Pb	µg/l	C02	0
Magnesium as Mg	mg/l	C01	12.86
Manganese as Mn	µg/l	C02	0
Nickel as Ni	µg/l	C03	0
pH - Autotitrator	-	C14	8.1
pH @ Water Treatment Works (Plants)	-		8.26
Potassium as K	mg/l	C01	2.04
Sodium as Na	mg/l	C01	30.38
Sulphate as SO4	mg/l	C33	54.79
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	3
Total Solids - dissolved	mg/l		374
Turbidity	NTU	C16	1.55
Turbidity @ WTW	NTU		2.22
Zinc as Zn	µg/l	C02	0

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated





Amatola Water Amanzi - *Water is life*
Scientific Services Department
 Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: J / Kleinshans Final WTW

Received Date: 19/06/2015

Sample Number	128262		
Sample Description	J / Kleinshans Final WTW		
Analysis Start Date	19/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	477.5
Ammonia as N	mg/l	C32	0.01
Calcium as Ca	mg/l	C01	21.1
Chloride as Cl	mg/l	C34	85.16
Chlorine	mg/l		0.29
EC - Autotitrator	mS/m	C29	79.83
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.64
Hardness (calcium)	mg/l		52.44
Hardness (magnesium)	mg/l		61.77
Hardness (total)	mg/l		114
Heterotrophic plate count @35°C	CFU/1ml	M03	150
Magnesium as Mg	mg/l	C01	14.94
pH - Autotitrator	-	C30	8.28
pH @ Water Treatment Works (Plants)	-		9.12
Potassium as K	mg/l	C01	1.63
Sodium as Na	mg/l	C01	85.46
Sulphate as SO4	mg/l	C33	66.79
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		399.18
Turbidity	NTU	C16	1.31
Turbidity @ WTW	NTU		1.85

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Amatola Water Amanzi - *Water is life*

Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: J / Kleinshans Final WTW

Received Date: 23/06/2015

Sample Number	128309		
Sample Description	J / Kleinshans Final WTW		
Analysis Start Date	23/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	271.8
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	17.17
Chloride as Cl	mg/l	C34	88.09
Chlorine	mg/l		0.33
EC - Autotitrator	mS/m	C29	78.04
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.66
Hardness (calcium)	mg/l		42.45
Hardness (magnesium)	mg/l		45.3
Hardness (total)	mg/l		87
Heterotrophic plate count @35°C	CFU/1ml	M03	5
Magnesium as Mg	mg/l	C01	10.92
pH - Autotitrator	-	C30	8.3
pH @ Water Treatment Works (Plants)	-		8.02
Potassium as K	mg/l	C01	2.01
Sodium as Na	mg/l	C01	57.14
Sulphate as SO4	mg/l	C33	62.44
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		390.2
Turbidity	NTU	C16	1.47
Turbidity @ WTW	NTU		1.74

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Amatola Water Amanzi - *Water is life*

Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK
 Scheme: J Street Community Tap
 Received Date: 03/06/2015

Sample Number	128086		
Sample Description	J Street Community Tap		
Analysis Start Date	03/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	463.5
Aluminium as Al	µg/l	C09	21.91
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	29.66
Chloride as Cl	mg/l	C34	95.21
Chlorine	mg/l		0.09
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.23
Copper as Cu	µg/l	C02	0.89
EC - Autotitrator	mS/m	C15	75.4
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.47
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		86.48
Hardness (total)	mg/l		161
Heterotrophic plate count @35°C	CFU/1ml	M03	312
Iron (total) as Fe	µg/l	C02	16.06
Lead as Pb	µg/l	C02	0.46
Magnesium as Mg	mg/l	C01	21.39
Manganese as Mn	µg/l	C02	3.38
Nickel as Ni	µg/l	C03	0.52
pH - Autotitrator	-	C14	8.29
pH @ Water Treatment Works (Plants)	-		8.33
Potassium as K	mg/l	C01	3.02
Sodium as Na	mg/l	C01	108.6
Sulphate as SO4	mg/l	C33	56.04
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	3
Total Solids - dissolved	mg/l		377
Turbidity	NTU	C16	4.48
Turbidity @ WTW	NTU		5.39
Zinc as Zn	µg/l	C02	12.73

