

Preliminary Water Quality Report

Report Number: 69217

Test List: EFFLUENT	
Scheme: Alicedale WWTW	
Received Date: 18/02/2015	

Sample Number			125926
Sample Description			Alicedale WWTW
analysis Start Date			18/02/2015
Analysis End Date			27/02/2015
Comment			,
Test	Units	Method No	-
Ammonia as N	mg/l	C32	0.37
al Oxygen Demand - DR2800	mg/l		86
	mg/l		0.1
coli waste water(colilert)	CFU/100ml	M01	167
EC @ 25*C	mS/m		115.3
Nitrate as N	hây		2.5
Nitrite as N	mg/l	C39	0.03
Ortho phosphate - Aquakem	mg/l	C37	4.18
PH @ 25*C	-		5.17
Solids - Total suspended	rńg/l		12

Test List: EFFLUENT

Scheme: Alicedale WWTW

Received Date: 24/02/2015

Sample Number			125977
Sample Description			Alicedale WWTW
Analysis Start Date			24/02/2015
Analysis End Date			
Comment			
Test	l Units	I Method No	
		I metrica No	
chemical Oxygen Demand - DR2800	mg/l		76
Chlorine	mg/l		0.06
E coli waste water(colilert)	CFU/100ml	M01	>2420
EC @ 25*C	mS/m		113.9
Nitrate as N	hðy		1.3
PH @ 25°C	-		4.82
Solids - Total suspended	mg/l		45

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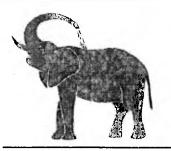
Report Number: 69217

Test List: FINAL_MK Scheme: Indoor Sports Centre

Received Date: 18/02/2015

Sample Number			125915
Sample Description			Indoor Sports Centre
Analysis Start Date			19/02/2015
Analysis End Date			
Comment			
			_
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	269.5
Ammonia as N	mg/l	C32	-0.07
Cr Trium as Cd	hđư	C03	-0.12
1 85 C8	mg/t	C01	72.55
Chloride as Cl	mg/l	C34	76.5
Chromium as Cr	Ngų	C03	-5.78
Cobatt as Co	Ngų	C03	-0.13
Copper as Cu	Ngų	C02	-1.67
EC - Autolitrator	mS/m	C29	79.02
Faecal collorms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.52
Hardness (calcium)	mg/l		182.28
Hardness (magnesium)	mg/i		131.78
Hardness (total)	mg/l		314
Heterotrophic plate count @35°C	CFU/1ml	M03	1001 -
Lead as Pb	Ngų	C02	-1.89
Magnesium as Mg	ng/i	C01	32.04
Manganese as Mn	hđy	C02	1.04
Nickel as Ni	hgy	C03	-0.4
Nitrate as N	hgų		0.2
pH - Autotitrator	-	C30	8.29
Potassium as K	mg/i	C01	5.71
Sodium as Na	mg/l	C01	241.01
S Vas SO4	mg/l	C33	62.89
Total Torm bacteria Membrane Filtration	CFU/100ml	M04	7
Total Solida - dissolved	mg/t	1	395.12
Turbidity	NTU	C16	2.04

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Test List: FINAL_MK Scheme: J Street Community Tap

Received Date: 18/02/2015

Sample Number			125914
Sample Description			J Street Community Tap
Analysis Start Date			19/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	-
Aikalinity - Autotitrator	mg/l	C28	273.6
Ammonia as N	mg/l	C32	-0.1
Carnium as Cd	hôvi	C03	-0.07
n as Ca	mg/i	C01	5.12
Chloride as Cl	mg/l	C34	76.91
Chromium as Cr	hgvi	C03	-6.67
Cobalt as Co	hðy	C03	0.12
Copper as Cu	hgų	C02	6.11
EC - Autolitrator	mS/m	C29	79.46
Faecal coliforms count Member Filtration	CFU/100ml	M05	1. 7
Fluoride as F	mg/l	C35	0.51
Hardness (calcium)	mg/l		12.73
Hardness (magnesium)	mg/l		24.71
Hardness (total)	mg/l		38
Heterotrophic plate count @35°C	CFU/1ml	M03	1001
Lead as Pb	hðy	C02	-1.8
Magnesium as Mg	mg/l	C01	5.99
Manganese as Mn	h84	C02	6.79
Nickel as Ni	hgų	C03	2.06
Nitrate as N	hðy		0.1
pH - Autotitrator		C30	8.39
Potassium as K	mg/l	C01	1.37
Sodium as Na	mg/l	C01	39.4
S [.] 'e as SO4	mg/l	C33	62.14
ib Jiform bacteria Membrane Filtration	CFU/100ml	M04	2
Total Solids - dissolved	mg/l		397.32
Turbidity	NTU	C16	2.27

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Report Number: 69217

Test List: EFFLUENT Scheme: Delmontvalley WWTW Received Date: 18/02/2015

Sample Number			125927
Sample Description			Delmontvalley WWTW
Analysis Start Date		·····.	19/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	_
Ammonia as N	mg/l	C32	3.2
Chemical Oxygen Demand - DR2800	mg/i		62
F waste water(colilert)	CFU/100ml	M01	>2420
E25*C	mS/m		122.8
Nitrate as N	μд/		1.2
Nitrite as N	mg/l	C39	13.65
PH @ 25°C			7.33
Solids - Total suspended	mg/l	+	9

Test List: EFFLUENT

Scheme: Mayfield Effluent

Received Date: 05/02/2015

Sample Number			125781
Sample Description			Mayfield Effluen
Analysis Start Date			05/02/2015
Analysis End Date			16/02/2015
Comment			
Test	Units	Method No	
Ammonia as N	mg/l	C32	10.2
Chemical Oxygen Demand - DR2800	mg/l		50
č,	mg/l		0.09
E coli waste water(colilert)	CFU/100ml	M01	261
EC @ 25*C	ភាS/m		128.8
Nitrate as N	μg/ī		0.5
Nitrite as N	mg/l	C39	2.95
Ortho phosphate - Aquakem	mg/l	C37	3.5
PH @ 25°C	(+)		8
Solids - Total suspended	mg/l		1



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

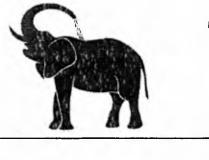
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Report Number: 69217

Test List: EFFLUENT Scheme: Mayfield Effluent Received Date: 18/02/2015

Sample Number 125925 Sample Description **Mayfield Effluent** Analysis Start Date 19/02/2015 Analysis End Date Comment Test | Units Method No C32 34.59 Ammonia as N mg/l Chemical Oxygen Demand - DR2800 93 mg/l E --- waste water(colilert) CFU/100ml M01 308 E. 25*C mS/m 118.5 Nitrite as N mg/l C39 2.87 Ortho phosphate - Aquakem mg/l C37 3.27 PH @ 25*C 8.31 Solids - Total suspended 38 mg/l