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Amatola Water Amanzi - *Water is life*

Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: J Street Community Tap

Received Date: 19/06/2015

Sample Number	128269		
Sample Description	J Street Community Tap		
Analysis Start Date	19/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
Alkalinity - Autotitrator	mg/l	C28	490.3
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	22.28
Chloride as Cl	mg/l	C34	85.3
Chlorine	mg/l		0.4
EC - Autotitrator	mS/m	C29	77.94
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.64
Hardness (calcium)	mg/l		54.93
Hardness (magnesium)	mg/l		65.89
Hardness (total)	mg/l		121
Heterotrophic plate count @35°C	CFU/1ml	M03	2
Magnesium as Mg	mg/l	C01	15.72
pH - Autotitrator	-	C30	8.32
pH @ Water Treatment Works (Plants)	-		7.78
Potassium as K	mg/l	C01	1.67
Sodium as Na	mg/l	C01	88.42
Sulphate as SO4	mg/l	C33	62.54
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		389.69
Turbidity	NTU	C16	4.05
Turbidity @ WTW	NTU		8.5

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Amatola Water Amanzi - *Water is life*

Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: Nonzwakazi Community Tap in Alicedale

Received Date: 19/06/2015

Sample Number	128268		
Sample Description	Nonzwakazi Community Tap in		
Analysis Start Date	19/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
Alkalinity - Autotitrator	mg/l	C28	107.8
Ammonia as N	mg/l	C32	0.04
Calcium as Ca	mg/l	C01	8.04
Chloride as Cl	mg/l	C34	163.63
Chlorine	mg/l		0.12
EC - Autotitrator	mS/m	C29	71.12
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.17
Hardness (calcium)	mg/l		19.98
Hardness (magnesium)	mg/l		28.83
Hardness (total)	mg/l		49
Heterotrophic plate count @35°C	CFU/1ml	M03	6
Magnesium as Mg	mg/l	C01	7
pH - Autotitrator	-	C30	8.04
pH @ Water Treatment Works (Plants)	-		8.08
Potassium as K	mg/l	C01	2.23
Sodium as Na	mg/l	C01	36.2
Sulphate as SO4	mg/l	C33	22.81
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		355.59
Turbidity	NTU	C16	2.38
Turbidity @ WTW	NTU		3.21

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: Nonzwakazi Community Tap in Alicedale

Received Date: 23/06/2015

Sample Number	128304		
Sample Description	Nonzwakazi Community Tap in		
Analysis Start Date	23/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
Alkalinity - Autotitrator	mg/l	C28	114.2
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	15
Chloride as Cl	mg/l	C34	161.1
Chlorine	mg/l		0.15
EC - Autotitrator	mS/m	C29	71.12
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.18
Hardness (calcium)	mg/l		37.45
Hardness (magnesium)	mg/l		53.53
Hardness (total)	mg/l		91
Heterotrophic plate count @35°C	CFU/1ml	M03	13
Magnesium as Mg	mg/l	C01	13.27
pH - Autotitrator	-	C30	7.99
pH @ Water Treatment Works (Plants)	-		9.26
Potassium as K	mg/l	C01	1.04
Sodium as Na	mg/l	C01	72.01
Sulphate as SO4	mg/l	C33	21.3
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		355.6
Turbidity	NTU	C16	4.84
Turbidity @ WTW	NTU		6.13

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Amatola Water Amanzi - *Water is life*

Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK
 Scheme: Riebeeck East Network Reservoir
 Received Date: 03/06/2015