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		кероп	Number: 6921
Test List: FINAL_MK			
Scheme: Alicedale Community Tap WTW			
Received Date: 04/02/2015			
Sample Number		· · · · · · · · · · · · · · · · · · ·	125767
Sample Description			Alicedale Community
Analysis Start Date			Tap WTW 04/02/2015
Analysis End Date			
Comment			
Test	1 Units	Method No	
Alkalinity - Autotitrator	ng/t		99.54
Ammonia as N	mg/l	C32	0.01
C Num as Cd	hđđ	C03	-0.08
Cn as Ca	mg/l	C01	23.3
Chloride as Cl	mg/l	C34	156.27
Chlorine	mg/l		0.24
Chromium as Cr	hột	C03	-6.42
Copper as Cu	hôri	C02	-0.81
EC - Autotitrator	mS/m	C29	72.19
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.13
Hardness (calcium)	ng/l		57.43
Hardness (magnesium)	ngA		65.89
Hardness (total)	mg/l		123
Heterotrophic plate count @35°C	CFU/1ml	M03	2.5
Lead as Pb	hđų	C02	-1.32
Magnesium as Mg	mg/l	C01	15.78
Manganese as Mn	hđđ	C02	6.91
Nicke! as Ni	hđđ	C03	-0.13
Nitrate as N	hðy		-0.1
pH - Autotiirator		C30	7.85
pH @ Water Treatment Works (Plants)	-		7.62
Potassium as K	mg/l	C01	5.06
Sr as Na	mg/l	C01	101.36
Sulphate as SO4	mg/l	C33	21.22
Total coliform bacteria Membrane Filtration	CFU/100mi	MO4	0
Total Solids - dissolved	mg/l		360.94
Turbidity	UTN	C16	0.92
Turbidity @ WTW	NTU		1.58
Zinc as Zn	höri	C02	16.48

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Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: Alicedale Community Tap WTW Received Date: 10/02/2015

Sample Number			125832
Sample Description			Alicedale Community Tap WTW
Analysis Start Date			10/02/2015
Analysis End Date			
Comment			
			1
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l		93.82
Ammonia as N	mg/l	C32	-0.04
C mas Cd	µg/l	C03	-0.06
Canaril as Ca	mg/l	C01	32.04
Chloride as Cl	mg/l	C34	157.67
Chlorine	mg/l		0.11
Chromium as Cr	hðy	C03	-5.81
Cobait as Co	hộd	C03	0.01
Copper as Cu	hôn	C02	2.57
EC - Autotitrator	mS/m	C29	74.12
Faecal collforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.15
Hardness (calcium)	mg/l		79.9
Hardness (magnesium)	mg/l		98.83
Hardness (total)	mg/i		179
Heterotrophic plate count @35°C	CFU/1ml	M03	38
Lead as Pb	µg/l	C02	-1.95
Magnesium as Mg	mg/i	C01	24.09
Manganese as Mn	hðy	C02	-0.48
Nickel as Ni	Ngų	C03	7.29
Nitrate as N	håd	+	-0.1
pH - Autotitrator		C30	7.87
pH M Water Treatment Works (Plants)	-		8.82
P mas K	mg/l	C01	3.29
Sodium as Na	mg/l	C01	117.45
Sulphate as SO4	mg/l	C33	23.68
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		370.6
Turbidity	NTU	C16	0.56
Turbidity @ WTW	NTU	+	0.62



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Report Number: 69217

Test List: FINAL_MK Scheme: Alicedale Community Tap WTW Received Date: 18/02/2015

Sample Number			125922
Sample Description			Alicedale Community Tap WTW
Analysis Start Date			18/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	-
Alkalinity - Autotitrator	mg/i	C28	104.6
Ammonia as N	mg/l	C32	-0.09
Cr '9 as Cl	mg/l	C34	152.1
Ct a	mg/l		0.45
EC - Autotitrator	mS/m	C29	73.42
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.13
Heterotrophic plate count @35*C	CFU/1ml	M03	1.5
Nitrate as N	hðri		0
pH - Autotitrator	-	C30	7.85
pH @ Water Treatment Works (Plants)		1	8.4
Sulphate as SO4	mg/i	C33	19.37
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		367.1
Turbidity	NTU	C16	1.77
Turbidity @ WTW	NTU		1.84

Test List: FINAL_MK

Scheme: Alicedale Community Tap WTW

Received Date: 24/02/2015

Sample Number			125981
Sa Jescription	Alicedale Community Tap WTW		
Analysis Start Date			24/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Chlorine	mg/i		0.13
EC - Autotitrator	mS/m	C29	72.83
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Heterotrophic plate count @35°C	CFU/1ml	M03	1001
Nitrate as N	hgų	1	0.2
pH - Autotitrator		C30	7.96
pH @ Water Treatment Works (Plants)			7.76
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	7
Total Solids - dissolved	mg/l		364.17
Turbidity	NTU	C16	0.74
Turbidity @ WTW	NTU	1	0.62



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Report Number: 69217

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Test List: FINAL_MK Scheme: Beaufort Str Police Station Received Date: 04/02/2015

Sample Number 125777 Sample Description **Beaufort Str Police** Station Analysis Start Date 04/02/2015 Analysis End Date Comment Test i Units | Method No Alkalinity - Autotitrator mg/l C28 56.35 Aluminium as Al µg/l C09 29.54 'a as N Ar C32 0.03 mg/l Caus and as Cd µg/l C03 -0.05 Calcium as Ca C01 8.76 mg/l Chloride as Cl C34 82.33 mg/l Chlorine mg/l 0.1 Chromium as Cr μg/l C03 -6.69 Copper as Cu μgΛ C02 14.77 EC - Autotitrator mS/m C29 34.35 Faecal coliforms count Member Filtration CFU/100ml M05 0 Fluoride as F mg/l C35 0.03 21.97 Hardness (calcium) mg/l 33.77 Hardness (magnesium) mg/l 58 Hardness (total) mg/l M03 7.5 Heterotrophic plate count @35°C CFU/1ml C02 48.28 Iron (total) as Fe µg/i C02 -0.93 Lead as Pb µg/l C01 8.16 Magnesium as Mg mg/î C03 2.16 Nickel as Ni Ngq hðy -0.1 Nitrate as N C30 7.16 pH - Autotitrator pH @ Water Treatment Works (Plants) 7.79 Po mg/l C01 1.65 m as K 44.56 mg/l C01 Sodium as Na 11.18 Sulphate as SO4 mg/l C33 0 Total coliform bacteria Membrane Filtration CFU/100ml M04 171.75 Total Solids - dissolved mg/l 0.95 C16 NTU Turbidity 1.01 NTU Turbidity @ WTW C02 0.13 µg/l Zinc as Zn

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Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK

Scheme: Beaufort Str Police Station

Received Date: 18/02/2015

Sample Number			125919
Sample Description			Beaufort Str Police Station
Analysis Start Date			19/02/2015
Analysis End Date			
Comment			
Test	1 Units	I Method No	-
			61.52
Alkalinity - Autotitrator	mg/l	C28	
Ammonia as N	mg/l	C32	-0.08
C ⁴ um as Cd	hội	C03	-0.63
n as Ca	mg/l	C01	35.29
Chloride as Cl	mg/t	C34	127.98
Chromium as Cr	hðy	C03	-6.46
Cobalt as Co	Ngų	C03	0.42
Copper as Cu	hðy	C02	0.52
EC - Autotitrator	mS/m	C29	55.73
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.08
Hardness (calcium)	mg/l		87.39
Hardness (magnesium)	mg/l		107.07
Hardness (total)	mg/l	1	194
Heterotrophic plate count @35°C	CFU/1ml	M03	9.5
Lead as Pb	hgų	C02	-5.43
Magnesium as Mg	mg/l	C01	26.3
Manganese as Mn	hgų	C02	-0.49
Nickel as Ni	Ngu	C03	13.61
Nitrate as N	Ngu		0
pH - Autotitrator		C30	7.36
Potassium as K	mg/l	C01	3.71
Sodium as Na	mg/l	C01	138.21
St as SO4	mg/l	C33	8.94
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	11
Total Solids - dissolved	mg/l		278.65
Turbidity	UTN	C16	0.79



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Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: Riebeeck Communal Tap Received Date: 04/02/2015

Sample Number			125776
Sample Description			Riebeeck Communa Tap
Analysis Start Date			04/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	272.7
Aluminium as Al	hgy	C09	-22.3
f nia as N	mg/l	C32	0.02
um as Cd	hôv	C03	-0.09
Calcium as Ca	mg/i	C01	9.36
Chloride as Cl	mg/l	C34	140.1
Chlorine	mg/l		1.26
Chromium as Cr	hgų	C03	-6.68
Copper as Cu	hgų	C02	-0.31
EC - Autotitrator	mS/m	C29	58.33
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.14
Hardness (calcium)	mg/l		23.47
Hardness (magnesium)	mg/t		61.77
Hardness (total)	mg/i		85
Heterotrophic plate count @35°C	CFU/1mi	M03	110
Lead as Pb	hgų	C02	-0.4
Magnesium as Mg	mg/l	C01	15.33
Manganese as Mn	hôri	C02	24.11
Nickel as Ni	hgyl	C03	4.27
Nitrate as N	µgЛ		-0.2
pH - Autotitrator	-	C30	7.54
pH @ Water Treatment Works (Plants)			8.23
Pu mas K	mg/i	C01	1.24
Sodium as Na	mg/l	C01	86.99
Sulphate as SO4	mg/l	C33	19.53
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		291.67
Turbidity	NTU	C16	1.91
Turbidity @ WTW	NTU		2.25
Zinc as Zn	hgy	C02	15.99



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



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Preliminary Water Quality Report

Report Number: 69217

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Test List: FINAL_MK Scheme: Riebeeck Communal Tap Received Date: 10/02/2015

Sample Number			125828
Sample Description	Riebeeck Commune Tap		
Analysis Start Date			10/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	-
Alkalinity - Autotitrator	mg/l	1	51.92
Ammonia as N	ng/l	C32	0
C ¹ um as Cd	Ngų	C03	-0.13
C n as Ca	mg/l	C01	3.91
Chlorine	mg/l	1	0.89
Chromium as Cr	hðr	C03	-6.15
Cobalt as Co	hon	C03	0.25
Copper as Cu	Ngų	C02	-1.22
EC - Autotitrator	mS/m	C29	55,57
Faecal coliforms count Member Filtration	CFU/100ml	M05	•0
Fluoride as F	mg/i	C35	0.17
Hardness (calcium)	mg/l	1	9.74
Hardness (magnesium)	mg/l	1	22.65
Hardness (total)	mg/l	1	32.7
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Lead as Pb	hôri	C02	-1.7
Magnesium as Mg	mg/l	C01	5.52
Manganese as Mn	hgų	C02	138.47
Nickel as Ni	Ngų	C03	0.92
Nitrate as N	hgų	I	-0.1
pH - Autotitrator	-	C30	7.18
pH @ Water Treatment Works (Plants)	-	T	6.78
Potassium as K	mg/l	C01	1.17
Sc 33 Na	mg/l	C01	32.76
Sulphate as SO4	mg/l	C33	18.43
Total coliform bacteria Membrane Filtration	CFU/100ml	MO4	0
Total Solids - dissolved	mg/l	1	277.86
Turbidity	NTU	C16	2.19
Turbidity @ WTW	NTU		2.66

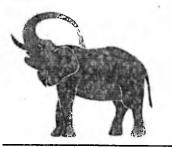


Preliminary Water Quality Report

Test List: FINAL_MK			_
Scheme: Riebeeck Communal Tap			V
Received Date: 18/02/2015			
Sample Number		<u> </u>	125918
Sample Description			Riebeeck Communal Tap
Analysis Start Date			18/02/2015
Analysis End Date			
Comment		· · · · · · · · · · · · · · · · · · ·	
Test	Units	Method No	-
Alkalinity - Autotitrator	mg/t	C28	62.32
Ammonia as N	mg/l	C32	-0.1
Critisium as Cd	hgų	C03	-0.65
C 1 as Ca	mg/l	C01	36.35
Chloride as Cl	mg/l	C34	111.57
Chlorine	mg/l		0.67
Chromium as Cr	hđų	C03	-6.91
Cobait as Co	рди	C03	-0.02
Copper as Cu	hðri	C02	2.64
EC - Autotitrator	mS/m	C29	52.26
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.16
Hardness (calcium)	mg/l		89.89
Hardness (magnesium)	mg/l		107.07
Hardness (total)	mg/i		197
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Lead as Pb	hđư	C02	-4.05
Magnesium as Mg	mg/l	C01	28.38
Manganese as Mn	μgγ	C02	-1.66
Nickel as Ni	hðy	C03	10.32
Nitrate as N	hðy		0
pH - Autotitrator	-	C30	6.98
pH @ Water Treatment Works (Plants)			6
Pr mas K	mg/l	C01	3.79
Sot as Na	mg/l	C01	136.69
Sulphate as SO4	mg/l	C33	17.29
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		261.32
Turbidity	NTU	C16	2.09
Turbidity @ WTW	NTU		2.64

Report Number: 69217

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Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK

Scheme: Environmental Health Office

Received Date: 04/02/2015

Sample Number			125775	
Sample Description	Environmental Heal Office			
Analysis Start Date	Inalysis Start Date			
Analysis End Date				
Comment				
Test	Units	Method No]	
Alkalinity - Autotitrator	mg/t	C28	60.41	
Aluminium as Al	hđư	C09	96.19	
Am this as N	mg/l	C32	0.03	
Cm as Cd	hðy	C03	-0.09	
Calcium as Ca	mg/l	C01	5.32	
Chloride as Cl	mg/l	C34	67.41	
Chlorine	mg/t		0.16	
Chromium as Cr	hðų	C03	-6.33	
Copper as Cu	µg/l	C02	7.16	
EC - Autotitrator	mS/m	C29	28.45	
Faecal coliforms count Member Filtration	CFU/100ml	M05	0	
Fluoride as F	mg/i	C35	0.03	
Hardness (calcium)	mg/l	100	13.23	
Hardness (magnesium)	mg/l		25.53	
Hardness (total)	mg/l		39	
Heterotrophic plate count @35*C	CFU/1ml	M03	188	
Iron (total) as Fe	hðy	C02	70.99	
Lead as Pb	hði	C02	0.37	
Magnesium as Mg	mg/l	C01	6.2	
Manganese as Mn	hôn	C02	307.5	
Nickel as Ni	hðy	C03	1.6	
Nitrate as N	hðy	1	-0.1	
pH - Autotitrator	-	C30	7	
pF ater Treatment Works (Plants)	•	1	7.56	
Potassium as K	mg/l	C01	1.26	
Sodium as Na	mg/l	C01	35.82	
Sulphate as SO4	mg/l	C33	11.12	
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	8	
Total Solids - dissolved	mg/l		132.25	
Turbidity	NTU	C16	2.16	
Turbidity @ WTW	NTU	+	2.55	
Zinc as Zn	μαλ	C02	12.22	