Sample Number	128083		128084	
Sample Description	Riebeeck East Network Reservoir		Riebeeck East Network Reservoir	
Analysis Start Date	03/06/2015		03/06/2015	
Analysis End Date				
Comment				
Test	Units	Method No		
Alkalinity - Autotitrator	mg/l	C28	142.2	133.3
Aluminium as Al	µg/l	C09	0	0
Ammonia as N	mg/l	C32	0	0
Cadmium as Cd	µg/l	C03	0	0
Calcium as Ca	mg/l	C01	7.02	7.08
Chloride as Cl	mg/l	C34	100.02	103.76
Chlorine	mg/l		0.81	0.45
Chromium as Cr	µg/l	C03	0.07	0
Cobalt as Co	µg/l	C03	0.08	0
Copper as Cu	µg/l	C02	1.26	0.38
EC - Autotitrator	mS/m	C15	44.3	45.7
Faecal coliforms count Member Filtration	CFU/100ml	M05	0	0
Fluoride as F	mg/l	C35	0.12	0.11
Hardness (calcium)	mg/l		17.48	17.73
Hardness (magnesium)	mg/l		49.42	49.42
Hardness (total)	mg/l		66	67
Heterotrophic plate count @35°C	CFU/1ml	M03	0	0
Iron (total) as Fe	µg/l	C02	0	0
Lead as Pb	µg/l	C02	0	0
Magnesium as Mg	mg/l	C01	11.99	12.48
Manganese as Mn	µg/l	C02	0.01	5.83
Nickel as Ni	µg/l	C03	0.95	0.08
pH - Autotitrator	-	C14	7.3	7.35
pH @ Water Treatment Works (Plants)	-		6.84	7.02
Potassium as K	mg/l	C01	1.27	1.3
Sodium as Na	mg/l	C01	68.88	70.37
Sulphate as SO4	mg/l	C33	15.61	16.06
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0	0
Total Solids - dissolved	mg/l		222	229
Turbidity	NTU	C16	3.25	1.86
Turbidity @ WTW	NTU		3.59	2.35
Zinc as Zn	µg/l	C02	2.58	0.99

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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 Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: Riebeeck East Network Reservoir

Received Date: 19/06/2015

Sample Number	128267		
Sample Description	Riebeeck East Network Reservoir		
Analysis Start Date	19/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	121
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	22.27
Chloride as Cl	mg/l	C34	122.08
Chlorine	mg/l		0.95
EC - Autotitrator	mS/m	C29	53.37
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.18
Hardness (calcium)	mg/l		54.93
Hardness (magnesium)	mg/l		65.89
Hardness (total)	mg/l		121
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Magnesium as Mg	mg/l	C01	15.67
pH - Autotitrator	-	C30	6.91
pH @ Water Treatment Works (Plants)	-		7.03
Potassium as K	mg/l	C01	1.65
Sodium as Na	mg/l	C01	88.22
Sulphate as SO4	mg/l	C33	21.98
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		266.83
Turbidity	NTU	C16	1.91
Turbidity @ WTW	NTU		2.16

Key: (S) - Subcontracted | (T) - New result | (TT) - Result updated



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 Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK
 Scheme: Riebeeck East Network Reservoir
 Received Date: 23/06/2015

Sample Number	128303		
Sample Description	Riebeeck East Network Reservoir		
Analysis Start Date	23/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
	Alkalinity - Autotitrator	mg/l	C28
			68.8
	Ammonia as N	mg/l	C32
			0
	Calcium as Ca	mg/l	C01
			14.08
	Chloride as Cl	mg/l	C34
			104.33
	Chlorine	mg/l	
			0.05
	EC - Autotitrator	mS/m	C29
			48.76
	Faecal coliforms count Member Filtration	CFU/100ml	M05
			0
	Fluoride as F	mg/l	C35
			0.21
	Hardness (calcium)	mg/l	
			34.96
	Hardness (magnesium)	mg/l	
			49.42
	Hardness (total)	mg/l	
			84
	Heterotrophic plate count @35°C	CFU/1ml	M03
			0
	Magnesium as Mg	mg/l	C01
			12.07
	pH - Autotitrator	-	C30
			7.2
	pH @ Water Treatment Works (Plants)	-	
			6.5
	Potassium as K	mg/l	C01
			0.94
	Sodium as Na	mg/l	C01
			69.44
	Sulphate as SO4	mg/l	C33
			20.86
	Total coliform bacteria Membrane Filtration	CFU/100ml	M04
			0
	Total Solids - dissolved	mg/l	
			243.78
	Turbidity	NTU	C16
			2.7
	Turbidity @ WTW	NTU	
			3.09