Scheme: Environmental Health Office Received Date: 18/02/2015

Test List: FINAL_MK

Sample Number

Sample Description

Amatola Water Amanzi - Water is life Scientific Services Department

Preliminary Water Quality Report

Report Number: 69217

Analysis Start Date			40000045
			19/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator			
	mg/t	C28	58.23
Ammonia as N	mg/l	C32	-0.05
Cert nium as Cd	hôn	C03	-0.62
L nas Ca	mg/l	C01	25.77
Chloride as Cl	mg/l	C34	130.38
Chromlum as Cr	hđų	C03	-6.64
Cobalt as Co	Ngu	C03	0
Copper as Cu	hgų	C02	-0.51
EC - Autotitrator	mS/m	C29	56.13
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.07
Hardness (calcium)	mg/l		64.92
Hardness (magnesium)	mg/l		78.24
Hardness (total)	mg/l		143
Heterotrophic plate count @35*C	CFU/1ml	M03	172
Lead as Pb	Ngų	C02	-5.13
Magnesium as Mg	mg/l	C01	18.68
Manganese as Mn	Ngų	C02	4.97
Nickel as Ni	hðri	C03	-0.96
Nitrate as N	hđų	1 1	0.1
pH - Autotitrator		C30	7.27
Potassium as K	mg/l	C01	5.67
Sodium as Na	mg/l	C01	121.03
St 3 as SO4	mg/l	C33	9.21
Tota-coliform bacteria Membrane Filtration	CFU/100ml	MO4	0
Total Solids - dissolved	mg/l	+	280.63
Turbidity	NTU	C16	8.51



Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: Extension 7 Clinic Received Date: 04/02/2015

Sample Number			125774
Sample Description			Extension 7 Clinic
Analysis Start Date	04/02/2015		
Analysis End Date			·····
Comment		·. · · · ·	
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	293
Aluminium as Al	Ngų	C09	22.19
A- nia as N	mg/l	C32	0.01
L um as Cd	hou	C03	-0.27
Calcium as Ca	mg/l	C01	30.17
Chloride as Cl	mg/l	C34	80.7
Chiorine	mg/l		0.1
Chromium as Cr	hân	C03	-6.31
Copper as Cu	hgų	C02	2.18
EC - Autolitrator	mS/m		79
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.54
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		98.83
Hardness (total)	mg/l		174
Heterotrophic plate count @35*C	CFU/1ml	M03	1001
Iron (total) as Fe	hđư	C02	-25.67
Lead as Pb	hôn	C02	-0.81
Magnesium as Mg	mg/l	C01	23.82
Manganese as Mn	Ngų	C02	-0.4
Nickel as Ni	Ngų	C03	7.48
Nitrate as N	μgΛ		0
pH - Autotitrator	-		8.56
pH ster Treatment Works (Plants)			8.92
Potassium as K	mg/l	C01	3.24
Sodium as Na	mg/l	C01	114.68
Sulphate as SO4	mg/l	C33	67.33
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	4
Total Solids - dissolved	mg/l		394.98
Turbidity	NTU	C16	1.12
Turbidity @ WTW	NTU		1.22
Zinc as Zn	hđđ	C02	-3.3



Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: Extension 7 Clinic Received Date: 18/02/2015

Sample Number			125916
Sample Description Analysis Start Date			Extension 7 Clini
			19/02/2015
Analysis End Date	· · · · · · · · · · · · · · · · · · ·		
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	274.7
Ammonie as N	mg/l	C32	-0.1
C 'um as Cd	Ngu	C03	-0
Com as Ca	mg/l	C01	7.13
Chloride as Ci	mg/l	C34	75.89
Chromium as Cr	hgų	C03	-7
Cobait as Co	hgų	C03	-0.16
Copper as Cu	Ngų	C02	-0.8
EC - Autotitrator	mS/m	C29	78.79
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.53
Hardness (calcium)	mg/l		17.73
Hardness (magnesium)	mg/l		18.12
Hardness (lotal)	mg/l		36
Heterotrophic plate count @35°C	CFU/1ml	M03	1001
Lead as Pb	hđų	C02	-1.59
Magnesium as Mg	/gm	C01	4.36
Manganese as Mn	hđđ	C02	-0.64
Nickel as Ni	hốn	C03	1.04
Nitrate as N	hgų		0
pH - Autotitrator	•	C30	8.39
Potassium as K	mg/l	C01	0.93
Sodium as Na	ng/t	C01	49.68
St 2 as SO4	mg/l	C33	62.8
Total collform bacteria Membrane Filtration	CFU/100ml	M04	1
Total Solids - dissolved	mg/l		393.97
Turbidity	NTU	C16	3.67

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

Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: Indoor Sports Centre

Received Date: 04/02/2015

Sample Number		-	125773
Sample Description			Indoor Sports Centre
Analysis Start Date	04/02/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	30.33
Aluminium as Al	hđđ	C09	26.54
A nia as N	mg/l	C32	0.01
Cm as Cd	Nori	C03	-0.07
Calcium as Ca	mg/l	C01	30.07
Chloride as Cl	mg/l	C34	81.15
Chlorine	mg/l		0.15
Chromium as Cr	Ngų	C03	-6.26
Copper as Cu	hðų	C02	2.8
EC - Autotitrator	mS/m	C29	78.58
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.56
Hardness (calcium)	mg/l		74.91
Hardness (magnesium)	mg/l		94.71
Hardness (lotal)	mg/l		170
Heterotrophic plate count @35°C	CFU/1ml	M03	1001
fron (total) as Fe	hgy	C02	-23.52
Lead as Pb	hđy	C02	-0.85
Magnesium as Mg	ngA	C01	23.47
Manganese as Mn	Ngų	C02	0.62
Nickel as Ni	Ngų	C03	6.88
Nitrate as N	hgų		0.1
pH - Autotitrator	-	C30	8.5
ph iter Treatment Works (Plants)	•		8.9
Potassium as K	mg/l	C01	3.25
Sodium as Na	mg/l	C01	114.47
Sulphate as SO4	mg/l	C33	68.85
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	7
Total Solids - dissolved	mg/i		392.88
Turbidity	NTU	C16	5.27
Turbidity @ WTW	NTU		6.09
Zinc as Zn	hori	C02	-3.17



Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: J Street Community Tap

Received Date: 04/02/2015

Sample Number			125772
Sample Description			J Street Community Tap
Analysis Start Date	04/02/2015		
Analysis End Date			
Comment			
Test			
Alkalinity - Autotitrator	Units mg/i	Method No	23.38
Aluminium as Al	hgu hgu	C09	-16.77
A nia as N	mg/l	C09	0.01
C. Jm as Cd		C03	-0.07
Calcium as Ca	Ngų		1
Claicium as Ca Chloride as Cl	mg/l	C01	10.23
	mg/i	C34	80.97
Chlorine	mg/l		0.11
Chromium as Cr	hgų	C03	-6.71
Copper as Cu	hgyl	C02	-1.62
EC - Autotitrator	mS/m	C29	78.73
Faecal coliforms count Member Filtration	CFU/100ml	M05	23
Fluoride as F	mg/l	C35	0.54
Hardness (calcium)	mg/l		24.97
Hardness (magnesium)	mg/l		61.77
Hardness (total)	mg/l	1	87
Heterotrophic plate count @35*C	CFU/1ml	M03	1001
Iron (total) as Fe	hBri	C02	-42.54
Lead as Pb	hði	C02	-0.74
Magnesium as Mg	mg/t	C01	15.27
Manganese as Mn	hđr	C02	1.11
Nickel as Ni	μgΛ	C03	4.24
Nitrate as N	hgų		0
pH - Autolitrator		C30	8.55
ph ater Treatment Works (Plants)			8.9
Potassium as K	mg/l	C01	1.75
Sodium as Na	mg/i	C01	77.68
Sulphate as SO4	mg/l	C33	66.36
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	548
Total Solids - dissolved	mg/l		393.67
Turbidity	NTU	C16	1.82
			2.02
Zinc as Zn		C02	103.87



Preliminary Water Quality Report

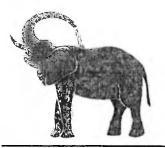
Report Number: 69217

Test List: FINAL_MK Scheme: J / Kleinshans Final WTW

Received Date: 10/02/2015

Sample Number			125833
Sample Description			J / Kleinshans Final WTW
Analysis Start Date	10/02/2015		
Analysis End Date			
Comment			
Test	Units	Method No	-
Alkalinity - Autotitrator	mg/l	1	276.4
Ammonia as N	mg/l	C32	-0.08
ium as Cd	hgų	C03	-0.07
Cim as Ca	mg/l	C01	31.11
Chloride as Cl	mg/l	C34	80.76
Chlorine	mg/l		0.08
Chromium as Cr	Ngų	C03	-3.22
Cobalt as Co	hôri	C03	0.29
Copper as Cu	hột	C02	0.63
EC - Autotitrator	mS/m	C29	80.95
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.53
Hardness (calcium)	mg/l		77.41
Hardness (magnesium)	mg/l	1	98.83
Hardness (total)	mg/l		176
Heterotrophic plate count @35°C	CFU/1ml	M03	1001
Lead as Pb	Ngų	C02	-1.95
Magnesium as Mg	mg/i	C01	24.37
Manganese as Mn	hôri	C02	18.08
Nickel as Ni	hôri	C03	16.25
Nitrate as N	hBy		0.1
pH - Autolitrator		C30	8.5
pH @ Water Treatment Works (Plants)			8.87
Pe am as K	mg/t	C01	3.92
Sodium as Na	Ngm	C01	117.18
Sulphate as SO4	mg/l	C33	66.84
Total coliform becteria Membrane Filtration	CFU/100ml	M04	4
Total Solids - dissolved	mg/t		202.37
Turbidity	NTU	C16	1.98
Turbidity @ WTW	NTU		2.14





Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: J / Kleinshans Final WTW Received Date: 18/02/2015

Sample Number			125923
Sample Description	J / Kleinshans Fina WTW		
Analysis Start Date	18/02/2015		
Analysis End Date			
Comment			
Test	(Units	Method No	
Alkalinity - Autotitrator	mg/i	C28	296.2
Ammonia as N	mg/l	C32	-0.11
Criticity as Col	hðų	C03	-0.08
C al as Ca	mg/l	C01	23.8
Chloride as Cl	mg/i	C34	76.84
Chlorine	mg/l		0.3
Chromium as Cr	hðy	C03	-6.72
Cobalt as Co	hgų	C03	-0.16
Copper as Cu	hðy	C02	-0.17
EC - Autotitrator	mS/m	C29	79.02
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.49
Hardness (calcium)	mg/l		59.93
Hardness (magnesium)	mg/l		65.89
Hardness (total)	mg/l		126
Heterotrophic plate count @35*C	CFU/1ml	M03	1001
Lead as Pb	hðri	C02	-2.54
Magnesium as Mg	mg/l	C01	16.41
Manganese as Mn	hgy	C02	2.37
Nickel as Ni	hgy	C03	-0.83
Nitrate as N	μg/l	1	0.3
pH - Autotitrator		C30	8.46
pH @ Water Treatment Works (Plants)	•		9.09
P/ Im as K	mg/l	C01	5.17
Soanum as Na	mg/l	C01	114.34
Sulphate as SO4	mg/l	C33	62.34
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	34
Total Solids - dissolved	mg/l		395.11
Turbidity	NTU	C16	0.93
Turbidity @ WTW	NTU		1.68



Preliminary Water Quality Report

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Report Number: 69217

1/

Test List: FINAL_MK Scheme: J / Kleinshans Final WTW Received Date: 25/02/2015

Sample Number			125982
Sample Description			J / Kleinshans Final WTW
Analysis Start Date			25/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	-
EC - Autotitrator	mS/m	C29	81.78
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Heterotrophic plate count @35*C	CFU/1ml	M03	64
A as N	Ngu		0.3
pH - Autotitrator		C30	8.39
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		408.91
Turbidity	NTU	C16	2.91

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



Preliminary Water Quality Report

Report Number: 69217

V

Test List: FINAL_MK Scheme: Nonzwakazi Community Tap in Alicedale Received Date: 04/02/2015

Sample Number	125771		
Sample Description			Nonzwakazi Community Tap in
Analysis Start Date			04/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l		107.3
Aluminium as Al	hðy	C09	46.66
Ammonia as N	mg/l	C32	0.01
C m as Cd	hôy	C03	-0.07
Calcium as Ca	mg/l	C01	23.03
Chloride as Cl	mg/i	C34	163.1
Chlorine	mg/l		0.07
Chromium as Cr	hgų	C03	-6.33
Copper as Cu	hđư	C02	-0.25
EC - Autolitrator	mS/m	C29	72.81
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.13
Hardness (calcium)	mg/l		57.43
Hardness (magnesium)	mg/l		65.89
Hardness (total)	mg/l		123
Heterotrophic plate count @35*C	CFU/1ml	M03	1001
ron (total) as Fe	hđi	C02	-0.24
Lead as Pb	hðy	C02	-0.35
Magnesium as Mg	mg/l	C01	15.77
Manganese as Mn	hgų	C02	7.8
Nickel as Ni	hđđ	C03	-0.21
Nitrate as N	hôd	-	0
pH - Autotitrator	-	C30	8.09
pH 'ster Treatment Works (Plants)	-		7.6
Potessom as K	mg/t	C01	5.09
Sodium as Na	mg/l	C01	101.93
Sulphate as SO4	mg/l	C33	23.16
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	1 3
Total Solids - dissolved	mg/i	-	364.04
Turbidity	NTU	C16	1.39
Turbidity @ WTW	NTU		1.83
Zinc as Zn	Ngų	C02	11.3



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Preliminary Water Quality Report

Report Number: 69217

u

Test List: FINAL_MK Scheme: Nonzwakazi Community Tap in Alicedale Received Date: 10/02/2015

Sample Number			125823
Sample Description			Nonzwakazi Community Tap in
Analysis Start Date	10/02/2015		
Analysis End Date			1
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	96.89
Ammonia as N	mg/l	C32	-0.03
Cedmium as Cd	hđų	C03	-0.12
n as Ca	mg/l	C01	8.8
Chioride as Cl	mg/l	C34	161.2
Chlorine	mg/l		0.12
Chromium as Cr	Ngų	C03	-6.13
Cobalt as Co	hgų	C03	0.35
Copper as Cu	hđų	C02	0.14
EC - Autotitrator	mS/m	C29	74.09
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.19
Hardness (calcium)	mg/l		21.97
Hardness (magnesium)	mg/l		57.65
Hardness (total)	mg/l		80
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Lead as Pb	hột	C02	-2.15
Magnesium as Mg	mg/l	C01	14.35
Manganese as Mn	μg/l	C02	19.57
Nickel as Ni	hgy	C03	3.88
Nitrate as N	hđų	1	-0.1
pH - Autotitrator	-	C30	8.05
pH @ Water Treatment Works (Plants)	-	1	9.04
Pc mas K	mg/i	C01	1.09
Soù as Na	mg/i	C01	79.78
Sulphate as SO4	mg/i	C33	23.2
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		370.44
Turbidity	NTU	C16	1.75
Turbidity @ WTW	NTU	1	1.99



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Preliminary Water Quality Report

Report Number: 69217

V

Test List: FINAL_MK Scheme: Nonzwakazi Community Tap in Alicedale Received Date: 18/02/2015