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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 Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: Waainek WTW Final

Received Date: 09/06/2015

Sample Number	128182		
Sample Description	Waainek WTW Final		
Analysis Start Date	09/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	8.97
Aluminium as Al	µg/l	C09	1.27
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	24.84
Chloride as Cl	mg/l	C34	40.66
Chlorine	mg/l		0.95
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.36
Copper as Cu	µg/l	C02	0.99
EC - Autotitrator	mS/m	C15	16.39
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.08
Hardness (calcium)	mg/l		62.42
Hardness (magnesium)	mg/l		53.53
Hardness (total)	mg/l		116
Heterotrophic plate count @35°C	CFU/1ml	M03	2
Iron (total) as Fe	µg/l	C02	5.71
Lead as Pb	µg/l	C02	0.7
Magnesium as Mg	mg/l	C01	13.14
Manganese as Mn	µg/l	C02	3.96
Nickel as Ni	µg/l	C03	0.53
pH - Autotitrator	-	C14	7.68
pH @ Water Treatment Works (Plants)	-		5.47
Potassium as K	mg/l	C01	2.4
Sodium as Na	mg/l	C01	58.78
Sulphate as SO4	mg/l	C33	7.43
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		82
Turbidity	NTU	C16	1.54
Turbidity @ WTW	NTU		2.54
Zinc as Zn	µg/l	C02	8.06

Key: (S) - Subcontracted | (T) - New result | (TT) - Result updated



Amatola Water Amanzi - Water is life
Scientific Services Department
 Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: Waainek WTW Final

Received Date: 19/06/2015

Sample Number		128259	
Sample Description		Waainek WTW Final	
Analysis Start Date		19/06/2015	
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	12
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	1.35
Chloride as Cl	mg/l	C34	41.13
Chlorine	mg/l		0.08
EC - Autotitrator	mS/m	C29	17.31
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0
Hardness (calcium)	mg/l		3.5
Hardness (magnesium)	mg/l		10.71
Hardness (total)	mg/l		14.5
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Magnesium as Mg	mg/l	C01	2.6
pH - Autotitrator	-	C30	6.31
pH @ Water Treatment Works (Plants)	-		6.54
Potassium as K	mg/l	C01	0.54
Sodium as Na	mg/l	C01	19.06
Sulphate as SO4	mg/l	C33	12.11
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		86.55
Turbidity	NTU	C16	1.39
Turbidity @ WTW	NTU		2

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



Amatola Water Amanzi - *Water is life*
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 Preliminary Water Quality Report

Report Number: 69479

Test List: FINAL_MK

Scheme: Waainek WTW Final

Received Date: 23/06/2015

Sample Number	128308		
Sample Description	Waainek WTW Final		
Analysis Start Date	23/06/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	11.78
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	14.37
Chloride as Cl	mg/l	C34	41.7
Chlorine	mg/l		1.25
EC - Autotitrator	mS/m	C29	17.46
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0
Hardness (calcium)	mg/l		34.96
Hardness (magnesium)	mg/l		37.08
Hardness (total)	mg/l		72
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Magnesium as Mg	mg/l	C01	9.04
pH - Autotitrator	-	C30	6.5
pH @ Water Treatment Works (Plants)	-		7.3
Potassium as K	mg/l	C01	0.12
Sodium as Na	mg/l	C01	22.81
Sulphate as SO4	mg/l	C33	11.25
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		87.3
Turbidity	NTU	C16	1.01
Turbidity @ WTW	NTU		1.33