Sample Number			125913
Sample Description			Nonzwakazi Community Tap In
Analysis Start Date			18/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	111.8
Ammonia as N	ng/l	C32	-0.08
Cadmium as Cd	hðy	C03	-0.61
(nas Ca	mg/l	C01	4.53
Chloride as Cl	mg/l	C34	152.36
Chlorine	mg/t		0.08
Chromium as Cr	hgų	C03	-8.16
Cobalt as Co	hđư	C03	0.13
Copper as Cu	hgų	C02	-0.56
EC - Autotitrator	mS/m	C29	73.96
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.13
Hardness (calcium)	mg/l		11.24
Hardness (magnesium)	mg/l	-	26.77
Hardness (total)	mg/l		38
Heterotrophic plate count @35°C	CFU/1ml	M03	314
Lead as Pb	hgyl	C02	-5.16
Magnesium as Mg	mg/i	C01	6.54
Manganese as Mn	hor	C02	33.57
Nickel as Ni	hgq	C03	2.06
Nitrate as N	hgų		0.1
pH - Autotitrator	-	C30	7.95
pH @ Water Treatment Works (Plants)			8.5
Po' 'm as K	mg/l	C01	1.33
Sou as Na	mg/l	C01	37.93
Sulphate as SO4	ma/l	C33	20.73
Total collform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solida - dissolved	ma/l		369.81
Turbidity	NTU	C16	1.58
Turbidity @ WTW	NTU		1.69

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Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK

Scheme: Nonzwakazi Community Tap in Alicedale

Received Date: 24/02/2015

Sample Number			125969
Sample Description			Nonzwakazi Community Tap in
Analysis Start Date			24/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	~
Chlorine	mg/i		0.05
EC - Autotitrator	mS/m	C29	70.55
Faecal coliforms count Member Filtration	CFU/100ml	M05	3 }
F trophic plate count @35*C	CFU/1ml	M03	1001
Nitrate as N	hgy	-	0.1
pH - Autolitrator		C30	8.09
pH @ Water Treatment Works (Plants)			7.96
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	40
Total Solids - dissolved	mg/l		352.73
Turbidity	NTU	C16	0.46
Turbidity @ WTW	NTU		0.67

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



Preliminary Water Quality Report

Report Number: 69217 Test List: FINAL_MK Scheme: Riebeeck East Network Resevior Received Date: 04/02/2015 Sample Number 125770 **Sample Description Riebeeck East Network** Resevior **Analysis Start Date** 04/02/2015 **Analysis End Date** Comment Test | Units | Method No Alkalinity - Autotitrator mg/l C28 249.5 Aluminium as Al C09 -22.6 µg/I Ammonia as N mg/l C32 0.02 C Im as Cd C03 0 μαΛ Carorum as Ca mg/l C01 9.48 Chloride as Cl mg/t C34 135.28 Chlorine mg/l , 0.78 Chromium as Cr hðy C03 -6.75 Copper as Cu hðų C02 -1.76 EC - Autotitrator mS/m C29 56.66 CFU/100ml M05 Faecal coliforms count Member Filtration 0 C35 0.13 Fluoride as F ma/l 23.72 Hardness (calclum) mg/l 61.77 Hardness (magnesium) mg/l Hardness (total) mg/l 86 Heterotrophic plate count @35°C CFU/1ml M03 6 Iron (total) as Fe C02 -47.04 µg/l Lead as Pb µg/l C02 -1 Magnesium as Mg mg/l C01 14.5 -0.51 Manganese as Mn µg/l C02 5.94 Nickel as Ni hav C03 -0.3 Nitrate as N µg/l 7.16 C30 pH - Autotitrator 7.96 pH # Mater Treatment Works (Plants) . 1.52 C01 Pol n as K mg/l 85.35 C01 Sodium as Na mg/l 18.59 C33 mg/l Sulphate as SO4 0 CFU/100ml M04 Total coliform bacteria Membrane Filtration 283.33 mg/l Total Solids - dissolved NTU C16 1.92 Turbidity NTU 2.21 Turbidity @ WTW C02 111.78 μgΛ Zinc as Zn



Preliminary Water Quality Report

Report Number: 69217

1

Test List: FINAL_MK
Scheme: Riebeeck East Network Resevior
Received Date: 10/02/2015

Sample Number			125822
Sample Description Analysis Start Date			Riebeeck East Networ Reservor
			10/02/2015
Analysis End Date			
Comment			_
Test	_		
	Units	Method No	
Alkalinity - Autobitrator Ammonia as N	mg/l	C28	55.86
	mg/l		-0.04
Cadmium as Cd	hộn	C03	-0.11
n as Ca	mg/l	C01	8.72
Chronide as Cl	mg/i	C34	129.3
Chlorine	mg/l		1.33
Chromium as Cr	hði	C03	-6.16
Cobait as Co	hðy	C03	-0.02
Copper as Cu	hðy	C02	-1.04
EC - Autotitrator	mS/m	C29	53.96
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.2
Hardness (calcium)	mg/l		21.72
Hardness (magnesium)	mg/l		61.77
Hardness (total)	mg/l	1	84
Heterotrophic plate count @35°C	CFU/1ml	M03	0
Lead as Pb	µg/l	C02	-1.43
Magnesium as Mg	mg/l	C01	14.77
Manganese as Mn	han	C02	4.91
Nickel as Ni	Nou	C03	4.2
Nitrate as N	Ngų		-0.1
pH - Autotitrator	-	C30	6.67
pH @ Water Treatment Works (Plants)			6.73
Potr 'um as K	mg/i	C01	1.22
So. as Na	mg/l	C01	81.63
Sulphate as SO4	mg/l	C33	17.29
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		269.81
	NTU	C16	5.96
Turbidity Turbidity WTW	NTU		6.7



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Preliminary Water Quality Report

			Number: 6921
Test List: FINAL_MK			
Scheme: Riebeeck East Network Resevior			
Received Date: 18/02/2015			
Sample Number			125912
Sample Description			Riebeeck East Networ Reservor
Analysis Start Date			18/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/t	C28	75.36
Ammonia as N	mg/l	C32	-0.13
Cadmium as Cd	hðv	C03	-0.04
(nas Ca	mg/l	C01	9.31
Chioride as Ci	mg/l	C34	114.34
Chlorine	mg/l		1.17
Chromium as Cr	hgu	C03	-6.92
Cobalt as Co	hđų	C03	0.07
Copper as Cu	hgų	C02	-1.14
EC - Autotitrator	mS/m	C29	54.98
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.19
Hardness (calcium)	mg/l		23.22
Hardness (magnesium)	mg/l		61.77
Hardness (total)	mg/l		85
Heterotrophic plate count @35*C	CFU/1ml	M03	40
Lead as Pb	hộd	C02	-2.09
Magnesium as Mg	mg/l	C01	15.34
Manganese as Mn	hôy	C02	4 29
Nickel as Ni	hđư	C03	5.33
pH - Autotitrator	•	C30	6.88
pH @ Water Treatment Works (Plants)	-		6.22
Potassium as K	mg/l	C01	1.73
Sort' as Na	mg/l	C01	79.45
Sur, a as SO4	mg/l	C33	18.69
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/i		274.92
Turbidity	NTU	C16	4.67
Turbidity @ WTW	NTU		5.68

Report Number: 69217

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

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Preliminary Water Quality Report

Report Number: 69217

Test List: FINAL_MK Scheme: Riebeeck East Network Reservor Received Date: 24/02/2015