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: RAW_AUD_MK
 Scheme: J / Kleinshans Raw WTW
 Received Date: 09/06/2015

Sample Number			128186
Sample Description			J / Kleinshans Raw WTW
Analysis Start Date			10/06/2015
Analysis End Date			
Comment			
	Test	Units	Method No
	Alkalinity - Autotitrator	mg/l	C28
	Ammonia as N	mg/l	C32
	Cadmium as Cd	µg/l	C03
	Calcium as Ca	mg/l	C01
	Chloride as Cl	mg/l	C34
	Chromium as Cr	µg/l	C03
	Cobalt as Co	µg/l	C03
	Copper as Cu	µg/l	C02
	EC - Autotitrator	mS/m	
	Fluoride as F	mg/l	C35
	Hardness (calcium)	mg/l	
	Hardness (magnesium)	mg/l	
	Hardness (total)	mg/l	
	Iron (total) as Fe	µg/l	C02
	Lead as Pb	µg/l	C02
	Magnesium as Mg	mg/l	C01
	Manganese as Mn	µg/l	C02
	Nickel as Ni	µg/l	C03
	pH - Autotitrator	-	C14
	Potassium as K	mg/l	C01
	Sodium as Na	mg/l	C01
	Sulphate as SO4	mg/l	C33
	Total Solids - dissolved	mg/l	
	Turbidity	NTU	C16
	Zinc as Zn	µg/l	C02

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated





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Scientific Services Department

Preliminary Water Quality Report

Report Number: 69479

Test List: RAW_AUD_MK
 Scheme: J / Kleinshans Raw WTW
 Received Date: 19/06/2015

Sample Number			128263
Sample Description			J / Kleinshans Raw WTW
Analysis Start Date			19/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Ammonia as N	mg/l	C32	0
Calcium as Ca	mg/l	C01	21.83
Chloride as Cl	mg/l	C34	82.18
E coli waste water (colilert)	CFU/100ml	M01	21
EC - Autotitrator	mS/m	C15	77.3
Fluoride as F	mg/l	C35	0.76
Hardness (calcium)	mg/l		54.93
Hardness (magnesium)	mg/l		61.77
Hardness (total)	mg/l		117
Magnesium as Mg	mg/l	C01	15.07
pH - Autotitrator	-	C14	7.97
pH @ Water Treatment Works (Plants)	-		9.35
Potassium as K	mg/l	C01	1.75
Sodium as Na	mg/l	C01	86.39
Sulphate as SO4	mg/l	C33	63.6
Total Solids - dissolved	mg/l		386
Turbidity	NTU	C16	76.2
Turbidity @ WTW	NTU		92.7

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Report Number: 69479

Test List: RAW_AUD_MK
Scheme: J / Kleinshans Raw WTW
Received Date: 23/06/2015

Sample Number			128310
Sample Description			J / Kleinshans Raw WTW
Analysis Start Date			23/06/2015
Analysis End Date			
Comment			
	Test	Units	Method No
	Ammonia as N	mg/l	C32
	Calcium as Ca	mg/l	C01
	Chloride as Cl	mg/l	C34
	EC - Autotitrator	mS/m	C15
	Fluoride as F	mg/l	C35
	Hardness (calcium)	mg/l	
	Hardness (magnesium)	mg/l	
	Hardness (total)	mg/l	
	Magnesium as Mg	mg/l	C01
	pH - Autotitrator	-	C14
	Potassium as K	mg/l	C01
	Sodium as Na	mg/l	C01
	Sulphate as SO4	mg/l	C33
	Total Solids - dissolved	mg/l	
	Turbidity	NTU	C16