Sample Number			125968
Sample Description	Riebeeck East Network Reservior		
Analysis Start Date	24/02/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Chlorine	mg/l		1.33
EC - Autolitrator	mS/m	C29	55.84
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
trophic plate count @35°C	CFU/1ml	_ M03	0
Nitrate as N	hgų		-0.1
pH - Autotitrator	-	C30	6.76
pH @ Water Treatment Works (Plants)	-		7.34
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		278.22
Turbidity	NTU	C16	3.5
Turbidity @ WTW	NTU		3.7

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

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Preliminary Water Quality Report

Report Number: 69217

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Test List: FINAL_MK Scheme: Waainek WTW Final Received Date: 04/02/2015

Sample Number			125765	
Sample Description			Waainek WTW Final	
Analysis Start Date			04/02/2015	
Analysis End Date				
Comment				
			_	
Test	Units	Method No		
Alkalinity - Autotitrator	mg/l	C28	19.32	
Ammonia as N	mg/l	C32	0.06	
Cadmium as Cd	hðy	C03	-0.11	
n as Ca	mg/l	C01	4.14	
Cinoride as Cl	mg/l	C34	58.68	
Chlorine	mg/l		0.1	
Chromium as Cr	hðy	C03	-6.55	
Copper as Cu	hðh	C02	-1.64	
EC - Autotitrator	mS/m	C29	23.64	
Faecal coliforms count Member Filtration	CFU/100ml	M05	0	
Fluoride as F	mg/l	C35	0.02	
Hardness (calcium)	mg/l		10.24	
Kardness (magnesium)	mg/l		22.65	
Hardness (total)	mg/l		33	
Heterotrophic plate count @35*C	CFU/1ml	M03	96	
Lead as Pb	уди	C02	-0.53	
Magnesium as Mg	mg/l	C01	5.5	
Manganese as Mn	hgų	C02	106.15	
Nickel as Ni	hđy	C03	1.14	
Nitrate as N	hðy		-0.1	
pH - Autotitrator		C30	6.81	
pH @ Water Treatment Works (Plants)			. 6.15	
Potassium as K	mg/l	C01	1.15	
Sod ^a as Na	mg/l	C01	33.64	
Sut, as SO4	mg/l	C33	10.35	
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	1	
Total Solids - dissolved	mg/l		118.2	
Turbidity	NTU	C16	0.87	
Turbidity @ WTW	NTU		1.02	
Zinc as Zn	heu	C02	-1.6	



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Preliminary Water Quality Report

Test List: FINAL_MK Scheme: Waainek WTW Final Received Date: 10/02/2015 Sample Number 125830 Sample Description Waainek WTW Finai Analysis Start Date 10/02/2015 **Analysis End Date** Comment Test Units | Method No Alkalinity - Autotitrator mg/l 13.72 Ammonia as N mg/l C32 -0.06 Cadmium as Cd hð\ C03 -0.1 C n as Ca mg/l C01 3.93 Chionde as Cl mg/l C34 59.8 Chlorine 2.2 mg/i Chromium as Cr C03 -4.99 hou Cobalt as Co C03 0.07 Jug/I C02 Copper as Cu -1 ua/ EC - Autotitrator C29 24.05 mS/m Faecal coliforms count Member Filtration CFU/100ml M05 0 Fluoride as F C35 0.03 mg/l Hardness (calcium) 9.74 mg/l Hardness (magnesium) 23.06 mg/l Hardness (lotal) mg/l 32.7 Heterotrophic plate count @35°C CFU/1ml M03 1001 Lead as Pb hðy C02 -1.46 5.55 Magnesium as Mg mg/l C01 37.54 Manganese as Mn μgΛ C02 1.72 C03 Nickel as Ni µg/l -0.1 Nitrate as N håv 6.5 C30 pH - Autotitrator . 6.74 pH @ Water Treatment Works (Plants) . C01 1.29 Pol- mas K mg/l C01 33.07 as Na mg/l Sou C33 9.62 Sulphate as SO4 mg/l Total coliform bacteria Membrane Filtration CFU/100ml M04 0 120.25 Total Solids - dissolved mg/l Turbidity NTU C16 0.98 Turbidity @ WTW NTU 1.48

Report Number: 69217

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



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Preliminary Water Quality Report

Report Number: 69217

Test LIst: FINAL_MK Scheme: Waainek WTW Final Received Date: 18/02/2015

Sample Number			125920
Sample Description			Waainek WTW Final
Analysis Start Date			18/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autotitrator	mg/l	C28	22.52
Ammonia as N	mg/l	C32	-0.1
Cadmium as Cd	hôri	C03	-0.05
(nas Ca	mg/l	C01	43.52
Chooride as Cl	mg/l	C34	67.12
Chlorine	mg/l		3.24
Chromium as Cr	Ngų	C03	-6.78
Cobait as Co	hgų	C03	0.03
Copper as Cu	Ngu	C02	-0.96
EC - Autotitrator	mS/m	C29	29.17
Faecal coliforms count Member Filtration	CFU/100ml	M05	0
Fluoride as F	mg/l	C35	0.05
Hardness (calcium)	mg/l		109.87
Hardness (magnesium)	mg/l		201.78
Hardness (total)	mg/l		312
Heterotrophic plate count @35*C	CFU/1ml	M03	0
Lead as Pb	hộų	C02	-2.17
Magnesium as Mg	mg/l	C01	49.12
Manganese as Mn	hgy	C02	4.77
Nickel as Ni	hgy	C03	7.25
Nitrate as N	hgy		-0.1
pH - Autotitrator		C30	6.57
pH @ Water Treatment Works (Plants)	-		. 7.38
Pot- Tum as K	mg/l	C01	7.64
So. 13 Na	mg/l	C01	419.82
Sulphate as SO4	mg/l	C33	7.11
Total coliform bacteria Membrane Filtration	CFU/100ml	M04	0
Total Solids - dissolved	mg/l		145.85
Turbidity	NTU	C16	2.04
Turbidity @ WTW	NTU		1.41



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Preliminary Water Quality Report

Report Number: 69217

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Test List: FINAL_MK Scheme: Waainek WTW Final Received Date: 24/02/2015

Sample Number 125979 Sample Description Waainek WTW Final Analysis Start Date 24/02/2015 Analysis End Date Comment Test Units | Method No Chlorine 0.27 mg/l EC - Autotitrator mS/m C29 28.1 Faecal coliforms count Member Filtration CFU/100ml M05 0 trophic plate count @35°C CFU/1ml M03 0 Narate as N µg/l 0 pH - Autotitrator C30 6.7 • pH @ Water Treatment Works (Plants) 6.26 CFU/100ml Total coliform bacteria Membrane Filtration M04 0 Total Solids - dissolved mg/l 140.5 Turbidity NTU C16 0.8 Turbidity @ WTW NTU 1.17

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



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Preliminary Water Quality Report

Report Number: 69217

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Test List: RAW_AUD_MK Scheme: J / Kleinshans Raw WTW Received Date: 10/02/2015