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated





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Report Number: 69479

Test List: RAW_AUD_MK
 Scheme: Waainek WTW Raw
 Received Date: 09/06/2015

Sample Number	128183		
Sample Description	Waainek WTW Raw		
Analysis Start Date	09/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
Alkalinity - Autotitrator	mg/l	C28	14.93
Ammonia as N	mg/l	C32	0
Cadmium as Cd	µg/l	C03	0
Calcium as Ca	mg/l	C01	16.96
Chloride as Cl	mg/l	C34	38.44
Chromium as Cr	µg/l	C03	0
Cobalt as Co	µg/l	C03	0.06
Copper as Cu	µg/l	C02	0.85
E coli waste water (coliert)	CFU/100ml	M01	579
EC - Autotitrator	mS/m	C15	15.9
Fluoride as F	mg/l	C35	0.09
Hardness (calcium)	mg/l		42.45
Hardness (magnesium)	mg/l		34.18
Hardness (total)	mg/l		76
Iron (total) as Fe	µg/l	C02	4.34
Lead as Pb	µg/l	C02	0.48
Magnesium as Mg	mg/l	C01	8.32
Manganese as Mn	µg/l	C02	2.37
Nickel as Ni	µg/l	C03	0.36
pH - Autotitrator	-	C14	7.63
pH @ Water Treatment Works (Plants)	-		5.94
Potassium as K	mg/l	C01	2.5
Sodium as Na	mg/l	C01	97.84
Sulphate as SO4	mg/l	C33	9.39
Total Solids - dissolved	mg/l		79.5
Turbidity	NTU	C16	42.9
Turbidity @ WTW	NTU		47.4
Zinc as Zn	µg/l	C02	7.79

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Report Number: 69479

Test List: RAW_AUD_MK
 Scheme: Waainek WTW Raw
 Received Date: 19/06/2015

Sample Number			128260
Sample Description			Waainek WTW Raw
Analysis Start Date			19/06/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Ammonia as N	mg/l	C32	0.12
Calcium as Ca	mg/l	C01	16.11
Chloride as Cl	mg/l	C34	39.61
E coli waste water(colilert)	CFU/100ml	M01	20
EC - Autotitrator	mS/m	C15	17.33
Fluoride as F	mg/l	C35	0.07
Hardness (calcium)	mg/l		39.95
Hardness (magnesium)	mg/l		41.18
Hardness (total)	mg/l		81
Magnesium as Mg	mg/l	C01	10.2
pH - Autotitrator	-	C14	6.86
pH @ Water Treatment Works (Plants)	-		6.65
Potassium as K	mg/l	C01	2.95
Sodium as Na	mg/l	C01	76.65
Sulphate as SO4	mg/l	C33	12.86
Total Solids - dissolved	mg/l		86.7
Turbidity	NTU	C16	24.8
Turbidity @ WTW	NTU		27.3

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated



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Report Number: 69479

Test List: RAW_AUD_MK
Scheme: Waainek WTW Raw
Received Date: 23/06/2015

Sample Number	128307		
Sample Description	Waainek WTW Raw		
Analysis Start Date	23/06/2015		
Analysis End Date			
Comment			
	Test	Units	Method No
	Ammonia as N	mg/l	C32
	Calcium as Ca	mg/l	C01
	Chloride as Cl	mg/l	C34
	E coli waste water(collert)	CFU/100ml	M01
	EC - Autotitrator	mS/m	C15
	Fluoride as F	mg/l	C35
	Hardness (calcium)	mg/l	
	Hardness (magnesium)	mg/l	
	Hardness (total)	mg/l	
	Magnesium as Mg	mg/l	C01
	pH - Autotitrator	-	C14
	pH @ Water Treatment Works (Plants)	-	
	Potassium as K	mg/l	C01
	Sodium as Na	mg/l	C01
	Sulphate as SO4	mg/l	C33
	Total Solids - dissolved	mg/l	
	Turbidity	NTU	C18
	Turbidity @ WTW	NTU	

Key: (s) - Subcontracted | (T) - New result | (TT) - Result updated