Sample Number	ample Number			
Sample Description	J / Kleinshans Raw WTW			
Analysis Start Date	11/02/2015			
Analysis End Date				
Comment				
Test	Units	Method No		
Alkalinity - Autotitrator	mg/i		261	
Ammonia as N	mg/l	C32	-0.07	
Cadmium as Cd	hđų	C03	-0.07	
m as Ca	mg/l	C01	22.84	
Cmoride as Cl	mg/l	C34	83.38	
Chromium as Cr	hột	C03	-5.96	
Cobalt as Co	hột	C03	0.14	
Copper as Cu	hðit	C02	-0.16	
EC - Autotitrator	mS/m	C15	79.4	
Fluoride as F	mg/l	C35	0.56	
Hardness (calcium)	mg/l		57.43	
Hardness (magnesium)	mg/i		65.89	
Hartiness (total)	mg/i		123	
Lead as Pb	hôri	C02	-1.16	
Magnesium as Mg	mg/l	C01	15.94	
Manganese as Mn	hộd	C02	7.23	
Nickel as Ni	hðh	C03	-0.42	
Nitrate as N	Ngu		0.6	
pH - Autolitrator	-	C14	8.39	
Potassium as K	mg/l	C01	5.1	
Sodium as Na	mg/l	C01	107.51	
Sulphate as SO4	mg/l	C33	69.97	
Total Solids - dissolved	mg/i		388	
Tur ⁴ "*v	NTU	C16	73.6	

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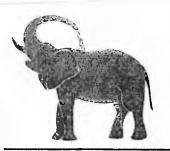
Preliminary Water Quality Report

Report Number: 69217

Test List: RAW_AUD_MK Scheme: J / Kleinshans Raw WTW Received Date: 18/02/2015

Sample Number			125924
Sample Description			J / Kleinshans Raw WTW
Analysis Start Date	18/02/2015		
Analysis End Date			
Comment			
Test	Units	Method No	
Alkalinity - Autolitrator	mg/l	C28	293.2
Ammonia as N	mg/l	C32	-0.08
Chloride as Cl	mg/l	C34	77.34
waste water(coliiert)	CFU/100ml	M01	11
E Autotitrator	mS/m	C15	79
Fluoride as F	ng/i	C35	0.51
Nitrate as N	hđư		0.6
pH - Autolitrator		C14	8.39
pH @ Water Treatment Works (Plants)			9.04
Sulphate as SO4	mg/l	C33	65.7
Total Solids - dissolved	Ngm		395
Turbidity	NTU	C16	84.3
Turbidity @ WTW	NTU	1	115

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



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Preliminary Water Quality Report

Report Number: 69217

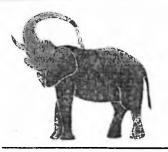
Test List: RAW_AUD_MK

Scheme: Waainek WTW Raw

Received Date: 04/02/2015

Sample Number Sample Description			125766 Wealnek WTW Raw 04/02/2015
Analysis End Date			
Comment			
Test	j Units	Method No	
Alkalinity - Autotitrator	mg/l		21.47
Ammonia as N	mg/l	C32	0.06
Cadmium as Cd	Ngų	C03	-0.42
C mas Ca	mg/l	C01	23.35
Ca_ sie as Ci	mg/l	C34	57.82
Chromium as Cr	hđđ	C03	-7.04
Cobalt as Co	Ngų	C03	-0.01
Copper as Cu	hgų	C02	-0.67
E coll waste water(colilert)	CFU/100ml	M01	28
EC - Autotitrator	mS/m	C29	23.8
Fluoride as F	ng/t	C35	0.05
Hardness (calcium)	mg/l		57.43
Hardness (magnesium)	mg/l		65.89
Hardness (total)	mg/l		123
Lead as Pb	Ngų	C02	-1.94
Magnesium as Mg	mg/l	C01	16.43
Nickel as Ni	hgy	C03	2.55
Nitrate as N	hgy		-0.4
pH - Autotitrator	-	C30	6.59
pH @ Water Treatment Works (Plants)	•		5.68
Potassium as K	mg/l	C01	3.28
Sodium as Na	mg/i	C01	70.73
Sulphate as SO4	mg/i	C33	10.66
Total Solids - dissolved	mg/l		119
Ти	NTU	C16	13.1
Turbidity @ WTW	NTU		15.5

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



Preliminary Water Quality Report

Report Number: 69217

Test List: RAW_AUD_MK Scheme: Waainek WTW Raw Received Date: 10/02/2015

Received Date: 10/02/2015

Sample Number Sample Description Analysis Start Date			125831 Waalnek WTW Raw 10/02/2015				
				Analysis End Date			
				Comment			
Test	j Units	Method No	4				
Alkalinity - Autotitrator	mg/l		17.1				
Ammonia as N	mg/l	C32	-0.05				
Cadmium as Cd	Ngu	C03	-0.12				
r mas Ca	mg/l	C01	22.61				
LJe as Cl	mg/l	C34	56.18				
Chromium as Cr	hôn	C03	-5.8				
Cobalt as Co	Ngų	C03	-0.11				
Copper as Cu	hðil	C02	-0.59				
E coli waste water(colilert)	CFU/100ml	MO1	10				
EC - Autotitrator	mS/m	C15	22.5				
Fluoride as F	mg/t	C35	0.07				
Hardness (calcium)	mg/l	1	57.43				
Hardness (magnesium)	mgA		65.89				
Hardness (total)	mg/l		123				
Leed as Pb	hðy	C02	-1.37				
Magnesium as Mg	ng/l	C01	16.06				
Manganese as Mn	λομ	C02	5.4				
Nickel as Ni	hôvi	C03	-0.95				
Nitrate as N	hôvi		0.1				
pH - Autotitrator		C14	7.67				
pH @ Water Treatment Works (Plants)	•		6.7				
Potassium as K	mg/l	C01	5				
Sodium as Na	mg/l	C01	104.76				
Sulphate as SO4	mg/l	C33	9.95				
Tot. Is - dissolved	mg/l		111.1				
Turbidity	NTU	C16	12.5				
Turbidity @ WTW	NTU		14.3				



Preliminary Water Quality Report

Report Number: 69217

Test List: RAW_AUD_MK Scheme: Waainek WTW Raw V Received Date: 18/02/2015 Sample Number 125921 Sample Description Waainek WTW Raw Analysis Start Date 19/02/2015 Analysis End Date Comment Test | Units | Method No Alkalinity - Autotitrator C28 21.65 mg/l Ammonia as N mg/l C32 -0 Cadmium as Cd μgΛ C03 -0.62 Calcium as Ca mg/l C01 26.1 **C34** ie as Ci mg/l 51.61 Chromium as Cr hðy C03 -7.04 -0.05 C03 Cobalt as Co μgΛ C02 -0.12 Copper as Cu µg/l 163.4 C15 EC - Autotitrator mS/m C35 0.06 Fluoride as F ma/l 64.92 Hardness (calcium) mg/l 78.24 Hardness (magnesium) ma/l 143 Hardness (total) ma/l C02 -5.72 Lead as Pb µa/l C01 18.73 Magnesium as Mg mg/l Manganese as Mn C02 -0.9 hðy Nickel as Ni C03 -1.16 µg/t pH - Autotitrator C14 7.15 5.82 Potassium as K mg/l C01 C01 125.02 Sodium as Na mg/l C33 7.77 Sulphate as SO4 mg/l 115.8 Total Solids - dissolved mg/l C16 17.6 Turbidity NTU

Tea : RAW_AUD_MK

Scheme: Waainek WTW Raw

Received Date: 24/02/2015

Sample Number			125980
Sample Description			Weainek WTW Ray
Analysis Start Date			24/02/2015
Analysis End Date			
Comment			
Test	Units	Method No	
E coli waste water(colilert)	CFU/100ml	M01	11
EC - Autotitrator	mS/m		7.07
Nitrate as N	Ngu		0.2
pH - Autotitrator	•		7.07
pH @ Water Treatment Works (Plants)		1	6.16
Total Solids - dissolved	ng/l	1	114.1
Turbidity	NTU	C16	14.3
Turbidity @ WTW	NTU		16.1

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